

May 8, 1923.

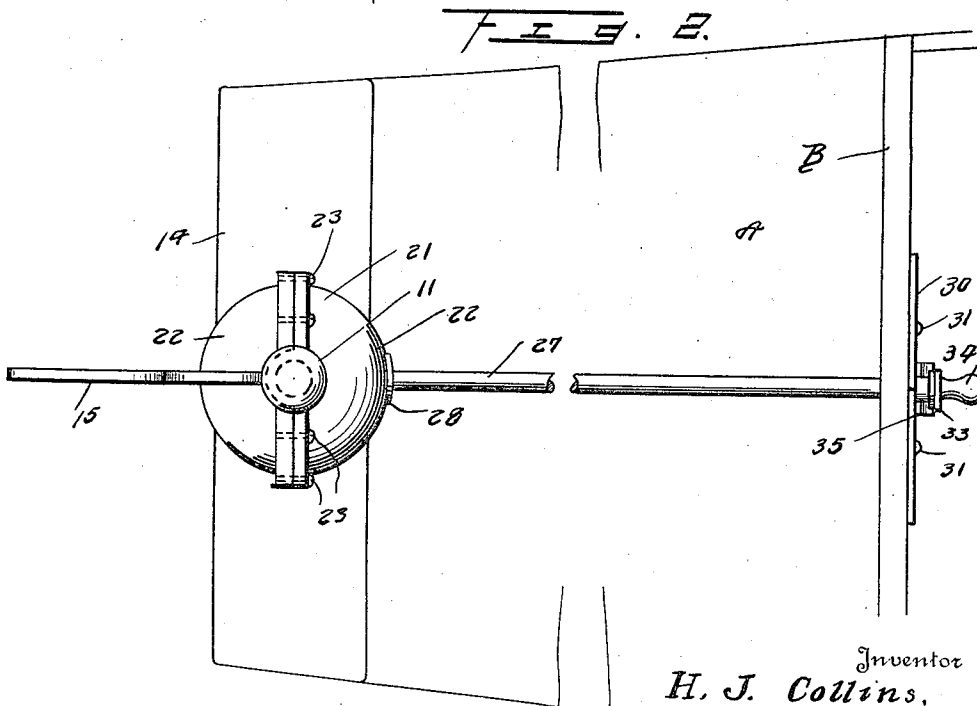
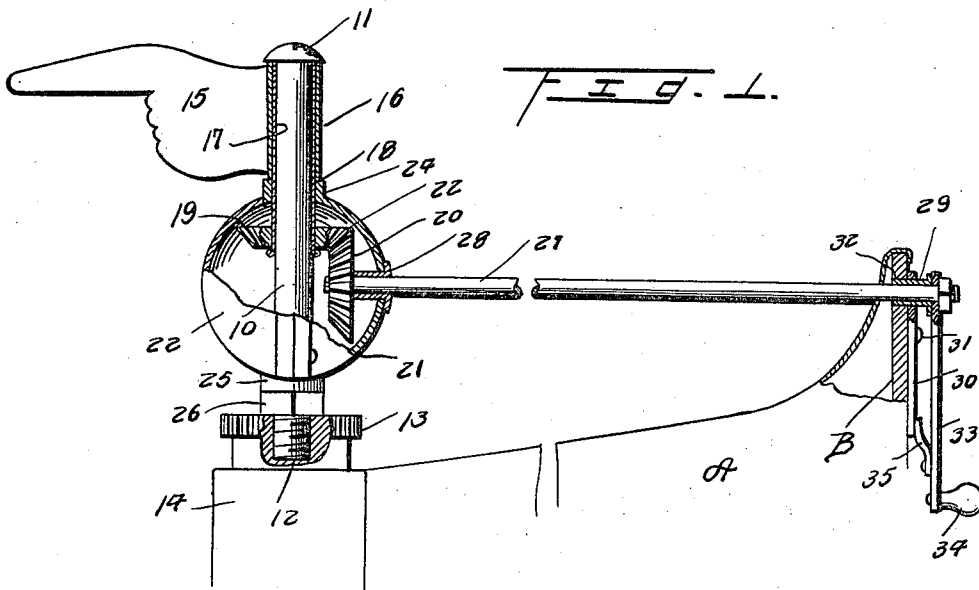
H. J. COLLINS

