

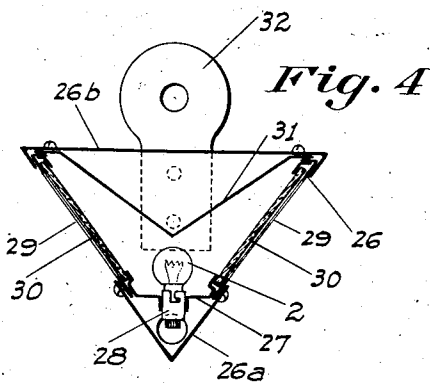
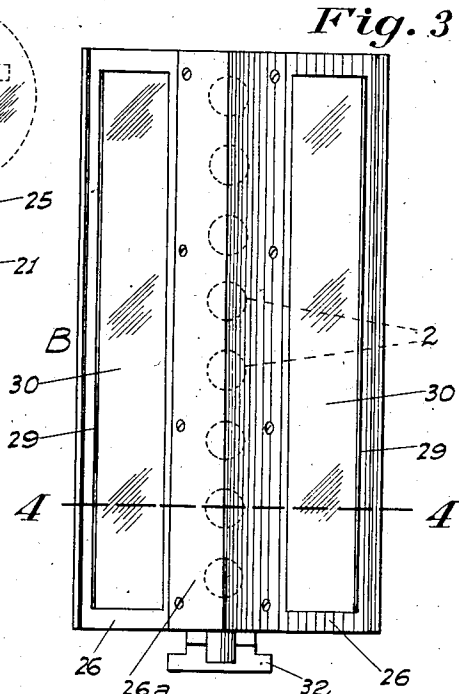
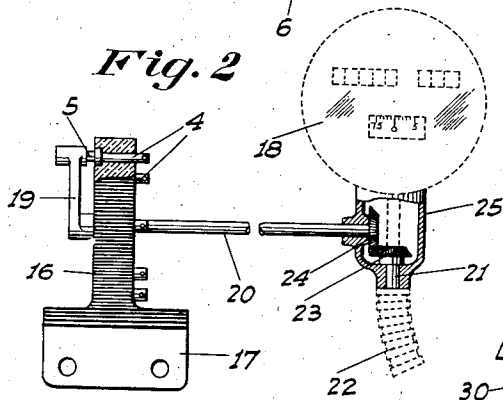
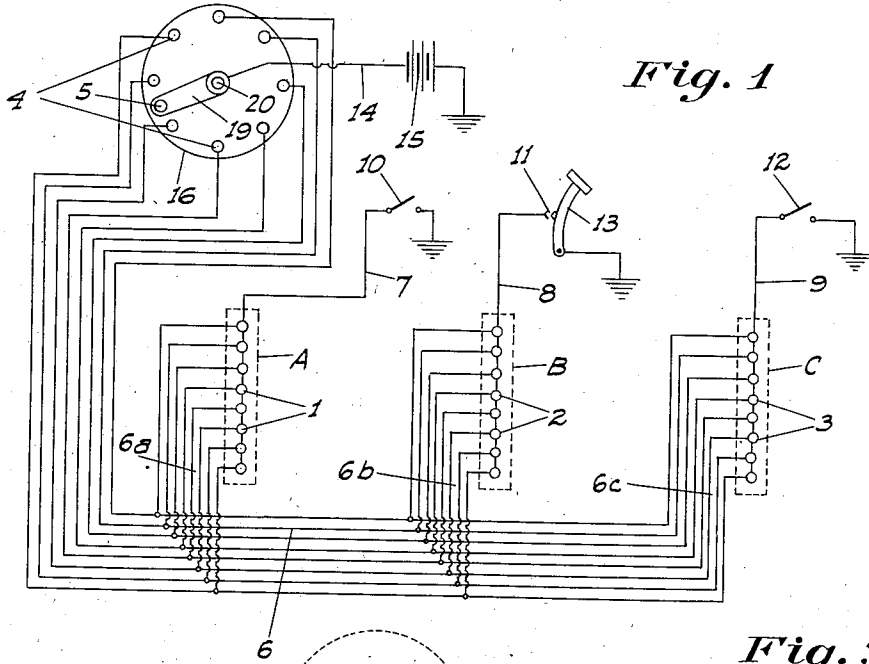
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SIGNAL FLASHING SYSTEM

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UNITED STATES PATENT OFFICE.

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SIGNAL-FLASHING SYSTEM.

Application filed February 24, 1926. Serial No. 90,322.

This invention relates to improvements in signal devices for motor vehicles, of the fixed type which function by the flashing of electric lights controlled by the driver of the vehicle.

The present invention particularly represents an improvement over the type of device shown in my co-pending application for patent filed February 9th, 1925, Serial No. 7823; my principal objects now being to arrange a simplified structure for operating the distributor brush from a moving element of the vehicle, and to provide an improved form of light casing so constructed that the lights as they are flashed will be visible from both sides of the car as well as from the rear, and without any direct glare being thrown into the eyes of an oncoming driver.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a diagrammatic view of the system.

Fig. 2 is an end view of the distributor showing the connection of the distributor brush with the drive shaft of an ordinary speedometer.

Fig. 3 is a rear elevation of a light casing.

