J. M. GILLIES & A. MOYNIHAN.

TRAFFIC INDICATOR FOR AUTOMOBILES.

APPLICATION FILED JAN. 5, 1916.

1,216,435. Patented Feb. 20, 1917.

Fig. 1.

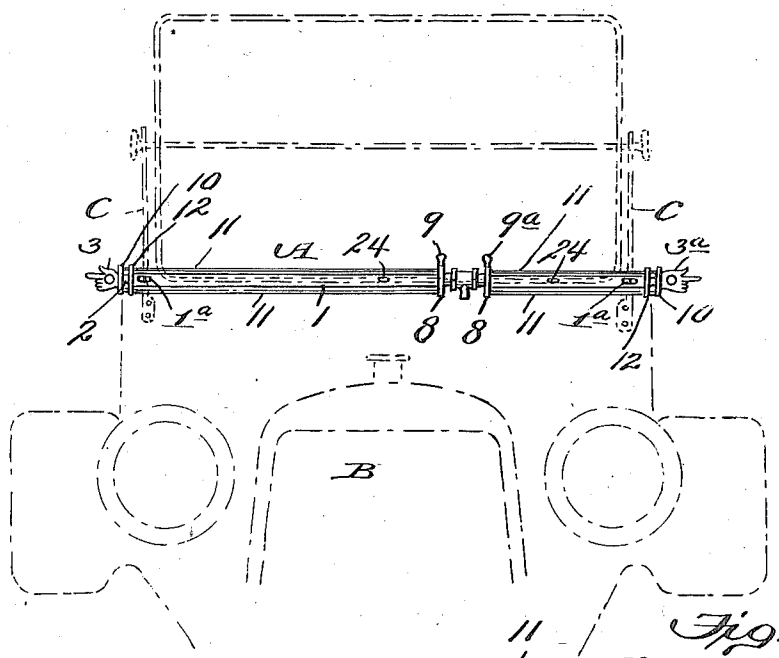


Fig. 3.

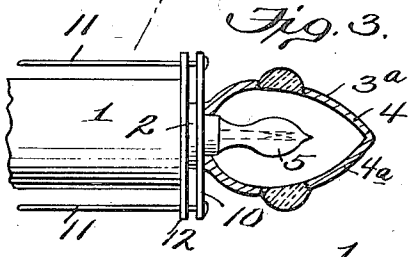


Fig. 2.

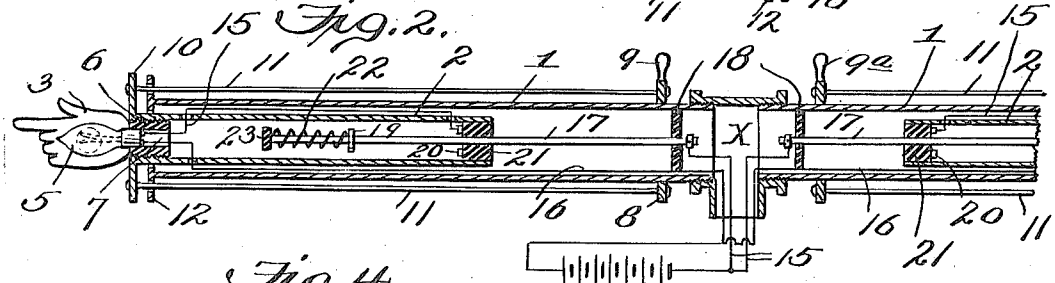
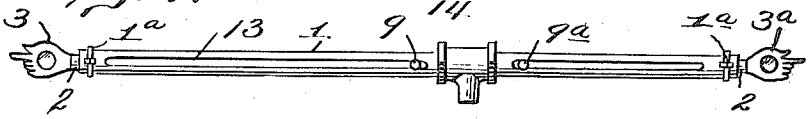


Fig. 4.



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TRAFFIC-INDICATOR FOR AUTOMOBILES.

1,216,435. Specification of Letters Patent. Patented Feb. 20, 1917.

Application filed January 5, 1916. Serial No. 70,440.

To all whom it may concern:

Be it known that we, JOHN M. GILLIES and ANDREW MOYNIHAN, citizens of the United States, residing at Salem, in the county of Washington and State of New York, have invented certain new and useful Improvements in Traffic-Indicators for Automobiles, of which the following is a specification.

The present invention relates to traffic signal indicators for automobiles and has for its object a novel construction of indicator which may be operated to indicate the direction of travel intended by the operator, and which may be illuminated for night service.

