S. NAKASORA.

DIRECTION INDICATOR.

APPLICATION FILED MAR. 25, 1920.

1,353,128. **Patented Sept. 14, 1920.**

Fig. 1.

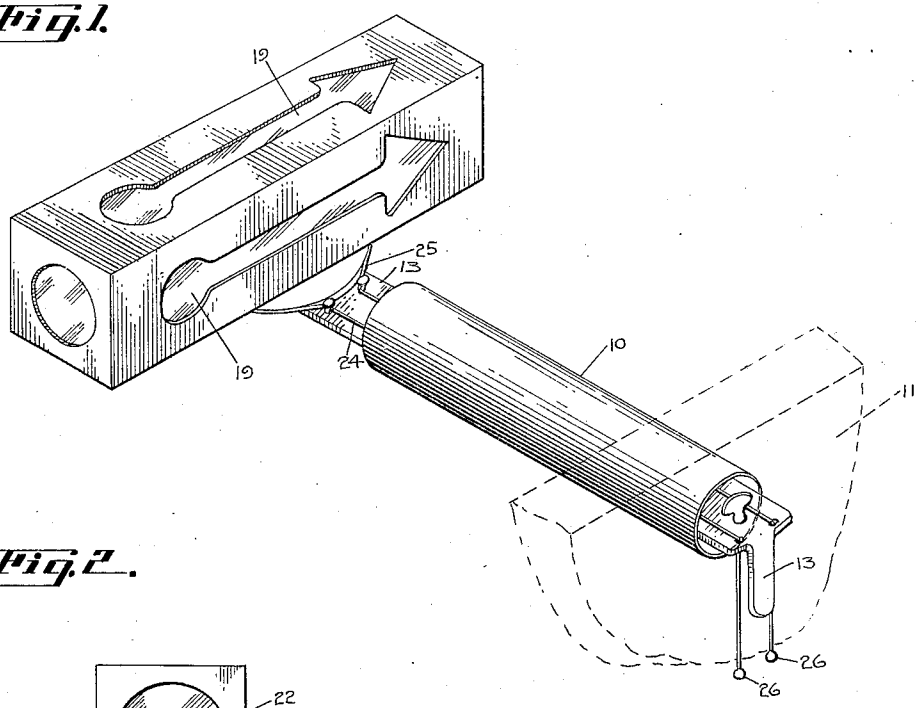
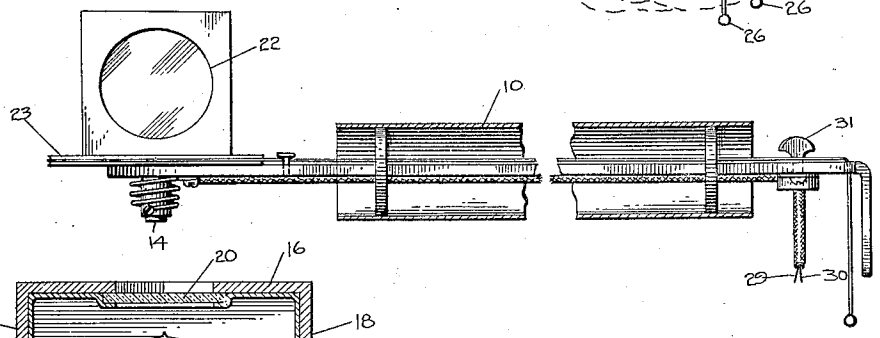


Fig. 2.



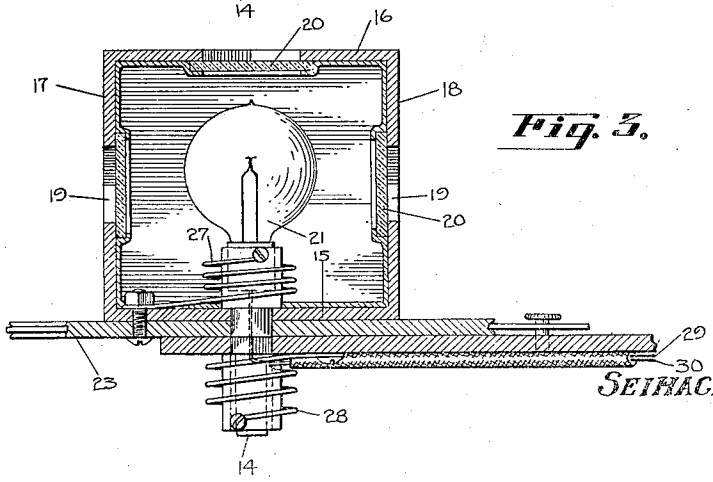


Fig. 3.

