Dec. 24, 1940. T. E. STEIBER 2,226,484

TRAFFIC SIGNAL

Filed May 8, 1937 3 Sheets-Sheet 1

Fig. 1

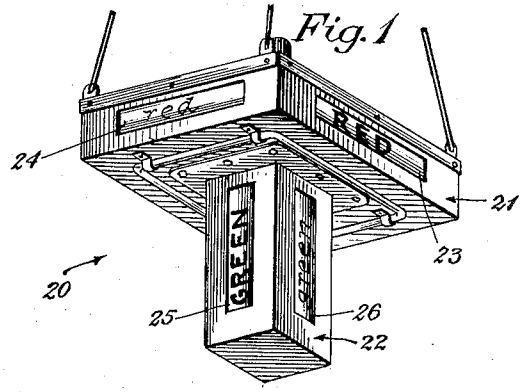



Fig. 4

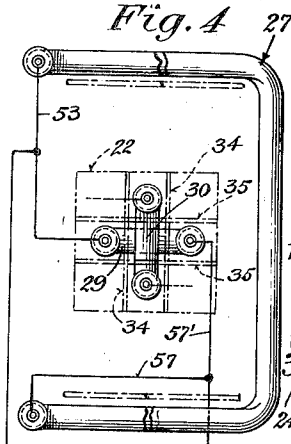



Fig. 2

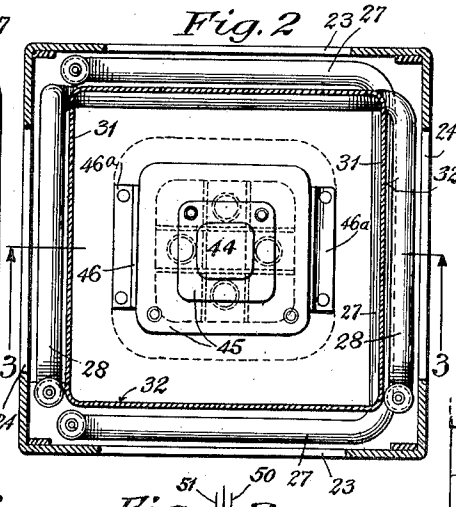



Fig. 6

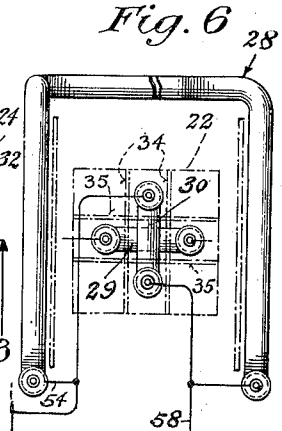



Fig. 3

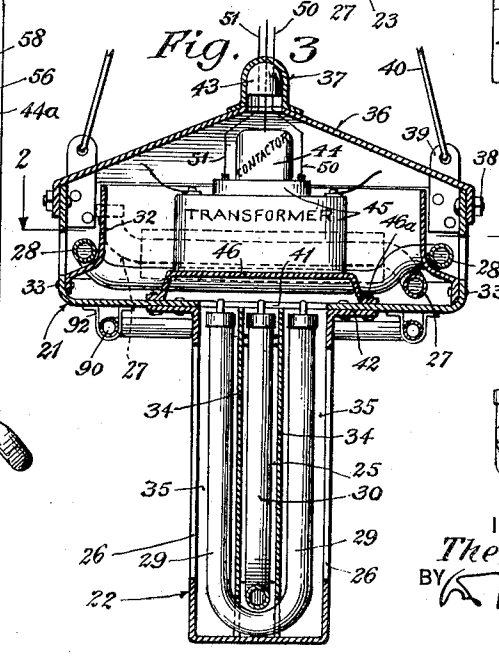



Fig. 5




Fig. 7




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Fig. 8

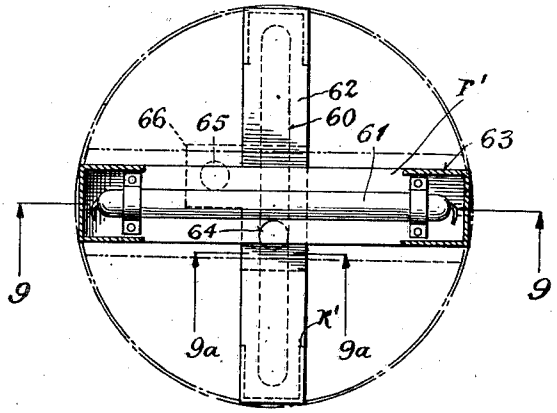



Fig. 9.

