

R. WETHERILL.
 SIGNAL DEVICE FOR AUTOMOBILES.
 APPLICATION FILED JULY 5, 1917.

1,339,938.

Patented May 11, 1920.
 2 SHEETS—SHEET 1.

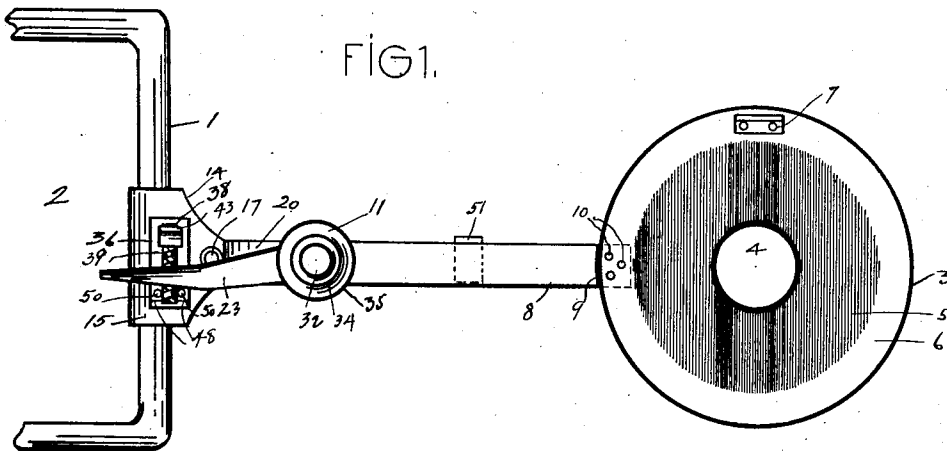
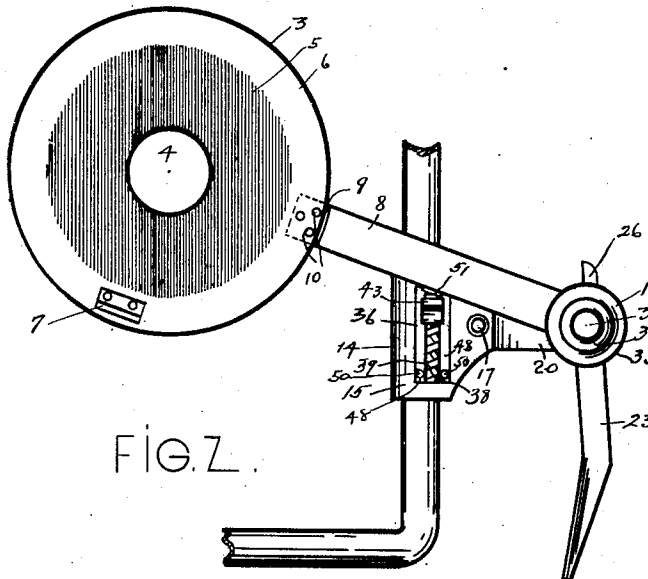


FIG. 4.

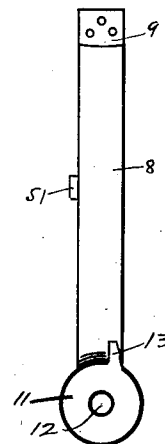
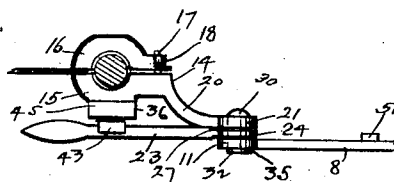


FIG. 3.



WITNESSES

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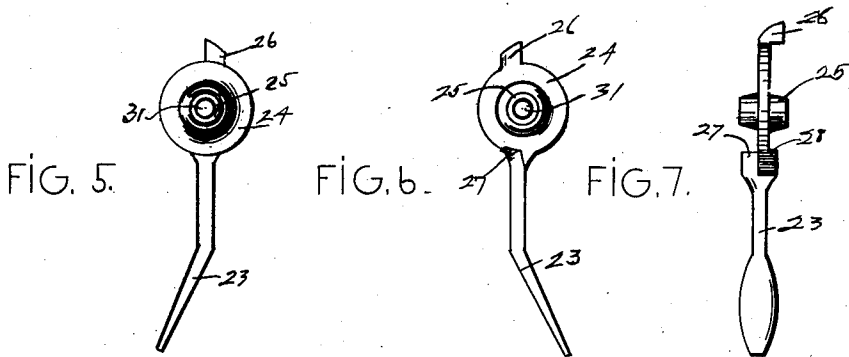
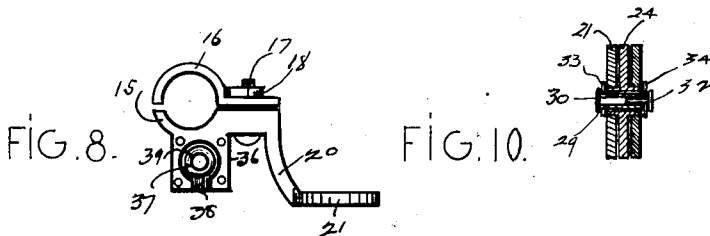
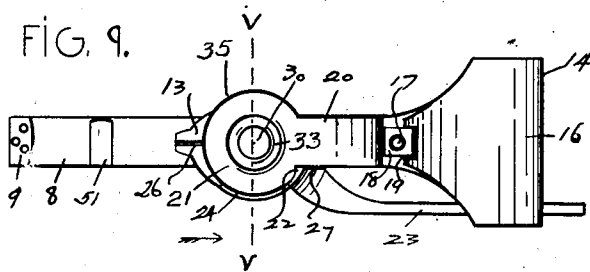


