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INVENTIONS PATENTED.

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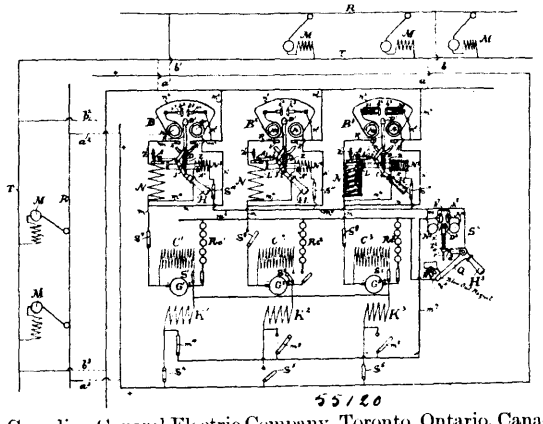
No. 55,129. Electric Circuit Controller.

(*Contrôleur de circuit électrique.*)



The Canadian General Electric Company, Toronto, Ontario, Canada assignee of William B. Potter, Schenectady, New York, U.S.A., 1st March, 1897; 6 years. (Filed 10th January, 1896.)

Claim.—1st. A plurality of dynamo-electric machines each provided with a circuit controller, and a series of electro-magnetic resetting devices for such circuit controllers actuated by a common circuit. 2nd. In a system of electric distribution, the combination, with a plurality of dynamo-electric machines, of electrically operated circuit-controlling switches, one in the circuit of each machine, magnets adapted to operate said switches having coils connected to a common controlling circuit, a switch adapted to control such common circuit and switches arranged to connect any of such magnets in a local controlling circuit at will. 3rd. In a system of electric distribution, the combination, with a dynamo electric generator, of a circuit controller adapted to connect such generator in a work circuit or disconnect it therefrom, such controller comprising a coil carrying the main current and adapted to open the circuit of the generator upon the flow of abnormal current therein, a magnet arranged to operate the circuit controller and close the circuit of such generator, a retractive device opposing the pull of the magnet, and an electric switch in the circuit of such magnet. 4th. The combination of a coil conveying the main current, mechanism controlled thereby adapted to open a main circuit switch, a magnet arranged to close such switch and actuated by the magnet adapted to engage the releasing mechanism when the switch is closed. 5th. In an electric circuit controller, a main switch, an auxiliary switch in shunt thereto provided with a magnetic arc-disrupter and arranged to open after the main switch by the same movement of the operating handle, and a coil in series in the main circuit adapted to open the switch by the passage of abnormal current, substantially as described herein. 6th. In an electric circuit controller, switching apparatus adapted to open the circuit, a series coil in the main circuit, an armature attracted by the coil and adapted to release the switching mechanism, and an adjustable spring arranged to vary the pull upon the armature, whereby the effect of the series coil may be predetermined and the circuit may be opened by a definite excess of current. 7th. In an electric circuit controller, a switching mechanism adapted to open the main circuit, a series coil adapted to actuate such switching mechanism, an armature actuated by such series coil against the pull of an adjustable spring, an index connected to such spring and reciprocating over a scale, substantially as herein described, whereby the switching mechanism may be released upon a previously determined excess of current. 8th. In an electric circuit controller, switching mechanism adapted to open the main circuit, a series coil in such main circuit, an armature actuated by such series coil and carrying a detent lever adjustable toward or away from such armature and engaging with a lug arranged to prevent the operation of the switch, whereby the adjustment of the detent lever may be made more or less delicate, as required. 9th. A circuit-controlling mechanism comprising a main switch carried upon the same rod with an auxiliary switch in shunt thereto and arranged to break contact before such auxiliary switch, the auxiliary switch being provided with a arc-disrupter and removable contacts. 10th. An electric circuit controller, comprising a main switch carried upon the same rod with an auxiliary switch in shunt thereto and arranged to open before such auxiliary switch, the rod being operated by a spring adapted to pen the contacts and by a toggle adapted to close such contacts, the toggle being connected to an electro-magnetically operated apparatus. 11th. In a circuit-controlling apparatus, the combination of a main switch comprising contact terminals and a bridge adapted to make sliding contact therewith, an auxiliary switch in shunt to such main switch, and provided with an arc-disrupting device, the main switch being adapted to open before the auxiliary switch and the two switches being carried upon the same rod, a spring adapted to open such switches, and a detent actuated by a series coil in the main circuit arranged to hold the switches closed until a predetermined excess of current in the series coil releases the detent and opens the circuit. 12th. In an electric circuit controller, a main switch comprising contacts and a flexible bridging piece operated by a toggle connected to an electro-magnetic apparatus, whereby the contact of the bridging piece is affected at the point of the greatest power of the toggle when the electro-magnetic apparatus is also in position to exert the greatest pull. 13th. In a system of electric distribution, a switch provided with double contact blades, separate circuits running to such blades, one of such circuits taking current through a resistence and the other circuit arranged to momentarily pass full current, substantially as herein set out. 14th. In a system of electric distribution, a plurality of generators provided with circuit-controlling switches adapted to be closed by electro-magnetic mechanisms and a switch, substantially as herein described, adapted to pass current through a resistance in series with such electro-magnetic switch-closing mechanism and then to momentarily pass the full current therethrough. 15th. In a system of electric distribution, a plurality of generators provided with circuit controllers adapted to be closed by electro-magnetic mechanisms, multiple circuits passing from the generators to such mechanism, one of such circuits including resistances and the other carrying the full current and a switch adapted to close