(No Model.)

S. W. STRATTON.

CIRCUIT MAKING AND BREAKING DEVICE.

No. 534,586. Patented Feb. 19, 1895.

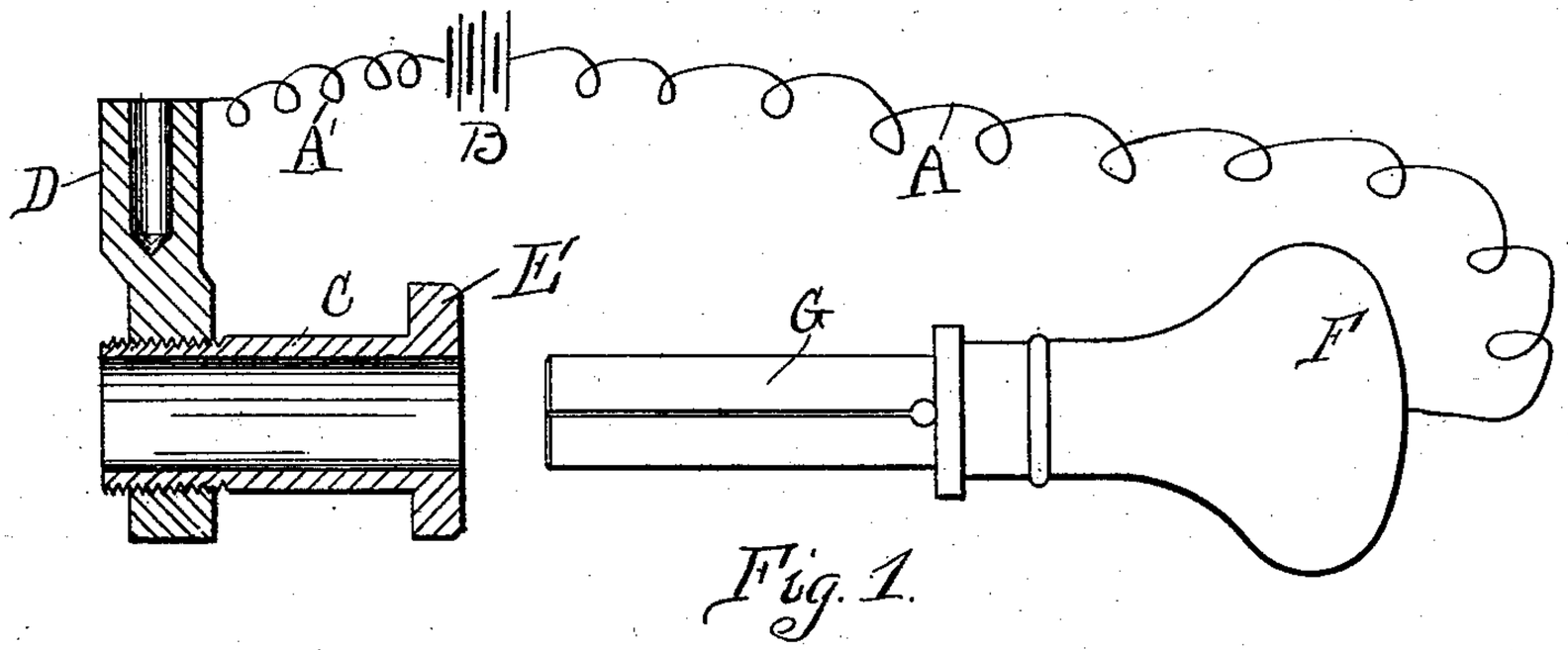

Fig. 1.

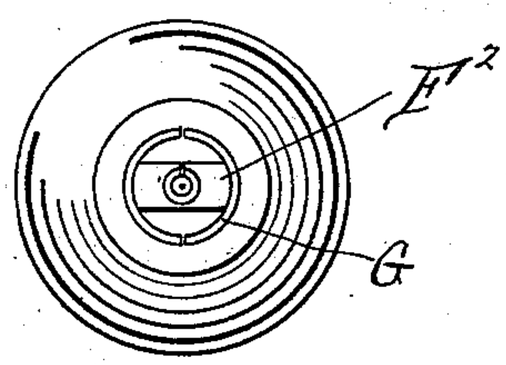

Fig. 2.

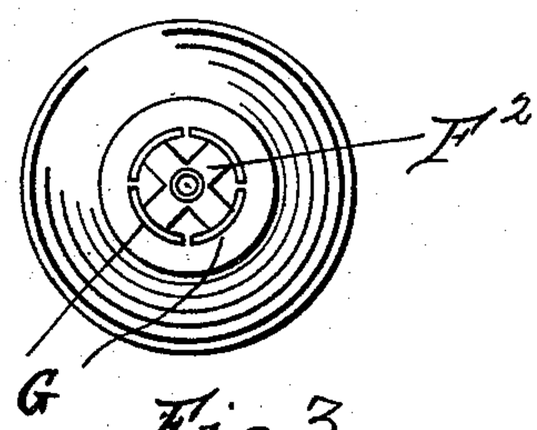

Fig. 3.

