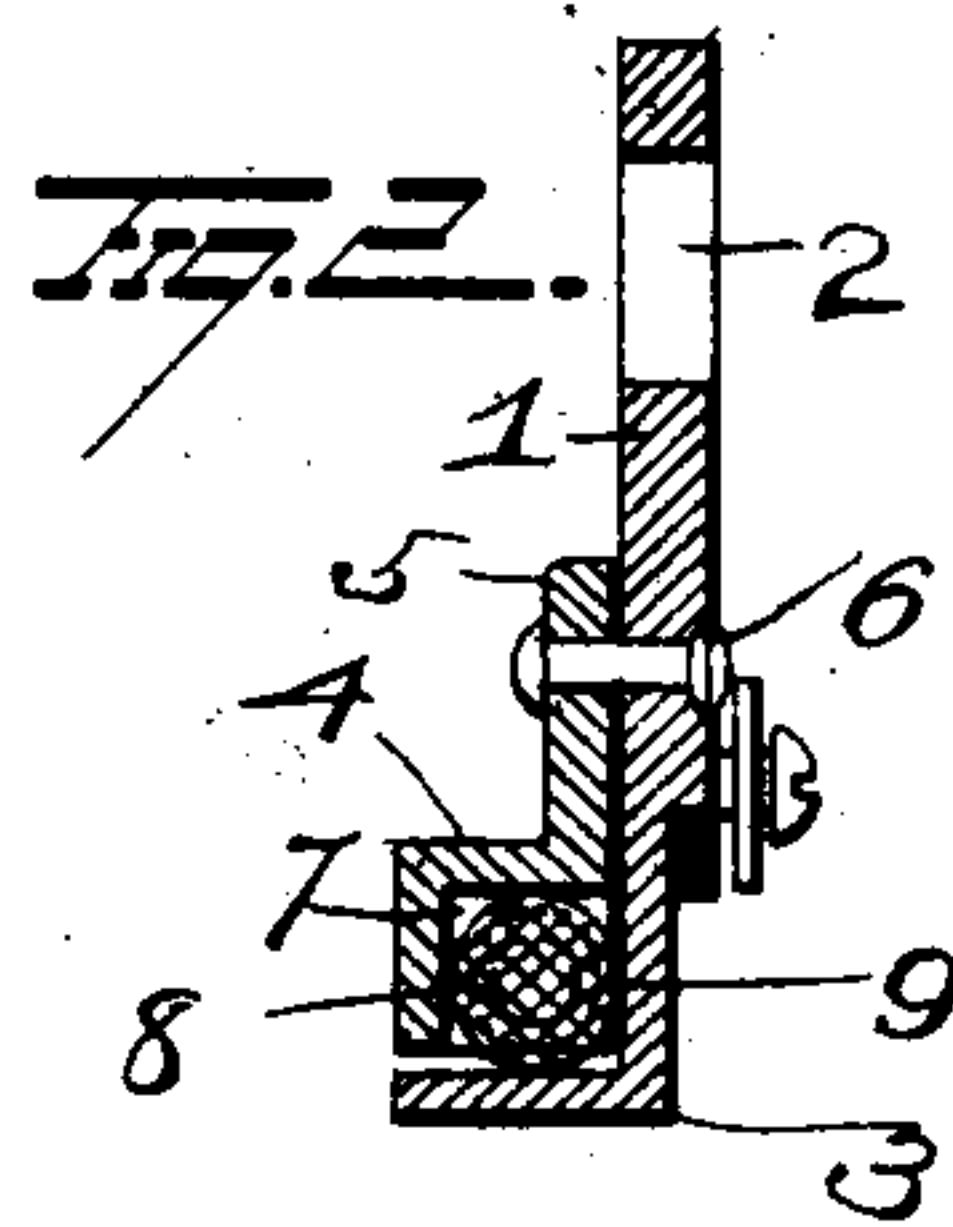