1,454,726

TRAFFIC SIGNAL FOR VEHICLES

Filed July 27, 1922

2 Sheets-Sheet 1



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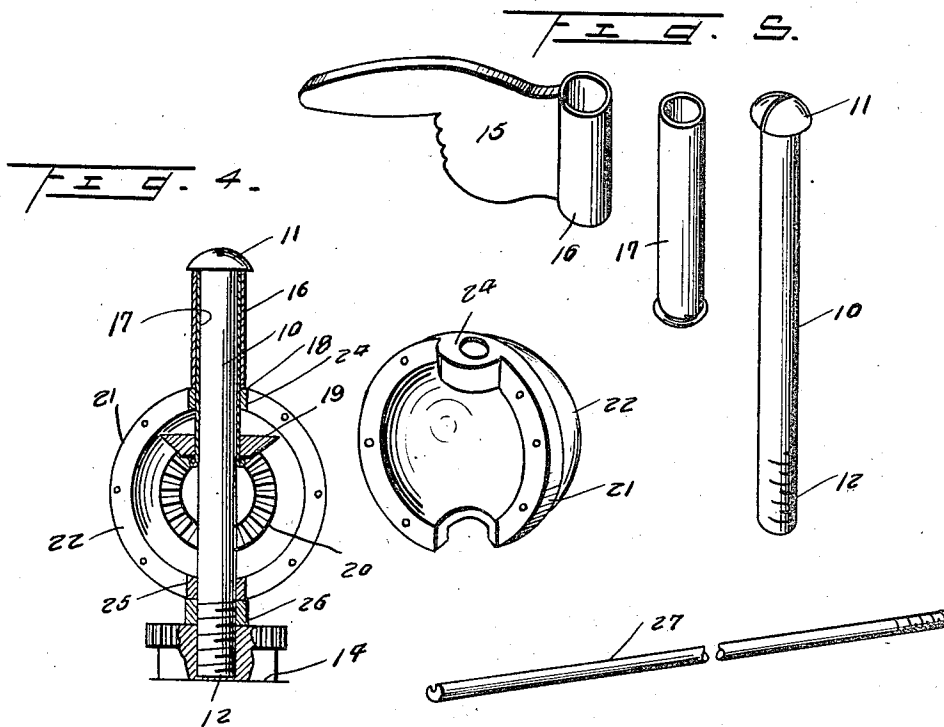
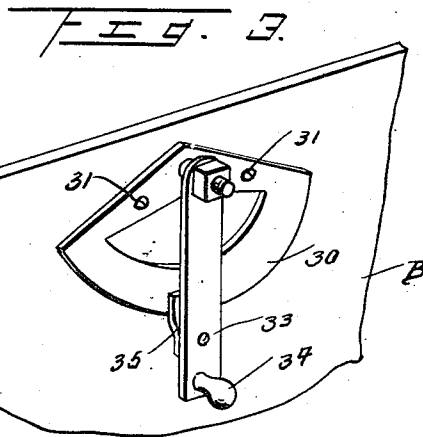
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TRAFFIC SIGNAL FOR VEHICLES

Filed July 27, 1922

2 Sheets-Sheet 2



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1,454,726

UNITED STATES PATENT OFFICE.

HENRY J. COLLINS, OF PROVIDENCE, RHODE ISLAND.

TRAFFIC SIGNAL FOR VEHICLES.

Application filed July 27, 1922. Serial No. 577,370.

To all whom it may concern:

Be it known that I, HENRY J. COLLINS, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in a Traffic Signal for Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a traffic signal or direction indicator for vehicles, particularly automobiles.

It is generally aimed to provide a novel construction which is readily attachable to existing automobiles as to the filling cap of the radiator for its propelling engine and adapted for manipulation from a point adjacent the driver's seat.

It is further aimed to provide a novel construction, essentially having a bolt to mount an indicator sleeve and a casing for gears and a shaft to operate such sleeve.

Additional objects and advantages will become apparent from a consideration of the description following taken in connection with the accompanying drawings illustrating one practical embodiment.

In said drawings:—

Figure 1 is a view illustrating an automobile principally in side elevation, partly broken away, to disclose the attachment of my improvement thereto;

Figure 2 is a plan view of the parts of Figure 1;

Figure 3 is a detail perspective view looking toward the instrument board and the operating means for the traffic signal;

Figure 4 is a vertical sectional view on an enlarged scale taken through my improvement and at a right angle to Figure 1;

Figure 5 is a detail perspective view showing the parts forming the signal proper in disassembled relation to disclose details.

Like reference characters designate like or similar parts in the different views.

In reducing the invention to practice, a rod 10 is provided for vertical disposition and which may be a bolt having a usual head 11 at its upper end and its lower end screw threaded as at 12 whereby it may be detachably secured in a cap 13 which forms the removable cap for the filling opening of the radiator 14 employed on an automob-

ile generally designated A and in the water cooling system of its propelling engine as usual.

