

(No Model.)

J. SNOWBERGER.

OILER AND WIPER FOR COMMUTATORS.

No. 338,197.

Patented Mar. 16, 1886.

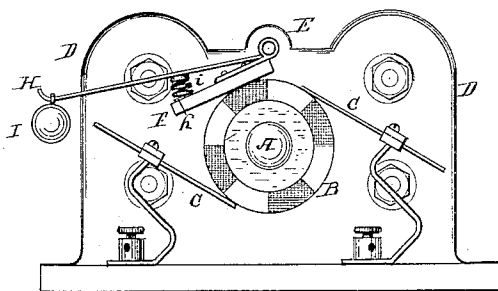


Fig. 1.

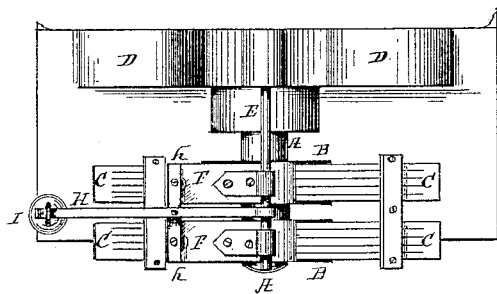


Fig. 2.

Witnesses:

Geo. M. Bronley.
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Inventor:

Jacob Snowberger,
by C. P. Humphrey
Atty.

UNITED STATES PATENT OFFICE.

JACOB SNOWBERGER, OF AKRON, OHIO, ASSIGNOR OF THREE-FOURTHS TO ORLANDO CASE, U. GRANT KIRN, AND LOUIS A. SMITH, ALL OF SAME PLACE.

OILER AND WIPER FOR COMMUTATORS.

SPECIFICATION forming part of Letters Patent No. 338,197, dated March 16, 1886.

Application filed December 28, 1885. Serial No. 186,946. (No model.)

To all whom it may concern:

Be it known that I, JACOB SNOWBERGER, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Oilers and Wipers for Commutators, of which the following is a specification.

The object of my invention is to provide devices which shall automatically apply to the surface of a commutator for dynamo-electric machines a lubricant in such quantity as will prevent wear between it and the brush, will not prevent or impede the electric current, and will continuously wipe said surface.

It consists in the devices illustrated in the accompanying drawings, as hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 is an end elevation of a dynamo-electric machine, showing a commutator provided with my improved oiler and wiper; and Fig. 2, a plan of the same, the magnets and revolving armature being omitted.

The main shaft A of the machine bears at its outer end two commutators, B B, upon which rest the brushes C C.

Projecting from the frame D of the machine, and substantially parallel with the shaft A, is a slender rod or shaft, E, upon which are hinged at one end two blocks, F F. These blocks are of wood, and preferably of a soft fine-grained variety—as whitewood, cucumber, bass-wood, and the like—and free from gums or resins, and each rests upon the face of one of the commutators, with the grain of the wood substantially tangential to said face. Hinged to the same shaft E is an arm, H, on the outer end of which is a weight, I, and to which is attached a cross-piece, h, which extends over each block F. Between the ends of the cross-piece h and the blocks F F are springs i.

In operation the blocks F F are saturated with oil, and, all surplus being wiped off, are

mounted on the shaft E, and held in place by the arm H, cross-piece h, and springs i. Thus arranged they not only afford a sufficient lubricant to prevent rapid wear of the brush and commutator, but continually wipe and polish the same.

It is obvious that each block F can be provided with a separate weighted arm, H, or the weight may be applied directly to the block, and a spring may be substituted for the weight I, without any change in my invention, the essential feature being the saturated wood block resting lightly on and with the grain substantially tangential to the periphery of the commutator.

I claim—

1. An oiler and wiper for commutators of dynamo-electric engines, consisting of a wood block saturated with a lubricating substance and arranged to rest on the periphery of said commutator, and having said wood grain substantially tangential to said periphery, substantially as shown, and for the purpose specified.

2. The combination, with a commutator of a dynamo-electric machine, of a wood block saturated with a lubricating substance resting against and with the grain of the wood substantially tangential to the periphery of said commutator, and a weight or equivalent device which presses said block against said commutator, substantially as shown, and for the purpose specified.

3. The combination, with the commutator B, of the block F, weighted arm H, and spring i, all constructed and arranged substantially as hereinbefore set forth, and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of December, A. D. 1885.

JACOB SNOWBERGER.

Witnesses:

C. P. HUMPHREY,
E. W. STUART.