No. 856,737. PATENTED JUNE 11, 1907.

R. VAN R. SILL.

ELECTRIC CONTROLLER.

APPLICATION FILED MAR. 6, 1907.

Fig. 1

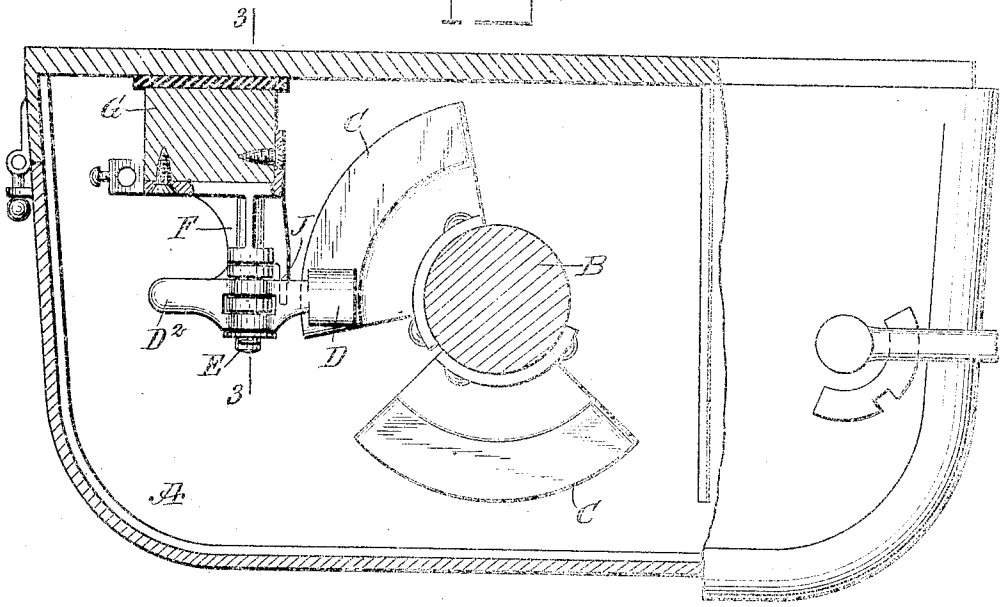


Fig. 2

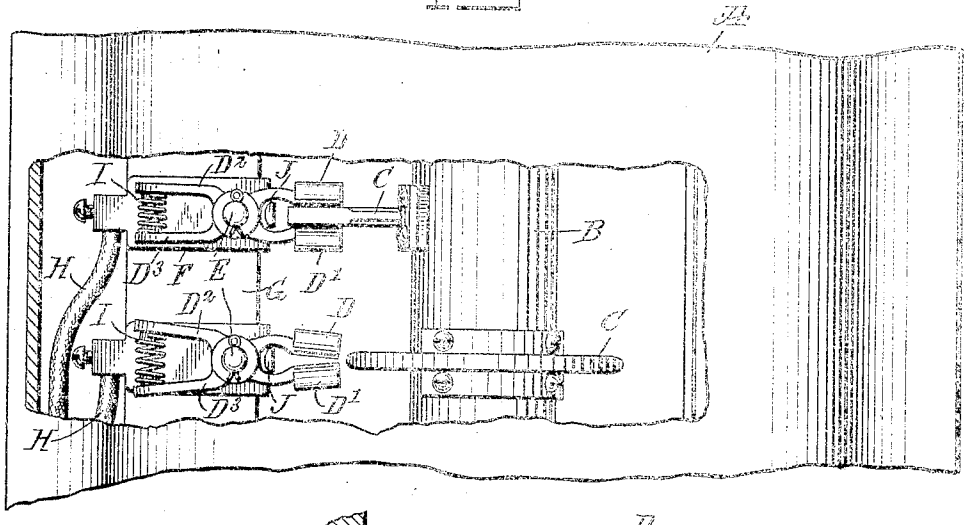
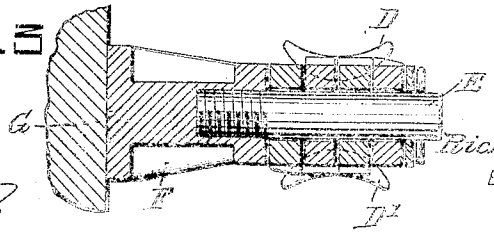


Fig. 3



WITNESSES

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RICHARD VAN R. SILL, OF NEWARK, NEW JERSEY, ASSIGNOR OF TWO-THIRDS TO ALPHONZO E. PELHAM, OF NEW YORK, N. Y.

ELECTRIC CONTROLLER.

No. 856,737. Specification of Letters Patent. Patented June 11, 1907.

Application filed March 6, 1907. Serial No. 360,837.

To all whom it may concern:

Be it known that I, RICHARD VAN R. SILL, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Electric Controller, of which the following is a full, clear, and exact description.

The invention relates to hand operated devices for electric motors, and its object is to provide a new and improved electric controller, more especially designed for use on electric street cars and other electric motor vehicles and devices, and arranged to insure long life to the contact members and to provide an exceedingly strong contact between the said members for the proper transmission of electricity.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional plan view of the improvement as applied to an electric street car; Fig. 2 is a side elevation of the same, part of the box being broken out, and Fig. 3 is an enlarged cross section of the improvement on the line 3—3 of Fig. 1.

In the box A is mounted to turn the usual shaft B under the control of the motorman, and on the said shaft B are secured the contact plates C, arranged in staggered form, to control the power of the electric current for the motor in the usual manner. Each of the contact plates C is made in segmental shape and is arranged at a right angle to the axis of the shaft B, and the said contact plate C is adapted to pass between contact jaws D, D′ fulcrumed on a pivot E held on a bracket F secured to the insulated post G arranged in the motor box A, each bracket F being connected in the usual manner with a conducting wire H, as plainly indicated in Fig. 2.

The contact jaws D, D′ are curved in opposite directions, so as to permit the contact plate C to readily pass between the said jaws from either side thereof on turning the shaft B correspondingly. The contact jaws D and D′ are provided with extension arms D^2, D^3, between each of which is arranged a spring I for moving the contact jaws D, D′ toward each other, so as to insure at all times a firm contact between the jaws D, D′ and the contact plate C when the latter is passed between the contact jaws. By having the contact jaws D and D′ fulcrumed on the pivot E, it is evident that the jaws can slightly swing up and down so as to readily accommodate themselves according to the position of the contact plate C, that is, to allow for any discrepancies in the position of the contact plate C on the shaft B. The swinging motion of the jaws D and D′ is limited by a stop J secured to or forming an integral part of the bracket F and projecting between the jaws near the pivot E, as plainly indicated in the drawings.

From the foregoing it will be seen that both the top and bottom surfaces of the contact plate C are engaged by the rounded off faces of the two contact jaws D and D′, so as to insure at all times an exceedingly strong contact between the said jaws, for the proper transmission of the electricity.

The device is very simple and durable in construction and can be readily applied to electric controllers as now in use.

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

An electric controller comprising a vertically disposed shaft under the control of the operator, segmental contact plates secured on the said shaft in staggered form, an insulated post, brackets secured on the said post opposite the said contact plates, each bracket having a horizontally disposed pivot and an integral stop, and a pair of spring-pressed contact jaws fulcrumed on each pivot and adapted to be engaged by the corresponding contact plate, the said stop extending between the jaws to hold the same in central position relative to the corresponding contact plate, for the latter to readily enter the jaws, the stop permitting free movement of the jaws when opened by the contact plate.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RICHARD VAN R. SILL.

Witnesses:

THEO. G. HOSTER,

EVERARD B. MARSHALL.