This invention relates to an electric switch for motor vehicles, and more particularly to a manually operated switch for flashing courtesy signals to drivers of other vehicles that it is safe for passing.

It is well known to those experienced in the art that there is a great need for a reliable courtesy switch for giving the above stated signals, and it was with this objective in mind that applicant invented the courtesy signal switch that was granted U.S. Patent No. 2,869,033, issued January 13, 1959 for his foot operated switch.

It is therefore an object of the present invention to provide an improved switch in the electric lighting circuit of a motor vehicle that may be operated by either the hand or foot of the operator.

Still another object of this invention is to provide a courtesy switch that will automatically disconnect the electric lighting circuit to the courtesy light when the hand or foot is removed from the switch.

Other and further objects and advantages of this invention will be hereinafter described and the novel features thereof defined in the appended claim.

Referring to the drawing:

Figure 1 is a vertical section of a courtesy signal switch constructed according to an embodiment of this invention, showing the switch clearly connected to the electric lighting circuit of a motor vehicle, the lighting circuit being shown diagrammatically.

Figure 2 is a sectional view taken substantially along line 2-2 of Fig. 1 as viewed in the direction indicated by the arrows.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Having reference now to the drawing in detail, and in particular to Fig. 1, there is generally indicated by the reference character 5 an electric switch embodying a box 6 having threaded terminal posts 7 and 8 which are insulated from the stated box by insulating washers 9 and 10. Threaded electric contacts 11 and 12 are also secured to box 6 by means of nuts 13. A binding post 14 in the bottom of the box 6 completes the terminal and contact assembly of this switch, as clearly shown in Fig. 1 of the appended drawing.

A spring contact 14 having a curved end 17 is secured to the head 16 of each of the terminal posts 7 and 8, the curved end of the contact being located directly over the head of the threaded electric contacts 11 and 12 with which they come into contact as the switch is operated, as will later be described in this specification.

A rubber finger 18 is connected to the binding post 14, while directly above the center of this finger is the lower end 19 of toggle 20. A non-metallic horizontal member 21 is secured to the stated lower end 19 of the toggle, while the toggle itself passes through a coil compression spring 22 which has its upper end pressing against the underside of plate 23, while its lower end is pressing against the horizontal member 21.

Although it has not been stated, it is realized from examination of Fig. 1 of the drawing that plate 23 has an opening 24 through which the toggle 20 projects, the toggle being pivotally secured to a lug on the outward face of the plate. The toggle 20 of course extends beyond the lug and terminates in a handle 24. The plate 23 is secured to supporting flanges 25 of the box 6 by any suitable means.

This courtesy signal switch, which has been described in considerable detail, is now secured to the vehicle, herein designated by the letter V in any desired location within reach of its operator. An electric wire 26 connects terminal post 7 with headlights 27 of the vehicle. A branch wire 28 connects this same terminal with the front signal light 29, while a third electric wire 30 connects terminal 8 with rear signal lights 31. Electric contact 11 is connected to the positive side of battery 32 by means of electric wire 11. The contact 12 is also connected to the positive side of the battery by means of electric wire 33. The battery 32 is of course the same one that forms a part of the basic electric system of the vehicle.

A switch 34 is wired to the positive side of the battery and is connected to the binding post 14 by electric wire 35. It is obvious from examination of Figure 1 of the drawing, that when the handle 24' of the toggle switch is moved to the right, both the headlights 27 or other bulbs in the headlamps and the front signal light 29 will go on and if the switch 34 is closed at this time the rear signal lights 31 or tail light in the same circuit and housing will stay on.

When the handle 24' is moved to the left, the rear signal light 31 will light up and should the stated switch be closed at this time, the head lights 27 and front signal light 23 will remain lit.

It is to be understood that this electric switch operates both the headlamps 27 and signal lights 29 and 31 as signals day or night, regardless of whether the switch in the vehicle is turned on or off.

From the foregoing it will now be seen that there is herein provided an improved electric switch for motor vehicles which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it will be understood that all matter heretofore interpreted merely as illustrative and not in a limiting sense.

I claim:

An electric switch for interposing in a pair of light circuits, comprising a housing having side and end walls and top and bottom walls, a stationary U-shaped contact member mounted in said housing, the ends of said U-shaped contact member extending upwardly and being spaced from the end walls of said housing, a pair of upper and lower electric circuit terminal posts extending through the end walls of said housing, spring contacts having curved lower ends, connected with the upper terminal posts of each pair of terminal posts and normally contacting said upwardly extended ends of said U-shaped contact member, completing a circuit through the U-shaped contact member and upper terminal posts of each pair of terminal posts, a vertical pivoted toggle extending through the top of said housing, a non-metallic bar secured to the end of said toggle within said housing, the ends of said horizontal bar lying opposite to the curved ends of said spring contacts, between said contacts, adapted to move the ends of said spring contacts into contact with the lower terminal of either pair of terminals, completing an electrical circuit and simultaneously engaging the upwardly extended ends of said U-shaped contact member with which said spring contact arm normally engages, upon lateral movement of said toggle within the housing.

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