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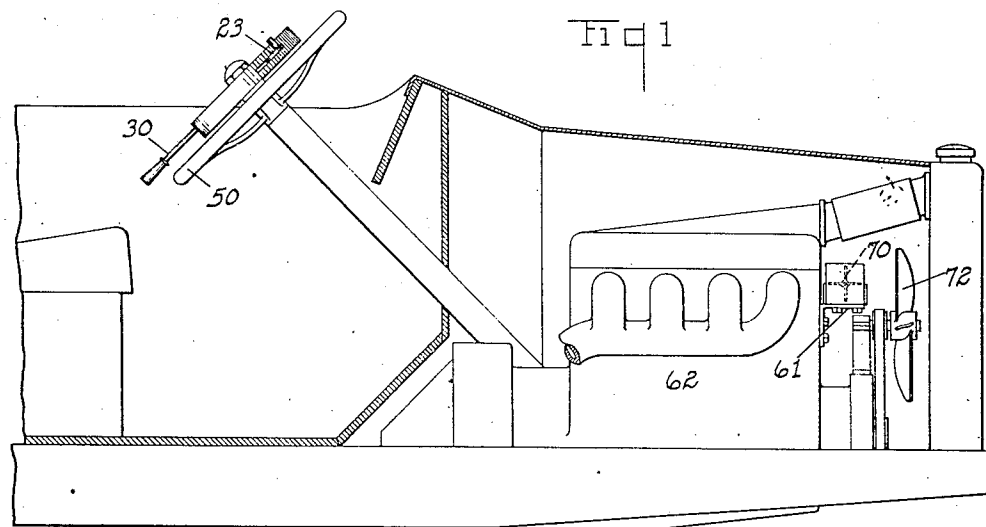
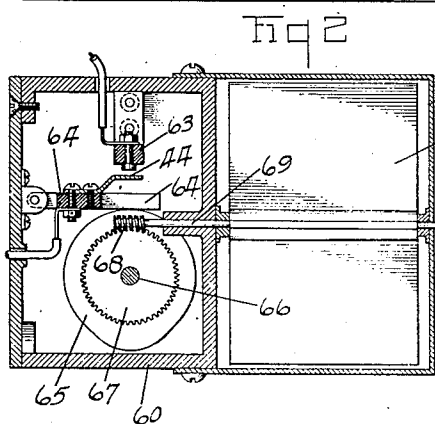
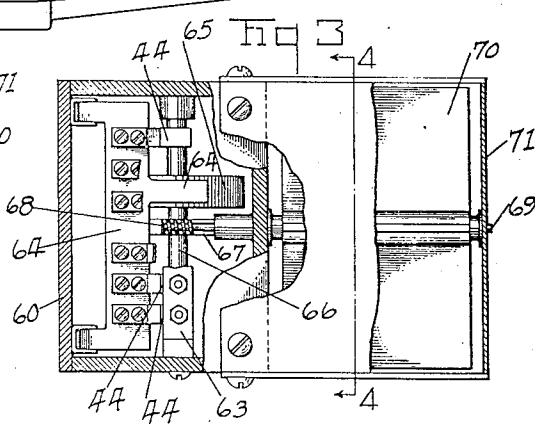
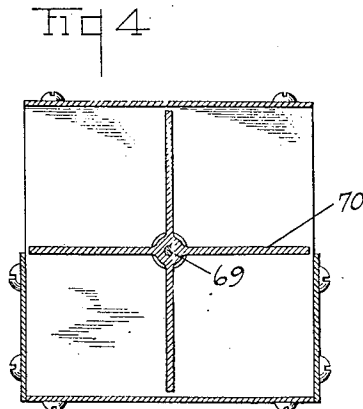
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AIR OPERATED SIGNAL SWITCH

Filed Jan. 26, 1924



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AIR-OPERATED SIGNAL SWITCH.

Application filed January 26, 1924. Serial No. 688,749.