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SEIHACHIRO NAKASORA, OF NILES, CALIFORNIA.

DIRECTION-INDICATOR.

1,353,128. Specification of Letters Patent. Patented Sept. 14, 1920.

Application filed March 25, 1920. Serial No. 368,559.

To all whom it may concern:

Be it known that I, SEIHACHIRO NAKASORA, a citizen of the United States, residing at Niles, in the county of Stockton and State of California, have invented new and useful Improvements in Direction-Indicators, of which the following is a specification.

This invention relates to a direction indicator.

It is the principal object of the present invention to provide a direction indicator adapted to be used upon vehicles to indicate the intended path of travel to be pursued by the vehicle, said indicator being further designed to be easily manipulated in a manner to indicate a proposed stop of the vehicle or when it is intended to reverse the direction of the vehicle's travel.

The present invention contemplates the use of a lamp house having translucent indicating members in its various sides and one end, said members being visible in the day time and rendered visible at night by the use of illuminating means, the lamp house being controlled so that it may be moved in a horizontal or vertical plane to indicate the various signals.

The invention is illustrated by way of example in the accompanying drawings, in which;

Figure 1 is a view showing the general construction and application of the present invention.

Fig. 2 is a view in side elevation showing the structure.

Fig. 3 is an enlarged view in transverse vertical section through the lamp house and more particularly showing the pivotal mounting therefor.

Referring more particularly to the drawings, 10 indicates a tube adapted to extend through a dash board 11. This tube is fixed in relation to the board and is intended to project forwardly of the vehicle so that a lamp house 12 may be readily visible from all angles. The lamp house 12 is not directly secured to the tube but is mounted upon a rotatable bar 13 which is housed within the tube and extends outwardly from both ends thereof. The outer end of this bar carries a pivot shaft 14 which is free to rotate within an opening in the bar and is preferably fixed to the bottom wall 15 of the lamp house.

The lamp house is preferably rectangular in cross section having a bottom wall 15, a top wall 16 and side walls 17 and 18. These walls are each formed with openings, in the present instance, to indicate arrows as shown at 19. The arrows of the four sides of the lamp house point in the same direction. The openings by which these arrows are defined are covered by pieces of translucent material 20 through which the illuminating rays from an incandescent lamp 21 may pass. The members 20 are normally of light color so that they may be readily observed in the day time without illumination. The end of the lamp house corresponding with the shaft of the arrows is formed with an opening 22 covered with a translucent member 20 and which opening is adapted to appear when the vehicle is to be reversed.

A disk 23 is fixed to the bottom of the lamp house and is adapted to receive cables 24 and 25. These cables are preferably secured to diametrically opposite sides of the disk, and are led through the tube 10. Their terminating ends are fitted with knobs or other grips as indicated at 26 which will permit either of the cables to be drawn and the lamp house swung in a corresponding direction on the axis of its pivot 14. In order that the lamp house will be restored to its original position and will be maintained in this normal position, oppositely wound coil springs 27 and 28 are suitably positioned around the pivot shaft 14. It is intended that the lamp house will stand with its longitudinal axis parallel to the longitudinal axis of the vehicle and that when signaling it will be swung a quarter of a circle in either direction to indicate a corresponding course of travel, after which the release of either of the cables 24 or 25 will permit the corresponding spring 27 or 28 to swing the lamp house to its original nonsignaling position.

In indicating a proposed stop the lamp house is adapted to be turned upwardly after it has been drawn to a transversely extending position. This action is permitted by rotation of the bar 13 within the pipe 10 thus

bodily swinging the pivot bolt 14 from its vertical to a horizontal position and thereby causing the arrow to point upwardly.

Electric current is supplied to bulb 21 through conductors 29 and 30. These members may be led through or along the bar 13 and are fitted with a snap switch 31 by which the circuit may be broken or closed as desired.

