Nov. 12, 1940. I. E. BRYK 2,221,295

TROUBLE LIGHT HOLDER AND SWITCH

Filed June 17, 1939

Fig. 1.

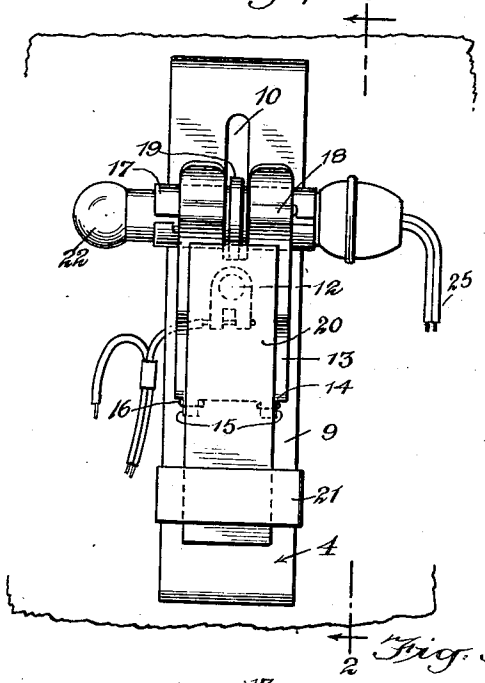


Fig. 2.

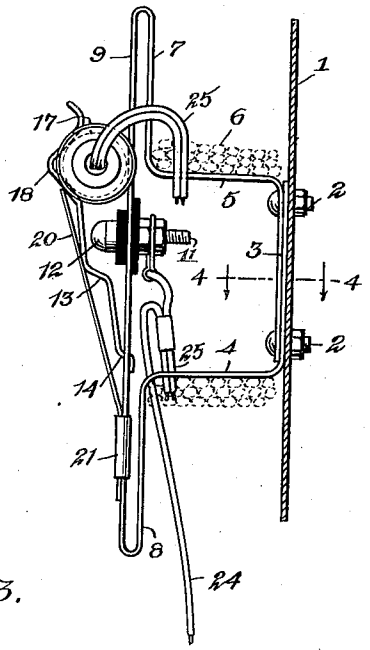


Fig. 3.

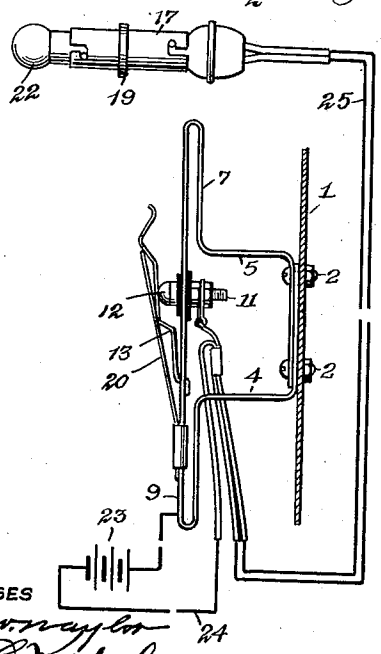
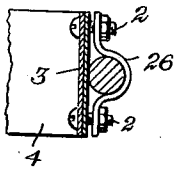


Fig. 4.



WITNESSES

Geo. W. Naylor

A. L. Ritchin

INVENTOR

Ignatius E. Bryk

BY

Munn, Anderson & Liddy

ATTORNEYS

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TROUBLE LIGHT HOLDER AND SWITCH

Ignatius E. Bryk, West New York, N. J.

Application June 17, 1939, Serial No. 279,649

2 Claims. (Cl. 240—8.18)

This invention relates to an improved trouble light holder and switch and has for an object to provide a construction which is adapted to be mounted on the instrument board of an automobile or other convenient place and automatically turn the current on and off as the light is moved into or out of engagement with the holder.

Another object of the invention is to provide a holder for a trouble light provided with a switch which is automatically opened when the trouble light is mounted on the holder and which presents means acting as a reel on which the wires or cables of the light may be wound when not in use.

