J. PFEIFER.

DIRECTION SIGNAL FOR AUTOMOBILES.

APPLICATION FILED APR. 12, 1917.

1,324,923. Patented Dec. 16, 1919.

FIG. 2

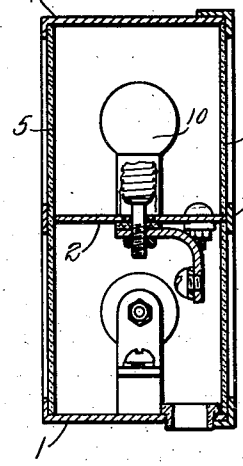


FIG 1

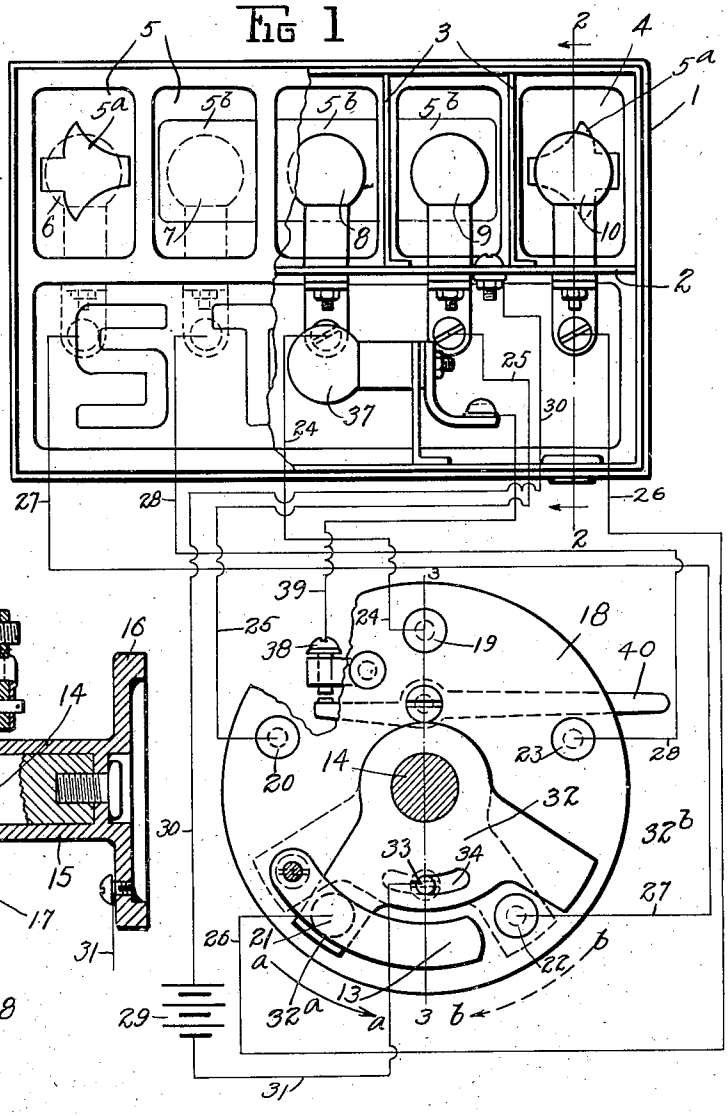


FIG 3

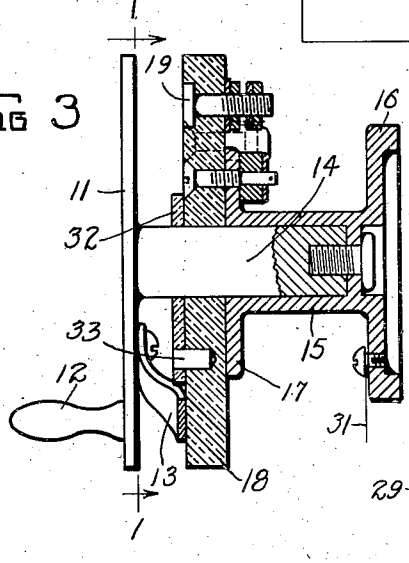
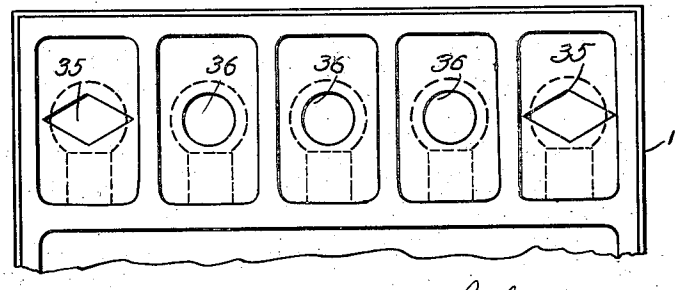


FIG 4



Witness

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DIRECTION-SIGNAL FOR AUTOMOBILES.

1,324,923. Specification of Letters Patent. **Patented Dec. 16, 1919.**

Application filed April 12, 1917. Serial No. 161,429.

To all whom it may concern:

Be it known that I, JOHN PFEIFER, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Direction-Signals for Automobiles, of which the following is a specification.

My invention relates to improvements in signals for automobiles, it more particularly relating to a signal for indicating the direction the driver proposes to turn.

The object of the invention is to provide a direction signal which will possess such novelty as will be calculated to attract attention not only on the part of drivers of other machines but of traffic officers and pedestrians.

In the accompanying drawings:—

Figure 1 is a front elevation of my signal with a portion of the front face broken away so as to show the interior of the casing, the electric circuits and the controlling switch for the same being also shown in connection therewith, the switch being shown in section on the line 1—1 of Fig. 3.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is a modification in the form of the signal indications.

Referring to the drawings, 1 represents a casing of suitable form for attachment to any convenient place on the vehicle, the casing shown in the present case being one which is intended to be attached at a point which can be observed both from the front and rear, such as on the wind shield. The interior of the casing is provided with a centrally arranged transversely extending partition 2 and the upper half of the casing is further divided by vertical partitions 