(No Model.)

M. FEILBOGEN.

ELECTRIC CIRCUIT BREAKER FOR SECONDARY GENERATORS.

No. 456,889. Patented July 28, 1891.

Fig. 1.

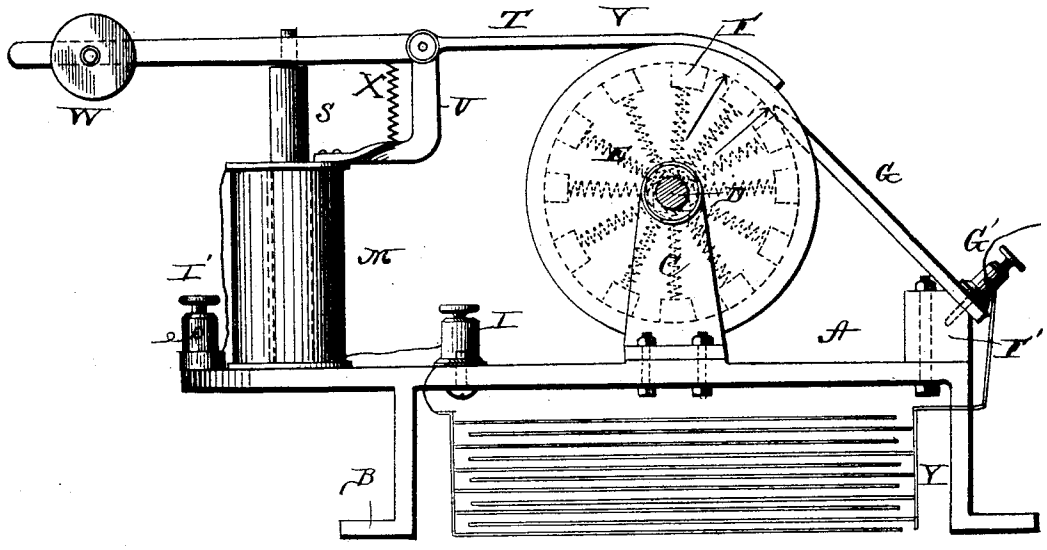
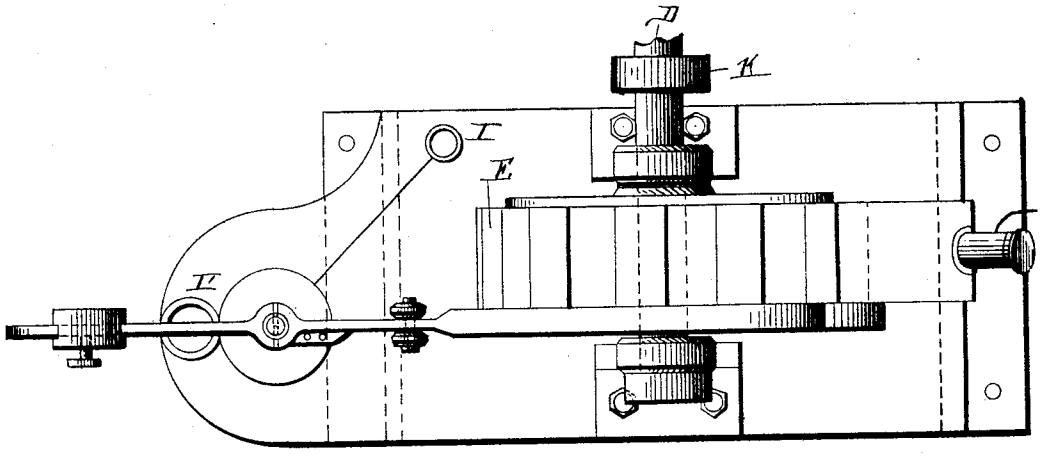


Fig. 2.



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ELECTRIC-CIRCUIT BREAKER FOR SECONDARY GENERATORS.

SPECIFICATION forming part of Letters Patent No. 456,889, dated July 28, 1891.

Application filed September 22, 1890. Serial No. 365,837. (No model.)

To all whom it may concern:

Be it known that I, MORRIS FEILBOGEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Electric-Current Interrupters for Secondary Generators; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in apparatus to be employed in connection with dynamo or other electric generators of that class in which a constant current of electricity is generated; and it has for its objects to provide a disrupter or circuit-breaker, by means of which the current in the main circuit may be broken at proper intervals in order to produce an induced current or currents in the secondary coil of an inductorium or a series of the same, to be employed in electric-light or other working circuit; and the invention further has for its object to provide for automatically regulating the intensity of the current in the main circuit of a system of electric distribution, as more fully hereinafter specified.

In the accompanying drawings, Figure 1 represents a side elevation of my disrupter or circuit-breaker, and Fig. 2 a top or plan view thereof.

Referring to the drawings, the letter A indicates a base, which is preferably mounted upon supports or standards B. At opposite sides of the said base are located vertical standards C, which are bolted to the base or otherwise secured thereto.

The letter D indicates a horizontal shaft, the journals of which have bearings in the upper portions of the standards C. Upon said shaft is mounted a disk E, of insulating material, which is provided with a series of radial segmental recesses extending from its periphery inwardly toward the center of said disk. In the recesses are set and secured segments F, of metal or other suitable material, the outer surfaces of which are flush with the periphery of the disk and form a continuation of the arc of the circle thereof.

To the base A of the apparatus is secured a metallic brush G, the free end of which bears against the periphery of the disk E, the fixed end of the said brush being secured to a block F′ of insulating material, which is located at one side of the base A, the brush being provided with a binding-post G′, to which one of the terminals of an electro-generator may be connected. The segments F are in electrical connection with the shaft D, which, through the metallic standard and base, is on electrical connection with a binding-post I, to which the other terminal of the electro-generator may be connected.

The shaft D is provided at one end with a pulley K, to which power may be applied to operate the disrupter through the medium of a suitable belt.

The letter M indicates a coil mounted upon the base A, and which may have one of its terminals connected with the binding-post I, the other with a binding-post I′, insulated from the base, to which one of the terminals of the generator may be connected, so as to pass the main current through the coil. In the central space of the coil is loosely set a soft-iron core S, the upper end of which is secured to one arm of a lever T, fulcrumed to a bracket U, secured to the upper portion of the spool of the coil. One end of said lever is provided with a curved plate of spring metal V, which bears against the periphery of the disk E, forming a brake, and the other end is provided with a weight W, which balances the lever and holds it normally; or the same object may be attained by means of a spring X. Below the base and in connection with the binding-posts is located a condenser Y, of the usual construction, neutralizing reflowing induction-currents.

The operation of my apparatus is as follows: The disrupter being properly connected in the main circuit of an electro-distributing system, in which a constant generator is employed, by its rotation makes and breaks the circuit rapidly, giving the proper impulses to generate an induced or secondary current or a series of such currents in an inductorium or a series of the same, which may be carried off by suitable conductors for use. The brake, by its differential bearing on the

periphery of the disk E, regulates the rapidity of its motion, and consequently the rapidity in the succession of interruptions occasioned by the disk.

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

In a circuit-breaker or disrupter, the combination of a disk constructed of insulating material carrying a series of segments in electrical connection with its shaft, a brush secured to an insulated seat, a weighted brake-lever having a curved spring-plate bearing against the periphery of the disk, a hollow coil having its terminals in the main circuit, and a movable core secured to the brake-lever and setting in the coil, whereby the lever is operated as a brake to control the movement of the disrupter, substantially as specified.

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

MORRIS FEILBOGEN.

Witnesses:

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