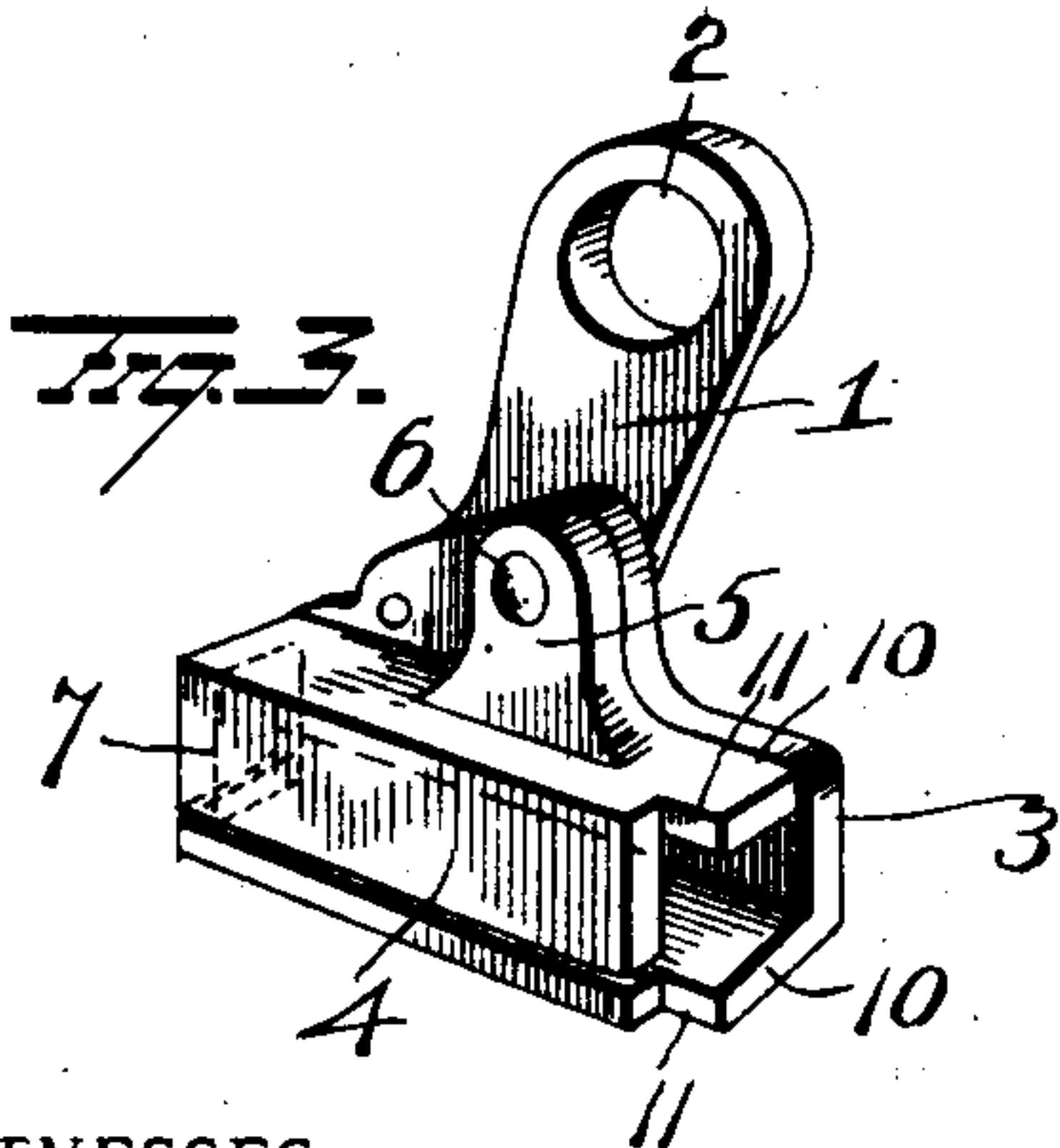