3 into a series of compartments, five being shown in the present instance. The front and rear of each of these five compartments is closed by a window, represented respectively by 4 and 5, these windows being formed from any suitable material such as glass or celluloid. Each window is provided with a translucent design surrounded by opaque material. The design on the windows of each of the end compartments is in the form of an arrow head 5^a, and the design 5^b on each of the intermediate compartments is of a form to indicate a portion of the shaft of an arrow. In each of the compartments there is an electric light represented by 6, 7, 8, 9, and 10 respectively.

For controlling the lights I employ a switch located in convenient reach of the driver. This switch consists of a rotating member shown in the present case as a circular disk or plate 11 provided with a finger piece or handle 12 and with a spring wiper 13, the disk having a rearwardly extending shaft or trunnion 14 journaled in a bearing 15 provided with a base portion 16 by which it may be secured to the point of attachment. This bearing 15 also has a flange 17 on its forward end to which is secured a disk 18 of insulating material which carries a series of contacts, one for each light, represented by 19, 20, 21, 22 and 23, arranged in the path of the wiper 13; the contacts being in electrical connection with the respective lights through the wires 24, 25, 26, 27 and 28. All of the lights in the compartments mentioned are in circuit with the battery 29 by a common wire 30, which may be connected to the transversely arranged partition 2 which is of metal so as to carry the current. The wiper 13 is electrically connected to the other pole of the battery through the metallic disk 11, its shaft 14 bearing 15 and wire 31.

As a result of this construction it will be seen that as the disk 11 is revolved in either direction a series of successive flashes will be caused to travel across the compartment, giving the effect of flying arrows.