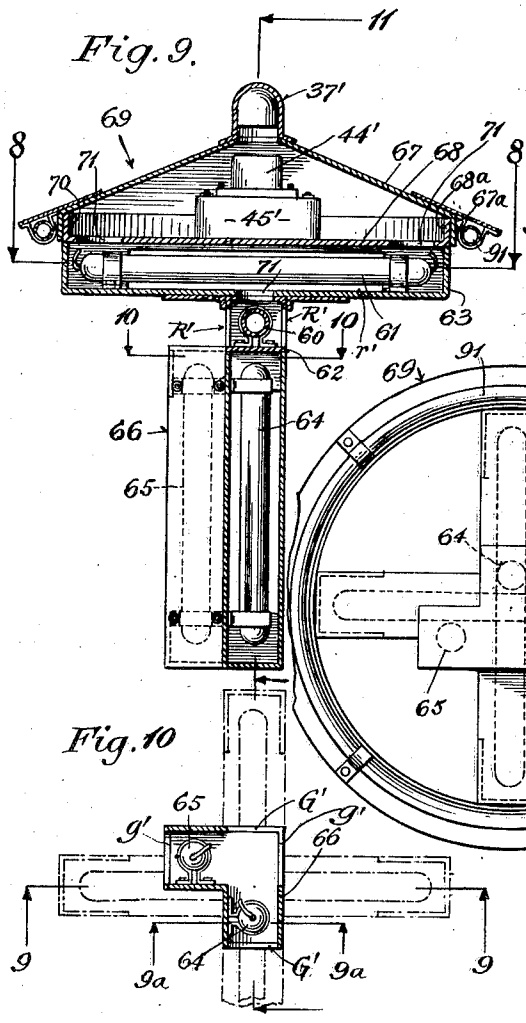



Fig. 11

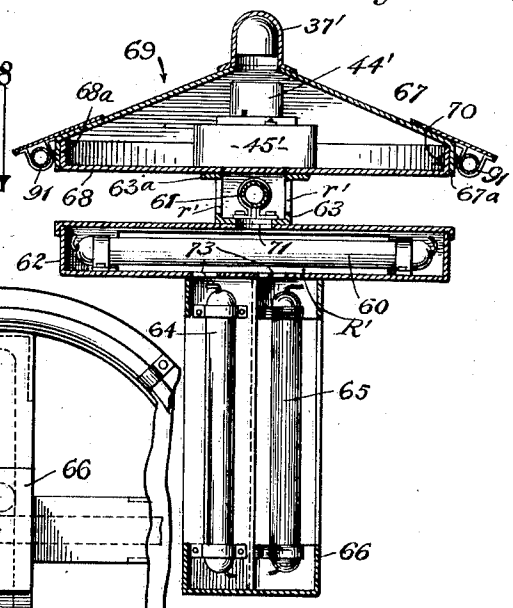






Fig. 10




Fig. 12

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Fig. 13

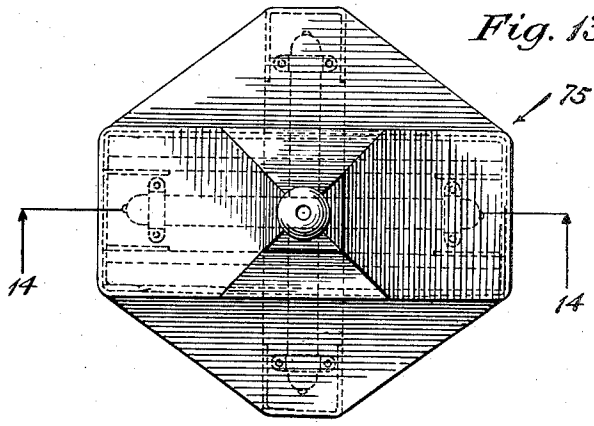



Fig. 14

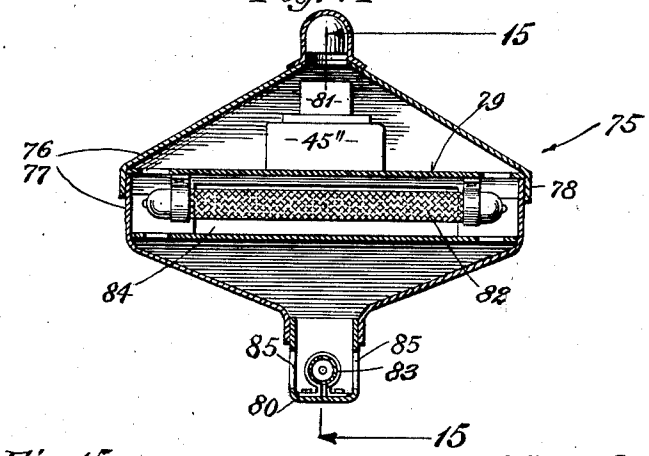



Fig. 15

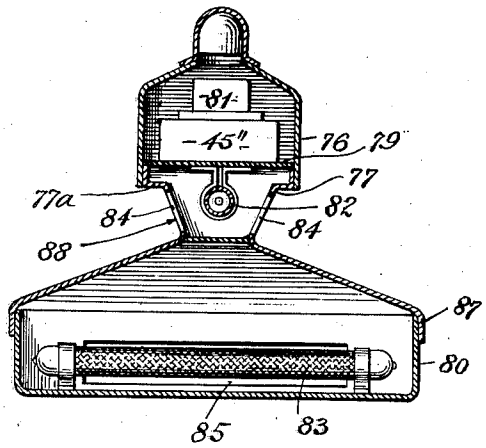
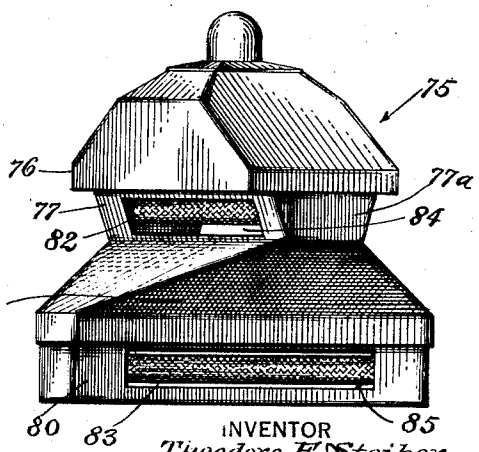



Fig. 16




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Patented Dec. 24, 1940 2,226,484

# UNITED STATES PATENT OFFICE

2,226,484

## TRAFFIC SIGNAL

Theodore E. Steiber, Bridgeport, Conn., assignor of one-half to Arthur A. Johnson, Bridgeport, Conn.

Application May 8, 1937, Serial No. 141,406

3 Claims. (Cl. 177—327)

This invention relates to traffic signals of the kind used at street and road intersections for regulating vehicular and pedestrian traffic along the same.

These traffic signals have a stop-and-go signal, and an optional caution signal. A stop-and-go signal ordinarily carries red and green lenses, and if it is a four-way signal, as is most usual, there is one red and green lens on each of the four sides of the signal casing, so that when the red lenses are illuminated on two of the opposite sides of the device, giving a stop signal to traffic moving in either of two directions along one line of travel, the green lenses may be illuminated on two other opposite sides of the device, giving a go signal to traffic moving in either of two directions along an intersecting line of travel. The caution signal is ordinarily a device for showing a yellow light simultaneously in both directions along all possible lines of travel approach.

A feature of the present invention is the provision of a traffic governing device which has its traffic regulating signals so brilliantly illuminated as not to be mistaken for fire-alarm location indices or street lights, and has these signals of special shapes so that any driver, even a color-blind one, will readily understand the given signal. In a preferred embodiment of the invention, the illuminated signal areas are elongated ones.

The preferred form of stop-and-go signal according to the invention is one in which the illuminated areas for giving a stop signal are colored red and horizontally elongated, and the illuminated areas for giving a go signal are colored green and vertically elongated. In order to brilliantly light these areas luminous gaseous discharge tubes are employed as the illuminating means. Hereinafter, in the claims as well as elsewhere, these tubes, which may be neon tubes, will be referred to as neon tubes.

The preferred form of caution signal in carrying out the invention is one incorporating an elongated signalling area for giving a caution warning when illuminated. The signal is elongated in the same direction as the stop signal but is positioned so as to be distinguishable, even by a color-blind driver, from either a stop or a go signal. The caution signal may operate in all directions at one time or in one direction at a time as desired. The device may be operated to control traffic by using only the stop-and-go signals, the stop, go and caution signals or the caution signal according to the traffic requirements of the intersection.

