

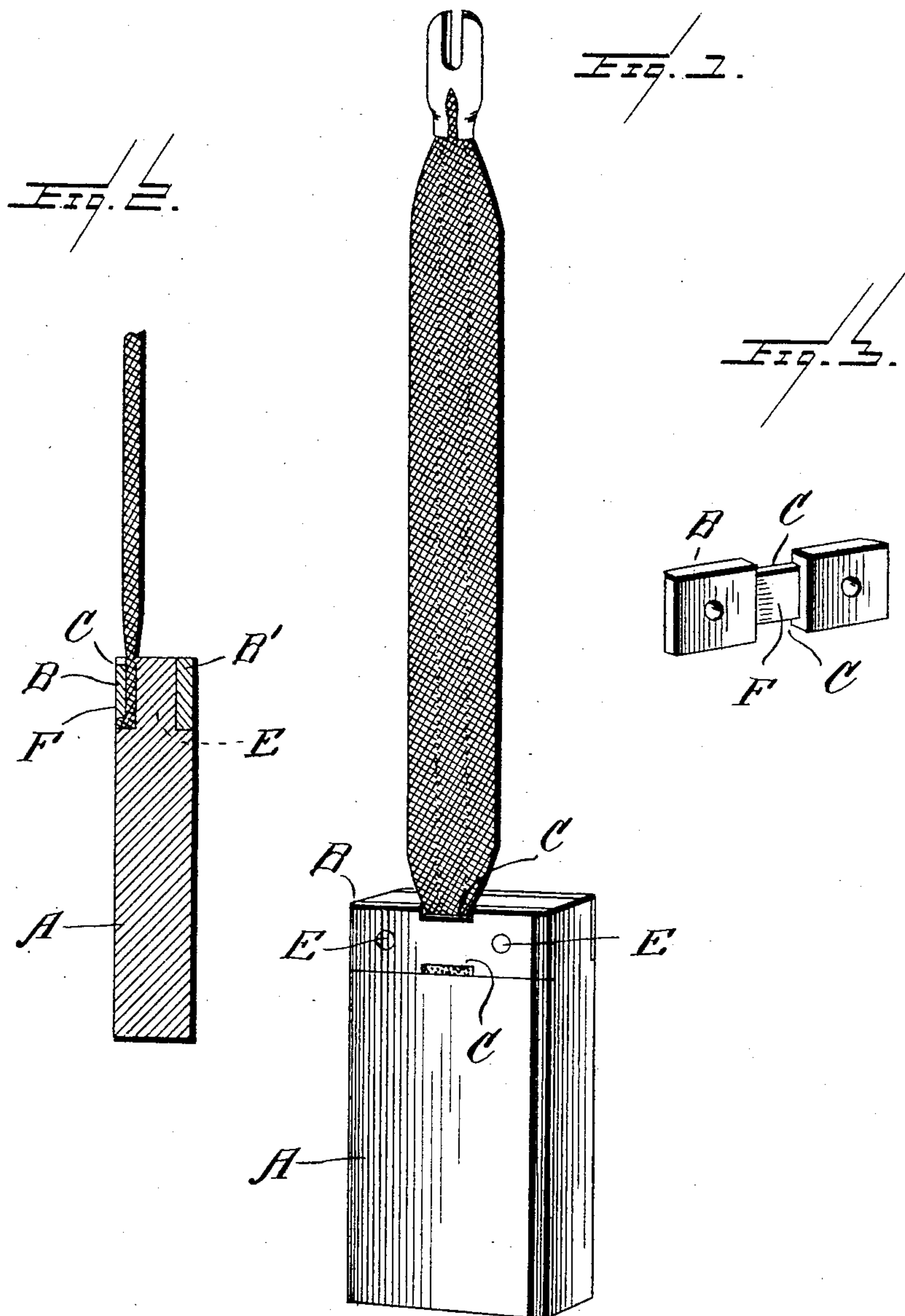
No. 865,059.

M. W. ROBERTSON.

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MEANS FOR ATTACHING PIGTAILS TO CARBON BRUSHES.

APPLICATION FILED APR. 29, 1907.



Witnesses

*Wm. F. Fowler*  
*Ada R. Fowler*

Inventor

*Maxwell W. Robertson,*

By *Franklin A. Tough*

Attorney

# UNITED STATES PATENT OFFICE.

MAXWELL W. ROBERTSON, OF NEW YORK, N. Y.

## MEANS FOR ATTACHING PIGTAILS TO CARBON-BRUSHES.

No. 865,059.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed April 29, 1907. Serial No. 370,907.

*To all whom it may concern:*

Be it known that I, MAXWELL W. ROBERTSON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Means for Attaching Pigtails to Carbon-Brushes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in brush connections or pigtails for attachment to carbons, and the object in view is to produce a practically indestructible device which is fastened to the carbon without soldering, which is a common manner of attaching the connection to the brush, and which results in frequent melting of the solder, causing short circuits, etc.

My invention comprises a brush connection having various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings:—

Figure 1 is a perspective view showing a pigtail connected to a carbon and embodying my invention. Fig. 2 is a vertical sectional view through the carbon and the plates fastening the pigtail thereto, and Fig. 3 is a detail view of one of the plates which is fastened to the carbon.

Reference now being had to the details of the drawings by letter, A designates a carbon having two recesses formed upon the opposite faces thereof, adapted to receive plates B and B'. One of said plates B is provided with recesses C formed in the opposite edges thereof to receive the woven wire pigtail or shunt conductor. Said plate B is also recessed upon its rear face, as at F, to receive the pigtail or shunt conductor. It will be noted that one end of said pigtail is passed

through the inner recess of the plate B and is held thereby securely against the shoulder formed upon the carbon and a portion of the pigtail, passing through the recess F and also through the recess in the upper face of the plate B, is held by the plate against the side wall of the recessed portion of the carbon, said plates B and B' being held in clamping relation by means of the screws E which are passed through threaded apertures in the plates, the walls of the apertures in the recessed plates being threaded to receive the threads of said screw. By this means, it will be noted that the shunt conductor or pigtail will be securely held to the carbon.

By the provision of brush attaching means, as shown and described, without the use of solder, the pigtail will be practically indestructible and there will be no danger of short circuiting incident to brush connections where the conductor wire is soldered; the current will be picked up from the full width of the brush which maintains its proportions throughout.

By the provision of a brush connection as shown and described, the pigtail may be readily readjusted to new carbons when the old ones are worn out.

What I claim is:—

1. An attaching means for holding pigtails to carbons comprising, in combination with a carbon, clamping plates, means for holding the same clamped against the carbon, one of said plates being recessed upon its opposite edges and one face, and a pigtail mounted in said recesses and held by the plates frictionally against said carbon, as set forth.

2. An attaching means for fastening pigtails to carbons comprising, in combination with a carbon having recesses formed in the opposite faces thereof, clamping plates resting upon the shoulders of said recesses, one of said plates having recesses in its opposite edges and in its inner face, a pigtail having its end engaging the recess in the bottom of the plate, resting upon the adjacent shoulder of the carbon, and extending in the recess in the rear of the plate, and screws passing through the plates and adapted to hold the same in clamping engagement with the carbon and said pigtail, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

MAXWELL W. ROBERTSON.

Witnesses:

CHAS. P. MEYER,  
FANNIE KLEIN.