C. S. ALTSCHUL.

ELECTRIC CONTROL FOR AUTOMOBILES.

APPLICATION FILED MAR. 17, 1916.

1,223,925. Patented Apr. 24, 1917.

Fig. 1.

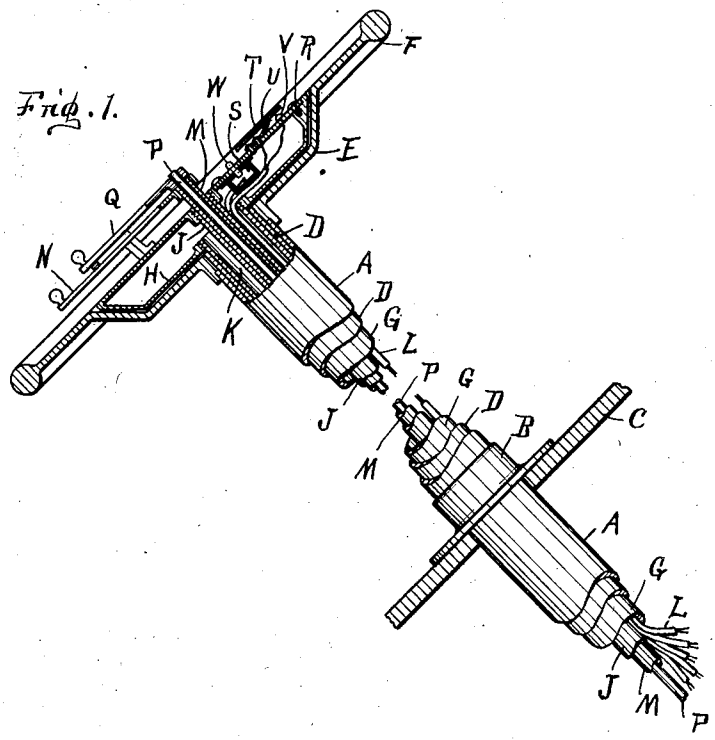
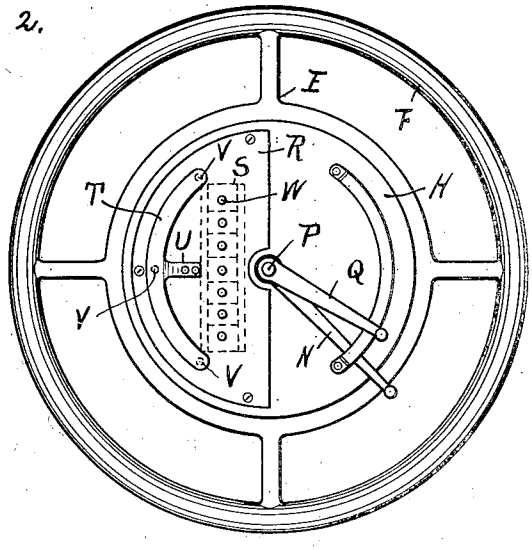


Fig. 2.



WITNESSES:

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ELECTRIC CONTROL FOR AUTOMOBILES.

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Application filed March 17, 1916. Serial No. 84,917.

To all whom it may concern:

Be it known that I, CARL S. ALTSCHUL, a citizen of the United States of America, and resident of Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Electric Controls for Automobiles, of which the following is a specification.

This invention relates to improvements in electric controls for automobiles and the object thereof is to provide a construction for the steering column and steering-wheel so that the switches for controlling the various electrical devices of the automobile may be positioned at the top of the steering column above the wheel without interfering with the latter and motor controlling levers. Ordinarily, the switches are placed upon the dash, or upon the column beneath the wheel in a more or less inconvenient position, rendering it awkward for the driver to locate the group and select the particular switch which he desires to operate. The present invention contemplates the placement of the group of switches immediately in view and within direct reach of the driver, thus facilitating their operation.

The objects of the improvement are accomplished by the construction illustrated in the accompanying drawings in which:—

Figure 1 is an elevation of a steering-wheel, motor controlling levers and the present invention incorporated, the parts being partially cut away and in section; and

Fig. 2 is a top view of the same.

Similar characters of reference indicate corresponding parts in both views and referring now to the same:

A is a stationary tubular post fixed in a base B on the frame C of the machine, and D is the steering tube within the post and to which the spider E of the steering-wheel F is keyed. A stationary supporting tube G extends within the steering-tube and is fixed at its upper end in the lower part of a housing H which is shaped so as to be contained within the central concavity of the spider. A secondary stationary tube J extends through the tube G and is of such diameter as to leave sufficient space K therebetween for the sheathed conductors L that extend up into the housing. The top of the tube J is secured in the top of the housing and together with the tube G supports the housing in fixed position. The throttle-tube extends loosely through the tube J and has fixed upon its upper end the throttle lever N. The rod P extends loosely through the tube M and has fixed upon its upper end the spark lever Q for manipulating the rod, the latter being intended for connection with the usual spark advancing device. A portion of the housing is in the form of a detachable cover R, and has secured upon its under side a series of electrical switches S that have respective connections with the corresponding conductors L. Also, upon the cover is mounted a curved contact plate T which is supported in a plane above the cover by an integral spring tongue U. A series of contact points V each having electrical connection with one of the conductors are adapted for contact with the plate T when the latter is depressed. The tongue U has electrical connection with a conductor that is also connected with the signal horn (not shown) in the usual manner, the intention is to close the signal circuit by pressing the plate T at any point so that it comes into contact with one or the other of the several contact points V.

The operating stems W of the switches protrude through the cover so that they may be readily manipulated. The spider being formed with the central concavity admits of the housing being supported therein so that the switch-stems and the plate T will not project beyond the upper plane of the wheel, so as to become an encumbrance to the driver.

What I claim is:—

1. In apparatus of the class described, a steering-tube, a steering-wheel fixed upon the tube at the top thereof and having a central concavity, a stationary supporting tube extending through the steering-tube, a secondary stationary tube extending through the former supporting tube, a housing supported upon said stationary tubes and extending within the concavity, a series of switches contained within the housing, their stems extending through the top thereof, and a series of conductors extending within the stationary supporting tube and connected respectively with said switches.

2. In apparatus of the class described, in combination with a steering-tube having a steering-wheel fixed thereupon, a stationary supporting tube extending through the steering-tube, a secondary stationary tube extending through the latter, a housing the top of which is fixed upon the innermost

stationary tube and the bottom of which is fixed upon the other supporting tube, a series of switches contained within the housing their stems extending through the top thereof, and a series of conductors extending between the stationary tubes and connected respectively with the switches.

3. In apparatus of the class described, in combination with a steering-tube having a steering-wheel fixed thereupon, a stationary supporting tube extending through the steering-tube, a housing fixed upon the top of the stationary-tube, a series of switches contained within the housing, and a series of conductors extending through the stationary tube and having respective connections with said switches.

4. In apparatus of the class described, in combination with a steering-tube having a steering-wheel fixed thereon, a stationary supporting tube extending through the steering-tube, a housing fixed upon the supporting tube at the top thereof, a series of contact points on the housing, a spring supported plate adapted to be pressed into contact with any of the points, a series of switches supported by the housing, and a series of conductors extending through the supporting tube and having connections respectively with said switches and contact points.

5. In combination with a steering-wheel having a central concavity, a stationary housing beneath the plane of the rim of the wheel, a series of switches within the housing, their stems extending through the top thereof, and a series of conductors having connections respectively with the switches.

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

CARL S. ALTSCHUL.

Witnesses:
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