In order that but one arrow head may show at each operation of the device, I have provided means for cutting out either one of the lights 6 or 10 and to this end there is provided a cut out in the nature of a plate 32 of insulating material loosely hung upon the shaft 14 having fingers or arms 32^a and 32^b which lie in the path of the wiper 13. When the wiper is turned in the direction of the arrow *a—a*, which will cause the flashes to travel to the right, it will throw the cut-out to the position shown in full lines in Fig. 1, thus covering contact 21 and cutting out light 10. When the disk is turned in the direction of the arrow *b—b*, the cut out will be thrown to the dotted line position thus covering the contact 22 and cutting out light 6; the flashes in this direction of rotation of the disk traveling to the left.

A stop pin 33 projecting from the disk 18

into a slotted opening 34 in the cut out limits the movement of the same.

In Fig. 4 there is shown a modification in the form of the designs on the windows. In this case each of the end windows is the diamond shape design 35 and the intermediate windows of circular design 36. When such a design is employed on the end windows the cut out before described may be eliminated and the flashes caused to travel throughout all of the compartments.

It is obvious that any other suitable form of design may be employed, the main idea of the invention being to cause the series of rapid successive flashes across the compartments in either direction so as to attract attention to the signal.

The lower half of the casing has its windows in the present case shown with the indication Stop thereon and with a light therein indicated by 37. This light 37 is connected to one pole of the battery 29 by the common wire 30 and to the contact 38 by a wire 39. A switch 40 in circuit with the battery provides the means for establishing the circuit, the switch being normally held open by a spring (not shown).

Having thus described my invention, I claim—

1. In a device of the character described, a casing having a plurality of compartments arranged transversely in line with each other, each compartment having a window pervious to light and an electric light in each compartment together with means for illuminating and extinguishing said lights in successive order in either direction in uninterrupted progression, and means for cutting out one of the end compartments when the lights are illuminated successively in one direction and the other end compartment when the lights are illuminated successively in the opposite direction.

2. In a device of the character described, a casing having a plurality of light separated compartments, each compartment having a window pervious to light, an electric light in each compartment, a switch for illuminating and extinguishing said lights in successive order in either direction by a continuous movement thereof, and a cut-out associated with said switch to cut out one of the end compartments, when the switch is moved in one direction and the other end compartment when the switch is moved in the opposite direction.

3. In a device of the character described, a casing having a plurality of electric lights, and a rotary switch which when rotated in one direction successively illuminates and extinguishes said lights in uninterrupted progression, a plurality of successive times in one direction and when rotated in the opposite direction successively illuminates and extinguishes said lights in uninterrupted progression, a plurality of successive times in the opposite direction depending on the number of times said switch is rotated.

4. In a device of the character described, a casing provided with a plurality of compartments arranged transversely in line with each other, each compartment having a window pervious to light, an electric light located in each compartment, and a rotary switch which when rotated in one direction successively illuminates and extinguishes said lights in uninterrupted progression a plurality of successive times in the same direction and when rotated in the opposite direction successively illuminates and extinguishes said lights in uninterrupted progression a plurality of successive times in the opposite direction, depending upon the number of times said switch is rotated.

5. In a signaling device of the character described, a stationary casing having a plurality of compartments, an electric light in each compartment, and devices, together with electrical connections, adapted when operated continuously in one direction to successively illuminate said lights in uninterrupted progression a plurality of successive times in one direction across said casing, and, when operated continuously in the opposite direction, adapted to successively illuminate said lights in uninterrupted progression a plurality of successive times in the other direction across said casing.

6. In a signaling device of the character described, a stationary casing having a plurality of compartments, an electric light in each compartment, and devices, including electrical connections, under manual control for successively illuminating and extinguishing said lights in uninterrupted progression a plurality of successive times in one direction and for also illuminating and extinguishing said lights in uninterrupted progression a plurality of successive times in the opposite direction.

In testimony whereof, I have hereunto set my hand this 5th day of April 1917.

JOHN PFEIFER.

Witness:

CHAS. I. WELCH.