E. F. THOMAS.

BUTTONHOLE ELECTRIC LIGHT.

APPLICATION FILED JULY 31, 1917.

**1,271,390.** Patented July 2, 1918.

Fig. 1.

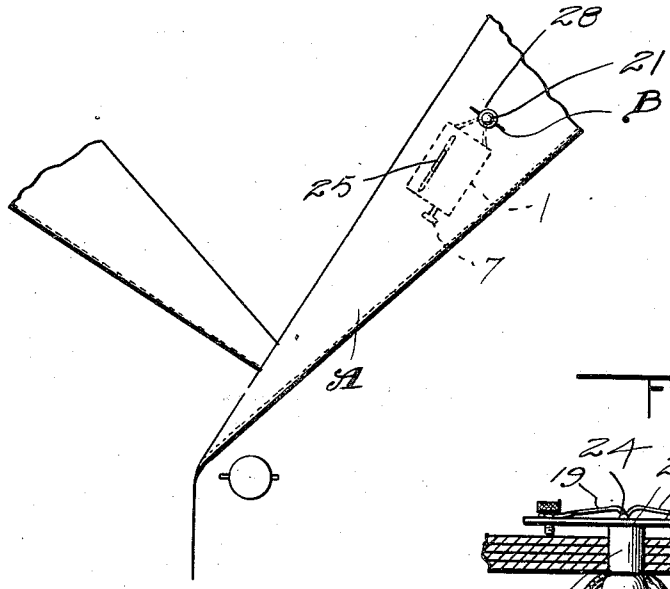



Fig. 4.

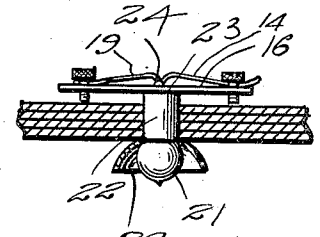



Fig. 2.

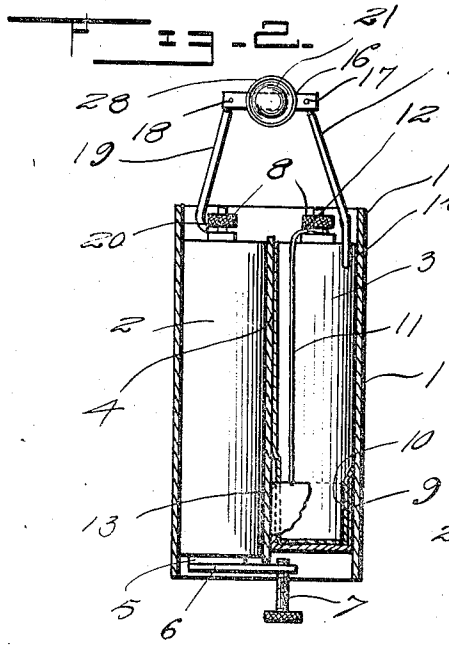
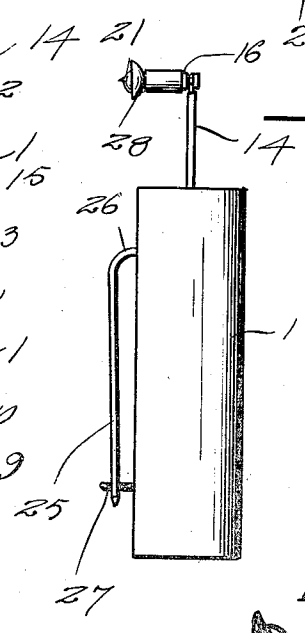



Fig. 3.




Witnesses

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# UNITED STATES PATENT OFFICE.

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## BUTTONHOLE ELECTRIC LIGHT.

1,271,390. Specification of Letters Patent. Patented July 2, 1918.

Application filed July 31, 1917. Serial No. 183,754.

*To all whom it may concern:*

Be it known that I, EDWIN F. THOMAS, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Buttonhole Electric Lights; 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 improvements in button hole electric lights.

The object of this invention is to provide a button hole flash light or electric light capable of being readily and quickly fastened to the garment of a person so that the light rays radiating therefrom may penetrate in the pathway of the person upon whom the device is secured.

Another object of this invention is to provide a device capable of being secured to the under side of the lapel of a coat and the flash light bulb arranged to extend through the button hole thereof so that the batteries may be concealed from view, thus providing a tidy and neat appearance and at the same time permit the path of the person wearing the same to be illuminated.

A further object of this invention is to provide a button hole electric light of this character, which will be simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view, the invention consists in the novel combination and arrangement of parts hereinafter more fully described and set forth in the claims hereto appended.

