

Nov. 18, 1924.

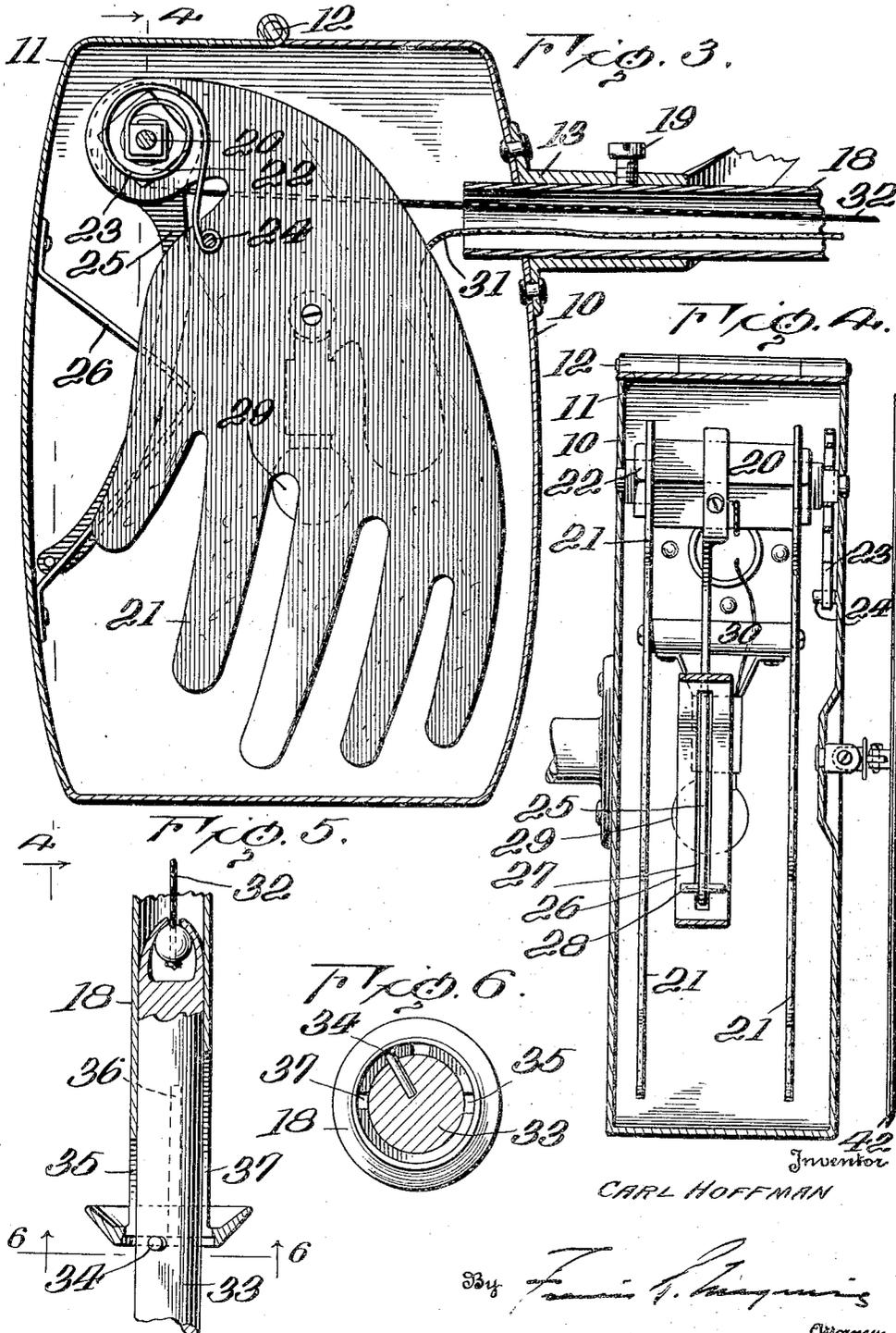
1,516,433

C. HOFFMAN

AUTOMOBILE SIGNAL

Filed March 31, 1923

3 Sheets-Sheet 2



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