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E. ST. JOHN

BATTERY LIGHT

Filed Feb. 8, 1926

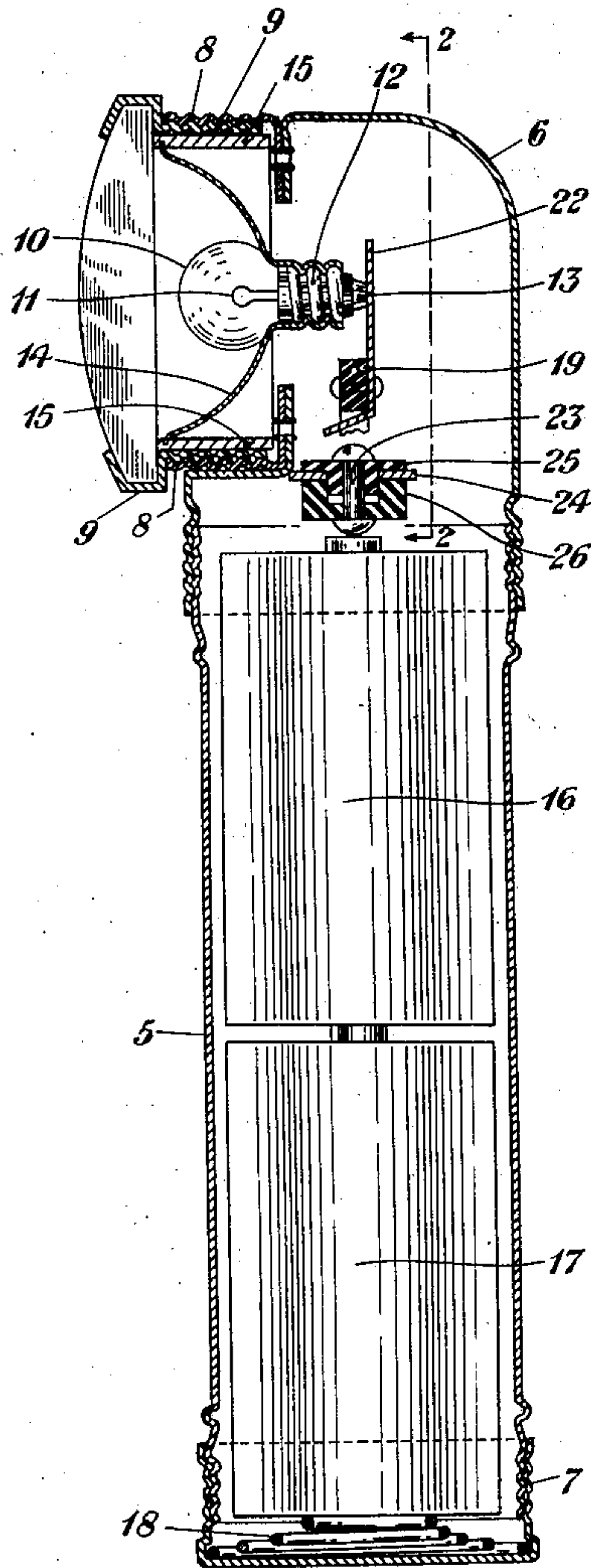


