Jan. 5, 1932. C. P. TAYLOR 1,839,276

TRAFFIC BUTTON

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FIG. 1.

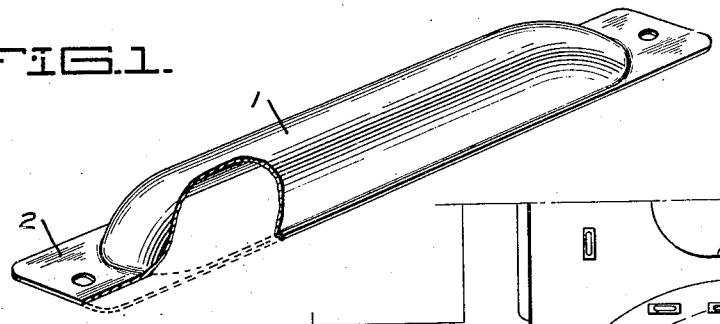


FIG. 2.

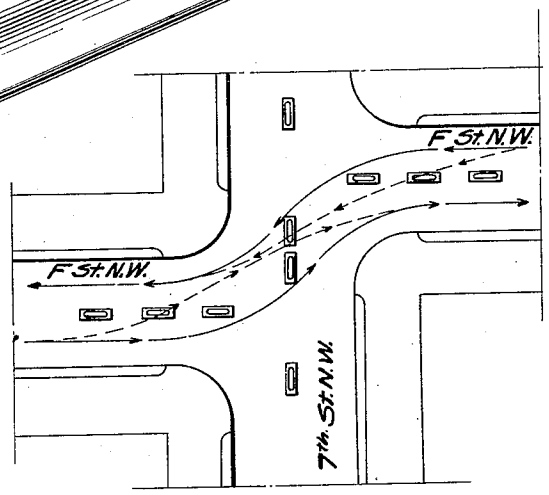


FIG. 3.

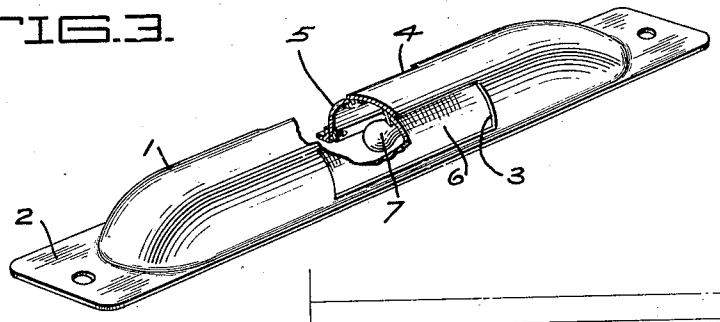
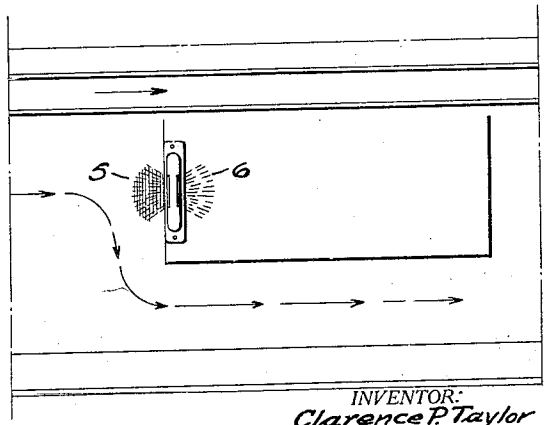


FIG. 4.



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FIG. 5.

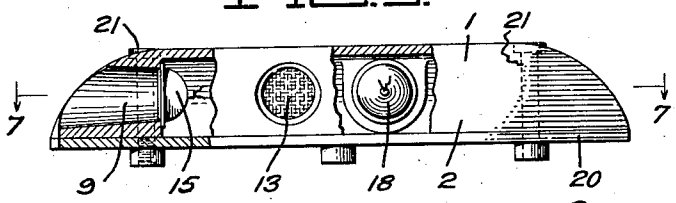
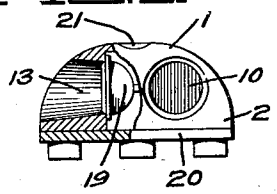


FIG. 6.



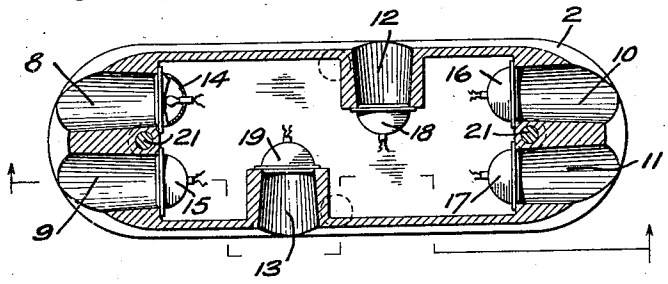


FIG. 7.