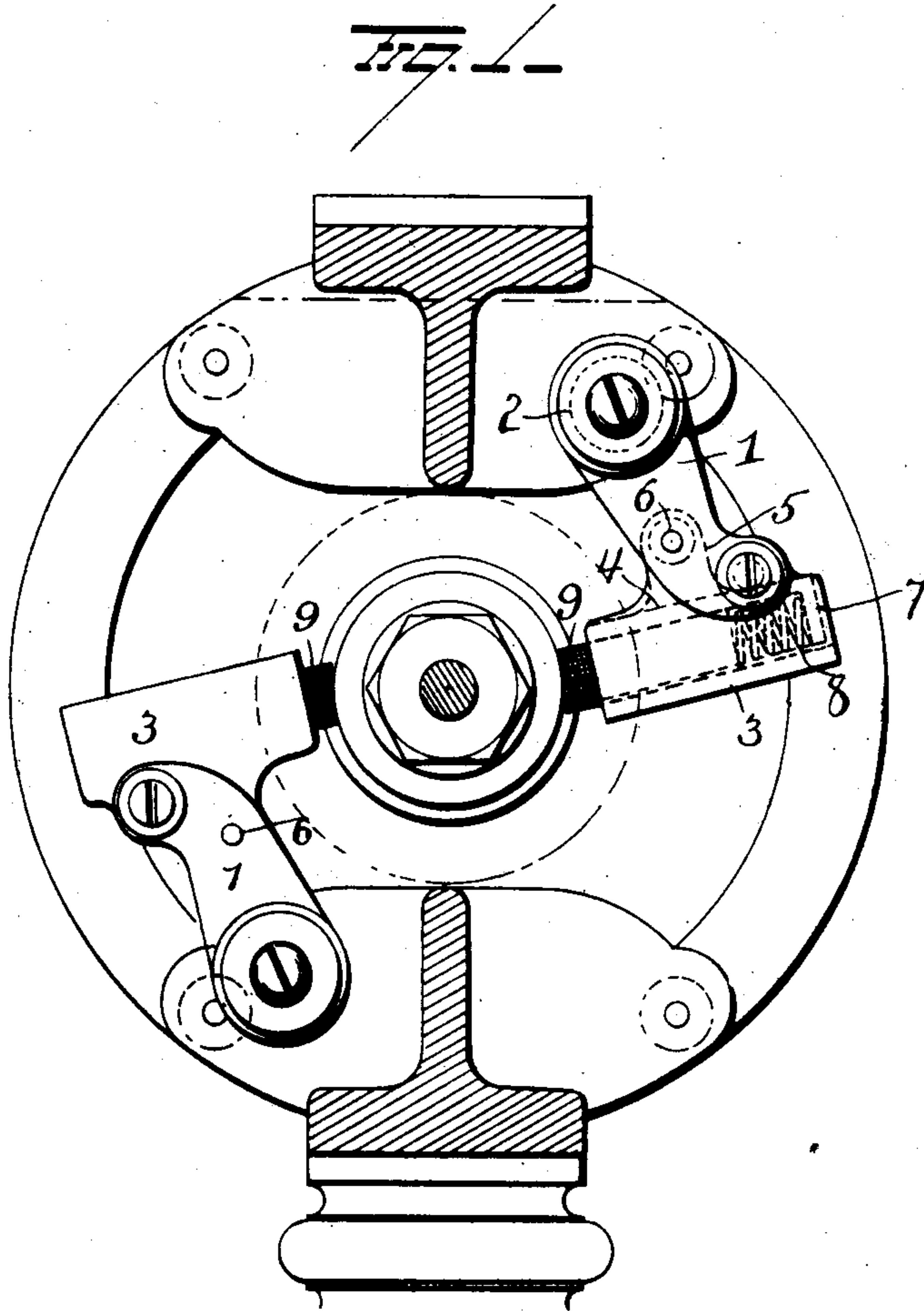


