

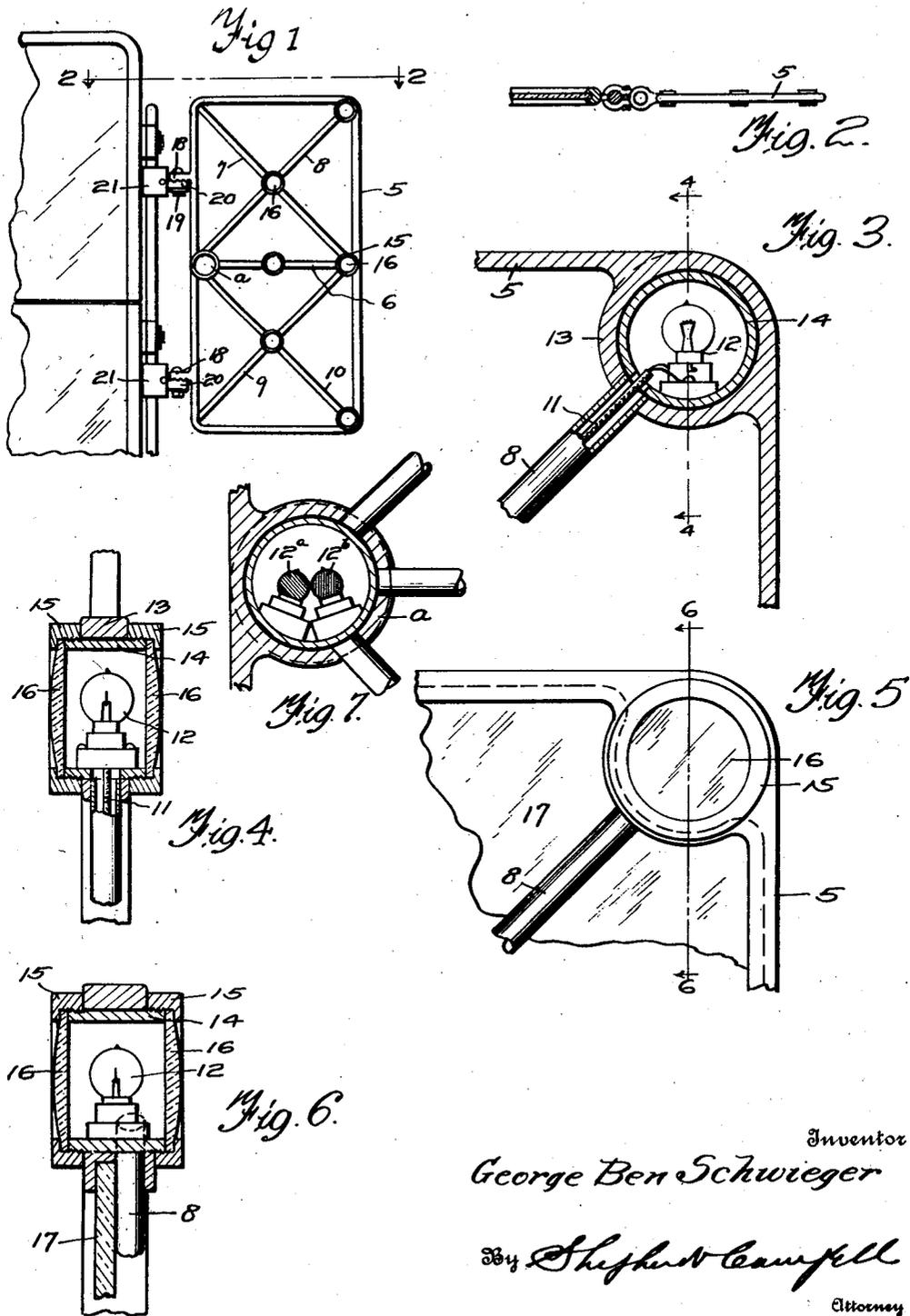
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MOTION AND DIRECTION SIGNAL FOR AUTOMOBILES

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UNITED STATES PATENT OFFICE.

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MOTION AND DIRECTION SIGNAL FOR AUTOMOBILES.

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To all whom it may concern:

Be it known that I, GEORGE BEN SCHWIEGER, a citizen of the United States, residing at Phoenix, in the county of Maricopa and State of Arizona, have invented certain new and useful Improvements in Motion and Direction Signals for Automobiles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a motion and direction signal for automobiles and it has for its object to provide an improved device of this character constructed and arranged to indicate whether the driver of the vehicle intends to turn to the left or the right, or to slow up, or stop, the signals being so arranged that they will be visible both from the front and the rear, whereby the intentions of the driver will be indicated not only to machines following but to machines coming in the opposite direction, to pedestrians, and to traffic officers.

Further objects and advantages of the invention will be set forth in the detailed description which follows.

In the accompanying drawing:

Fig. 1 is a front elevation of a signaling device constructed in accordance with the invention;

Fig. 2 is a fragmentary horizontal sectional view on line 2—2 of Fig. 1;

Fig. 3 is an enlarged sectional view through one of the corner lights;

Fig. 4 is a transverse sectional view on line 4—4 of Fig. 3;

Fig. 5 is an enlarged front elevation of a portion of a slightly modified form of the invention;

Fig. 6 is a sectional view on line 6—6 of Fig. 5; and

Fig. 7 is a detail sectional view of one of the lamp casings hereinafter described.