In the accompanying drawing—

Fig. 1 is a front view of a trouble light holder disclosing an embodiment of the invention, the same being shown applied to the instrument board of an automobile;

Fig. 2 is a sectional view through Fig. 1 approximately on the line 2—2;

Fig. 3 is a view similar to Fig. 2 but provided with a diagram illustrating how the switch functions and how the light may be used;

Fig. 4 is a sectional view through the rear part of the holder shown in Fig. 2, the same being illustrated in connection with a supporting rod instead of the instrument board of an automobile.

Referring to the accompanying drawing by numerals, 1 indicates any suitable panel, as for instance, the instrument board of an automobile and 2 a number of clamping bolts for clamping in place the overlapping ends 3 of the holder frame 4. This frame is made from suitable metal, as for instance steel, and is provided with a section 5 that really acts as a reel for the cable or wire 6. The material of section 5 merges into upper and lower loops 7 and 8, as shown in Fig. 2, and these loops merge into a front plate 9 having a slot 10. A bolt 11 extends through the center part of plate 9 but is insulated therefrom and at the outer end provides a contact 12 adapted to be engaged by a swinging metal plate 13 which is pivotally mounted at 14 by having a pair of fingers 15 projecting through suitable slots 16, as shown in Fig. 1. This plate 13 acts as a clamping or retaining plate for a lamp 17.

It will be observed that the clamping plate 13 is provided with a V-shaped portion 18 that partly surrounds the base of the lamp and holds the annular bead 19 thereof projecting into slot 10. This will prevent the lamp from becoming accidentally disengaged. A spring 20 bears against plate 13 and is held in place by a strap 21, whereby the spring continually functions to tend to swing plate 13 to the right, as shown in Fig. 2, whereby it will engage when released the contact 12, as indicated in Fig. 3. Strap or sleeve 21 may slid along plate 9 to vary the tension of spring 20. The lamp 17 will normally hold plate 13 out of engagement with contact 12 and, consequently, the circuit of the bulb 22 will be opened. The moment that the lamp is pulled out of the holder, spring 20 will move the plate 13 over into engagement with contact 12 and, consequently, the circuit of the lamp will be closed.

As shown in Fig. 3, the plate 9 is grounded on one side of the battery 23 and wire 24 extends from the other side of the battery to one terminal of lamp 17. The other terminal of the lamp 17 is engaged with a wire 25 which extends to the bolt 11 where it electrically engages the same and thereby charges the contact 12 continually. When the plate 13 engages contact 12 the circuit will be closed and the bulb will be supplied with current.

When it is desired to use the trouble light the same may be grasped and pulled out of the holder, whereupon the bulb 22 will immediately light up. As much of the cable 6 as desired may be unwound from the section 5 and the trouble light used in the regular way. After use the trouble light is merely forced downwardly into the position shown in Fig. 2 and the current is automatically turned off. Before this is done the desired amount of cable is wound on section 5 and then the lamp is placed in the holder.

By reason of this construction it will be seen that the trouble light is always in condition for use but current is not flowing until after the lamp has been disengaged from its holder.

In Fig. 4 a slightly modified construction is shown wherein a U-shaped bracket 26 is secured to the overlapped ends 3 by the bolts 2 instead of the bolts securing these ends to the instrument board as shown in Fig. 2. It will be evident that other means for mounting the holder may be used without departing from the spirit of the invention. However, it is desired to mount the holder at a convenient place to the driver of the automobile so that he may at any time quickly grasp the lamp 17 and use the same.

I claim:

1. A trouble lamp and holder including a body provided with a front plate having a slot therein, a contact carried by said front plate, means for insulating said contact from said front plate, a lamp having having a bulb and a socket formed with an annular bead, said bead being adapted

to project into said slot when the socket is resting against said front plate and extending transversely thereof whereby the socket is held against independent movement transversely of the front plate, a clamping plate hingedly mounted at one end, said clamping plate at the free end having a pair of spaced substantially V-shaped clamping fingers fitting over said socket and straddling said bead for holding the socket against said front plate, a spring continually urging the free end of said clamping plate toward said front plate whereby said socket is removably held against said front plate, and a circuit for said bulb including said socket, said front plate and said contact.

2. A trouble lamp and holder as set forth in claim 1 characterized by having means for adjusting the tension of said spring, said means having a retaining band encircling said spring and said front plate and slidable along said spring and front plate.

IGNATIUS E. BRYK.