Another feature of the invention is the provision of a caution signal, employable only as such, which, too, has the advantages of being attention-arresting to an extreme degree, of being immediately identified as a traffic signal regardless of the presence of other lights, and of being suggestive of a familiar danger or stop signal yet readily identifiable as a caution signal; and which device, further, is of a simple and inexpensive construction. Where the stop signal of a stop-and-go signal is a horizontally elongated signal area, the caution signal is preferably one having a similarly elongated signalling area facing in every direction of traffic approach, but with this area intermittently illuminated, so as to glow at intervals, with preferably, a yellow color.

The preferred way of carrying out the invention in providing a stop-and-go signal is by the provision of a housing structure for the signal device including an upper casing and a lower casing, the former extending horizontally in a plurality of angularly related directions and for presenting horizontally elongated signalling areas, and the latter in the shape of a vertical column of small lateral dimensions as compared with the lateral dimensions of the upper casing and for presenting vertically elongated signalling areas.

Another feature of the invention is the positioning of the transformer and other operating mechanism within the frame of the signal unit.

Still another feature of the invention is the provision of neon tube illuminating means for a traffic signal, in which there are less tubes than the number of signalling areas.

A further feature of the invention is the provision of neon tube illuminating means for a stop-and-go signal device, in which these tubes emit a glow of different colors, and in which, nevertheless, each tube serves a plurality of different signals.

Other features and advantages will hereinafter appear.

Referring to the accompanying drawings, in which embodiments of the invention as now preferred are shown:

Figure 1 is a perspective view of a form of the invention suitable for use as a stop-and-go signal at a street road intersection where one such intersection crosses the other at substantially right angles.

Fig. 2 shows the embodiment of Fig. 1 in hori-

zontal section, taken substantially on the line 2—2 of Fig. 3.

Fig. 3 is a vertical section, taken substantially on the line 3—3 of Fig. 2.

Fig. 4 is a detail view in top plan as in Fig. 2 showing one of the two generally horizontal extended neon tubes and both the two generally vertical extended neon tubes shown in Fig. 3, together with a wiring diagram for the tubes.

Fig. 5 shows the horizontally extended neon tube in Fig. 4 in end elevation, looking toward the arrow 5 of Fig. 4.

Fig. 6 is a view similar to Fig. 4, showing the other of the two horizontally extended neon tubes and a different control circuit.

Fig. 7 is a view similar to Fig. 5, but showing the horizontally extended neon tube of Fig. 6 in end elevation, looking in the direction of the arrow 7 of Fig. 6.

Fig. 8 is a plan view of another embodiment of the invention taken on the line 8—8 of Fig. 9.

Fig. 9 is a staggered vertical section, taken on the lines 9—9 of Figs. 8 and 10, so far as the upper structure of the device is concerned, and on the lines 9a—9a of Figs. 8 and 10 so far as the lower structure of the device is concerned.

Fig. 10 is a horizontal section, taken on the line 10—10 of Fig. 9.

Fig. 11 is a vertical section taken on the line 11—11 of Fig. 9.

Fig. 12 is a bottom plan view of the device of Fig. 8, partially broken away at one side.

Fig. 13 is a top plan view illustrating another embodiment, for use solely as a caution signal.

Fig. 14 is a vertical section, taken on the line 14—14 of Fig. 13.

Fig. 15 is a similar section, taken on the line 15—15 of Fig. 14.

Fig. 16 shows this embodiment in perspective.

While it is being described that the preferred embodiment of the invention is one showing four sides and adapted for suspension, it is to be understood that any number of sides, one for each approaching lane of traffic, may be used and it may be mounted on a post or other support.

In the embodiment of the invention illustrated in Figs. 1 through 7, a four-way signalling device for traffic control is provided which includes a housing 20 incorporating an upper shallow casing 21 of square outline and a lower casing 22 of reduced cross-section but also of square outline.

The four sides of both casings are cut away so that each of the two opposite sides of upper casing 21 presents a horizontally elongated opening or signalling area 23, and each of the other two opposite sides of this casing presents a similar opening or area 24, and also so that each of two opposite sides of the lower casing 22 presents a vertically disposed elongated opening or signalling area 25 and each of the other two opposite sides of this casing presents a similar opening or area 26.

As shown in Fig. 1, the horizontal openings 23 and 24 are provided, when illuminated, to emit a red-light signal, and the vertical openings 25 and 26 are provided, when illuminated, to emit a green-light signal.

The areas illuminated at any one time will be either those carrying the legends "RED" and "GREEN" or those carrying the legends "red" and "green."