This invention relates to air operated signal switches to a light signal system, particularly for use on automobiles and other vehicles to indicate preferably at both front and rear of the vehicle when it is intended to turn the same either to the right or to the left.

The primary object of the invention resides in the means employed for effecting an automatic, intermittent opening and closing of the signalling circuits, such means being actuated by fluid pressure generated by a moving of the vehicle or by the operation of some fluid current-creating means of the vehicle, as, for instance, the engine exhaust or the air current created by the fan of the engine cooling system.

The invention is fully described in the following specification, and while in its broader aspect it is capable of embodiment in numerous forms, one embodiment thereof is illustrated in the accompanying drawings, in which,—

Figure 1 illustrates a fragmentary elevation in longitudinal section of an automobile embodying the invention. Fig. 2 is an enlarged sectional detail of the fluid actuated circuit interrupting means employed. Fig. 3 is a top plan view thereof, with parts broken away. Fig. 4 is a cross-section on the line 4—4 in Fig. 3.

Automatic means, hereinafter described, is provided to effect an intermittent opening and closing of each of the switches 40 so that when a light circuit is closed through any one of the signal lines a flickering of the light is effected. The general operation of the system is as follows:

The means which includes the vibrator switches 44 for effecting intermittent making and breaking of the signal circuits may be of any desired form and operated in any suitable manner. The means illustrated, in the present instance, for accomplishing such purpose comprises a case 60 mounted on a bracket 61 at the front of the engine 62 of the vehicle, the case containing the several switches 44, the stationary members of which are mounted in spaced relation along a bar 63 disposed within the case and the movable members of which switches are mounted on a rocker 64 within the case, whereby movements of the rocker will effect a making and breaking of the respective

switch circuits. The rocker 64 rests on a cam wheel 65, a turning of which is adapted to effect a predetermined rocking of the rocker member 64 to make and break the switch circuits. The cam wheel 65 is mounted on a shaft 66 which is journaled within the case 60 and this shaft carries a worm wheel 67 in mesh with and driven by a worm 68 on a shaft 69.

Fluid pressure is preferably used to drive the shaft 69, and for such purpose the shaft is provided with a propeller wheel or fan 70 disposed within a conduit formed by a casing part 71 attached to the casing 60. One end of the propeller wheel conduit is disposed, in the present instance, adjacent to the fan 72 of the engine cooling system in position for a portion of the air current set-up by a running of the fan to pass through the conduit and effect a rapid propelling of the wheel 70. It is also apparent that the fluid current set-up by the engine exhaust or by the movement of the vehicle could be utilized, if desired, for operating the vibrator switch. It is also apparent that the vibration of the vehicle could be utilized to operate the switch.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A switch mechanism, including a casing, a stationary and a movable contact in the casing, a shaft, means on the shaft to rock said movable contact, a housing substantially U-shaped in cross-section forming a continuation of said casing and having bottom side and front walls, said shaft being journaled in the casing and the front wall of the housing, a top for the housing spaced from the upper edges of the side walls to provide a transverse passage there-through between the upper edges of the side walls and the top, and blades carried by the shaft extending into the transverse passage whereby the blades may be rotated to actuate the switch mechanism.

2. A switch mechanism including a casing having closed walls, a stationary and a movable contact in the casing, a shaft having its ends journaled in the front and rear walls of the casing, means on the shaft to rock said movable contact, a housing forming a continuation of said casing, and having bottom side and top walls, connected to the respective adjacent walls of the casing, a second

shaft in the housing having one end disposed within said casing means on said end of the second shaft to drive the first shaft from the second shaft and fan blades on said second shaft, the front and rear walls of the housing terminating in a line with the axis of said second shaft to provide a transverse conduit between the upper edge of said walls and the top of the housing for the admission and exit of fluid to drive said blades and thereby operate the switch mechanism.

In testimony whereof I have hereunto signed my name to this specification.

WALTER L. SLAYTON.