Fig. 1

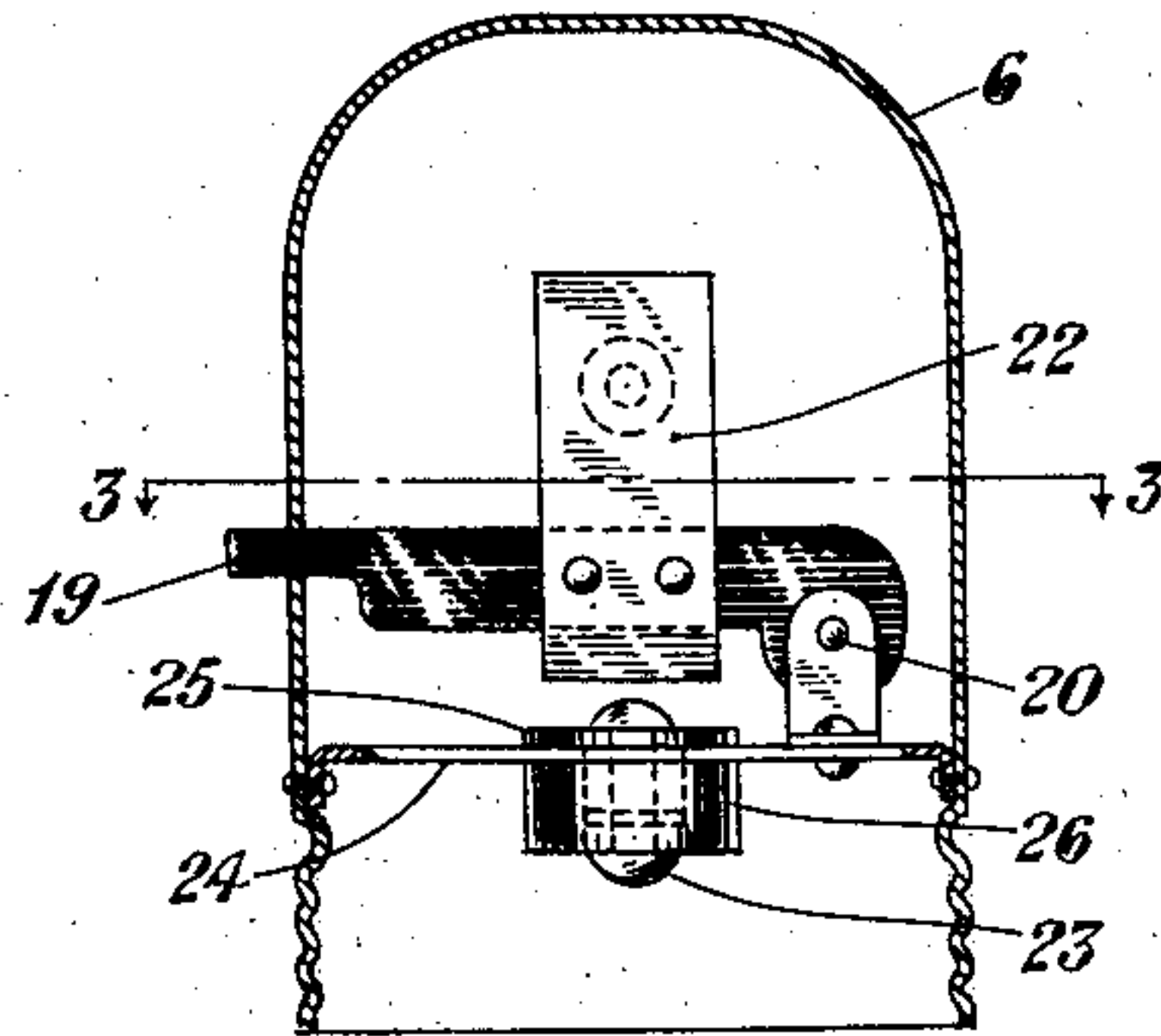


Fig. 2

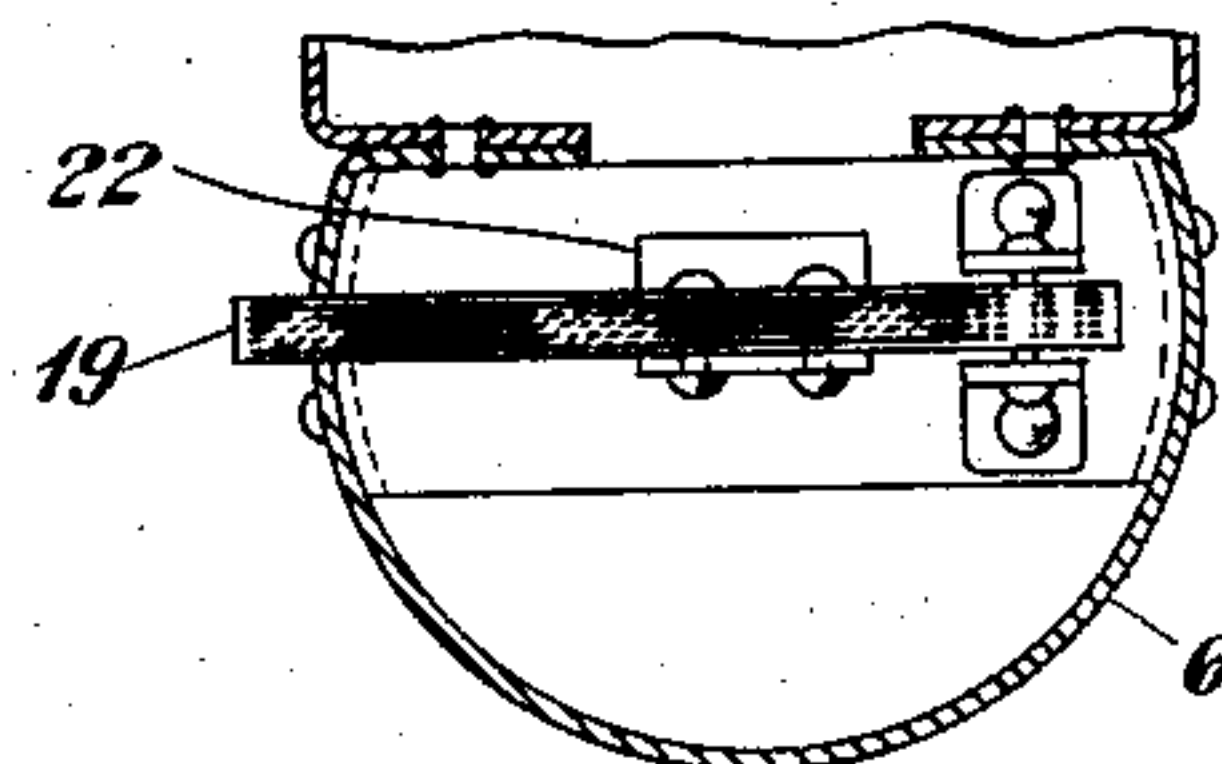


Fig. 3

