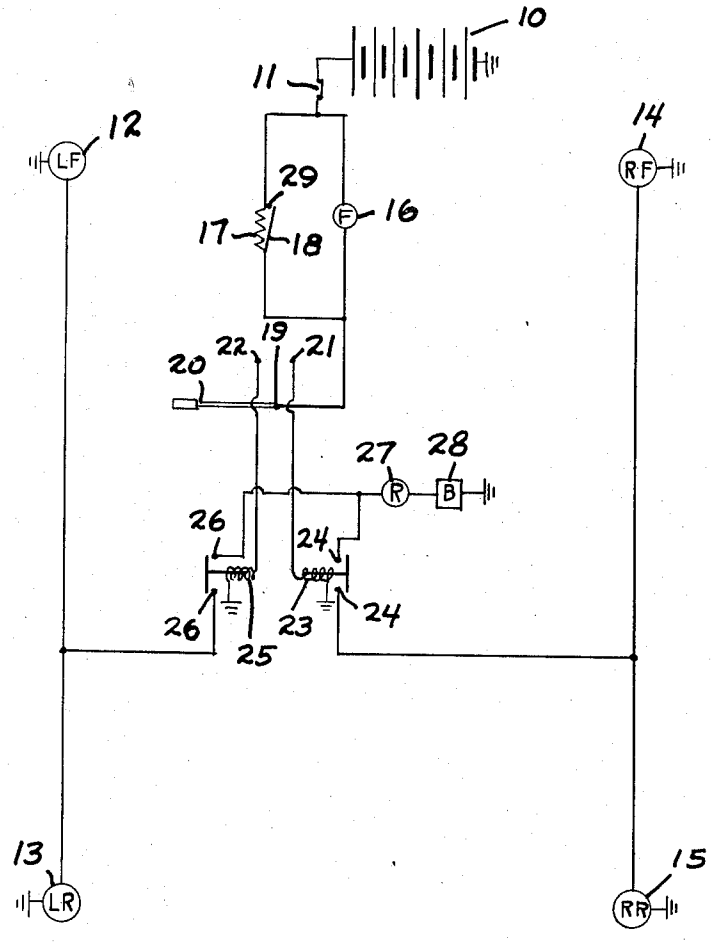
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TURN SIGNAL WARNING DEVICE

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TURN SIGNAL WARNING DEVICE

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1 Claim. (Cl. 340—73)

My invention relates to a turn signal warning device.

An object of my invention is to provide a buzzer or similar signal which will function together with the turn signal arrangement on an automobile which will indicate that the signal is working.

A further object of my invention is to provide an arrangement of this type in which the buzzer will also indicate if the signal is not working by buzzing steadily at such occurrences.

With these and other objects in view, my invention consists in the construction, arrangement, and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawing, in which the figure shown indicates a wiring circuit by which the objectives of my invention are attained, it being understood that other similar circuits could be employed.

My invention contemplates the provision of a buzzer circuit in combination with the usual turn indicator circuit of an automobile in which the buzzer will indicate to the driver whether or not the turn indicator is operating, my invention also contemplating an arrangement wherein a suitable rheostat is employed to vary the volume of the buzzer.

I have used the character **10** to designate the battery of the automobile, the character **11** the usual ignition switch, and I have used the character **12** to indicate the left front light, the character **13** indicating the left rear light, the character **14** indicating the right front light, and the character **15** the rear right light.

I have further used the character **16** to indicate the conventional flasher arrangement which causes the circuit to be applied intermittently, and I have used the character **17** to indicate a resistance type relay which actuates the contact **18** at a predetermined heat.

The character **19** indicates the usual turn indicator contact which is operated by means of the lever **20**, the character **21** indicating the contact for establishing the circuit for the right turn, the character **22** indicating the contact for establishing the circuit for the left turn.

I have also used the character **23** to indicate a double contact relay having the contacts **24**, said relay being operable on the right contact, the character **25** indicating a further double contact relay for the left turn having the contacts **26**. These relays are connected into the circuit as shown to a rheostat **27** which in turn is connected to the buzzer **28**, which buzzer can be attached behind the dashboard of the automobile, the rheostat,

however, being controllable and thereby being attached to the front of the dashboard.

It will be noted that if a right turn is made, and if the bulbs **14** and **15** are operating, the flasher **16** will operate since the circuit will be complete, and the buzzer will buzz intermittently thereby indicating to the driver that the device is working satisfactorily. The same applies when the contact **22** is established for the left hand turn.

However, if either one of the bulbs **12** or **14**, for instance, are burned out, since the resistance of the bulb is no longer in the circuit the flasher **16** will operate much faster and the buzzing sound will be more rapid and continuous, thereby indicating to the driver that a bulb is burned out on that particular side.

If both bulbs **14** and **15** burn out, however, and if the turn member **19** establishes a right turn contact, the circuit will not be established to the right hand bulbs and due to this considerably decreased resistance, the current will flow through the resistance relay **17** and the heat set up will cause the member **18** to establish contact with the point **29** whereby the circuit will be shunted past the flasher and will flow directly into the buzzer circuit thereby applying a constant buzzing action which is not intermittent and which will indicate to the driver that the bulbs are burned out so that he can readily replace the same.

The rheostat is used for the reason that the intensity of the buzzing sound can be regulated and rendered quieter in cases where such is desired, and it should be realized that other modifications could be made in my invention without departing from the spirit thereof.

Some changes may be made in the construction and arrangement of the parts of my invention without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claim any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

In combination with the turn signal device of an automobile in which said turn signal includes a pivoted contact bar, and a first contact, and a second contact, a first relay connected to said first contact, a second relay connected to said second contact, a rheostat connected to both of said relays, a buzzer connected in series to said rheostat, a flasher member connected to said contact bar, and in series with the battery of said automobile, a shunt circuit attached to both sides of said flasher member, said shunt circuit including a resistance relay connected therein, said shunt circuit being connected to said battery, said relays being connected to the forward and rearward lights of said automobile.

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