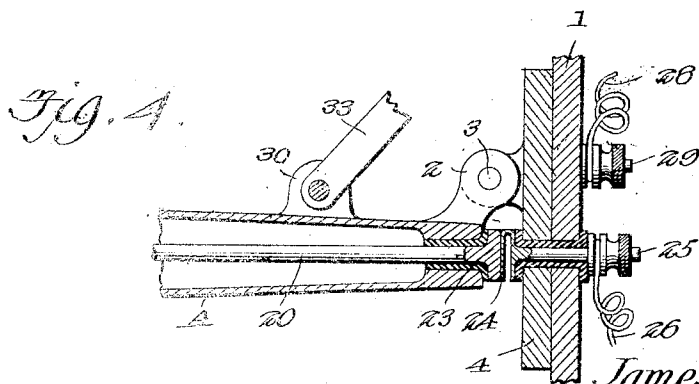
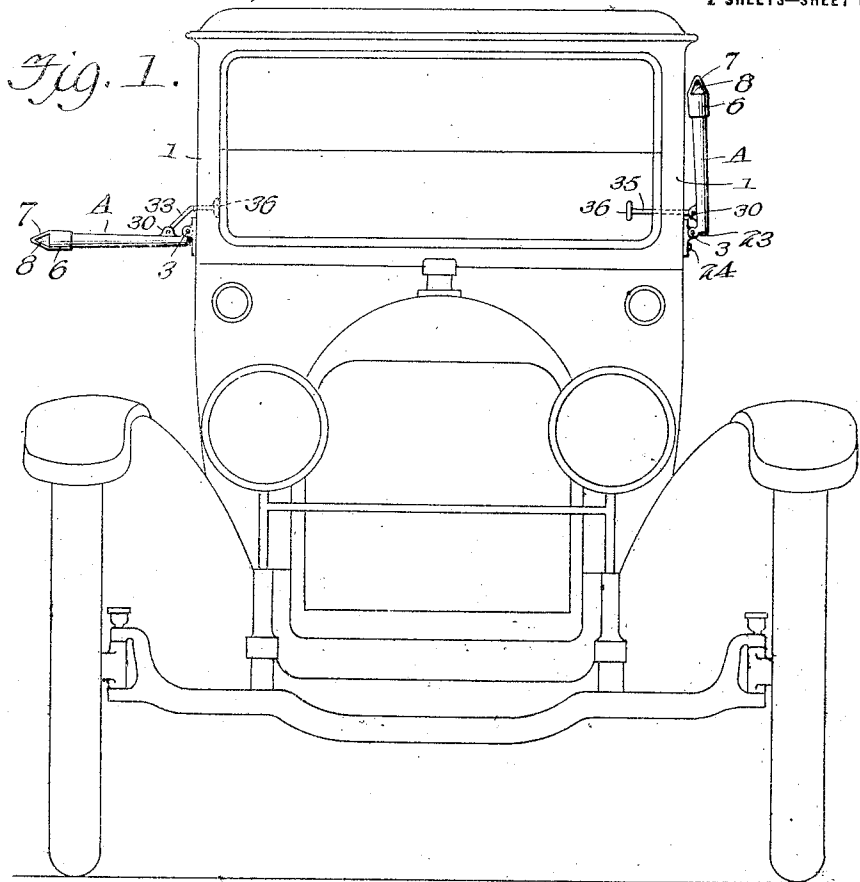


1,211,330.

Patented Jan. 2, 1917  
 2 SHEETS—SHEET 1.