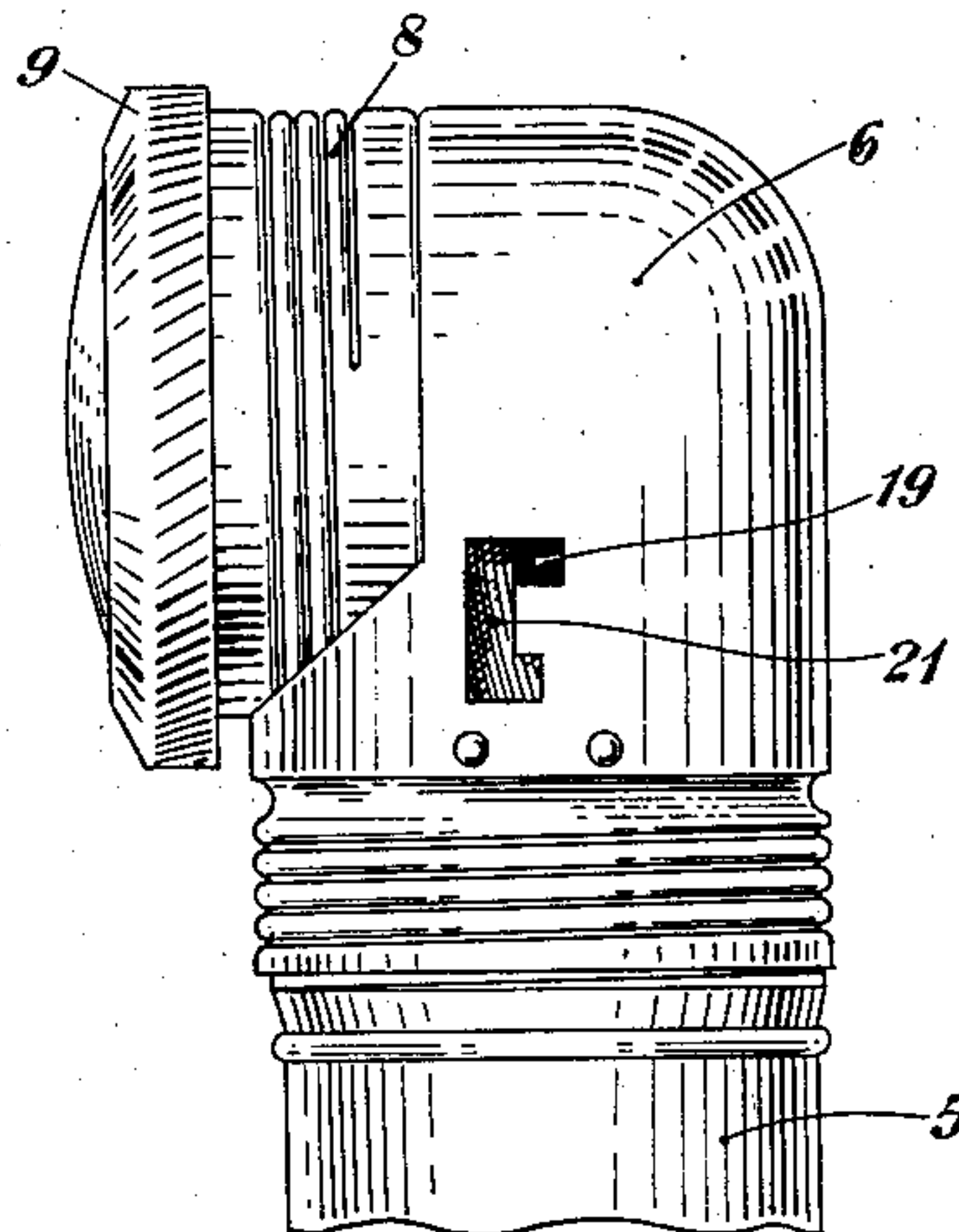


Fig. 4

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UNITED STATES PATENT OFFICE.