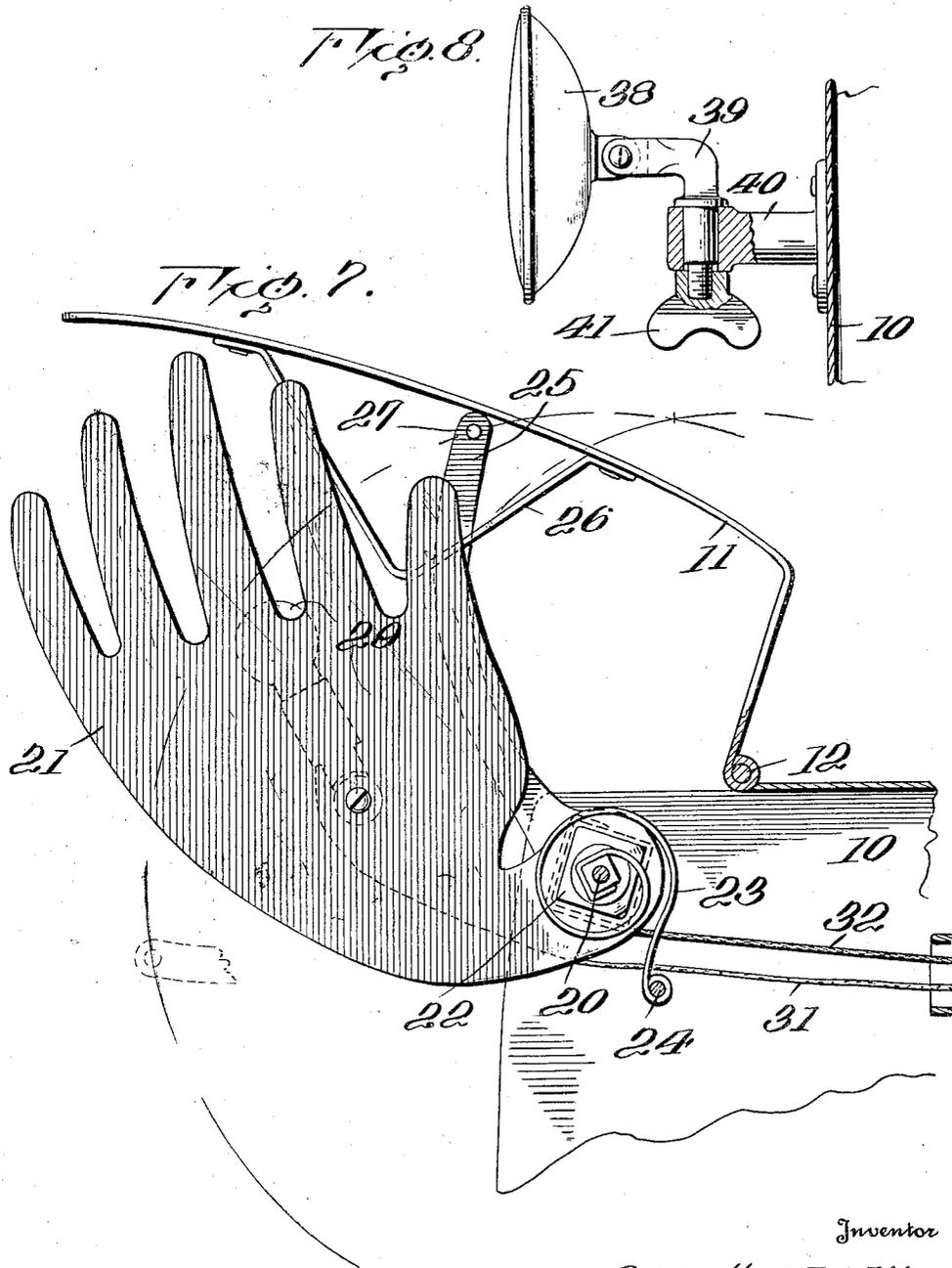
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3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE.

