

No. 656,372.

Patented Aug. 21, 1900.

A. L. RIKER.

GUARD FOR CONTROLLER BRUSHES.

(Application filed Jan. 8, 1900.)

(No Model.)

Fig. 1.

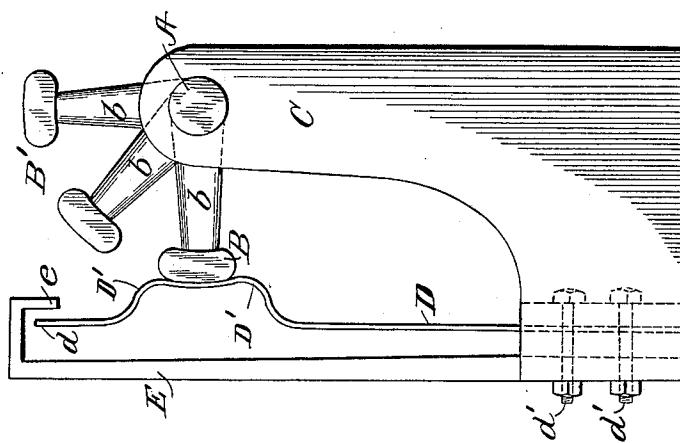
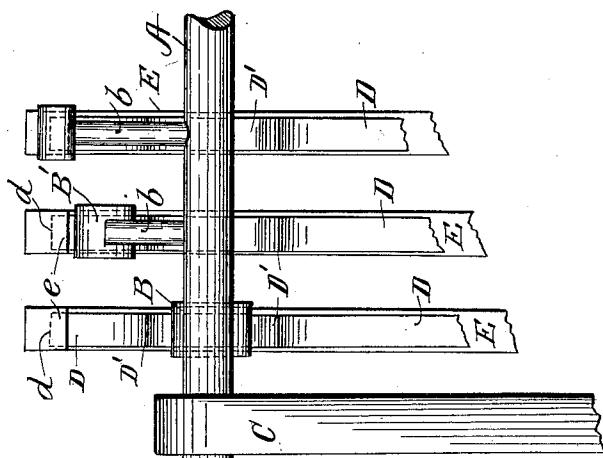


Fig. 2.



Witnesses

W. B. Edgin.  
John Davis.

Inventor

Andrew L. Riker  
by Philip Mauro  
his Atty.

# UNITED STATES PATENT OFFICE.

ANDREW L. RIKER, OF NEW YORK, N. Y.

## GUARD FOR CONTROLLER-BRUSHES.

SPECIFICATION forming part of Letters Patent No. 656,372, dated August 21, 1900.

Application filed January 8, 1900. Serial No. 760. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW L. RIKER, a citizen of the United States, and a resident of the city of New York, State of New York, have 5 invented a new and useful Guard for Controller-Brushes, which is fully set forth in the following specification.

The present invention is a guard for controller-brushes; and it consists in the employment of a device to prevent the controller-brushes from catching upon the controller-segments.

In the drawings annexed hereto as part of this application, Figure 1 is an end elevation 15 showing one form of guard in position, and Fig. 2 is a side elevation of a number of controller segments and brushes with the guards for the latter.

In ordinary devices of this kind there is a 20 tendency when the controller-brush is vibrating back and forth for its upper end to become caught by the toe of an approaching segment. This produces a shock and is liable to break the brush, always wearing and fray- 25 ing its upper end. By my construction, however, while the brush is otherwise free to move the new guard keeps it from flying too far into the path of its approaching controller-segment.

30 Referring to the drawings, A is the main body or axis of a controller-barrel, carrying the segments B B' on the staggered arms b and mounted in the frame C, all as usual.

D represents the controller-brush, secured 35 by bolts d', as shown and bent or curved at D' to conform to its controller-segment. It is prolonged at d somewhat farther than has heretofore been customary.

E represents one form of guard, consisting 40 of a plate or metal piece secured in any convenient manner, preferably adjustably, and by the same bolts d' that hold its brush D.

It lies sufficiently back of its brush D not to interfere with the movement of the latter and passing over the top of the brush presents 45 the depending lip e in front of the upper portion d of the latter. This lip e is so situated relatively that while it does not hold brush D out of its normal position for contact with its segment B nor otherwise interfere with its motion it keeps it from going too far into the path of the approaching segment.

I do not limit myself to the exact form of guard shown nor to the particular manner of mounting it, for the spirit of my invention 55 consists in providing a device that will keep the controller-brush from being caught by its controller-segment without otherwise interfering with it.

Having thus described my invention, I 60 claim—

1. The combination with a controller-brush and its controller-segment, of a guard for the former that keeps it from interfering with the latter, substantially as described.

2. The combination with a controller-brush and a controller-segment, of a guard suitably held in front of the upper portion of the former to prevent it from flying into the path of the latter, substantially as described.

3. The combination with a controller-brush and a controller-segment, of a guard for the former consisting of a plate extending behind said brush and presenting a depending lip in front of the upper portion thereof, whereby 75 said brush is kept from interfering with said segment, substantially as described.

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

ANDREW L. RIKER.

Witnesses:

ELISHA K. CAMP,  
C. A. L. MASSIE.