FIG. 11.

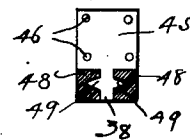


FIG. 12.

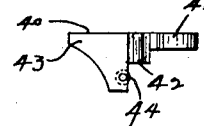
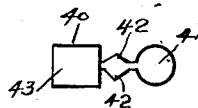


FIG. 13.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ROY WETHERILL, OF KANSAS CITY, MISSOURI.

SIGNAL DEVICE FOR AUTOMOBILES.

1,339,938.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROY WETHERILL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Signal Device for Automobiles, of which the following is a specification.

My invention relates to improvements in signaling devices for automobiles; and the objects of my invention are, first, to provide an inexpensive, durable and efficient manually operated visual signaling device which may be attached to the frame of the wind shield of an automobile and displayed to stop traffic, second, to provide the signaling apparatus with means of storing energy to force the signal to stop position, and a reversing lever for returning the signal to normally clear position, and, third, to provide an elbow with motion limiting stops to allow the signal arm to assume a horizontal position to display the stop signal and to engage stops on the reversing lever and thereby return to normal clear position.

I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1, is an elevation of my invention, and showing the same in operative stop position; Fig. 2, is an elevation of my invention, and showing the same in normally clear position; Fig. 3, is a top view of the signal in stop position, the signal disk being omitted, and showing the method of attaching the same to the frame of the wind shield, and also showing the elbow which permits the signaling arm and reversing lever to rotate to effect signaling operations; Fig. 4, is a plan view of the inner side of the signaling arm and showing the circular disk adapted to receive the hub on the reversing lever; Fig. 5, is a plan view of the inner side of the reversing lever, and showing the stop to engage the signaling arm; Fig. 6, is a plan view of the outer side of the same; Fig. 7, is a view of the upper side of the same; Fig. 8, is a top view of the attaching member and showing the means for storing energy to force the signaling arm to stop position; Fig. 9, is an elevation of the reverse side of the device, and showing the signaling arm and the reversing lever in operative engagement to hold the arm horizontal; Fig. 10, is a vertical section through the elbow on the line V—V, in Fig. 9; Fig.

11, is a view from the lower end of the cover of the energy storage compartment, and showing the legs integral therewith and provided with V-shaped slideways; Fig. 12, is a side elevation of the slide member, and showing the V-shaped slides which traverse the slideways in the cover, also showing the roller which bears upon the outer sides of the legs; and, Fig. 13, is a top plan view of the slide member.

Similar numerals of reference refer to corresponding parts throughout the several views.

The numeral 1, indicates a fragment of the frame of the wind shield 2, of an automobile. The signaling device comprises a disk 3, having a central opening 4, which is adapted for reducing wind pressure and to provide opportunity to display a lamp for night signaling. The disk is, preferably, colored red to adjacent its peripheral edge, the outer portion being colored white, as shown at 5 and 6, respectively. A lip 7, is attached to the rearward side of the disk, adjacent its edge, and is adapted to receive hand pressure, in the manner hereinafter described. A signal arm 8, is provided at its outer end with a seat 9, which is adapted to receive a marginal portion of the disk, to which the latter is fixed by rivets 10. A disk 11, is formed integral with the inner end of the signaling arm and is provided centrally with an opening 12, and with a motion limiting stop 13, and which is formed integral therewith. An attaching member 14, comprising oppositely disposed individual adjustably mounted rigid jaw 15 and movable jaw 16, are held in place by a bolt 17, provided with a nut 18, which is lodged in and detained by a seat 19, formed in the outer end portion of the jaw 16. A supporting arm 20, is formed integral with the outer end portion of the jaw 15, and is extended outwardly of the jaw in horizontal alignment, but bowed rearwardly in suitable degree, and is provided at its outer end with a disk 21, having a central opening therein, similar to the opening in the disk 11, on the signaling arm, the inner lower edge of the disk, adjacent the arm, is cut away inwardly a suitable distance to form an abutting stop 22. A reversing lever 23, is provided on its outer end with a disk 24, having a hollow hub 25, which extends outwardly of the sides of the disk a sufficient distance to re-