Witnesses

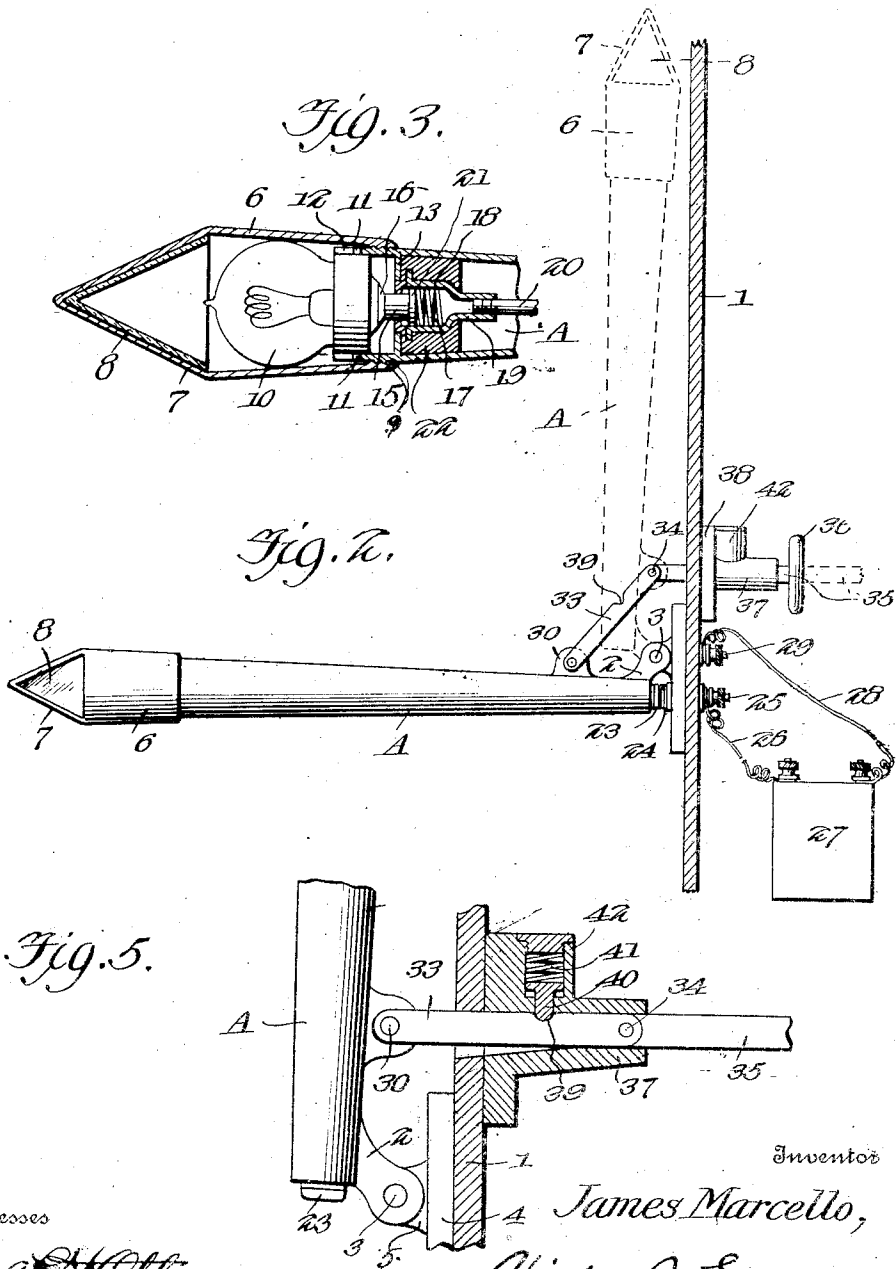
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# UNITED STATES PATENT OFFICE.

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## DIRECTIONAL SIGNAL.

1,211,330.

Specification of Letters Patent.

Patented Jan. 2, 1917.

Application filed May 24, 1916. Serial No. 99,596.

To all whom it may concern:

Be it known that I, JAMES MARCELLO, a citizen of the United States, residing at Greenwich, in the county of Fairfield and State of Connecticut, have invented new and useful Improvements in Directional Signals, of which the following is a specification.

This invention relates to directional signals especially designed for use in connection with automobiles, motor trucks and the like and particularly closed cars or limousines wherein by reason of the closed doors the operator is unable to extend his arm or hand beyond the side lines of the vehicle for the purpose of indicating the direction in which he intends to steer the machine.

The object in view is to provide signaling apparatus of the character referred to embodying movable signal arms or semaphores arranged on opposite sides of the body of the vehicle and operable from the interior thereof, whereby the driver of the machine may easily move either one of said arms to and from its signaling position, each of the signaling devices embodying means whereby it is illuminated at night time, the signaling arm carrying an electric lamp and novel circuit breaking means whereby the signal is illuminated only when it has reached its signaling position.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts, as herein described, illustrated and claimed.

In the accompanying drawings: Figure 1 is a front elevation of a closed automobile showing the signaling apparatus of this invention in its applied relation thereto, one of the signaling arms being shown in its signaling position. Fig. 2 is a fragmentary vertical sectional view taken transversely of the vehicle showing one of the signal arms in its signaling position in full lines and indicating the non-signaling position thereof by dotted lines. Fig. 3 is an enlarged fragmentary sectional view of the outer end of the signaling arm showing the relation of the electric lamp thereto. Fig. 4 is a fragmentary vertical section taken adjacent to the inner end of said arm and showing the contact maker. Fig. 5 is a fragmentary vertical section showing the signal arm operating means.