One of the main objects of the invention is to have the indicator automatically illuminated when the latter is extended to a signaling position and extinguished when in a retracted or inoperative position.

With the above objects in view, the invention consists in telescoping members which carry a pointer or indicating element upon the member adapted to be extended farthermost, and, the invention also consists in means for illuminating said indicator and means controlled by the relative positions of said members for establishing and breaking a circuit to said illuminating medium.

The invention further consists in the novel features of construction, combination and arrangement of parts hereinafter set forth and finally pointed out in the appended claims.

In the drawings which form a part of the specification:

Figure 1 is a front view showing the invention applied to an automobile;

Fig. 2 is a longitudinal sectional view, illustrating in detail and in enlarged scale the construction shown in Fig. 1;

Fig. 3 is a detail plan view of the pointer or indicating element; and

Fig. 4 illustrates a slightly modified embodiment of the invention.

Like reference characters denote similar like parts throughout the drawings and specification.

According to the invention, the traffic signal indicator A is designed to extend transversely of the automobile B and is preferably secured to the rod C of the wind-shield by the clamps 1^a, and at such a height as will be convenient to the reach of the chauffeur or driver of the automobile.

The indicator B comprises the transversely extending tubular member 1 having the tubes 2 slidably received or telescoping in the ends thereof. The outermost ends of the tubes 2 have mounted thereon the pointers or indicating hands 3 and 3^a, respectively, consisting of two complemental index hand sections 4 and 4^a arranged and secured together with their palms opposing so as to form a transparent casing or housing for the electric bulb 5, as shown in Fig. 3. The plugs 6 of the pointers are preferably of insulating material threaded in the outer ends of the tubes 2 and formed with an opening 7 to receive or accommodate the socket of the bulb 5.

As will be seen from the drawings, a pointer or indicator 3 is provided on each side of the automobile and is projected from the opposite ends of the outer tube member 1, and since their constructions and operation are identical, only one will be referred to in detail, for clearness.

Collars 8, having the handles 9 and 9^a projecting therefrom, are slidable on the outer tube and have connection with the respective inner tubes 2 for sliding the latter relatively to the tube 1, whereby the indicators 3 and 3^a are extended to notify the traffic and pedestrians of the direction of travel intended. When it is desired to turn to the right, the handle 9 will be slid outwardly by the operator, whereby the indicator 3 will be extended from the right side of the automobile. On the other hand, when it is desired to turn to the left, the corresponding handle 9^a is similarly operated. As shown in Figs. 1 and 2, the handles 9 and 9^a are connected to the flanges 10 on the outer ends of the tubes 2 by the rods 11 slidably extending through the guide flanges 12 on the outer ends of the outer tube 1. In Fig. 4, however, a slight modification of this construction is shown wherein the handles 9 and 9^a are directly secured to the inner tube 2 and extend through elongated slots 13 in the outer tube 1.

The construction just described especially permits the easy application of means for automatically illuminating the bulb 5, when the latter is extended into signaling position, and which illumination is desirable for night service.

The circuits to the bulbs 5 from the source of energy 14 are shown diagrammatically, in Fig. 2. The conductors 15 and 16 are brought into the tube 1 preferably at a point

X between the handles 9 and 9a. The conductors 15 to each of the indicators 3 and 3a have interposed therein a circuit breaker consisting of a rod 17 longitudinally disposed in the outer and inner tubes 1 and 2, respectively, the rod 17 being held stationary in position by the insulating block 18 adjacent the opening X. As shown, the outer end of the rod 17 extends into the inner tubes 2 for a considerable distance and has slidable thereon the contact piece 19 adapted to engage with the contact 20 carried on the insulating block 21 secured to the inner end of the tube and surrounding the rod 17.

It will thus be seen that when the inner tubes 2 are extended or projected from the stationary tube 1 so as to move the indicators 3 and 3a into signaling position, the bulb 5 will automatically illuminate the indicators when the latter are moved to the extent of their signaling position; and when the indicators are retracted from this position, the circuit to the bulbs is broken and the latter extinguished. To reduce shock, due to the engagement of the contacts 19 and 20, caused by suddenly ejecting the indicator, a spring buffer 22 is interposed between the contact 19 and a nut 23 on the outer extremity of the rod 17. The contact 20, spring 22 and nut 23 are preferably secured together so that said contact and spring will also be held in proper position.

Stops 24 are provided to limit the outer movement of the tubes 2, as shown in Figs. 1 and 2, whereas the ends of the slots 13 will limit the movement of the tubes 2, as shown in Fig. 4.

