S. S. GAY.

SEARCH LIGHT FOR AN UMBRELLA OR CANE HANDLE.

APPLICATION FILED NOV. 5, 1915.

1,177,241. Patented Mar. 28, 1916.

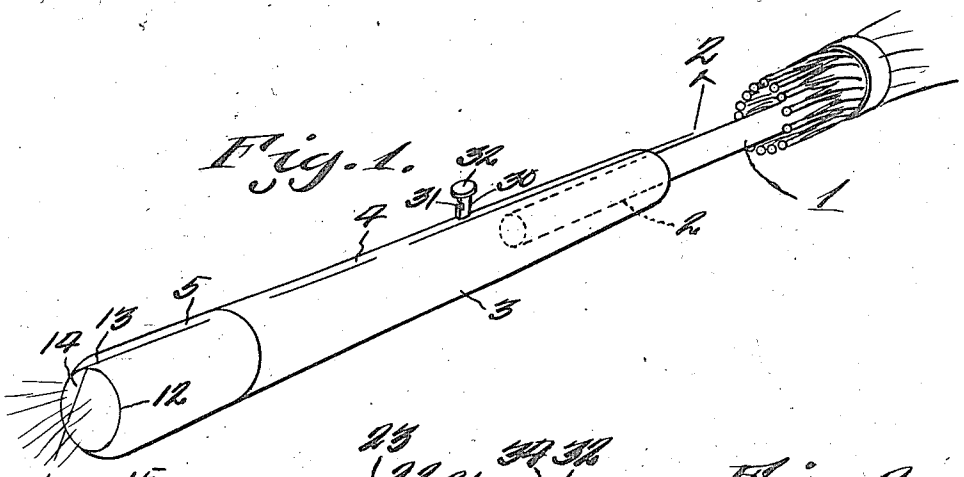


Fig. 1.

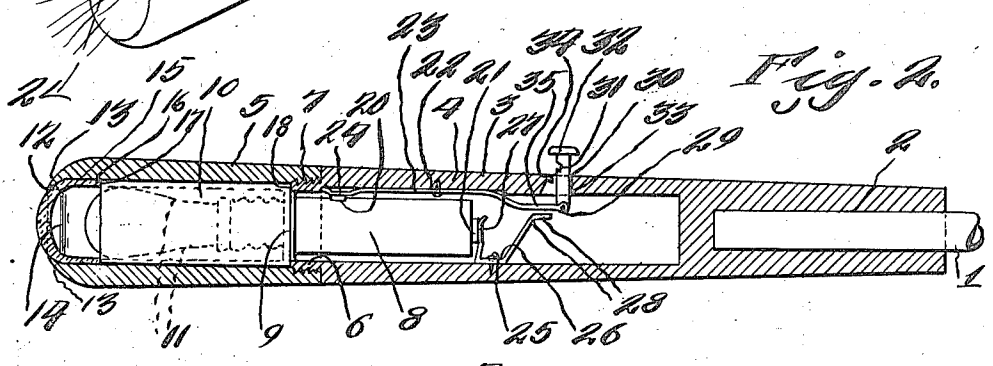


Fig. 2.

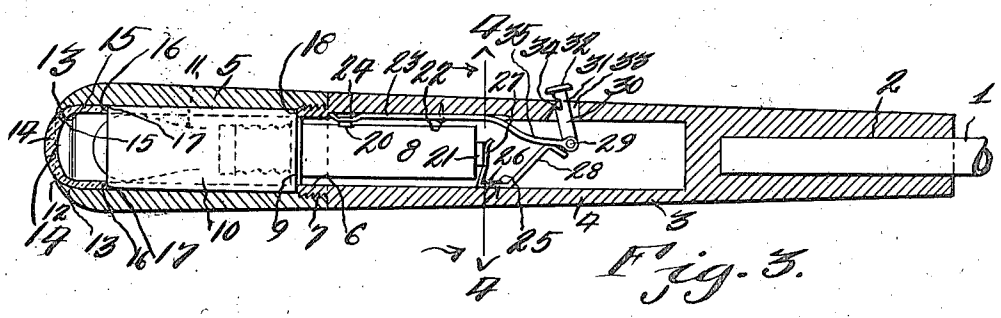


Fig. 3.

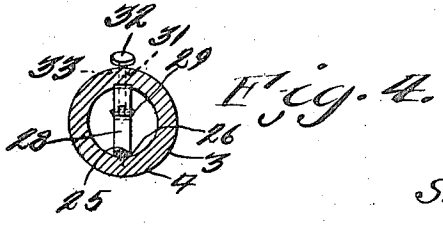


Fig. 4.

Witnesses

H. M. Wilcox G. Bowdoin

Philip J. Mellon

Inventor

S. S. Gay

By D. Swift & Co

his Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL S. GAY, OF SEDRO WOOLLEY, WASHINGTON.