In carrying out the present invention, two signaling arms each of which is designated

generally at A are employed, the same being arranged at opposite sides of the vehicle body a fragment of the side wall of which is indicated at 1. Each signaling arm is of hollow or tubular formation as shown and is provided adjacent to the inner end thereof with a laterally extending ear 2 which is connected by means of a pivot 3 to a supporting plate 4 fastened by any convenient means to the outer side of the body 1, the plate being also provided with an ear 5 to overlap the ear 2 and receive the connecting pivot 3. At its outer end the arm is provided with an enlarged detachable and hollow head 6 having a tapered or conical end portion 7 formed in the front and rear thereof with orifices covered by transparent panels 8 preferably of glass and of a red color. The head 6 is threaded upon the outer end of the arm A as indicated at 9 and serves as a protector for an electric lamp 10. The lamp 10 is provided with a locking pin 11 which is insertible in and removable from a bayonet slot 12 formed in the outer extremity of the arm A as shown. The outer extremity of the arm A thus forms a socket for the lamp 10 while the hollow head 6 prevents injury to or breakage of said lamp, the rays of light from which are transmitted through the panels 8 so as to show both from the front and rear of the machine.

Adjacent to its outer end each arm A is formed with an internal flange 13 having a central opening therein to receive a slidable contact 15 which is yieldingly held in contact with the contact piece 16 of the lamp 10 by means of an expansion spring 17. This spring is located within a socket 18 connected to and extending inwardly from the flange 13 and having its inner end contracted to form a neck 19, the latter being internally threaded to receive the threaded end of a contact rod 20. The outward movement of the contact 15 is prevented, when the lamp 10 is removed, by means of a stop shoulder 21. An insulating bushing 22 surrounds the socket 18 within the arm A as shown in order to prevent a short circuit.

The inner end of the rod 20 extends beyond the inner end of the arm A where it is formed with a contact head 23 adapted, when the arm A is moved to a substantially horizontal position, to bear against a contact spring 24 on a binding post 25 which is shown as extending through the body 1

of the vehicle and having one of the wires 26 of a source of electrical energy such as a battery 27 attached thereto. The other wire 28 of the battery is connected to another binding post 29 secured to the supporting plate 4 forming the ground for the circuit. An insulating bushing is inserted within the inner end of the hollow arm A and around the rod 20 to avoid a short circuit. On its inner side, each of the signaling arms is provided with a lug 30 having pivotally connected thereto one end of a link 33 in turn connected by a pivot 34 to a stem or rod 35 which extends through an opening in the vehicle body 1 and is provided at its inner end with a knob or handle 36. The rod or stem 35 slides through a tubular guide 37 having an attaching base 38 fastened to the vehicle body 1 as shown. The link 33 is formed at a suitable place with a notch or depression 39 adapted to be engaged by a catch 40 pressed toward the notch 39 by means of an expansion spring 41 located in a tubular housing 42. The notch 39 is so arranged that it will be engaged by the spring pressed catch 40 when the signaling arm is in its non-signaling position. The arm is held in signaling position by the knob or handle 36 resting against the extremity of the guide 37.

It will now be understood that the device is operable from the interior of a closed car by simply pushing the knob or handle 36 outwardly or drawing the same inwardly. When the arm is moved to its signaling position, the head 23 of the rod 20 rests against the contact 24 thus energizing the lamp 10 thereby making the signal useful at night as well as by day. During the day time, if it is desired to economize in the current, one of the wires 26 or 28 may be disconnected.

I claim:—

1. The combination with the body of a closed vehicle, of a signaling arm pivotally supported on said body, means for shifting said arm from a substantially vertical to a

substantially horizontal position, means for retaining said arm in either of said positions, a head at the free end of said arm having an illuminating panel, an electric lamp contained in said head, a contact rod extending longitudinally within said arm, an electric circuit including a contact against which said rod is adapted to rest when the signal arm is in signaling position, a socket contained within and insulated from said arm, a sliding contact piece movable in said socket, a spring for pressing said contact piece against the contact point of the lamp, and an internally threaded neck on said socket in to which the adjacent end of the contact rod is threaded.

2. The combination with the body of a closed vehicle, of a signaling arm pivotally supported on said body, means for shifting said arm from a substantially vertical to a substantially horizontal position, means for retaining said arm in either of said positions, a head at the free end of said arm having an illuminating panel, an electric lamp contained in said head, a contact rod extending longitudinally within said arm, an electric circuit including a contact against which said rod is adapted to rest when the signal arm is in signaling position, the signal operating means comprising a rod operable from the interior of the vehicle, a link connecting the operating rod with the signaling arm, a fixed guide for said operating rod, and said retaining means comprising a spring pressed catch adapted to engage said link to sustain the signaling arm in non-signaling position, the guide serving in conjunction with the head of the operating rod to sustain the signaling arm in signaling position.

In testimony whereof I affix my signature.

JAMES MARCELLO.

Witnesses:

ALICE N. MACMATH,  
JAMES R. MEAD.