Aug. 9, 1927. 1,638,054

E. MYERS

REMOVABLE BRUSH HEAD

Filed Sept. 30, 1925 2 Sheets-Sheet 1

Fig. 1.

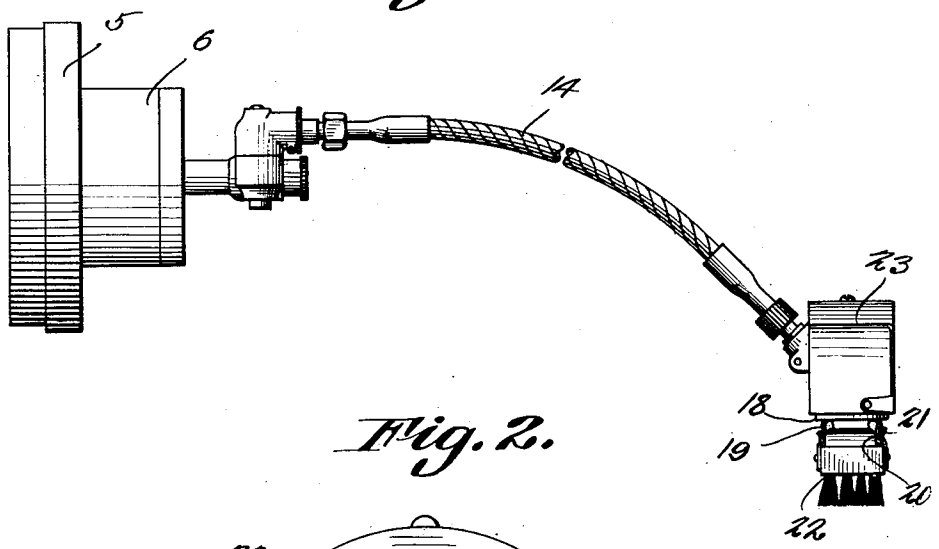
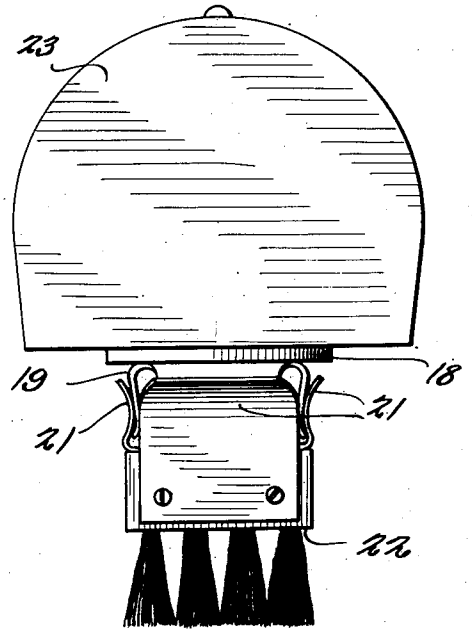


Fig. 2.



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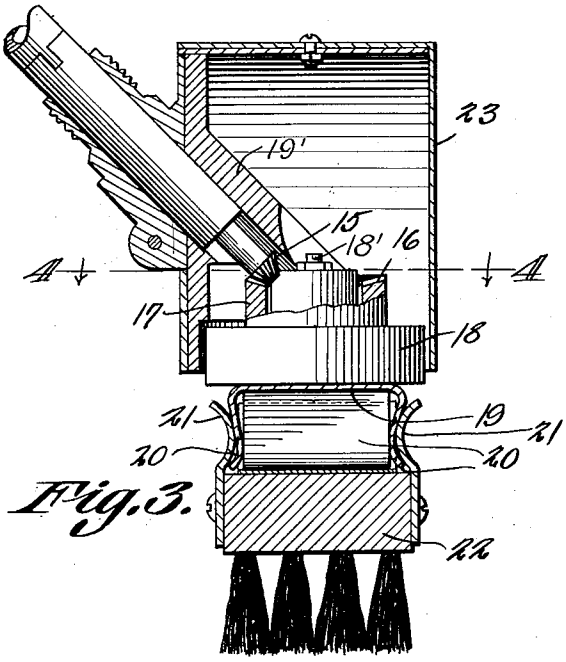
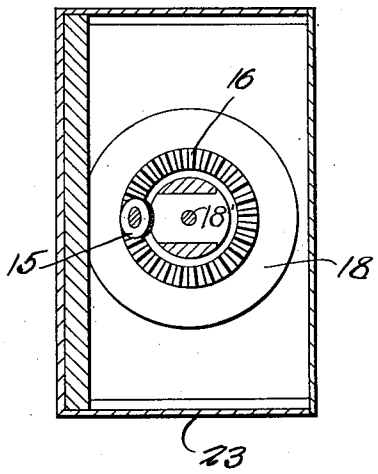


Fig. 3.