No. 713,711.

Patented Nov. 18, 1902.

B. A. STOWE.
BRUSH HOLDER FOR MOTORS, &c.
(Application filed July 12, 1902.)

(No Model.)



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BRUSH-HOLDER FOR MOTORS, &c.

SPECIFICATION forming part of Letters Patent No. 713,711, dated November 18, 1902.

Application filed July 12, 1902. Serial No. 115,354. (No model.)

To all whom it may concern:

Be it known that I, BERNARD A. STOWE, a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain
5 new and useful Improvements in Brush-Holders for Motors, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable
10 others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in brush-holders for motors and dynamos, the object of the invention being to construct the device in such manner that a carbon-brush
15 will be properly fed as it wears away to the commutator and at the same time properly hold the brush and prevent it from undue lateral play without applying such friction as would tend to retard the feed of the brush.

20 A further object is to construct a brush-holder in such manner that a single spring will effect the feeding of the brush and at the same time operate to sufficiently clutch the brush to prevent undue lateral movement of
25 the brush without affecting its feed.

A further object is to provide a simple and efficient brush-holder which will operate to effectually hold and feed a carbon-brush and compensate for varying diameters of such
30 brushes or inequalities thereof.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed
35 out in the claims.

In the accompanying drawings, Figure 1 is a view showing portions of a motor and illustrating the application of my invention thereto. Fig. 2 is a sectional view. Fig. 3 is a per-
40 spective view.

1 represents an arm provided at one end with a hole 2 for the passage of a suitable screw by means of which to attach the device to the machine on which it is to be used.
45 The other end of the arm 1 is provided with a housing comprising two elongated jaws 3 4, each of which is made right angular in cross-section, and the two jaws cooperate to form a rectangular box or housing square in cross-
50 section. The two jaws may, however, have a curved cross-section, if desired. The jaw

3 of the housing is made integral with the arm 1, so as to have a fixed relation thereto, and the jaw 4 is made of a separate piece and provided with a laterally-projecting lug or
55 ear 5, located, preferably, at a point between the center of the jaw and its forward end. This lug or ear is pivoted to the arm 1 at 6. The rear end of the pivoted jaw 4 is provided with an end wall 7, which serves as a seat
60 for a coiled spring 8, located within the housing, said spring bearing at its forward end against the carbon-brush 9, disposed within the housing. The forward ends of the re-
65 spective jaws are provided with lips 10 10, which engage the carbon-brush, and this engagement is maintained with proper tension to prevent lateral displacement of the brush and to compensate for varying diame-
70 ters of brushes or inequalities of the same by means of the spring 8. The cause of this action will be readily understood when it is observed that when the brush is bearing against the commutator the spring will be more or less compressed and tend to press
75 the brush toward the commutator to provide for the feed of the brush as the latter wears away. The spring will also exert a pressure against the end wall of the pivoted jaw and tend to cause said jaw to turn on its pivotal
80 connection with the arm 1, thus causing the lips at the forward ends of the jaws to grip the brush with a yielding pressure sufficient, however, to prevent lateral displacement of the brush without applying such amount of
85 frictional resistance as would interfere with the proper feeding of the brush.

The forward ends of the jaws 3 4 are cut away, as at 11.

Slight changes might be made in the de-
90 tails of construction of my invention without departing from the spirit thereof or limiting its scope, and hence I do not wish to limit myself to the precise details herein set forth.

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

1. In a brush-holder, the combination with an arm and a fixed jaw at one end thereof, of
100 a jaw pivoted to the arm and cooperating with the fixed jaw to form a housing, and a

spring within the housing and bearing at one end against the end of the pivoted jaw and adapted to bear at its other end against a brush inserted into the housing.

5 2. In a brush-holder, the combination with a fixed jaw and a jaw having a pivotal connection with the fixed jaw and cooperating therewith to form a housing, a spring located within the housing and bearing against the
10 end of the pivoted jaw, said spring tending to press one end of the pivoted jaw toward the corresponding end of the fixed jaw and acting simultaneously to feed a brush mounted in said housing.

15 3. The combination with a fixed jaw, of a jaw having a pivotal connection with the fixed jaw and cooperating therewith to form a housing, the pivoted jaw closed at one end, lips at the forward ends of the jaws, and a
20 spring located within the housing and bearing against the closed end of the pivoted jaw.

4. The combination with a fixed jaw, of a jaw provided at a point between its ends with a laterally-projecting lug or ear pivotally connected with the fixed jaw, said piv- 25
oted jaw closed at one end, lips at the forward ends of the jaws, and a spring disposed within the housing and bearing at one end against the closed end of the pivoted jaw, said spring serving to feed a carbon-brush 30
disposed in the housing and simultaneously turn the pivoted jaw on its fulcrum to cause the lips at the forward ends of the jaws to grasp said carbon-brush.

In testimony whereof I have signed this 35
specification in the presence of two subscribing witnesses.

BERNARD A. STOWE.

Witnesses:

J. POTTER,

C. R. MEGERTH.