Fig. 4 is a cross section of the casing on the line 4—4 of Fig. 3.

Referring now more particularly to the characters of reference on the drawings, I preferably employ three separate signal members A, B, and C, to indicate the left hand, stop or rear, and right hand signals respectively. These signal members are preferably individual units to be mounted on the rear left hand fender, at the center of the car, and on the rear right hand fender respectively. These signal members are hereinafter described in detail.

These various signal members have batteries of electric light bulbs 1, 2, and 3 respectively, all the signals having the same number of lights, which are preferably arranged in a vertical row in said signal members, as hereinafter set forth. To cause the

lights to be flashed on and off in consecutive order I employ the following circuit and operating structure: A plurality of separate contacts 4 insulated from each other are adapted to be engaged in consecutive and recurring order by a revolving brush 5, the number of contacts 4 being the same as the number of lights in each signal. Wires 6 are connected to the contacts 4 and lead thence to connections with the different batteries of lights 1, 2, and 3 in parallel relation by means of branch leads 6^a, 6^b, and 6^c respectively. The batteries of lights 1, 2, and 3 have common return wires 7, 8 and 9 respectively with switches 10, 11 and 12 interposed therein. The switches 10 and 12 controlling the left and right hand signals A and C are preferably of the push-button type and would be mounted on the steering wheel of the vehicle on which the system is installed. The switch 11 controlling the stop signal B would preferably be of that commonly employed type closed by the depression of the foot pedal 13. The lead from the moving contact 5 is connected to one terminal of the battery 15 of the car. The other terminal of the battery is grounded on the car as are the wires 7, 8 and 9 beyond the switches. These grounds course merely take the place of the actual wire connections between the battery and said wires 7, 8 and 9, which would otherwise be necessary.

The wires 6 are so connected to the different lights in the respective signals that with the rotation of the brush 5 the lights are flashed on and off in a predetermined and recurring sequence, either up or down as may be desired.

The contacts 4 are mounted in concentric relation to each other in a support 16 of insulating material. This support is mounted on a bracket 17 adapted to be attached to the inner or forward face of the dashboard of the car, to one side of the usual speedometer 18, which also is of course mounted on the dashboard as is customary.

The brush 5 is mounted on an arm 19 secured to a horizontal shaft 20 which extends toward the speedometer. The speedometer shaft 21, above the termination of the usual flexible shafting enclosed in the tubing 22, is provided with a bevel gear 23 which engages a similar gear 24 fixed on the shaft 20. The adjacent end of this shaft is journaled in a casing 25 which connects the

speedometer with the tubing 22 and in which the bevel gears are enclosed. This provides a simple and compact driving arrangement and enables the distributor to be concealed and located in a position where it is not liable to be splattered with grease or dirt or damaged in any way.

All the signal members are preferably of the same form and each is constructed as follows, taking the central member B as an example: A vertical casing 26 is provided for each member in the form of a triangle of symmetrical form in a horizontal plane. The apical portion of the casing, pointing toward the rear, is in the form of a removable cap 26^a, the sides of the casing proper adjacent the inner end of the cap being connected by a transverse wall 27. Socket and wire connection members 28 for the lights 2 are mounted in the wall 27 in vertically spaced order, the lights facing inwardly of the casing or away from the cap 26^a. The space between the wall 27 and the said cap, into which the members 28 project, provides sufficient room for the wires running to the different lights, so that the wires are concealed. The cap being removable it enables the wiring connections to be readily made and inspected whenever necessary, while normally maintaining them out of sight.

The side walls of the casing are provided with vertical openings 29 backed by panes 30 of glass or the like colored or not as may be desired. To cause the rays from the lights 2 to be reflected efficiently through these side panes, a reflecting element 31 triangular in a horizontal plane is mounted in the casing ahead of the lights, the reflector extending for the full height of the casing and the apex thereof being centrally disposed relative to the lights a short distance ahead of the same. The back plate 26^b of the casing, as well as the reflector, are removable, to enable the lights to be replaced when necessary.

A bracket 32 of a character suitable for attachment to a convenient member of the vehicle is mounted on and projects forwardly from the bottom of the casing.

The lights may be all of one color, of

whatever color may be desired, or they may be of different colors, arranged in alternate order to provide a multicolored flashing effect. By reason of the particular casing structure employed the light rays from any casing are visible not only from the rear of the vehicle but from both sides of the same as well. The lights facing forward never cause a direct glare to be had, while as previously stated, the use of the removable cap 26^a conceals the unsightly wiring connections and light sockets otherwise visible and maintains the neatness of appearance of the casing.

The right and left hand casing A and C however, would be mounted with the apex of the casing projecting upwardly and extending transversely of the vehicle. Such casings would preferably be mounted on top of the fenders, so that the signal when given would show both from front and rear. A different form of bracket would of course have to be provided from that shown for use with the centrally disposed casing B.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claim.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

A signal device including a casing comprising a back plate and translucent side plates converging from the edges thereof toward each other but terminating in edges spaced from each other, a wall extending between said spaced edges of the side plates, longitudinally spaced light sockets in the wall to hold lamps directed toward the back of the casing, and a V-shaped cover mounted to cover the sockets and complete the convergence of the side walls.

In testimony whereof I affix my signature.

DELVIN B. HARRIS.