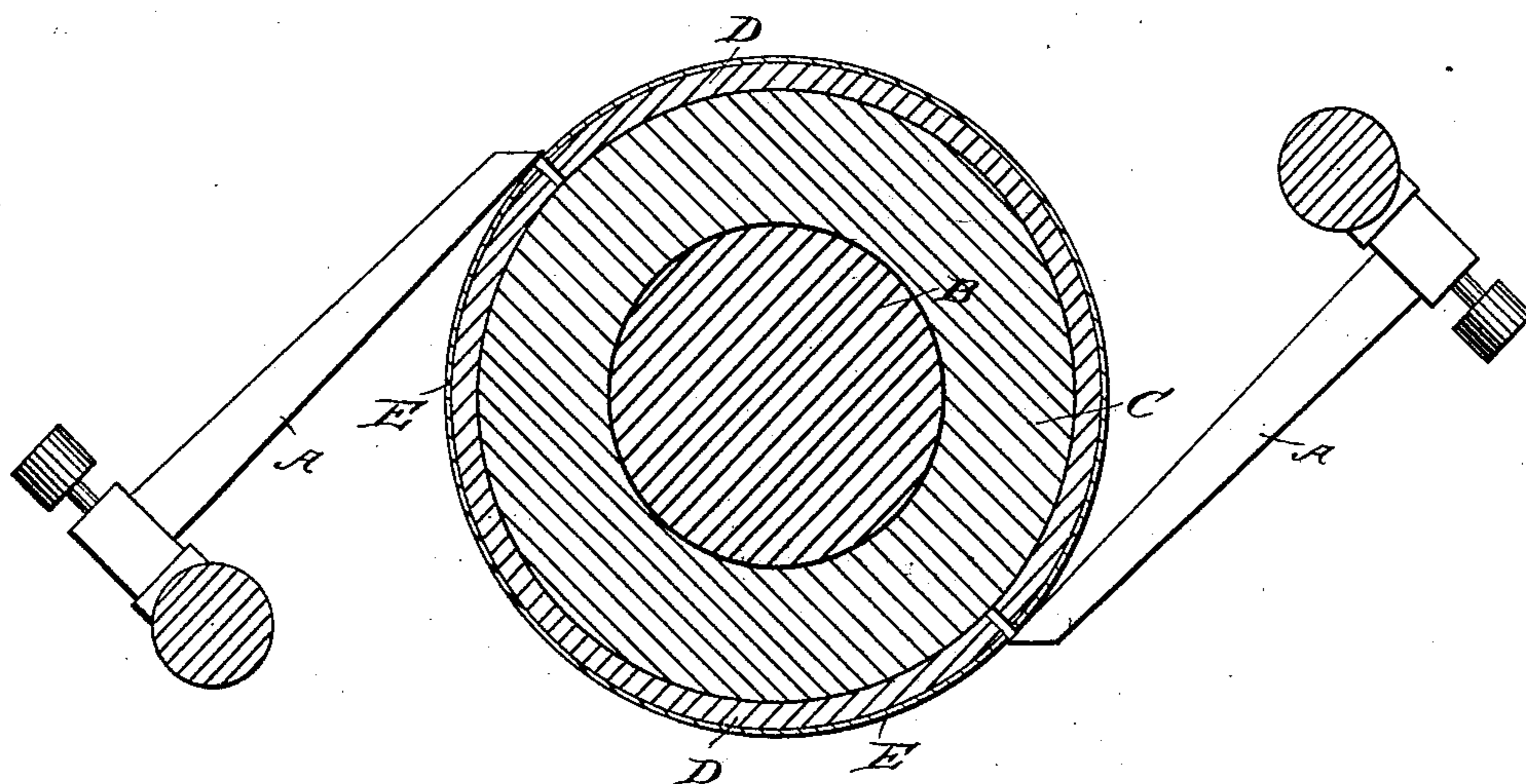


(No Model.)

J. R. DAVIS.  
ANTISPARKLE COMMUTATOR COMPOUND.

No. 551,263.

Patented Dec. 10, 1895.



WITNESSES:  
*W. C. [Signature]*  
*John L. [Signature]*

INVENTOR  
*J. R. Davis*  
BY *Munn & Co*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN R. DAVIS, OF NEW IBERIA, LOUISIANA, ASSIGNOR OF ONE-HALF TO  
MARGARET M. DAVIS, OF SAME PLACE.

## ANTISPARKLE COMMUTATOR COMPOUND.

SPECIFICATION forming part of Letters Patent No. 551,263, dated December 10, 1895.

Application filed March 30, 1895. Serial No. 543,817. (No specimens.)

*To all whom it may concern:*

Be it known that I, JOHN R. DAVIS, of New Iberia, in the parish of Iberia and State of Louisiana, have invented a new and Improved Antisparkle Commutator Compound, of which the following is a full, clear, and exact description.

My invention relates to devices for preventing sparking at the commutator of a dynamo, and has for its object not only to overcome the above-indicated defect, but furthermore to reduce the wear both of the commutator and the brushes, and to preserve a uniformly good contact so as to obtain a steady flow of electricity, which will be evidenced by the absence of fluctuations in the indicator.

To these ends my invention consists of a novel compound which is applied on the commutator, this novel compound being fully described hereinafter.

The invention will be particularly pointed out in the appended claims.

The accompanying drawing illustrates an ordinary commutator with the compound applied thereto, the thickness of the coating being somewhat exaggerated.

In the drawing, A represents the brushes; B, the shaft; C, the collar; D, the commutator-segments, and E the coating applied thereto.

In carrying out my invention, I take a quantity of some waxy or fatty substance, such as sperm, (I generally use sperm candles,) and melt it, and while it is in a liquid condition I add to it graphite, the preferred proportion being one part by volume of graphite and one hundred parts by volume of sperm. The mixture is stirred so as to obtain as homogeneous a body as possible, it being understood that the graphite will per-

vade the body in a finely-divided state; and while the mixture is still hot I make an addition of well-sifted and prepared chalk in sufficient quantity to impart great stiffness to the mixture. The warm mixture is then molded into small blocks and after cooling is ready for use.

My improved compound has been applied in several cases where other expedients had failed, and when used on the commutator of an electric-light dynamo has always been found to insure brilliancy and steadiness of light. The trials have also proved that the application of the new compound prevents the brushes from cutting and undue wear, and likewise reduces the wear of the commutator.

I do not confine myself to the exact proportions stated, and it will be understood that equivalents may be substituted for the substances hereinbefore mentioned, without departing from the nature of my invention.

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

1. The herein described compound, containing a fatty substance, a good conductor of electricity mixed with said substance, and chalk to harden the mixture, substantially as set forth.

2. The herein described compound, containing sperm and graphite mixed together, substantially as described.

3. The herein described compound, containing sperm, graphite mixed therewith, and chalk, substantially as described.

JOHN R. DAVIS.

Witnesses:

J. A. DEBLUM,  
EDWARD T. WEEKS.