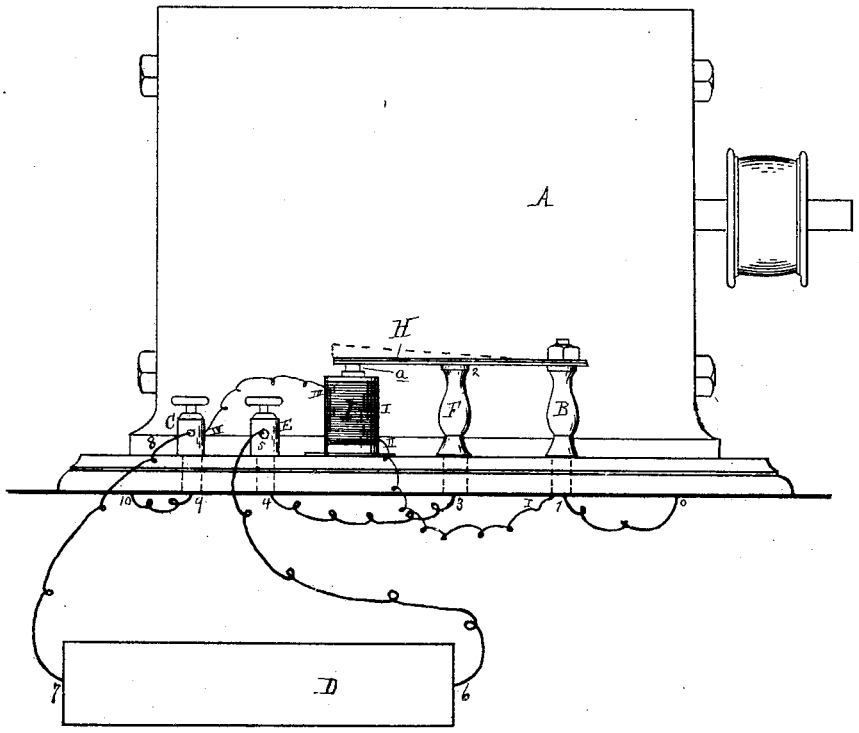
(No Model.)

S. M. PUFFER.

ATTACHMENT TO DYNAMO ELECTROPLATING MACHINE.

No. 265,340. Patented Oct. 3, 1882.



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UNITED STATES PATENT OFFICE.

SAMUEL M. PUFFER, OF DETROIT, MICHIGAN.

ATTACHMENT TO DYNAMO-ELECTROPLATING MACHINES.

SPECIFICATION forming part of Letters Patent No. 265,340, dated October 3, 1882.

Application filed February 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL M. PUFFER, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Attachments to Dynamo-Electroplating Machines; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification.

The nature of this invention relates to certain new and useful improvements in the construction of devices for the prevention of short-circuiting of the electric current in dynamo-electroplating machines.

The invention consists in the peculiar adaptation of an electro-magnet and spring armature-plate, and the connection of the same with the posts of a dynamo-machine, all as more fully hereinafter set forth.

In the accompanying drawing, which forms a part of this specification, A represents a dynamo-machine of any of the known constructions. The positive pole of the machine is connected to the post B by means of the wire 0 1, as shown, while the negative pole is connected, by means of the wire 9 10, to the post C. A wire, 7 8, connects the vat D to the pole C, while a wire, 5 6, connects the opposite end of the vat with the post E. From this post there runs a wire, 3 4, to the post F.

H represents a conducting spring-plate, secured at one end to the top of the post B and in contact with the wire 0 1. The free end of this spring-plate is provided with an armature, *d*, which is attracted by the electro-magnet I, the coil of such magnet being connected, by means of small wires I II, and III IV, to the posts B and C, respectively, and as is clearly shown in the drawings.

In practice, as the machine is started, a sufficient current passes through the wires I II III IV and the magnet to render the latter active and attract thereto the armature of the spring-plate, causing the latter to come in contact with the post F, which establishes the main current from the machine to the vat through the posts and wires hereinbefore described, the spring-plate being held in this position at all times while the machine is running. When the machine is stopped, there being a cessation of the electrical current, the electro-magnet becomes inactive, and the spring-plate instantly flies up, breaking the connection between itself and the post F, and thus avoiding all danger of there being a return-current to the machine, as would be thrown off by the highly-charged vat.

I am aware of Patents Nos. 31,545, 252,665, and 253,435, and I do not claim the devices described in either patent.

What I claim is—

The combination, with the dynamo-electric machine A and the posts B C, connected to the positive and negative poles of said machine, of a separate electro-magnet, I, connected, by wires I II and III IV, to the posts B C, the depositing-cell D, connected at one end, by the wires 7 8, to the post C, and at its opposite end, by suitable connections with the post F, the spring-plate H, secured to the post B and provided with an armature, *a*, over the electro-magnet I, and adapted to make and break the circuit between the posts B F, substantially as shown and described, and for the purpose specified.

SAMUEL M. PUFFER.

Witnesses:

H. S. SPRAGUE,

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