Fig. 4.



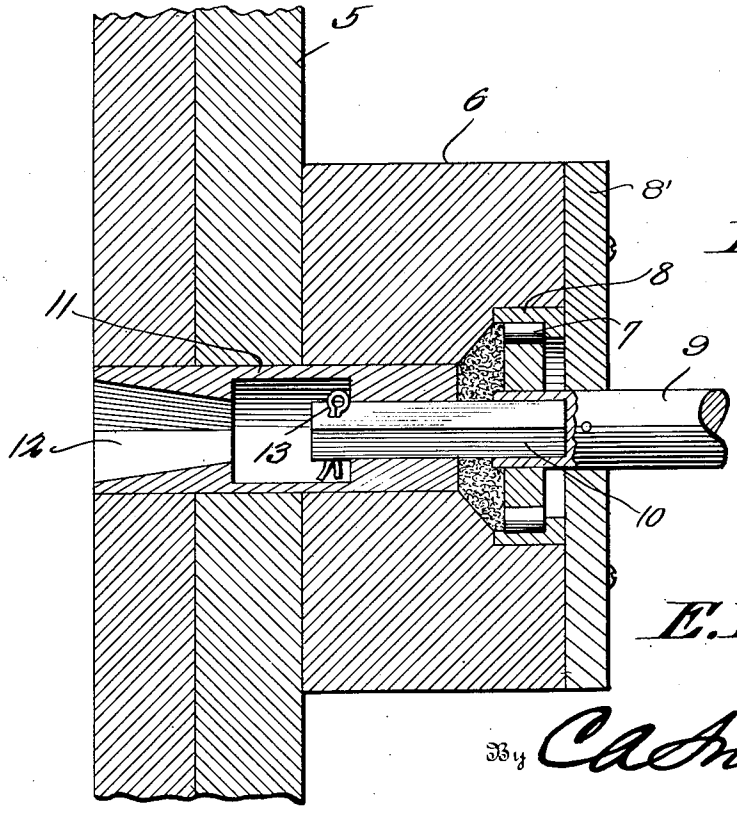


Fig. 5.

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UNITED STATES PATENT OFFICE.

EBENEZER MYERS, OF CONCORD, NORTH CAROLINA, ASSIGNOR OF ONE-HALF TO ERNEST HICKS, OF CONCORD, NORTH CAROLINA.

REMOVABLE BRUSH HEAD.

Application filed September 30, 1925. Serial No. 59,666.

This invention relates to brushes and aims to provide novel means whereby a brush head may be removably mounted in such a way that the same may be readily and easily removed so that larger or smaller brushes may be substituted therefor at the will of the operator.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is a side elevational view illustrating a brush constructed in accordance with the invention.

Figure 2 is an enlarged elevational view of the brush and its supporting housing.

Figure 3 is a vertical sectional view through the brush and its housing.

Figure 4 is a sectional view taken on line 4—4 of Figure 3.

Figure 5 is a sectional view through the connecting drum.

Referring to the drawings in detail, the device includes a connecting drum indicated generally by the reference character 5, and as shown, the connecting drum is provided with a projecting bearing housing 6 in which the bearings 7 are mounted, the bearings being held within the bearing housing by means of the retainer 8, and plate 8′.

The power shaft is shown at 9 and is provided with a squared opening in one end thereof to receive one end of the shaft 10 which is also fitted in a squared opening formed in one end of the connecting sleeve 11, the opposite end of the sleeve being provided with a squared socket 12 for the reception of the armature shaft of the motor to which the device is to be secured.

The power shaft 9 is secured within the member 11 by means of the cotter pin 13 which extends through a suitable opening formed in the shaft 10.

Mounted on the outer end of the flexible shaft 14 is a pinion 15 which meshes with the gear 16 formed at the upper end of the sleeve 17, the opposite end of the sleeve being connected with the support 18 which is held in position by means of the bolt 18′ shown as extending through the support, and through the inner bearing member 19′. The support 18 also carries the connecting member 19 that is provided with outwardly extended flanges 20 curved to conform to the curvatures of the flanges 21 that are carried by the brush 22. Thus it will be seen that due to this construction, the brush 22 may be readily and easily removed from the flanges 20, so that brushes of various sizes may be used in connection with the brush support.

The reference character 23 designates a gear housing, the shape of the same being such as to be readily grasped and held by the operator in moving the brush from place to place during the cleaning operation.

In the use of the device, the device is connected with a suitable motor as described which motor is adapted to rapidly rotate the flexible shaft, which in turn transmits rotary motion to the brush support and brush carried thereby.

I claim:—

In a device of the character described, a brush support including outwardly extended curved flanges, a brush including a head, outwardly curved flanges extending from the head and adapted to be positioned over the first mentioned flanges to removably secure the brush head to the brush support.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

EBENEZER MYERS.