The illumination of the signal areas is produced by gas luminous tubes, as neon tubes, which have portions extending longitudinally of the horizontal openings 23 and 24 in the upper casing 21, and longitudinally of the vertical openings 25 and 26 in the lower casing 22.

These tubes are energized in different sets, so as to illuminate either the RED, GREEN or red, green signals. Tube 27 having portions behind apertures 23 is connected to operate with the tube 29 having portions behind aperture 25, and the tube 28 having portions behind apertures 24 is connected to operate with the tube 30 having portions behind apertures 26. In this manner four tubes are sufficient to control traffic in both directions simultaneously.

As shown in the drawings all of the tubes are substantially U-shaped. The legs of the U tubes 27 and 28 are the portions which extend behind the apertures 23, 24 and the center or curved portion of the U is offset to be ineffective for signalling and in addition may be covered with opaque paint and enclosed in a partition as shown at 31 to prevent the giving of a false stop signal. In tubes 29 and 30 the legs of the U are the portions behind the apertures 25 and 26. These tubes are placed in small individual compartments formed by the partitions 34, 35, as shown in Figs. 3 and 4, and are shielded from one another to prevent a false go signal. The tube 30 is shorter than tube 29 so as to be nested therein in the manner shown in Fig. 3.

The partitions 31, in the present case, however, are only at the two sides of the casing which have the openings 24, and are in the form of bottom extensions from a hollow shield 32 of square outline extended up into the casing 21 so as to present vertical walls in back of the four openings 23 and 24. The outer faces of these walls, in back of the four portions of the two tubes 27 and 28 used for signalling and the walls of partitions 34, 35, are desirably finished so as to act as reflectors for light rays from the tubes. The extensions 31 from the shield 32 serve to mount the latter rigidly in the casing 21 as by the application of rivets 33, and also serve as rest supports for the tube 28.

The casing 21 is shown as covered by a top 36, surmounted by a dome 37; the top 36 having a downbent peripheral flange by which it is secured, as by bolts 38, to the main body of the casing 21. Also as shown, the device is of the overhead suspension type, the suspending means here being illustrated as including upwardly projecting plates 39 to which are attached the lower end rods 40. The openings in the top 36 through which the plates 39 extend are desirably made watertight in any suitable manner.

The bottom wall of the upper casing 21 has a central opening 41 matching the open top of the lower casing 22. This casing 22 around its top is provided with a flange 42, by way of which the casing 22 is riveted fast to the upper casing 21 as indicated in Figs. 1 and 3.

Through the dome 37, and an insulating plug 43 secured in a watertight manner in the dome, may be led, as shown in Fig. 3, the circuit wires for the four neon tubes in the upper and lower casings 21 and 22; in which circuit, as illustrated in Figs. 3, 4 and 6, is interposed a contactor 44 and a transformer 45. With the tubes 27 and 28 in the casing 21 and arranged therein about the four sides of the shield 32 as shown, a chamber within the shield is provided within which the transformer 45 is mounted; such mounting in the present case being by way of a platform presented at the top of a sheet metal strip 46, inclined downward at opposite ends toward inte-

gral flanges 46a riveted as indicated to the bottom wall of casing 21 at opposite sides of the opening 41. The top 36 provides a suitable space, above the transformer, for conveniently accommodating the contactor 44.

Referring to the signal-controlling circuit shown in Fig. 4, it is such that when a switch 47 is open, as in Fig. 4, the "RED" and "GREEN" signals of Fig. 1 are given, and when the switch 47 is closed, the "red" and "green" signals of Fig. 1 are given.

The switch 47 represents the make and break instrumentality operated by any suitable time-controlled automatic means for changing the signals at regular intervals, or a manual switch of a kind operated by a policeman on duty at a traffic intersection.

The switch 47 is interposed in a wire 48, which, with a wire 49, forms a circuit for the electromagnet of the contactor 44 in parallel with the current supply circuit including wires 50 and 51 between which wires the primary of the transformer 45 is interposed. From one of the secondary terminals of the transformer a wire 52 leads to one of the electrodes of each of the tubes 27 and 29. Branched from this wire 52, which is also shown in Fig. 6, are wires 53 and 54 each leading as in Fig. 6 to one of the electrodes of each of the tubes 28 and 30. From the other secondary terminal of the transformer 45, a wire 55 leads to the make and break arm 44c of the contactor 44.

While the switch 47 is open, the arm 44c of Fig. 4 is in engagement with the lower contact 44b, being normally urged to this position by any suitable means, as a spring (not shown); and then the tubes 29 and 27 of Fig. 4 are in the power circuit, by way of wire 56, and wires 57 and 57' leading respectively to electrodes of these tubes.