SEARCH-LIGHT FOR AN UMBRELLA OR CANE HANDLE.

1,177,241. Specification of Letters Patent. Patented Mar. 28, 1916.

Application filed November 5, 1915. Serial No. 59,811.

To all whom it may concern:

Be it known that I, SAMUEL S. GAY, a citizen of the United States, residing at Sedro Woolley, in the county of Skagit, State of Washington, have invented a new and useful Search-Light for an Umbrella or Cane Handle; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved search light for umbrellas and cane handles, and an object of the invention is to provide improved means for clamping the glass closure in the end of the handle, and removably supporting the storage battery of the light in spaced relation with the interior of the handle, by means of a shell, and to provide a circuit and circuit closer.

In practical fields the details of construction may necessitate alterations, falling within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings: Figure 1 is a view in perspective showing the searchlight as applied to a handle of an umbrella. Fig. 2 is a longitudinal sectional view on line 2—2 of Fig. 1, showing the contacting terminals out of contact. Fig. 3 is a view similar to Fig. 2 showing the terminals in contact. Fig. 4 is a cross sectional view on line 4—4 of Fig. 3.

Referring more especially to the drawings, 1 designates an umbrella stick, to which is attached, in the usual manner as at 2 a handle 3. This handle 3 comprises two hollow sections 4 and 5. The section 4 has a reduced exteriorly threaded portion 6, which engages the interior threads 7 of the inner end of the section 5. The searchlight consists of the storage battery section 8, which is connected in any suitable manner as at 9 to a protecting shell or casing 10, which incloses the electric light bulb 11. The protecting shell or casing 10 is integrally connected at 9 to the casing of the storage battery. The outer end portion of the section 5 has an opening 12, there being an overhanging flange 13. Arranged in the hollow of the section 5 is a cup shaped glass protector 14, and the outer surface as at 15 of the glass protector abuts against the inner surface of the overhanging flange 13, while the inner edge portion 16 of the glass protector engages the edge portion 17 of the protecting shell or casing 10. It is to be noted that the shoulder 18 where the shell or casing 10 is made integral at 9 with the casing of the storage battery 8 engages the edge of the reduced portion 6 of the hollow section 4 of the handle. When the hollow section 5 is screwed or connected to the hollow section 4, the metal shell or casing 10 is clamped between the reduced portion 6 of the hollow section 4 and the glass protector 14, whereas the glass protector is clamped between the shell or casing 10 and the overhanging flange 13. In this manner the parts are held securely in position.

A terminal contact 20 of the storage battery (not shown) projects through the casing 8, whereas the second terminal contact 21 projects through one end of the casing 8 of the storage battery. Secured in the hollow section 4 by means of the screw or the like 22 is a metal plate or bar 23 having a bulge 24 at one end constituting a contact to coöperate with the contact 20 when the storage battery and the bulb 11 are inserted in the handle. Secured at 25 in the section 4 is a plate 26 having a portion 27 constituting a contact, with which the contact 21 cooperates, when the storage battery section 8 is inserted in the section 4 of the handle. The plate 26 is provided with a yieldable arm 28 constituting a terminal contact. Pivotally hinged at 29 to the inner end of the bar or plate 23 (which inner end is offset or deflected, and designed to contact with the contact 28) is a push bar 30 having a notch 31 and a head 32. This push bar 30 projects through an opening 33 in the wall of the section 4 of the handle, and one end of this opening 33 is formed with a lug 34, designed to enter the notch 31, when the push bar 30 is depressed, thereby holding the terminal contact portion 35 of the plate or bar 23 in coöperation with the terminal contact 28, which will maintain the circuit of the storage battery closed and the bulb 11 lighted. However, the push bar may be depressed to bring the terminal contacts 28 and 35 in coöperation, without causing the notch 31 to engage the projection or lug 34, in order to light the bulb for a short period, and when pressure is relieved on the push bar, the spring action of the terminal con-

tact portion 35 will cause disconnection of the contact, thereby opening the circuit and extinguishing the light of the bulb.

The invention having been set forth, what is claimed as new and useful is:—

In combination, a hollow body having its open end exteriorly threaded and provided with a storage battery chamber, an open ended cap having its inner open end interiorly threaded and engaging the exterior threads of the body, the outer open end of the cap having an inturned partially curved flange, a cup-shaped glass closure fitted telescopically in the cap and having its outer curved end face adjacent the side of the glass cup closure abutting the inturned curved flange, a cylindrical hollow shell telescoping into the cap and being clamped axially between the inner end of the glass cup closure and the threaded end of the body, said shell having a chamber, an electric lamp supported in the chamber of the shell, a storage battery fixed to and supported by the shell and extending into the storage battery chamber and spaced from the interior cylindrical wall of the battery chamber, and means including a push member for closing the circuit of the battery for lighting the electric lamp.

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

SAMUEL S. GAY.

Witnesses:
T. J. MORROW,
C. J. WICKES.