FIG. 8.

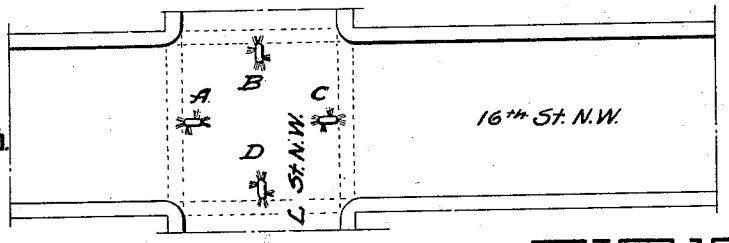


FIG. 9.

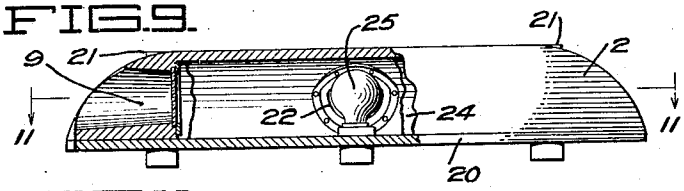


FIG. 10.

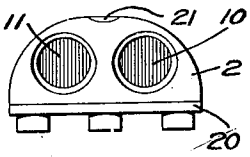


FIG. 11.

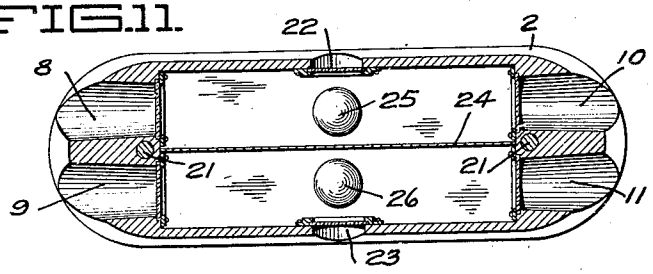
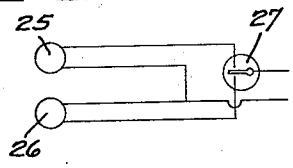


FIG. 12.



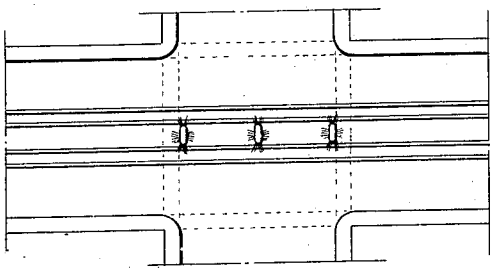


FIG. 13.

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UNITED STATES PATENT OFFICE

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TRAFFIC BUTTON

Application filed August 24, 1927. Serial No. 215,081.

This invention relates to a traffic button for directing traffic. Today the direction of traffic at street intersections is done better and cheaper by automatic signal devices than it is done by a traffic officer. The traffic signals in use today are subject to a number of disadvantages. By far the greater number of traffic signals are of the overhead type and have not proved to be entirely satisfactory, for the reason that due to windshields, sun visors, etc., they cannot always be seen by the driver. Unless very complicated the signals now on the market are not satisfactory for regulating traffic flow by lanes, that is, to the left, right or straight ahead. Frequently a pedestrian light which is grouped with the traffic light, is ineffective as such or by reason of its not being placed in the direct view of the person intending to make the crossing.

In general the object of this invention is to provide a traffic button which will overcome some of the above stated disadvantages.

One of the objects of the invention is to provide a traffic button whose length is substantially greater than its width, which because of its particular shape not only indicates to the driver that a turn must be made, but also indicates the direction in which the turn is to be made.

Another object of this invention is to provide an elongated hollow traffic button having windows on each side and provided with means for illuminating one window with one color and the other window with another color. This type of button is adapted to be used in bounding one end of a safety zone. When put to such use the side of the button indicating danger is placed toward the oncoming traffic, the other side of the button may then be illuminated with a white light so as to illuminate the safety zone and its occupants.

Another object of this invention is to provide an elongated hollow traffic button which not only has lights at its sides, but is also provided with lights at its ends. This type of traffic button is adapted for use at a street crossing. The lights on the ends of the button may be red and green to indicate, when the button is placed longitudinally in the center of the street, when the traffic may cross. When so placed the lights on the side of the button serve as an indication for the pedestrians as to when it is safe for them to cross the street.

