

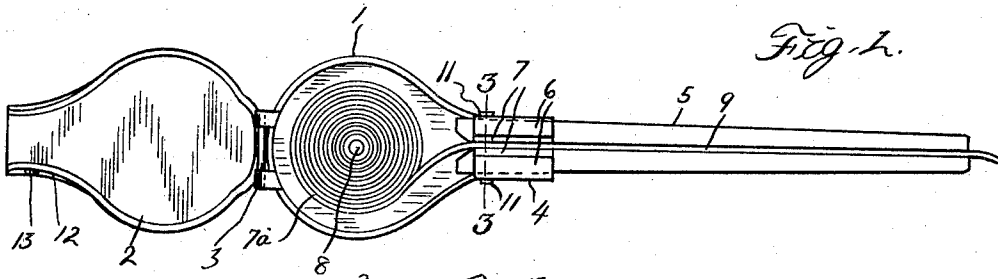
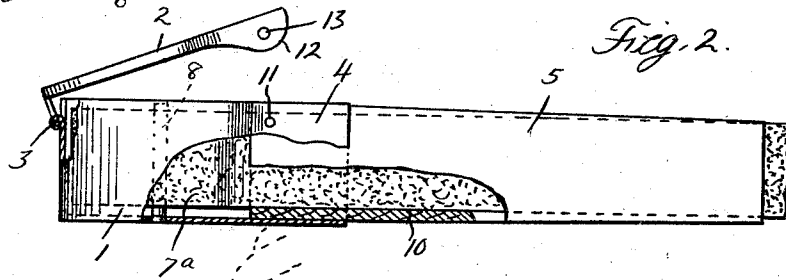
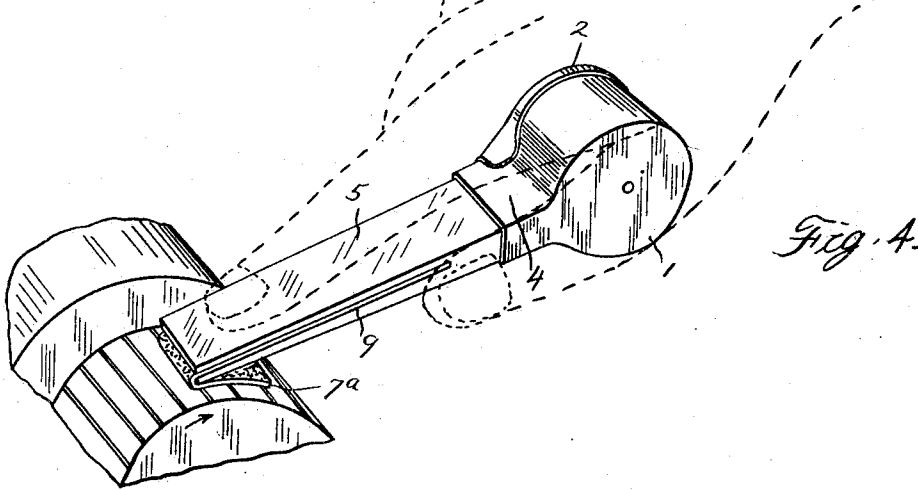
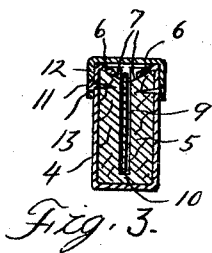
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TOOL FOR CLEANING COMMUTATORS

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TOOL FOR CLEANING COMMUTATORS

Application filed April 8, 1927. Serial No. 181,938.

This invention relates to tools for cleaning commutators.

It is an object of the invention to provide a tool comprising a holder for a rolled strip of sand paper or the like, and a projection from said holder over which the strip is adapted to be extended for the purpose of pressing the strip into working contact with a commutator.

More specifically, the invention has for its object the provision of a container for a rolled strip of sand paper and of a slotted projection from said container through which the strip is extended, said strip being subjected to sufficient pressure to prevent its feeding from said slot except under a positive pull.

Another object is to form such a container with resilient portions pressing together the walls of the slot through which the abrasive strip is drawn to avoid a too free feeding of the strip.

These and various other objects the invention attains by the construction herein-after described, and illustrated in the accompanying drawing, wherein:

Figure 1 is a plan view of the herein disclosed tool with the cover of the container thereof partly broken away.

Figure 2 is a view of the same in side elevation with the cover partially raised.

Figure 3 is a cross sectional view taken upon the line 3—3 of Figure 1.

Figure 4 is a perspective view of the tool in use.