In operation of the present invention the lamp house as before stated is held in its normal position with its longitudinal axis parallel to the longitudinal axis of the pipe 10 and the vehicle. When it is desired to indicate that the vehicle will turn to the right the cable 25 is drawn so that the disk 23 and the lamp house will swing in a manner to cause the arrows 19 to point toward the right. This signaling operation may be maintained as long as the cable 25 is held. A release of this cable will cause one of the springs 27 or 28 to restore the lamp house to its original non-signaling position. When a turn to the other side is contemplated the cable 24 is drawn as indicated in Fig. 1. These two signaling operations are made while the disk 23 is standing in a horizontal plane. If it is desired to stop the vehicle one of the cables 24 or 25 is pulled to swing the lamp house transversely of the vehicle and thereafter the bar 13 is rotated a quarter of a turn to dispose the disk and lamp house in a vertical plane rather than their normal horizontal plane. This signaling position may be discontinued by the release of the cable drawn. In the day time the translucent plates will appear visible and will clearly outline the arrows, while at night the bulb 21 may be illuminated by switch 31 to close the lighting circuit.

It will thus be seen that the device here disclosed is simple in its construction, possesses few moving parts, thereby eliminating wear and the possibility of rendering the structure inoperative and furthermore. that the present invention may be simply and directly operated to produce all of the signaling actions required.

While I have shown the preferred form of my invention as now known to me, it will be understood that various changes in the combination, construction and arrangement of parts may be made by those skilled in the art, without departing from the spirit of the invention as claimed.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. A vehicle direction indicator comprising a rectangular lamp containing casing with longitudinal, colored, translucent direction pointers in its sides, a horizontal bar upon which the casing is supported, a vertical pin journaled in the bar, upon which the casing is turnable, means connected with the casing by which it may be horizontally turned with the pointers indicating the direction of the turn to be made and a pair of oppositely coiled springs connected with the pin, the tension of one spring being increased when the casing is turned to return the casing to its normal balanced position when released, and means by which the bar may be revolved to place the indicator in a vertical position.

2. In a vehicle direction indicator of the character described, a rectangular lamp containing casing with longitudinal colored translucent direction indicators in its sides, a horizontal bar upon which the device is mounted, a vertical pin about which it may be horizontally turned, a ground disk fixed to the pivot pin above the bar, cords by which the disk and connections may be turned to indicate right or left turn, a pair of opposed tension return springs, a tube extending at right angles with the indicator, through which tube the bar extends, circular guide disks fixed to the bar and turnable therewith within the tube to place the indicator in a vertical position.

3. A direction indicator comprising a rotatable horizontally disposed bar, a disk rotatably mounted near the outer end of said bar, said disk carrying a horizontally disposed signal casing at right angles to the bar, and said casing being rectangular in cross section and having longitudinal, colored translucent direction indicators in its sides, and a pair of cables, each of which have one of their ends secured upon the periphery of the disk at diametrically opposing points whereby with the pulling upon either of the cables the lamp casing will be turned in a corresponding direction.

4. A direction indicator comprising a rotatable horizontally disposed bar, a disk rotatably mounted near the outer end of said bar, said disk carrying a horizontally disposed signal casing at right angles to the bar, and said casing being rectangular in cross section and having longitudinal, colored translucent direction indicators in its sides, and top, and means by which the bar may be manually rotated to bring the lamp casing to a vertical position.

5. A direction indicator comprising a rotatable horizontally disposed bar, a disk rotatably mounted near the outer end of said bar, said disk carrying a horizontally disposed signal casing at right angles to the bar, and said casing being rectangular in cross section and having longitudinal, colored translucent direction indicators in its sides, and a pair of cables, each of which have one of their ends secured upon the periphery of the disk at diametrically opposing points, guide means by which the cables

are brought to have their other ends disposed at the other end of the bar and permitting either of said cables to be drawn to produce alternate signal movements of the signal casing, and a handle formed on the inner end of the bar by which the bar may be manually rotated to bring the signal casing to a vertical position.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

SEIHACHIRO NAKASORA.

Witnesses:
W. W. HEALEY,
M. E. EWING.