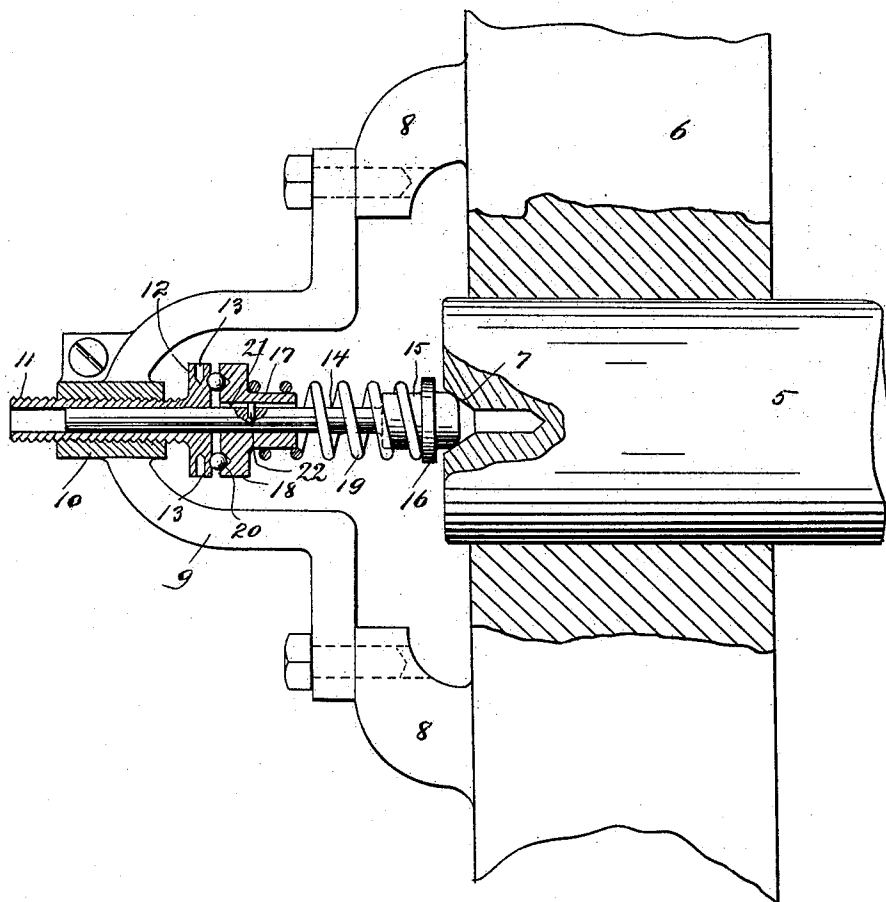


(No Model.)

W. R. THOMPSON.
SUPPORT FOR ARMATURE SHAFTS.

No. 592,502.

Patented Oct. 26, 1897.



WITNESSES:

C. Fordson
C. Gerst

INVENTOR

William R. Thompson.
BY
Edgar Tate
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM R. THOMPSON, OF SOUTH NORWALK, CONNECTICUT.

SUPPORT FOR ARMATURE-SHAFTS.

SPECIFICATION forming part of Letters Patent No. 592,502, dated October 26, 1897.

Application filed April 26, 1897. Serial No. 633,937. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. THOMPSON, a citizen of the United States, residing at South Norwalk, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Supports for Armature-Shafts, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to supports for the armature-shaft of an electrical generator; and the object thereof is to provide an improved device of this class which is designed to prevent the commutator-brushes from pressing upon the commutator at the same point at all times, and thus cutting or wearing said commutator unevenly.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, said drawing being a sectional plan view of one end of the armature-shaft of an electrical motor or generator and showing my improvement.

In the drawing forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawing I have shown at 5 one end of a commutator-shaft and at 6 the support through which it passes.

The armature-shaft is provided at its end with a conical socket or recess 7, and secured to the support 6 or formed thereon are brackets 8, with which is connected a yoke 9, the cross-head of which is provided with a tube 10, through which is passed a screw-threaded tubular shaft 11, the inner end of which is provided with a circular head 12, in the perim-eter of which are formed cavities or recesses 13, which are adapted to receive a wrench or other device by means of which the tubular shaft may be adjusted. I also provide a supplemental shaft 14, which passes into the screw-threaded tubular shaft 11 and through the head 12 thereof and which is provided at its inner end with a cylindrical head 15, which is adapted to enter the conical socket 7 in the end of the armature-shaft 5, and formed on the head 15 of the shaft 14 is a collar 16, and mounted on the shaft 14 is a sleeve 17, provided with a head 18, which is similar in

form to the head 12 of the tubular shaft 11, and mounted on said sleeve and on the outer end of the cylindrical head 15 of the shaft 14 is a spiral spring 19, and between the heads 12 and 18 of the shafts 11 and 14 are placed ball-bearings 20.

The armature-shaft 5 is free to move in its supports 6, and it will be understood that either or both ends of said shafts may be provided with the construction herein shown and described, and in the operation of the machine or engine the spring 19 and the parts connected therewith will operate to give said shaft a slight longitudinal movement.

The commutator or commutator-brushes are not shown, and it will be understood that the commutator is mounted on the shaft 5 in the usual manner, and the commutator-brushes are also supported in the usual manner so as to bear upon said commutator, and the commutator will be given the same longitudinal movement as the shaft 5, and the brushes will thus be prevented from bearing upon the commutator in the same place at all times, and thus cutting and wearing the same unevenly.

The sleeve 17 is adapted to slide on the shaft 14, and the shaft 11 may be adjusted so as to regulate the pressure of the spring 19 to any desired extent, and said sleeve is provided with a groove 21, in which moves a pin 22, secured to said shaft.

This device is simple in construction and operation and is perfectly adapted to accomplish the result for which it is intended, and it will be apparent that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

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

1. The combination with the supports of an armature-shaft, of a yoke secured thereto, a tubular screw-threaded shaft passing through said yoke, and a supplemental spring-operated shaft passing thereinto, and adapted to bear on the armature-shaft, substantially as shown and described.

2. The combination with the supports of an armature-shaft, of a yoke secured thereto, a

tubular screw-threaded shaft passing through
said yoke, and a supplemental spring-oper-
ated shaft passing therinto, and adapted to
bear on the end of the armature-shaft, said
5 supplemental spring-operated shaft being
provided with a sleeve which is mounted
thereon, and with a head which is formed on
said sleeve, and said screw-threaded tubular
shaft being also provided with a head between
10 which and the head formed on the sleeve are

ball-bearings, substantially as shown and de-
scribed.

In testimony that I claim the foregoing as
my invention I have signed my name, in pres-
ence of the subscribing witnesses, this 23d 15
day of April, 1897.

WILLIAM R. THOMPSON.

Witnesses:

C. GEIST,

A. C. VAN BLARCOM.