In these views the reference character 1 designates a substantially cup-shaped sheet metal container, having a sheet metal cover 2, hinged thereto as indicated at 3. Said container has a radial projection 4 of a width considerably reduced in comparison to the diameter of said container, and said projection acts as a keeper for an end of an arm 5 formed of wood or some other insulating material. The side walls of the keeper 4 are formed at their upper edges with an integral pair of lugs 6 which are pressed down against the top face of the arm 5 into suitable notches 7 in said face for holding the arm securely in the keeper.

Within the container 1 there is disposed a rolled strip of fine sand-paper, or other suitable abrasive, 7^a, the roll formed by said strip being preferably mounted upon a pin 8 rigidly rising from the bottom of said container. The free end portion of said strip is passed through a slot 9 formed in the arm 5 and extended from end to end thereof. In the outer portion of the arm said slot may completely bifurcate the arm, but it is preferred in the inner portion of the arm to give said slot a depth less than that of the arm so as to leave a connecting portion 10 between the walls on each side of the slot.

The side walls of the keeper 4 are resilient and maintain the divided portions of said arm pressed toward each other sufficiently to restrain the abrasive strip 7^a from feeding too freely.

11 designates a pair of small headed pins which extend into the arm 5 through the side walls of the keeper 4 to assist in holding said arm in place. Preferably the free end of the cover 2 has a pair of down-turned lugs 12 at its opposite sides, which lugs are apertured as indicated at 13 to engage the heads of the pins 11 when said cover is seated. The resiliency of the side walls of the keeper 4 tends to hold said pin heads engaged in the apertures 13 and a slight compression exerted upon said side walls toward each other will release said pins permitting the cover to be raised.

In the use of the described tool the strip 7^a is allowed to project a few inches beyond the outer end of the arm 5 and the end of said arm is pressed upon the commutator to be cleaned with the projecting portion of said strip return bent between the arm and the commutator, as is best seen in Figure 4. Whenever necessary the used portion of the strip may be torn off and a fresh portion may be withdrawn from the slot 9.

Said tool presents the advantages that it keeps the supply of sand paper (or other abrasive) protected from dust and dirt and accomplishes a considerable economy in the use of the sand paper since it will eliminate the present practice of discarding each piece

of sand paper after use whether or not it is unfit for further use.

The described tool is further adapted to save considerable time since it maintains constantly a relation of use between the sand-
 5 paper (or other abrasive) and the tool by which pressure is to be applied to a commu-
 10 tator, whereas in the present practice the operator wastes time in wrapping each piece of sand-paper around a stick, or the like, used to apply the necessary pressure. Furthermore, the described tool reduces the danger of an inexperienced operator receiving a shock through using a non-insulating member to
 15 press a cleaning strip against a commutator.

What I claim is:—

1. A tool for pressing an abrasive strip against work, comprising a substantially cup-shaped container for receiving a rolled abra-
 20 sive strip, an arm mounted at one end upon said container and slotted lengthwise to provide an exit for said strip from said container, the end portion of said strip being adapted to be return bent against the end
 25 portion of said arm and to be held by said arm against the work.

2. A tool for pressing an abrasive strip against work comprising a substantially cup-shaped container for receiving a rolled
 30 portion of said abrasive strip, a keeper integral with said container and projecting laterally therefrom, said keeper having resilient side walls and an arm project-
 35 ing from said container and engaged at its inner end in said keeper and slotted length-
 wise to form an exit from said strip for said container, the portions of said arm at oppo-
 40 site sides of said slot being urged toward each other by the resiliency of said keeper to sub-
 105 ject the strip to pressure.

3. A tool for pressing an abrasive strip against work, comprising a holder for a strip of abrasive material, an arm secured at one
 45 end to said holder and slotted from end to end to form a passage for feeding said strip from the holder to the outer end of said arm, the outer portion of said arm being bifur-
 50 cated by the slot thereof and the furcations being sprung toward each other to retain the strip properly positioned in said slot.

4. A tool for pressing an abrasive strip against work, comprising a handle forming member having an opening therein to receive
 55 a rolled portion of said abrasive strip, an arm extending from said member slotted lengthwise to provide an exit for said strip from said opening, the end portion of the strip being adapted to be return-bent against the free end portion of the arm to be pressed
 60 by the arm against the work.

5. A tool for pressing an abrasive strip against work, comprising a handle member having an opening therein to receive a rolled
 65 portion of said abrasive strip, a keeper carried by said member having resilient side

walls and having an opening in communica-
 tion with that of said handle member be-
 tween said walls, an arm projecting from said
 keeper and comprising portions engaging
 each resilient wall of the keeper, said strip
 70 being adapted to feed from the handle mem-
 ber through said keeper and between said por-
 tions of said arm, the resiliency of said arm
 urging said portions toward each other to
 subject the strip to restraining pressure.

In testimony whereof I sign this specifica-
 75 tion.

JENTJE MULDER.

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