

(No Model.)

D. W. DUNN.
COMMUTATOR BRUSH FOR DYNAMOS.

No. 494,629.

Patented Apr. 4, 1893.

Fig. 1.

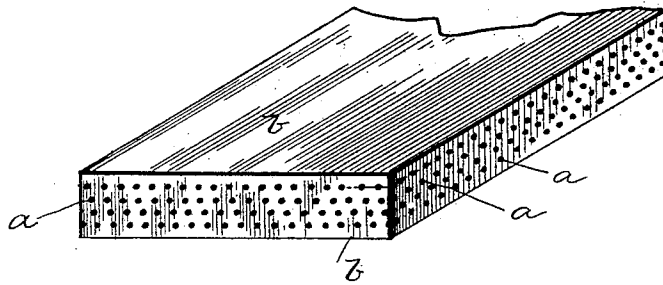
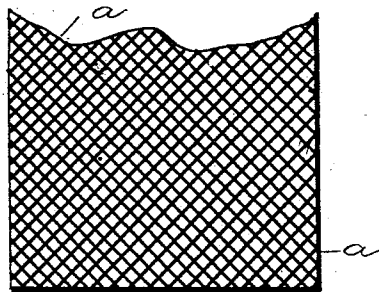


Fig. 2.



Witnesses:
J. B. Seal
H. C. Harrison.

Inventor.
David W. Dunn,
by his Attorney,
Wm. L. Pierce.

UNITED STATES PATENT OFFICE.

DAVID W. DUNN, OF PITTSBURG, PENNSYLVANIA.

COMMUTATOR-BRUSH FOR DYNAMOS.

SPECIFICATION forming part of Letters Patent No. 494,629, dated April 4, 1893.

Application filed August 13, 1892. Serial No. 442,944. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. DUNN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered a new and useful Commutator-Brush for Dynamos, of which the following is a specification.

In the accompanying drawings which make part of this specification, Figure 1, is a perspective broken away of my brush and Fig. 2 a plan of one of the copper gauze sheets broken off.

The purpose of my invention generally stated is to devise a suitable binder for a commutator brush made from powdered carbon and copper gauze.

Heretofore attempts have been made to manufacture a commutator brush by making a mixture of finely divided carbon and pitch and forming a block by pressing said mixture into the meshes of several layers of copper gauze. Before the block so resulting could be used it was necessary to dry out the pitch as it is a non-conductor. This operation necessitated a degree of heat which volatilized the copper gauze and thus rendered the whole

manufacture a failure. I have discovered a binder in liquid silicate of soda which as it is itself a fair conductor, does not require the application of heat to be expelled and consequently no injury results to the copper gauze.

In the practice of my invention I make a batch of pulverized carbon and liquid silicate of soda. Sheets *a—a* of copper gauze cut bias so as to present the ends of the wire to the rubbing contact, are then cut of the size of the proposed brush. These sheets are then spread with the mixture *b*, of carbon and silicate of soda, and the whole put in a mold and compacted under great pressure. The block resulting is then laid by and dried out, when it is ready to use.

I claim—

A commutator brush of pulverized carbon and silicate of soda having sheets of copper gauze interspersed therein.

In testimony whereof I have hereunto set my hand this 9th day of July, A. D. 1892.

DAVID W. DUNN.

Witnesses:

WILLIAM BEAL,
WILLIAM L. PIERCE.