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BATTERY LIGHT.

Application filed February 8, 1926. Serial No. 86,903.

This invention relates to battery lights, and more particularly to switching arrangements in such lights for closing and opening the electric circuit.

5 In battery lights provided with switch control means secured to the side of the battery case, it is necessary, if the ordinary type of circuit is used, that the reflector and numerous connections be insulated from the casing. This requirement gives rise to
10 various chances of circuit trouble due to faulty insulation.

It is the object of applicant's invention to provide such an arrangement of the circuit
15 and the switching means that the number of insulated parts is reduced to the minimum.

Applicant's invention will be clearly understood when the following detailed description of one desirable embodiment thereof is read with reference to the accompanying drawing. Figure 1 of the drawing is a sectional view of applicant's battery light taken in a lateral direction; Fig. 2 is a sectional view of the head portion of the light taken on the line 2—2 of Fig. 1; Fig. 3 is a sectional view of the head taken on the line 3—3 of Fig. 2; and Fig. 4 shows a side elevation of the head portion.
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30 With reference to the details of the drawing, the case of the battery light includes the battery case portion 5 and the head portion 6, both constructed of metal. The portion 5 is threaded at its upper end to receive the head portion 6 and at its lower end to receive the screw cap 7. The head portion 6 is so constructed as to carry riveted to it an extension member 8 which is internally threaded to receive the externally threaded lens cap 9. In the head of the light there is
40 mounted the lamp 10 with filament 11, base member 12 and contact tip 13. The reflector 14 is held in position by the supporting ring 15 of brass or other suitable metal. The battery cells 16 and 17 are mounted in the usual position in the battery case 5 and are forced upward by the spring 18 mounted in the screw cap 7. A switch lever 19 constructed of hard fibre or other suitable insulating material is pivoted at one end at
45 20; the other end of this lever extends

through the slot 21 in the head portion of the battery case, so located that the switch may be conveniently operated with the thumb. The switch lever 19 carries riveted
55 to it the spring brass contact strip 22, the upper end of which makes contact with the lamp tip 13 at all times. The contact button 23 is mounted near the base of the head portion on the brass strip 24, and is insulated
60 from this strip by the fibre members 25 and 26. This button 23 makes contact with the upper end of the battery cell 16, and this contact is maintained by the upward pressure of the spring 18. The switch lever 19
65 may be thrown up or down in the slot 21, and a notch is provided at each end of the slot, the lever being forced into one of these notches upon operation by the action of the spring contact strip 22. With the lever 19
70 in the upper notch of the slot, the circuit is broken between the contact strip 22 and the contact button 23. When the switch lever is thrown down, it forces the lower end of the contact strip 22 down into contact with
75 the button 23. There is thus connected the following circuit: upper cell 16, lower cell 17, spring 18, screw cap 7, battery casing 5, reflector 14, base member 12, filament 11, contact tip 13, contact strip 22 and contact
80 button 23.

It is clear from the above description that applicant's circuit and switching arrangements permit a reduction in the number of insulated parts as compared with the
85 ordinary battery light having the switch control on the side of the battery case.

While applicant's invention has been described in one particular embodiment, which is deemed desirable, it is to be understood
90 that it is capable of embodiment in other and different forms within the scope of the invention as defined in the appended claim.

What is claimed is:

In a battery light, a lamp, a source of
95 electric current, a casing member and a reflector member forming a current path between one terminal of said source of current and said lamp, an insulated contact button making connection with the other
100 terminal of said source of current, a longitudinally movable contact strip making con-

tact at one end thereof with said lamp in any position of said strip, and a lever of insulating material fixed to said strip, said lever being pivoted at one end, having its free end projecting through a longitudinal slot in the casing member, and being so positioned that when it is operated from one end of said slot to the other end it forces the contact strip into contact with the insulated contact button, completing the electric circuit. 10

In testimony whereof, I have signed my name to this specification this 6th day of February, 1926.

EVERETT ST. JOHN.