While the switch 47 is closed, however, the circuit for the magnet of the contactor 44 is closed at the contact 44a, because energization of the magnet raises the arm 44c, and now the tubes 30 and 28 of Fig. 6 are in the power circuit, by way of a wire 58. This wire is also shown in Fig. 6, from which view it will be seen that the wire 58 and a wire 59 branched therefrom lead respectively to electrodes of these tubes.

A stop-and-go signal pursuant to the present invention, may, when desired, be employed as a stop-and-go signal during busy hours; but as a caution signal merely, at other times. According to this utilization of the invention by the assistance of the embodiment now being described, both a horizontally elongated signal and a vertically elongated signal will be displayed at each side of the device facing a line of traffic approach thereto.

The means for transforming the device from a stop-and-go signal into a caution signal, as this means is illustrated, includes, in addition to the circuit connections shown in Fig. 4 and repeated in Fig. 6, a second electromagnet 44' interposed in a shunt circuit including a wire 49' branched from the wire 49, a wire 47a leading to a second switch 47', and a wire 47b leading from this switch to the wire 50. Associated with the electromagnet 44' is an armature arm 44c', normally urged to the position illustrated, as by a suitable spring (not shown), but which when raised by energization of the electromagnet 44' engages a contact 44d at one end of a wire 56' substituted for the wire 56 of Fig. 4; the arm 44c' being connected by a wire 55' to the wire 55.

When the device is to be used as a caution signal, the switch 47 is left closed as in Fig. 6, and, also, the switch 47' is closed, either manually or in any other suitable way. Then by raising of the armature arm 44c, the tubes 30 and 28 of Fig. 6 are in the power circuit as hereinabove described, and, by raising of the armature arm 44c', the tubes 29 and 27 of Fig. 4 are also in the power circuit, by way of said second shunt circuit including the wires 55' and 55'. As long as both switches 47 and 47' are left closed, all the usual stop-and-go signals of the device will be simultaneously displayed.

The switches 47 and 47' may be operated alternately if desired to give stop-and-go signals in the various directions.

If desired the caution signal may be used between the stop-and-go change. This is shown as a yellow neon tube 90 mounted under casing 21 by brackets 92 and extends around all four sides of the same. The circuit for operating this signal is through the conductor 93 to one side of the transformer and from the other side of the transformer through the lead 98 to arm 96 of electromagnet 97, contact 95 and conductor 94. The electromagnet 97 is connected across to line 50 by conductor 102 and 49 and to line 51 by conductor 101, switch 99 and conductor 100, as shown in Fig. 6. By operating switches 47, 47' and 99 in proper sequence the signal will display stop, go and caution signals as desired.

Referring to the form of the invention illustrated in Figs. 8 through 12, a traffic-governing device according to the invention of the stop-and-go type is illustrated wherein again only four neon tubes are employed. In the present case, however, each of these tubes may be straight, because each need have but a single signal-delivering portion.

In thus carrying out the invention, two horizontally arranged tubes 60 and 61 are employed crossing each other at right angles, and are contained, respectively, within individual elongate casings 62 and 63. These casings are suitably rigidly interconnected where they cross each other, with the casing 62 above the casing 63. If the stop signals are to be horizontally elongated ones and colored red in accordance with preferences already indicated, the tubes 60 and 61 will be ones such that when illuminated they will glow with a red color, and display such glow in both directions along both of two lines of travel at right angles to each other. Accordingly, the casing 62 is cut away at opposite sides to present two oppositely facing horizontally extended openings or signalling areas R', and the casing 63 as shown as cut away at opposite sides to present two oppositely facing similar openings or signalling areas r'.

The other two tubes, marked 64 and 65, are ones such that when illuminated they will glow with a green color; and these tubes are vertically arranged with their center lines contained in a vertical plane as shown in Figs. 10 and 12, so that the tubes 64 and 65 may be suitably secured, upright in a single casing 66 L-shaped in cross-section. In the vertically extended pocket provided within the two limbs of the L, the two tubes 64 and 65 are respectively positioned. Along a line perpendicular to the length of the tube 60, the casing 66 is provided with oppositely disposed vertically elongated openings, which are best seen in Fig. 10, and there marked G'. Also, in a line perpendicular to the length of the tube 61, the casing 66 is provided

with oppositely disposed similar openings, which are likewise best seen in Fig. 10, and there marked *g'*.