CARL HOFFMAN, OF ALLENTOWN, PENNSYLVANIA.

AUTOMOBILE SIGNAL.

Application filed March 31, 1923. Serial No. 629,142.

To all whom it may concern:

Be it known that I, CARL HOFFMAN, a citizen of the United States, and resident of the city of Allentown, county of Lehigh, and State of Pennsylvania, have invented new and useful Improvements in Automobile Signals, of which the following is a specification.

This invention relates to an improvement in automobile signals and more particularly to that type operable by the operator of a machine for indicating to the traffic the direction or course of his machine.

The invention consists of a casing or housing having a spring actuated indicator journaled therein, and a cover for concealing the indicator within the casing when not in use and protecting it against the elements, the movement of the indicator and cover being under the control of the driver of the machine, who may regulate the angle the indicator is to assume in indicating to the traffic the course of his machine.

The invention consists of certain other novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a view in perspective showing the invention applied to the windshield of an automobile;

Figure 2 is a view in rear elevation of the invention applied to a windshield;

Figure 3 is a vertical sectional view of the invention;

Figure 4 is a transverse vertical sectional view on line 4—4 of Figure 3;

Figure 5 is a detail sectional view of the operating handle and tube or pipe;

Figure 6 is a cross sectional view on line 6—6 of Figure 5;

Figure 7 is a view in elevation and partially diagrammatic to show the movement of the indicator in its various positions; and

Figure 8 is a view in elevation of a searchlight attached to the signal casing.

The signal casing 10 is constructed somewhat rectangular in form and has an opening in its outer end and in a portion of the top, which is normally closed by a cover 11 hinged to the top at 12, conforming to the shape of the casing.

A bracket 13 is connected to the inner end or wall of the casing, and to a post 14 of a windshield 15 by means of a jaw which engages the post and is fastened to the

bracket by a screw bolt 17. The bracket 13 is preferably hollow throughout a portion of its length and received in the hollow portion of the bracket is a tube or pipe 18 that extends into the casing 10. The tube 18 extends inwardly from the casing and along the inner surface of the windshield 15 for a short distance and then is bent downwardly at right angles. The tube 18 is held in the bracket and against movement by a screw 19.

A shaft 20 is journaled transversely of the casing 10 and the ends are reduced to receive signal hands or indicators 21 constructed in the shape of a hand and being of some transparent or translucent material, such as celluloid, and preferable red in color. Nuts 22 are screwed on the reduced ends of the shaft for rigidly holding the hands or signal indicators in position. A coiled spring 23 has one end thereof connected to the shaft 20 and at its other end is connected to a stud 24 on one of the side walls of the casing 10. The spring is placed under tension and normally tends to force the hands 21 outwardly so that they project from the outer or open end of the casing.

A curved arm 25 is mounted on the shaft 20 and located between the two signal hands 21. A V-shaped bracket 26 is connected to the inner surface of the door 11 and is provided with a slot 27 therein through which extends the free end of the arm 25. The arm 25 is provided with a pin 28 extending transversely through the free end thereof and engaging the bracket 26 for causing the door 11 to be brought to closed position when the signal hands 21 are retracted into the casing. When the signal hands are released and allowed to project from the casing, the arm 25 will engage the inner surface of the door 11 and cause it to be swung outwardly for the purpose of protecting the hands against the elements and insuring their observation by the oncoming drivers.

Supported between the signal hands 21, 21, is a lamp 29, on a bar 30 connected to the signal hands, so that the hands may be illuminated and observed during night driving. An electric wire 31 leads from the lamp 29 from the casing 10 through the tube 18 to a suitable electric source.