We claim:—

1. A traffic indicator comprising, an outer tubular member, an inner tubular member slidably mounted in the outer member, an electrically illuminated indicator carried by the inner member, means for projecting and retracting the inner member, an electric circuit to said indicator, a circuit controller interposed in said circuit including a contact carried on said inner tubular member, and a substantially stationary contact within the latter adapted to be engaged by the first mentioned contact, when said inner tubular member is in its projected position.

2. A traffic indicator comprising, an outer tubular member, an inner tubular member slidably mounted in the outer member, an electrically illuminated indicator carried by the inner member, means for projecting and retracting the inner member, an electric circuit to said indicator, a circuit controller interposed in said circuit including a contact carried on said inner tubular member, a substantially stationary contact within the latter adapted to be engaged by the first mentioned contact when said inner tubular member is in its projected position, and yielding means for cushioning the engagement of said contacts.

3. A traffic indicator comprising, a tubular casing, an inner tubular member slidably mounted in said casing, means for sliding said member, a guide rod secured in said casing and extended into said tubular member, means insulating said rod from said casing and tubular member, a contact provided on the extended end of said rod, a contact provided on said member to engage with said first mentioned contact when said member is projected, an electric-circuit connected to said rod and the contact on said tubular member, and a lamp mounted on said member and in said circuit.

4. A traffic indicator comprising, a tubular casing, an inner tubular member slidably mounted in said casing, means for moving said member and to project it from one end of said casing, a rod extending longitudinally in said casing and having one end extended into said tubular member, said rod being stationarily secured in said casing adjacent the other end thereof and insulated therefrom, a contact provided on the end of the rod extending in said tubular member, an insulating block secured in said tubular member and through which said rod extends, a contact secured to said block and adapted to engage the contact on said rod when said member is projected, an electric circuit connected to said rod and the contact of said tubular member, and a lamp mounted on said member and in said circuit.

5. A traffic indicator comprising a tubular casing, an inner tubular member slidably mounted in said casing, means for moving said member and to project it from one end of said casing, a rod extending longitudinally in said casing having one end extending into said tubular member, said rod being stationarily secured in said casing adjacent the other end thereof and insulated therefrom, a contact yieldingly mounted on the end of rod extending in said tubular member, an insulating block secured in said tubular member and through which said rod extends, a contact secured to said block and adapted to engage the contact on said rod when said member is projected, an electric circuit connected to said rod and the contact of said tubular member, and a lamp mounted on said member and in said circuit.

6. A traffic indicator for vehicles comprising a tubular housing adapted to extend transversely of the vehicle and to be secured thereto, said housing having an inlet intermediate its ends for the insertion of electric conductors, slidable tubular members mounted in the ends of said housing, means for reciprocating each slidable member whereby it is projected from and retracted into said housing, rods rigidly secured in the housing and arranged to longitudinally

extend one in each of said slidable members, an insulating block secured to each of said slidable members and through which said rods extend, a contact provided on the extended ends of said rods, a contact provided on said insulating blocks to engage the contacts on the rods, when said slidable members are projected, electric circuits each having one terminal thereof connected with one of the rods and the other with the contact on one of said insulating blocks, and a lamp mounted on each of said slidable members and in one of said circuits.

7. A traffic indicator for vehicles comprising a tubular housing adapted to extend transversely of the vehicle and to be secured thereto, said housing having an inlet intermediate its ends for the insertion of electric conductors, slidable tubular members mounted in the ends of said housing, means for reciprocating each slidable member, whereby it is projected from and retracted into said housing, rods secured in said housing and arranged to extend one in each of said slidable members, means insulating said rods from said housing and slidable members, contacts on the extended ends of said rods, a contact provided on each of said members to engage the contacts on the rods, when said members are projected, a lamp mounted on each member, and an electric circuit to each lamp and having one terminal thereof connected with the contact on the slidable member and the other with the rod extended into the latter.

8. A traffic indicator for vehicles comprising, a tubular housing adapted to extend transversely of the vehicle and to be secured thereto, slidable tubular members mounted in the ends of said housing, means for reciprocating each slidable member whereby it is projected from and retracted into said housing, an electrically illuminated indicator carried by each of said slidable members, an electric circuit to each indicator, and circuit controllers interposed in said circuits, each including a contact carried on each slidable member and a substantially stationary contact within each of said members to be engaged by the first-mentioned contacts, when said members are in their projected position.

In testimony whereof we affix our signatures in the presence of two witnesses.

JOHN M. GILLIES.
ANDREW MOYNIHAN.

Witnesses:
KATHERINE MOYNIHAN,
JAMES GIBSON.