In the drawing:

Figure 1 is a front elevation illustrating the same applied to the lapel of a cost and as made in accordance with this invention,

Fig. 2 is a vertical sectional view taken through the main casing and illustrating the battery cells and the manner in which the same is wired up,

Fig. 3 is a side elevation of the same,

Fig. 4 is a transverse sectional view illustrating the manner in which the bulb extends through the button hole of a cloth garment or the like,

Like numerals of reference designate corresponding parts in all the figures of the drawings.

Referring to the drawings, the numeral 1 designates the supporting casing, which has both ends open as illustrated, and has located therein, the battery cells 2 and 3 respectively. The battery cells are secured within the casing 1 and terminate adjacent each end thereof as illustrated and these cells are insulated from one another by the vertically extending insulating strip 4, which is arranged between the opposing faces. The strip 4 extends above and below the ends of the cells 2 and 3 to prevent them from coming in contact with one another. The cell 2 is provided on its lower end with a lug 5, to which is secured a laterally extending extension 6, through which is adapted to extend, a circuit closing screw 7, which has its inner end located in direct alinement with the under side of the battery cell 3.

Each of the battery cells 2 and 3 respectively are provided with a binding post 8 of any suitable construction.

The cell 3 has removably arranged on its lower end, a removable cap 9, which is insulated therefrom by suitable insulation 10. A wire 11 has one end connected to the binding post 8 of the battery 3 as at 12 and has its opposite end secured to the cap as at 13.

A wire 14 has one end secured to the side face of the battery 3 adjacent the upper end thereof as at 15. The wire is then extended upwardly and has secured adjacent its free end an insulated block 16, as at 17. The insulated supporting block is arranged in a horizontal plane and has secured to its other end, as at 18, a wire 19. One end of the wire 19 is secured to the binding post 8 of the battery cell 2, as at 20, thus it can be seen that a circuit will be completed to a lamp bulb 21 which is removably arranged in a socket 22 secured centrally to the insulating block 16. The socket is secured to the free ends of the wires 14 and 19, respectively, and thus it can be seen that by urging the circuit closing screw 7 into engagement with the cap carried by the cell 3, the circuit will be completed through the wire 11 and through the wire 14 into the socket, lighting the lamp, and then down through the wire 19 into the cell 2 and through the member 6 and screw 7. The wires 14 and

19, respectively, are illustrated as being connected to the socket 22, as at 24, and illustrated in Fig. 4.

The casing 1 has secured to its exterior on one face thereof, a supporting pin 25, which facilitates the securing of the same to the lapel of a coat or other suitable place about a garment. The pin 25 is secured to the face of the casing 1 as at 26 and has its free end extended downwardly and adapted to be arranged under a suitable catch 27, secured to the casing 1 adjacent the lower end thereof and as illustrated in Fig. 3, thus it can be seen that the same may be removably supported upon a garment in any place desired. A reflector 28 is removably secured or formed integrally with the socket 22 and is located in rear of the lamp bulb 21, which is fitted in the socket, radiating the rays of light therefrom. It is also to be noted that the reflector 28 will facilitate the holding of the device securely within the button hole in the lapel of a wearing apparel.

The device is illustrated as being applied to the lapel of a coat designated A, and the pin is arranged to extend through the lapel, supporting the batteries and casing on the under side thereof and permitting the light bulb 21 to extend through the button hole designated B so that the light may penetrate in the path of the user.

In operation, when it is designed to light the bulb 21, it is only necessary to screw inwardly on the circuit closing screw 7, forcing the inner end into engagement with the cap 9, which completes the circuit through the wire 11 and battery 3 and then through the wire 14 and the lamp 21 and then down through the wire 14, the battery 2, and through the extension 6 and screw 7 and again into the battery 3.

The device may be used in the manner illustrated in Fig. 1, or it is to be understood that the same can be applied in any desired position desired by the user.

What is claimed is:

1. A device of the class described comprising a supporting casing, battery cells located in said casing, an insulating means located in the casing and between the cells, wires connected to each cell and extending out through one end of the casing, a light supporting block carried by the wires, a contact strip carried by one of the cells and located in close proximity to the other cell, and means extending through the casing and engaging the strip for engagement with the other cell to complete the circuit to the light through the wires and batteries.

2. A device of the class described comprising a supporting casing, means for supporting the casing to the garment of a wearer, battery cells located in the casing, an insulating means located between each cell, a wire secured to one binding post and extending through the casing, a second wire secured to the other cell and extending from the casing, a light supporting block carried by the wires, a light carried by the block, a third wire secured to the binding post of the other cell and extending downwardly therefrom, a cap removably arranged over said cell and secured to the free end of the last named wire, a contact strip secured to the other cell and extending in close proximity to the cap, and means extending through the casing in contact with the strip and adapted to be urged into engagement with the cap for completing the circuit to the light, as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN FRANK THOMAS.

Witnesses:

JAMES McAVOY,

CHARLIE TITTEL.