A further object of this invention is to provide an elongated hollow traffic button, provided with a plurality of lights at its ends and a light on each side, together with the means for causing intermittent illumination of these lights. This type of traffic button is adapted for use as a substitute for the ordinary wig-wag signal at a railroad grade crossing.

My invention possesses other objects and features of advantage, some of which with the foregoing will be set forth in the following description of my invention. It is to be understood that I do not limit myself to the showing made by this description, as I may adopt variant forms of the invention within the scope of the claims.

Referring to the drawings:

Figure 1 is a perspective view of an elongated hollow traffic button having one corner broken away.

Figure 2 is a diagrammatic representation of the manner in which the traffic button shown in Fig. 1 is used.

Figure 3 is a perspective view of an elongated hollow traffic button having windows at each side and provided with means for illuminating said windows.

Figure 4 is a diagrammatic indication showing how the traffic button disclosed in Fig. 3 may be used to bound a safety zone.

Figure 5 is a side elevation partly in section of an elongated hollow traffic button provided with windows at its ends and sides.

Figure 6 is an end elevation of the traffic button shown in Fig. 5.

Figure 7 is a sectional elevation taken on the line 7—7 of Fig. 5.

Figure 8 is a diagrammatic representation showing how the traffic button disclosed in Figs. 5, 6 and 7 may be used at a street intersection.

Figure 9 is a side elevation partly in section of an elongated hollow traffic button having windows at its ends and sides and pro-

vided with the means for illuminating said windows.

Figure 10 is an end elevation of the traffic button shown in Fig. 9.

Figure 11 is a plan sectional view of Fig. 9 taken on the line 11—11.

Figure 12 is a wiring diagram indicating the manner in which the illuminating means provided in Figs. 9, 10 and 11 may be intermittently operated.

Figure 13 is a diagrammatic representation showing the manner in which the traffic button disclosed in Figs. 9, 10 and 11 may be used at a railroad grade as a substitute for the ordinary form of wig-wagging signal.

My traffic button comprises an elongated hollow body member designated as 1 throughout the various figures. A flange 2 is provided on the periphery of this body member by which said body member may be anchored to the highway. The ends of this flange may be perforated as shown in Figs. 1 and 3 to accommodate a bolt or other anchoring means. It will be noted from Fig. 2 that this particular shape of a traffic button has two functions, first, to indicate to the driver of a vehicle that some change in direction must be made and second, by its elongated form, it indicates to the driver the direction of the line of travel which he must follow. For example at street intersections such as at Seventh and F in Washington, D. C., where F Street takes a jog as indicated in Fig. 2 without the use of my elongated traffic button the line of travel followed is shown by the dotted line. By the use of my elongated traffic button it has been found that at such intersections the traffic will follow the line of travel as suggested by the buttons and so take the intersection in the proper manner. My traffic button is of sufficient height to prevent drivers from attempting to run over it and thereby avoid the proper line of travel.

In Fig. 3 is shown an elongated traffic button provided with openings or windows 3 and 4, a red color screen or lens 5 of glass or celluloid is placed over the window 4, while a white lens 6 of the same material is placed over the window 3. Within the button is placed a light 7 or other means for illuminating said color screens. The functions of this particular type of button are three in number and have been diagrammatically indicated on Fig. 4. As shown in this figure the button has been placed across the roadway at the near end of a safety zone with its red window facing the approaching traffic and its white window facing the safety zone. The button itself together with its red light serves to warn the approaching traffic of danger, the length of the button serves to indicate the direction in which the traffic is to take in order to avoid this danger and the white color screen serves to illuminate the safety zone.

In Figs. 5, 6 and 7 I have shown an elongated traffic button 1, provided with a flange 2 and windows 8, 9, 10, 11, 12 and 13. These windows are adapted to be illuminated by lamps secured in sockets 14, 15, 16, 17, 18, and 19. Windows 8 and 11, by means of either colored lenses or properly colored lamps, may be illuminated green to indicate Go. Windows 9 and 10 may likewise be illuminated red to indicate Stop, and windows 12 and 13 may be illuminated amber in order to direct the pedestrians. As shown in these figures the body member 1 is detachably secured to a base 20 by means of bolts 21. The sockets 14, 15, 16, 17, 18 and 19 may be connected by insulated conductors to suitable switching mechanism for operating the lamps in any desired manner. Fig. 8 diagrammatically shows a street intersection whose traffic is controlled by means of a traffic button as disclosed in Figs. 5, 6 and 7. As shown in this figure the traffic approaching from the left on Sixteenth Street is controlled by means of the traffic button A and also by means of the left hand end of the traffic button C. The traffic on the cross street L is controlled by means of the traffic buttons at B and D. The amber lights at the sides of the traffic button, as readily seen from the diagram, are visible to pedestrians on the side walks and therefore direct their crossing.