Like numerals designate corresponding parts in all of the figures of the drawing.

The device of the present invention comprises an elongated, rectangular frame 5, a horizontal brace 6 and diagonal braces 7, 8, 9 and 10. The braces 6 to 10 are preferably of tubular formation to provide conduits for electric wires 11, through which current is supplied to a plurality of incandescent lights, such as are indicated at 12, and which lights are arranged in one horizontal row and two diagonal rows as hereinafter described. There are many ways in which the lamps 12

may be mounted upon the frame and it is to be understood that the invention is not limited to any specific method of mounting said lamps. However, as one way of mounting the lamps I have indicated ring-like elements 13 with which the tubular braces are connected. Bushings 14 fit within these ring-like elements and nuts 15 are adapted to be threaded upon these bushings and to bind lenses 16 in place, these lenses constituting between them a lamp casing or chamber in which the lamps 12 are located.

In the structure illustrated in Figs. 1 to 4 the framework is an open framework, while in Figs. 5 and 6 I have illustrated plates 17 to constitute a closed frame. These plates may be of glass so that the driver will not have his vision obstructed by the presence of the signaling frame or they may be of metal, if desired.

The frame 5 is provided along its inner edge with ears 18 and these ears, in turn, are connected by friction bolts 19 with corresponding ears 20 of clamps 21, said clamps being, in the present instance, attached to the side of the windshield frame; though it is apparent that in the case of closed cars, said clamps may be attached to the body of the car. It is intended that the bolts 19 shall exert such frictional binding upon the parts as will hold the frame in the position to which it may be adjusted. Thus when not in use the frame may be swung inside of the car.

One of the housings, viz, that indicated at *a* is adapted to receive two lights 12^a, 12^b, one being a red light and the other being a green light. It is immaterial as to the particular colors employed but it is preferred to use red and green lights since these are respectively well recognized as danger and caution signals. The upper diagonal row of lights are green. This may be effected by making the bulbs themselves green or by making the lenses 16 of the two upper lights of green glass or celluloid. With respect to the lamp *a* the glass 16 will be clear so that this may show either red or green as the circumstances demand. This is necessary because this light constitutes a part sometimes of a red row and sometimes of green row. The two outer lights in the horizontal row are green and the two lower lights of the lower diagonal row are red. Thus with the green light in the casing *a* and the two upper green lights

in the upper diagonal row lighted, a row of three green lights will appear across the upper portion of the frame. With the green light in casing *a* and the two outer green lights in the horizontal row lighted, a row of green lights will appear horizontally across the frame, while with the red light in casing "*a*" lighted and the two lower red lights lighted, a row of red lights will appear diagonally across the lower portion of the frame. The upper diagonal row of green lights will indicate that the driver is about to make a right-hand turn, the horizontal row of green lights will indicate that the driver is about to make a left-hand turn and the lower row of red lights will indicate that the driver is about to slow up or stop. It is manifest that since the lights are visible in both directions these signals will serve to warn persons ahead as well as those in the rear and that this result is accomplished without the provision of moving arms or other devices likely to get out of order.

It is quite common in the art of automobile signaling to mount the control buttons upon the steering column and it is my intention to follow this practice, well known to the art, and to mount upon the steering column the necessary buttons to control the circuits through the several rows of lights, so that the driver may, while maintaining full control over the steering of the vehicle, signal his proposed course to those both in front and in the rear. In addition to being a warning to pedestrians and the drivers of other vehicles, such a device as this is of great aid to traffic officers, since such officers are apprised well in advance of the intention of the driver to turn.

The recognized and standard signal as approved by the American Automobile Association and recommended to motorists throughout the country is for the driver who is about to make a right-hand turn to extend the upper arm out horizontally with the forearm raised to a position almost at right angle. If the turn is to be a left-hand one, the arm is extended horizontally. Thus it will be seen that the arrangement of the signals in the present invention closely conforms to the standard and recognized method of signaling. The exhibition

of a red light is, of course, a well recognized signal of warning to stop, or slow up.

It is to be understood that the invention is not limited to the precise construction set forth but that it includes within its purview whatever changes fairly come within either the terms or the spirit of the appended claims:

Having described my invention what I claim is:

1. A device of the character described comprising a substantially rectangular frame and tubular braces constituting an electrical conduit, lamp casings at the juncture of said frame and braces with which said conduit communicates, the casings being disposed in two diagonal rows and one horizontal row and a sheet of transparent material spanning said frame and secured therein to adapt it to constitute a wind break.

2. A device of the character described comprising a frame consisting of a substantially rectangular member and tubular braces, constituting an electrical conduit, one of said tubular braces lying substantially horizontal and centrally of the rectangular element and others of said braces being disposed in cross formation above and below said horizontal brace, lamp casings at the juncture of said rectangular member and braces and at the juncture of said braces and an additional lamp casing carried by the horizontal brace, said casings being disposed to form a horizontal row along the horizontal brace and two diagonal rows, one above and the other below said horizontal row.

3. A device of the character described comprising a substantially rectangular frame and tubular braces constituting an electrical conduit, lamp casings at the juncture of said frame and braces with which said conduits communicate each of said lamp casings comprising lenses facing both front and rear, said casings being disposed in two diagonal rows and one horizontal row and a sheet of transparent material spanning said frame and secured thereto to adapt it to constitute a wind break.

In testimony whereof I hereunto affix my signature.

GEORGE BEN SCHWIEGER.