It will be noted that to a person viewing the tube **60** broadside on, from either side of this tube, the vertical tube **64** will be seen, but not the tube **65**, and that to a person viewing the tube **61** broadside on, from either side of this tube, the tube **65** will be seen, but not the tube **64**.

A contactor **44'** and a transformer **45'** are shown as housed in the device, for functioning like the contactor **44** and transformer **45** of the form of the invention shown in Fig. 1, when employed in a circuit like that already described, and which circuit may be assumed to be present here.

As in Fig. 1, the contactor is placed above the transformer, in a top casing for the device which includes a roof or top **67** having the same downward outward flare characteristic of the top **36** of Fig. 3. The top **67** is further shown as surmounted by a dome **37'**, which may serve, as does the dome **37** of Fig. 3, for the introduction of circuit connections to the contactor and transformer.

The roof or top **67** forms, with a circular base **68**, a canopy structure **69** at the top of the device, and by which it may be suspended if desired. The top **67** and the base **68** have interfitting annular flanges marked **67***a* and **68***a*, respectively, these bolted together as indicated at **70**; and the casing **63** is at its top made fast to the bottom of the base **68**, to extend diametrally thereof, by way of flanges **63***a* running along the topside edges of the casing and suitably connected as by welding to the base. To facilitate stringing of the wires which serve the four tubes, there are shown passageways **71** (Fig. 9) between the canopy **69** and the casing **63**, a passageway **72** (Figs. 9 and 11) between the casing **62** and the casing **63**, and passageways **73** (Fig. 11) between the casings **62** and **66**. A caution signal similar to that previously described is positioned adjacent the under edge of the roof **67** as shown in Figs. 9 and 11, at **91**. This signal functions in the same manner as signal **90** previously described.

Referring to the form of invention illustrated in Figs. 13 through 16, a traffic-governing device according to the invention is illustrated wherein only two neon tubes need be employed in providing a caution signal which continuously delivers a caution warning in both directions along lines of traffic flow one crossing the other and which persists in giving the same caution signal simultaneously in all four directions of possible approach. Such a signal is particularly useful in rural districts, and in other places where traffic does not have to be controlled by alternate flows thereof along intersecting lines of travel; the caution signal apprising a driver approaching the intersection in any direction to slow down and otherwise take special care in attempting to pass the signal. The accepted color for such a caution signal is yellow. However, to a color-blind person, or one with an impaired color-sense perception, the signal may be misread as green.

According to the present invention, however, no such mistake can possibly be made, as the caution signal is given the same special shape, and disposed horizontally as an elongated one, characteristic of the red or stop signal employed pursuant to the present invention.

In order that the caution signal may not be confused or be mistaken for a stop signal, even by a color-blind person, it is intermittently flashed.

The form of the invention shown in Figs. 13 through 16, and one incorporating the features of the present invention just above described, includes a housing **75** made of two sheet metal upper sections **76** and **77**, secured together at interfitting flanges indicated at **78** and carrying a horizontal interior partition **79**, and a lowermost sheet metal section **80**.

A transformer **45''**, for stepping up the voltage of the current energizing the two neon tubes here employed for giving caution signals according to the invention, is conveniently mounted on the partition **79**; while an automatic intermittent circuit breaker or flasher **81**, of any suitable construction is conveniently placed above the transformer as illustrated.

The two neon tubes here employed, which are desirably such as will become yellow when luminous, are marked **82** and **83**, one being hung as shown just below the partition **79**, and the other being cradled as shown in the bottom of the lowermost casing section **80**.

These tubes are straight and both are horizontally extended but with one crossing the other at right angles thereto. Horizontal openings or signalling areas **84** are provided in the casing section **76** opposite both sides of the upper tube, and similar openings or areas **85** are provided in the lowermost casing section **80** opposite both sides of the lower tube.

As will be noted, not only do the openings **84** and **85** face in opposite directions along two lines of traffic flow one at right angles to the other, but the housing **75** is so contoured as to be of minimum over-all vertical dimension, yet to fully display these openings when viewed from points well below the same; thereby providing a small, light-weight device especially adapted to be suspended at a highly elevated point. The most vertically compact device is obtained when the caution signals are horizontally elongated, which is another reason why such an elongation for a caution signal is now preferred.

