(No Model.)

T. E. CRAIG.

OILER FOR COMMUTATORS.

No. 393,422. Patented Nov. 27, 1888.

Fig. 1

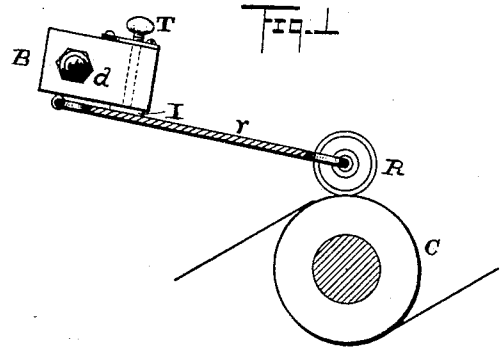


Fig. 2

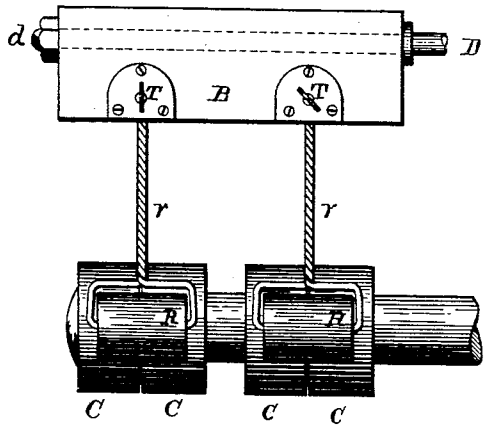
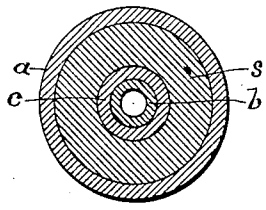


Fig. 3



Witnesses.

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UNITED STATES PATENT OFFICE.

THOMAS E. CRAIG, OF AKRON, OHIO.

OILER FOR COMMUTATORS.

SPECIFICATION forming part of Letters Patent No. 393,422, dated November 27, 1888.

Application filed August 20, 1888. Serial No. 283,199. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. CRAIG, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Oiler and Wiper for Commutators, of which the following is a specification.

The object of my invention is to provide an appliance adapted to be attached to a dynamo-electric machine, which shall rest upon and follow any inequalities of the commutator, constantly wipe the same, and apply to it a sufficient lubricant to prevent cutting between it and the brushes.

My invention consists in the devices illustrated in the accompanying drawings, as hereinafter described and claimed.

In the accompanying drawings, in which similar letters of reference indicate like parts in the different figures, Figure 1 is a side elevation of my improved wiper and oiler, with commutators, indicated in outline to show their relative position; Fig. 2, a plan of the same; and Fig. 3 a cross-section of the wiping and oiling roller, enlarged, showing its construction.

Upon the commutators C, which are shown as simple cylinders, as the machine is confined to no particular form or construction, rest the rollers R R, hereinafter more fully described, mounted on wires or small rods *r r*, each returned about the ends and side of the roll and twisted to form a shank or arm, which is hinged at its other end to the under face of the block B farthest from the rolls. The block B is supported on a spindle or shaft, D, which is attached to any convenient part of the dynamo-frame, and is retained thereon and held at any angle by a nut, *d*. Hence, by turning the block B forward on the spindle D, its front lower edge will press on the arms that support the rolls R R and press the latter against the commutators C. As these arms are, however, often of different degrees of straightness and strength, I provide in the block B two thumb-screws, T, whose lower ends rest on insulating-plates I on the arms, and whereby I am enabled to regulate the pressure of the block B on each. The rollers R are preferably constructed of an inner core, *c*, of metal surrounded by a sleeve, *s*, of elastic material, as rubber or soft wood, the core and sleeve being covered and lined, respectively, with a porous material, *a b*, as leather, adapted to absorb and give off a lubricant, as oil. By this construction the rollers are prevented from heating on their axles, and the outer covering, *a*, gives off gradually sufficient oil to prevent cutting of the commutator and brushes, but not enough to insulate the former.

I claim—

1. In a wiper and oiler for commutators, the combination of two rollers, covered with an absorbent material, which rest on the commutators, each journaled at the end of an arm, said arms being hinged to a pivoted block attached to the dynamo-frame, substantially as shown, and for the purpose specified.

2. In a wiper and oiler for commutators, the combination, with the block B, supported on the spindle D and provided with thumb screws T, and plates I, of the arms *r* and rollers R, all constructed and arranged as shown, and for the purpose specified.

3. In a wiper and oiler for commutators, the combination of a supporting-block attached to the dynamo-frame, and supporting-arms hinged thereto, of rollers journaled in said arms and consisting of a core, *c*, sleeve *s*, and porous cover *a*, and lining *b*, all constructed and arranged substantially as shown, and for the purpose specified.

In testimony that I claim the above I hereunto set my hand.

THOMAS E. CRAIG.

In presence of—

C. P. HUMPHREY,

F. H. STUART.