March 9, 1926 1,575,986

B. L. GAMBLE, JR

CIRCUIT CLOSER FOR BACK SIGNALS

Filed August 29, 1923

Fig. 2.

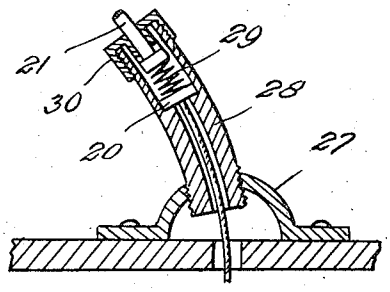
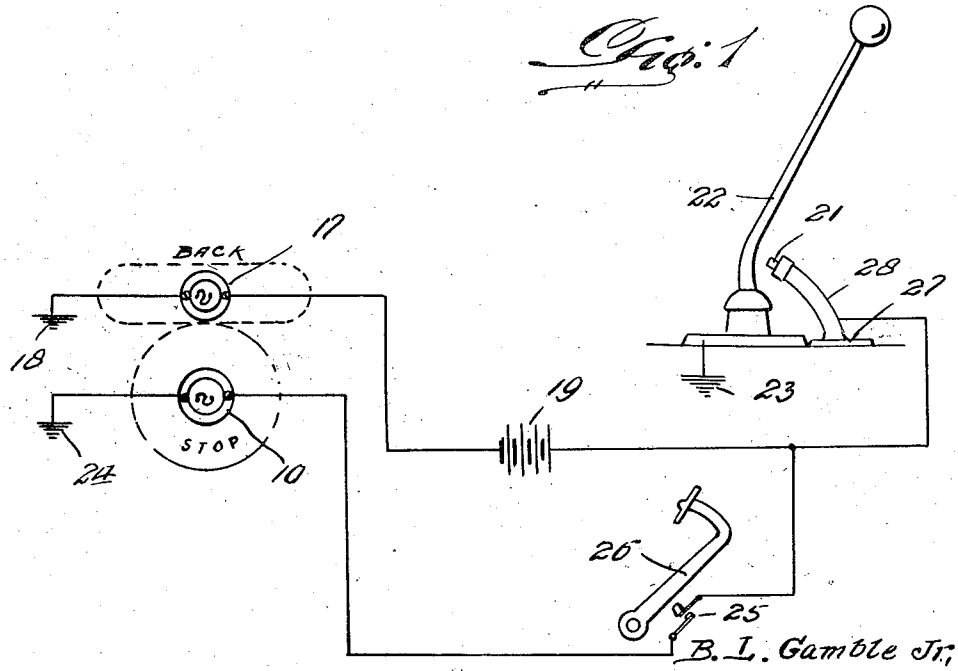


Fig. 1



Witnesses:
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UNITED STATES PATENT OFFICE.

BURTON L. GAMBLE, JR., OF ST. PETERSBURG, FLORIDA.

CIRCUIT CLOSER FOR BACK SIGNALS.

Application filed August 29, 1923. Serial No. 659,875.

To all whom it may concern:

Be it known that I, BURTON L. GAMBLE, Jr., a citizen of the United States, residing at St. Petersburg, in the county of Pinellas and State of Florida, have invented certain new and useful Improvements in Circuit Closers for Back Signals, of which the following is a specification.

The present invention relates to a circuit closer particularly adapted for use with back signals on automobiles and the like and has for its principal object to provide a simple and efficient structure of this nature which may be used in association with the gear shift lever so that when said gear shift lever is disposed in "reverse" position, said circuit closer will be in a closed position.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

Figure 1 is a diagrammatic view illustrating the preferred arrangement of switches and electric circuits employed in the invention, and

Figure 2 is an enlarged longitudinal sectional view of the circuit closer for the back signal.

Referring to the drawing in detail, it will be seen that I have diagrammatically shown a bulb 17 adapted to be located in a "back" signal. One terminal of this bulb 17 is grounded as at 18 while the other terminal thereof is connected to a suitable source of electricity 19.

This source of electricity may consist of the usual battery carried upon motor vehicles having its outer terminal connected to a stationary contact 20 of a special form of switch, and which special form of switch includes a movable contact 21 adapted to be engaged by the usual gear shift lever 22 which is grounded as at 23. A bulb 10 has one terminal grounded as at 24 and its other terminal is connected to a suitable switch 25 which is normally opened and positioned to be automatically closed upon depression of the brake pedal 26 of the vehicle. One terminal of the switch 25 is of course connected to the source of electricity 19, and the switch associated with the lever 22 is preferably of the form shown in Figure 2.

As shown, this switch includes a flanged base 27 adapted to be fastened upon the floor of the car rearwardly of the lever 22 and having a threaded opening into which the curved nipple 28 is threaded, which nipple forms the casing of the switch. The ball of the nipple 28 is enlarged at its upper end to provide a chamber in which the contact 20 is placed, and a compression spring 29 is interposed between the contacts 20 and 21 to normally project the latter outwardly of the end of the nipple 28 through a central opening provided in a cap 30 which is threaded upon the ends of said nipple.

In operation, the contact 21 is adapted to be engaged by the lever 22 when the latter is shifted to reverse gear position so that the circuit through the bulb 17 is closed for illuminating a suitable signal for advising drivers of vehicles of the intention of the driver of the car equipped with the present signal to back the vehicle. The spring 29 merely provides a yielding mounting of the contact 21 for permitting the lever 22 to engage said contact just prior to final movement of the lever to reverse gear position.

What I claim as new is:

A switch for electric "back" signals comprising a hollow base having a flange adapted for attachment to the floor of a vehicle, said base having a threaded opening, a curved nipple threaded at its lower end into said opening and constituting a switch casing, said nipple having a bore enlarged at its upper end and forming a shoulder, a screw threaded cap disposed on the upper end of the nipple and having a central opening, a contact movable through said opening in the cap, a fixed contact in the enlarged portion of the bore and resting on the shoulder therein, a lead extending through the remaining portion of the bore and through the base, yieldable means engaged between the two contacts electrically connecting the same for projecting the first mentioned contact outwardly through said cap, said base being adapted to be mounted rearwardly of a gear shift lever whereby the movable contact is engaged by said lever when the latter is shifted into reverse gear position, and means to provide a ground connection for the gear shift lever.

In testimony whereof I affix my signature.

BURTON L. GAMBLE, JR.