ceive the openings in the disks on the signaling arm and supporting arm, the said hub being formed with a hollow core. Laterally extending stop 26, is formed on the outer portion of the peripheral edge of the disk and shoulders 27 and 28, are formed on the reversing lever at the inner side of the disk, and are adapted to engage the cut away portion 22, on the disk 21. The disk 24, on the lever 23, is lodged between the disk 11, on the signaling arm and the disk 21, on the supporting arm 20, the projecting ends of the hollow hub 25, being respectively entered into the adjacent openings in the disks 11 and 21, in such a manner that the latter will permit the reversing lever to turn. A bushing 29, having a head 30, is extended through the core 31, of the hub 25, the free end of the bushing being provided with internal screw threads which are adapted to receive the screw end of a bolt 32, washers 33 and 34, being interposed between the heads of the bushing and bolt and bear on the ends of the hub, thereby forming an elbow joint 35, which is adapted to permit simultaneous rotative movements of the signaling arm and the reversing lever. In assembling the disks, in the manner mentioned, the disk 21, operates as a rigid support or bearing for the revoluble hub 25, thereby permitting the reversing lever to bring its limiting stop 26, in engagement with the stop 13, on the signaling arm to force the latter to turn inwardly, the outward turning of the signaling arm forcing the reversing lever to turn inwardly until its shoulder 27, is engaged by the under or lower edge of the supporting arm 20. A vertically extending mass of metal 36, is formed integral with the outer side of the jaw 15, and is provided with a bore 37, which is extended to adjacent the lower end of the mass. A longitudinally extending slotted aperture 38, is formed in the outer side of said mass and communicates with the bore 37.

A compression spring 39, is lodged in the bore 37, and a slide member 40, having a head 41, lodged upon the upper end of the spring 39, and V-shaped slide bearings 42, slidably mounted in the V-shaped slideways, hereafter described, is extended outwardly through the slotted aperture 38, to form a lip 43, having a downwardly extending portion provided with a roller 44. A cover 45, having dowel pins 46, adapted to enter the holes 47, in the upper end of the mass 36, is provided with legs 48, which are spaced apart a distance, substantially conforming with the width of the slotted aperture 38, and having oppositely disposed V-shaped slideways 49, on their inner sides, which are occupied by the V-shaped slide bearings 42,

in the slide member 40, the outer sides of the legs forming a bearing for the roller 44, the lower ends of the legs being secured on the mass by fasteners 50.

To attach the signaling device to the frame of the wind shield of an automobile, the jaws 15 and 16, are separated to admit the frame, when the jaws are closed upon the frame by the clamping bolt 17, in the well known manner. The signal arm 8, is turned inwardly by the reversing lever 23, thereby bringing the signaling device to clear position, with the stop 51, on the arm 8, bearing upon the lip 43, of the slide member 40, the lip 7, on the signaling disk 3, being thereby brought in position to be conveniently engaged by the hand of the driver, as shown in Fig. 2. To bring the signal to stop position, the signal arm is depressed by applying downward pressure upon the lip 7, thereby pressing the slide member 40, downward against the tension of the spring 39, which, when the pressure is discontinued, will react to force the signaling arm outward to the stop position. In this action the stop 13, on the inner end of the signaling arm, engages the stop 26, on the reversing lever, and turns the latter inwardly until its shoulder 27, engages the lower edge of the signaling arm, when the further movement of the latter is prevented, and it is detained in a horizontal position. The stop 13, on the signaling arm engages the stop 26, on the reversing lever, in its outward movement of the signaling arm, and turns the lever inwardly to normal position. To return the signaling arm to normally clear position an outward pressure is applied to the reversing lever 23, when the stop 26 will engage the stop 13, on the signaling arm and force the latter to turn inwardly to normally clear position, in readiness for setting the signal in stop position.

Having described my invention what I claim is—

A signaling device for automobiles, comprising a lever having a disk portion provided with a hollow hub and with a laterally projecting stop, a supporting arm having a disk portion mounted idly on the hub on said lever and a stop engaged by the stop on the disk of the lever, an attaching member having a disk portion mounted idly on the hub on said lever, and a yielding stop member demountably secured on the inner end of said attaching member and projecting in the rotative field of said lever and said supporting arm.

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Witnesses:

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