In Figs. 9, 10 and 11 I have shown an elongated hollow traffic button comprising a body 2 which is detachably secured to a base 20 by means of bolts 21. This modification as shown in Figs. 5, 6 and 7 is also provided with end windows 8, 9, 10 and 11, and with side windows 22 and 23. It will be noted that these side windows 22 and 23 are flush with the sides of the button in contrast to the indented windows 8, 9, 10, 11, 12 and 13. An opaque screen 24 extends longitudinally of the button and midway between its sides. On either side of this partition and symmetrically disposed with respect to the three windows on each side of the partition, are placed lamps 25 and 26. These lamps 25 and 26 are by means of an automatic switch 27, adapted to be alternately energized. The windows in this modification may be provided with lenses of various colors or with lenses of the same color. This modification is designed to be used as shown in Fig. 13, as a substitute for the ordinary wig-wag, overhead, railroad grade crossing signals. As so used these buttons are placed across the railroad tracks and located where their ends may be seen by pedestrians about to cross the track and by traffic approaching a track. The switch which controls this signaling system may be automatically operated by an approaching train and so cause a blinking of the lights within the button. The lights at the sides of the button are

visible to the engineer or conductor and serve to indicate to these men whether the signaling device is in proper operation.

It will be seen that the construction and location of my traffic button in no way interferes with the normal movement of traffic, and although the button is large enough to be uncomfortable to cross in vehicles, yet should a vehicle be forced to hit it no damage would result, because of its curved sides and ends.

The button may be constructed from a casting or forging and sufficiently strong to withstand heavy impact. The glass lenses or screens are sufficiently indented so that under ordinary service they will not be damaged. It will be noted that the pedestrians always have their own signals to go by, that it is located directly in their line of vision and that it stands alone for that one object. The vehicle driver as shown in the second and third modifications of my button has the benefit of two signals; one on the near side and one on the far side. This system of doubling up permits the signals to continue in operation while one is being repaired, or while a lamp is being replaced and under normal conditions it will allow a driver standing on the right of another to see the signal across the street when his view nearest the signal is blocked by the first driver's car.

The operation and advantages of my improved traffic button are thought to be apparent from the above disclosure.

I claim:

1. A combined course and direction indicator of a type which may be used alone to indicate the direction of traffic flow or the end of a safety zone, comprising an elongate hollow body portion and a planar base portion integral with the body portion, said hollow body portion having a transverse curvature and a substantially uniform height between its ends, the ends of the body portion being similar and having a smooth gradual convex curvature to permit tires to roll over it in any direction without injury, the length of the body portion being several times its width, the planar base including substantial end areas at the ends of the hollow body portion for attachment to the road, and providing narrow flanges at each side of the hollow body portion which connect the end areas, whereby the base enhances the length of the hollow body portion without materially increasing its effective width.

2. A combined course and direction indicator of a type which may be used alone to indicate the direction of traffic flow or the end of a safety zone, comprising an elongate hollow body portion and a planar base portion integral with the body portion, said hollow body portion having a transverse curvature and a substantially uniform height between its ends, the ends of the body portion being similar and having a smooth gradual convex curvature to permit tires to roll over it in any direction without injury, the length of the body portion being several times its width, the planar base including substantial end areas at the ends of the hollow body portion for attachment to the road and providing narrow flanges at each side of the hollow body portion which connect the end areas, illuminating means within the hollow body portion, and an elongate opening in the side of the body portion and extending longitudinally thereof adjoining a base flange, whereby the base enhances the length of the hollow body portion without materially increasing its effective width, and whereby the opening permits the illuminating means to indicate direction.

3. A combined course and direction indicator of a type which may be used alone to indicate the direction of traffic flow or the end of a safety zone, comprising an elongate hollow body portion and a substantially rectangular planar base portion integral with the body portion, said hollow body portion having a transverse curvature and a substantially uniform height intermediate to its ends, the ends of the body portion being similar and having a smooth gradual convex curvature to permit tires to roll over it in any direction without injury, the length of the body portion being several times its width, the planar base including substantial end areas at the ends of the hollow body portion for attachment to the road and providing narrow flanges at each side of the hollow body portion to connect the end areas, the ends of the base having openings for attachment to a street surface, whereby the base enhances the length of the hollow body portion without materially increasing its effective width.

In testimony whereof, I have hereunto set my hand.

CLARENCE P. TAYLOR.