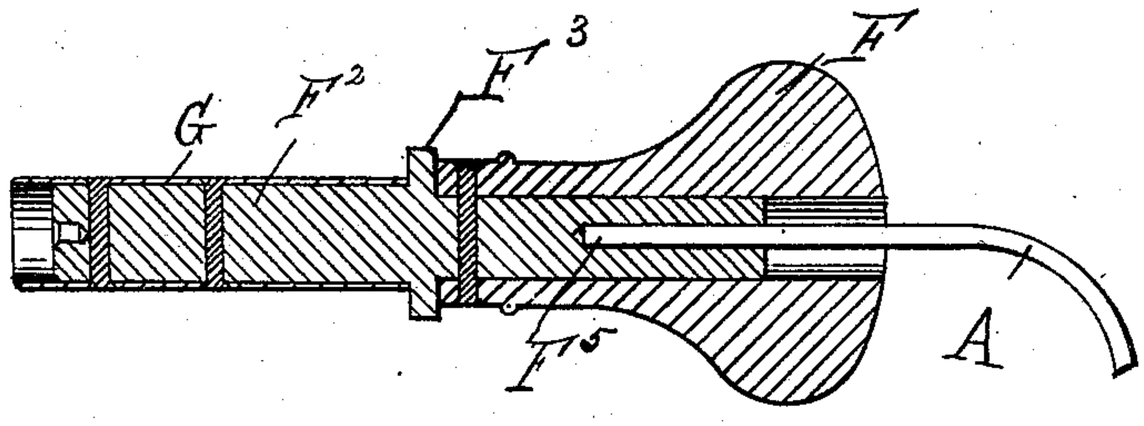

Fig. 4.

WITNESSES

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CIRCUIT MAKING AND BREAKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 534,586, dated February 19, 1895.

Application filed July 2, 1894. Serial No. 516,374. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL W. STRATTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Circuit Making and Breaking Devices, of which the following is a specification.

My invention relates to circuit closing plugs and is, of course, particularly applicable to use on switch boards and the like. There is, however, no special limitation as it would serve for making and breaking circuits wherever such a device might be required.

I have illustrated a particular form of my device in the accompanying drawings, wherein—

Figure 1 is a sort of diagrammatic view of a circuit with my device. Fig. 2 is a cross-section through the plug. Fig. 3 is a cross section through a modification; and Fig. 4 is an enlarged longitudinal section.

Like parts are indicated by the same letters in all the figures.

A and A′ are branches of the circuit, which lead from the source of electrical energy B to the device. There is a cylindrical socket having on one end thereof, for example, a screw-threaded portion D into which the conductor A′ is let. This portion D may for convenience be screw-threaded upon the cylindrical socket or otherwise secured thereto as may be found convenient. On the opposite end is the up-turned collar E against which the end of the plug may conveniently bear.

F is the preferably wooden or insulation handle of the plug. It is secured on one end F′ of the bar F^2 and bears against the collar F^3. The handle is perforated at F^4 to admit the wire A which is securely inserted in the end and soldered or otherwise secured to the bar F^2 at F^5. The bar F^2 is of any desired form as for example that illustrated in Fig. 3 or that illustrated in Fig. 2. Surrounding the bar F^2 or its various ribs or members is the sheet metal part G which may be composed of a series of pieces arc-shaped in cross-section and which together make up substantially a cylindrical tube with a series of slots longitudinally therealong. The shape of the sheet metal pieces need not be such as to produce an exact cylinder or tube but this would be the preferred form and would give the largest contact as a rule. In other words the general outline of the sheet metal portion should preferably conform to the outline in cross-section of the interior of the plug.

It is obvious that various changes could be made herein without departing from the spirit of my invention and it is also obvious that the plug may be solid or continuous while the receiving socket is composed of the slotted sheet metal portions. In other words, the peculiarities of the two parts are interchangeable though I prefer the form here indicated. The spring parts may be slotted cross wise if desired or if thought necessary on account of the length of the spring leaves.

The use and operation of my device are sufficiently evident. Each of the two parts being properly connected with the source of electrical energy by means of one branch of the circuit, when it is desired to make or break said circuit, it is only necessary to bring said parts together or to separate them. The sheet metal parts are preferably of spring metal and the cross-section of the plug is slightly greater than the area of the socket so that when the plug is forced in, the parts of the plug are slightly contracted and the two parts of the circuit closer are thus brought into very close and yet yielding relation. The plug is easily turned in its socket and easily inserted or withdrawn while at the same time the circuit closer produced is capable of carrying heavy currents without material heating. In case the socket should be made of the spring sheet metal portions, the supporting parts therefor would have to be about and on the outside of said spring portions instead of being on the inside thereof as in the case of the plug.

I claim—

1. A circuit making and breaking device consisting of two co-operating parts, one a socket with continuous surface, the other a block having a solid central portion with sheet metal parts thereabout, longitudinally slotted or separated from each other and conforming substantially in cross-section to the cross-section of the socket.

2. A receiving socket connected with one terminal and in combination with a plug connected with the other terminal, said plug con-

sisting of a solid bar or rod or portion, with a series of sheet metal parts thereabout separated along longitudinal lines and conforming in cross-section substantially to the cross section of the socket.

3. A receiving socket connected to one terminal and in combination with a plug connected with the other terminal, said plug consisting of a solid bar or rod or portion, with a series of spring metal parts thereabout separated along longitudinal lines and conforming in cross-section substantially to the cross-section of the socket.

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