As will be seen perhaps most clearly in Fig. 16, the lowermost casing section **80** is a long, narrow, trough-like one, as is the upper part **77***a* of the lower casing section **77**, located just below the partition **79**, and which carries the openings **84**. The side walls of this upper part **77***a* of the casing section **77**, and in which sides are cut the openings **84**, are shown as downwardly inwardly inclined, to place the openings **84** in planes normal to an upwardly directed line of vision. This is desirable when the device is suspended at a comparatively high point; although, even then, the side walls of the lowermost casing section **80**, in which are cut the openings **85**, may well be kept parallel with each other as illustrated, in view of the fact that these openings are at the bottom of the device and below the shaped parts thereof now to be specially referred to.

The lower part of the lower section **77**, that is, the part thereof below the part **77***a* is beveled inwardly on two opposite sides, from the end bottom edges of the upper part **77***a* of the section **77**, down to a point near the tops of the openings **85**, thereby to provide awnings or shading eaves **87** over said openings **85**, which eaves gradually increase in width as they closer and closer approach these openings; but, at the same time, this lower part of the casing section **77** is beveled

upwardly inwardly on its two other opposite sides, from the end top edges of the lowermost section 80 up to a point near the bottoms of the openings 84, which bevels, marked 83, although they gradually increase in width as they closer and closer approach said openings 84, are inclined downward at such an angle as to allow these openings to be fully exposed to a line of vision at a considerable angle to the horizontal.

The shaping of the housing 77 as above described is a preferred feature of the present invention, when, in embodying the same as a caution signal, a plurality of horizontally elongated neon tubes are employed, each arranged to signal along the two opposite directions of a line of traffic flow, and both so arranged that these signals are simultaneously given in four directions.

While in the preferred form of the invention U-shaped tubes are used, it is obvious that straight sections properly connected by wires may be substituted.

From the above it will be seen that the device is an efficient traffic signal and the use of neon lamps in the same give a brilliant light which can be seen from a distance and not be readily mistaken. Also the distinctive positioning of the stop-and-go signals makes it difficult for anyone, even if color-blind, to be confused by the signal.

Variations and modifications may be made within the scope of this invention and portions of the improvements may be used without others.

I claim:

1. An intersection traffic signal comprising a frame having a plurality of sides, each side having horizontal and vertical apertures; horizontally disposed U-shaped gaseous-discharge tube signalling means positioned adjacent said horizontal apertures adapted to emit a characteristic light to indicate a "stop" signal; vertically disposed U-shaped gaseous-discharge tube signal means positioned adjacent said vertical apertures adapted to emit a characteristic light to indicate a "go" signal, said tubes being mounted on the frame so that the legs of said U-shaped tubes are visible from opposite directions of approach to the intersection; and means for shielding said tubes whereby the same are invisible from directions substantially at right angles to the direction of traffic flow controlled by said tubes.

2. In an intersection traffic signal comprising a frame having a plurality of sides, each side having horizontal and vertical apertures; a plurality of electrically illuminable signal indicators for signalling "stop" and "go," said indicators comprising gaseous discharge tubes carried by the frame, the indicators for signalling "stop" comprising nested horizontally disposed U-shaped tubes positioned so that the legs of said U-shaped tubes are directly behind said horizontal apertures, the "go" indicators comprising U-shaped gaseous discharge tubes so positioned relative to said vertical apertures that the legs thereof lie directly behind said apertures; all of said tubes being mounted on the frame so that the legs of said U-shaped tubes are visible from opposite directions of approach to the intersection, the horizontally disposed tubes controlling traffic flowing at substantially right angles to that controlled by the vertical tubes; and means for shielding said tubes from sight from directions at substantially right angles to the direction of traffic flow controlled by said tubes.

3. In an intersection traffic signal comprising a frame having a plurality of sides, each side having horizontal and vertical apertures; a plurality of electrically illuminable signal indicators for signalling "stop" and "go," said indicators comprising gaseous discharge tubes carried by the frame, the indicators for signalling "stop" comprising nested horizontally disposed U-shaped tubes positioned so that the legs of said U-shaped tubes are directly behind said horizontal apertures, the "go" indicators comprising U-shaped gaseous discharge tubes so positioned relative to said vertical apertures that the legs thereof lie directly behind said apertures; all of said tubes being mounted on the frame so that the legs of said U-shaped tubes are visible from opposite directions of approach to the intersection, the horizontally disposed tubes controlling traffic flowing at substantially right angles to that controlled by the vertical tubes; means for shielding said tubes from sight from directions at substantially right angles to the direction of traffic flow controlled by said tubes; and a continuous gaseous discharge tube carried by the frame and extending about all sides thereof so as to indicate when energized a caution signal from any direction of approach to said intersection.

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