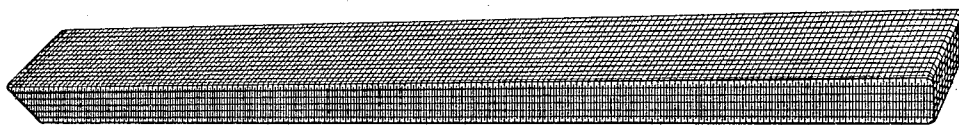


(No Model.)

G. W. BROWN.
COMMUTATOR BRUSH.

No. 518,913.

Patented Apr. 24, 1894.



Witnesses :

Wm. H. Chapman
A. J. Fountaine.

Inventor

George Washington Brown

UNITED STATES PATENT OFFICE.

GEORGE W. BROWN, OF DEERING, MAINE.

COMMUTATOR-BRUSH.

SPECIFICATION forming part of Letters Patent No. 518,913, dated April 24, 1894.

Application filed November 15, 1893. Serial No. 491,062. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BROWN, a citizen of the United States, residing at Deering, in the county of Cumberland and State of Maine, have invented a new and useful Commutator Brush, of which the following is a specification.

My invention relates to improvements in the brushes used on the commutators of dynamos and electric motors; and the objects of my invention are, first to provide a brush that is flexible and adapts itself to the surface over which it slides; and second to provide continuous lubrication and means for causing the surface over which the brush slides to become glazed, reducing the wear. I attain these objects by the brush shown in the accompanying drawing, which is a perspective view.

My brush consists of woven wire cloth folded upon itself many times until the suitable thickness and width are attained. While being folded, the inner layers of wire cloth are impregnated with a compound made of graphite and some liquid or pasty matter with which it can be mixed. Such materials as oil, vaseline, paraffine melted, and even water, have been used with good results. It is well known that graphite itself has great lubricating qualities, and therefore this material alone put into a copper brush will produce excellent results. But I find that an oily ma-

terial like vaseline in small quantities in a brush with the graphite is preferable. But in any case graphite is the important material as it causes the metallic surfaces that rub together to become polished and glazed. It is evident from the above description that all the materials used are such as to leave the finished brush flexible so that when the beveled end of the brush is applied to the surface of the commutator it will be yielding enough to secure perfect contact throughout its width.

I am aware that brushes have been made with woven wire cloth previously to mine, but

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A commutator brush composed of woven wire cloth folded together and the inner layers only of which are impregnated with a graphite compound left in a soft yielding condition and adapted to make contact at its end with a commutator.

2. A commutator brush composed of woven wire cloth folded together and having its inner layers only saturated with a graphite compound, the whole being in a flexible condition and adapted to make contact at its end with the commutator.

GEORGE W. BROWN.

Witnesses:

ALBION LITTLE,
SETH L. LARRABEE.