Connected to the shaft 20 is a suitable rope or cable 32, extending from the casing 10 through the tube 18 to an operating han-

dle 33. A pin or projection 34 on the handle 33 engages the outer end of the tube and holds the shaft 20 from rotating. A plurality of varying length slots 35, 36, and 37 are formed in the tube 18 extending lengthwise of the tube from the outer end thereof, and into which slots the pin 34 is inserted according to the movement or angle the hands 21 should assume in giving the required signal.

When it is desired to operate the signal the handle 33, is turned to cause the pin 34 to enter one of the slots 35, 36 or 37, according to the angle which the hands 21 are to assume. The releasing of the handle or forcing it into the desired slots, permits the spring 23 to rotate the shaft, thereby causing the arm 25 to force the door 11 open and the signal hands 21 to be projected from the casing 10. If the pin 34 is inserted in the slot 35, the hands 21 would be projected to the first position, as indicated in Figure 7, indicating a turn to the left; or if the pin should be inserted in slot 36, the hands 21 would assume the second or full line position as indicated in Figure 7, indicating that the machine was stopping, and when the pin is inserted in slot 37, the hands would assume the third or uppermost position to indicate a right hand turn.

When the signal has been given and it is desired to return the signal hands 21 to the casing 10, and the door 11 brought to closed position, the handle 33 is drawn outwardly, causing a reverse rotation of the shaft 20, and against the action of the spring 23, until the pin 34 has been brought into engagement with the outer end of the tube 18, when the parts will again be in their normal position, and ready for the next signaling operation.

The handle 33 is provided with a pointer or arrow 43, which is so positioned thereon that the driver may readily know when the handle has been rotated sufficiently to permit the pin 34 to enter the desired slot in the tube 18.

Supported on the front wall of the casing 10 is a search light 38, provided with a pivotal arm 39 engaging a bracket 40 on the casing. The arm 39 is held on the bracket 40 by a wing-nut 41, so that the lamp may be detached and used as a trouble lamp.

A mirror 42 is pivotally connected with the rear wall of the casing 10, whereby the driver may position the mirror to best advantage for him to observe the traffic approaching him from the rear.

Having described my invention what I

claim as new and desire to secure by Letter Patent, is:

1. A traffic signal for automobiles, comprising a casing, a signal indicator comprising spaced, registering parts mounted in the casing, a spring for projecting the indicator from the casing, and means operating between the registering parts for controlling the action of the spring and for returning the indicator to the casing.

2. A traffic signal for automobiles, comprising a casing, a signal indicator comprising spaced registering parts mounted in the casing and normally tending to project from the casing, a source of light housed between the registering parts to shine outwardly about the entire edge portions thereof, and means under the control of the driver for regulating the angular position assumed by the indicator when projecting from the casing.

3. A traffic signal comprising a casing, a cover hinged thereto, a V-shaped bracket secured to the door with its apex extending inwardly, a signal member pivoted in the casing, and an actuating arm movable with the signal member and engaged with the inner face of the bracket to close the cover.

4. A traffic signal including a casing, a signalling member pivotally mounted therein, a coil spring mounted in the casing and connected with the signal member normally acting to project the same from the casing, and means for holding the signal member in the casing and for positively and predeterminedly limiting its projection to a plurality of predetermined positions.

5. A traffic signal including a casing having an open end, a cover for said open end pivoted on the casing, a signal member pivoted in the casing for projection through the open end, a sliding connection between the cover and signal member, and means for operating the signal member to project it into a plurality of signalling positions, said cover being projected with the signal and retracted and held against the casing when the signal is retracted.

6. A traffic signal comprising a casing having a hinged cover, a shaft journaled in the casing, spaced signal member parts fixed on the shaft to register with each other and to move in unison, means for rotating the shaft, and a cover operating arm fixed on the shaft between the fixed signal member parts and projecting therebetween to move therewith.

In testimony whereof I have signed this specification.

CARL HOFFMAN.