An indicator arm of any preferred shape is employed at 15 having an attaching tube 16 which is rigidly secured to a sleeve 17 which depends below the tube 16 in order to provide a shoulder at 18. Keyed or otherwise fastened on the sleeve 17 is a beveled gear wheel 19 adapted to be driven by a beveled gear wheel 20. Said gear wheels 19 and 20 are enclosed and protected by a casing as at 21 which is preferably made in a plurality of sections 22 detachably bolted or otherwise secured together as at 23. Said casing has upper and lower bearing extensions 24 and 25. The shoulder 18 is in direct engagement and bearing contact with the extension 24 as shown. Extension 25 rests on a jam nut 26 which is screwed up against the same and intermediate the same and cap 13.

Gear wheel 20 is keyed to a shaft 27 which passes through and is journaled in a bearing opening 28 in one of the sections 22. This shaft connection at this point prevents rotation of the casing 21.

Shaft 27 extends substantially longitudinally of the vehicle and is journaled in a guide member or bearing 29 suitably secured to the instrument board B of the vehicle. Also secured to the instrument board B or to any other appropriate part of the vehicle, is a lock plate or segment 30. Plate 30 may be screwed or otherwise fastened in place as at 31. Shaft 27 is journaled in an opening 32 of said plate 30 and a manipulating or crank arm 33 is rigidly fastened to the inner end of shaft 27 and has a knob or the like extending therefrom to facilitate manipulation. Crank 33 carries a securing plate 35 which is in the nature of a blade of spring metal adapted to normally frictionally bear against the plate 30 and thus maintain the crank 33 and operating parts in the different adjusted positions. Arm 33 is slightly resilient so that upon depression of the knob 34 the frictional action of securing plate 35 with the plate 30 will be destroyed and the crank 33 capable of movement to rock the shaft 27. It is clear of course that any means may be substituted for that shown in order to secure the parts positioned to the plate 30.

In operation, the parts are arranged so that the indicator 15 will normally point straight ahead. When a turn is to be made,

the crank 23 is turned in the appropriate direction so that the indicator 15 will accordingly turn to the right or left and specifically through the rocking of shaft 27, the coaction of gear wheels 19 and 20, the rotation of sleeve 17 on rod 10 through movement of the gear wheel 19.

As merely one practical embodiment has been illustrated and described, it is to be understood that changes in the details may be resorted to provided they fall within the spirit and scope of the invention.

I claim as my invention:—

1. A traffic signal including a rod, an indicator journaled on said rod, a casing surrounding said rod and on which said indicator rests, said indicator having a sleeve extending into the casing, a gear wheel on said sleeve and within the casing, driving means extending into said casing and cooperating with said gear, a fastening member on said rod below and upholding said casing, and said rod extending below said fastening member for attachment to a support.

2. A traffic signal including a rod having a head, an indicator journaled on said rod and in contact with said head, a casing surrounding said rod, said indicator having a sleeve extending into said casing, a gear wheel on said sleeve within said casing, a driving shaft extending into said casing, a gear wheel on said driving shaft in mesh with the first mentioned gear wheel, a nut screw threaded on said rod below and upholding said casing, and screw threads on said rod extending below said nut for attachment of the rod to a support.

3. A traffic signal including a rod provided with a head, an indicator having a tube, a

sleeve within and depending from said indicator and journaled on said rod, a casing surrounding said rod, said casing having upper and lower extensions, said tube resting on said upper extensions, said sleeve extending into the casing, a gear wheel on said sleeve within the casing, a shaft journaled in and extending into the casing, a driving connection between the second mentioned shaft and said gear wheel, said rod being provided with screw threads, a nut operable on said screw threads to contact with the lower extension, and said threads projecting below said nut for attachment to a support.

4. A traffic signal including a rod provided with a head, an indicator having a tube, a sleeve within and depending from said indicator and journaled on said rod, a casing surrounding said rod, said casing having upper and lower extensions, said tube resting on said upper extensions, said sleeve extending into the casing, a gear wheel on said sleeve within the casing, a shaft journaled in and extending into the casing, a driving connection between the second mentioned shaft and said gear wheel, said rod being provided with screw threads, a nut operable on said screw threads to contact with the lower extension, and said threads projecting below said nut for attachment to a support, a plate in which said shaft is journaled, a crank arm on said shaft, and a securing member on said crank arm for coaction with said plate.

In testimony whereof I affix my signature in presence of two witnesses.

Mr. HENRY J. COLLINS.

Witnesses:

HARVEY ARNER BACON,
AVILA H. LEDOUX.