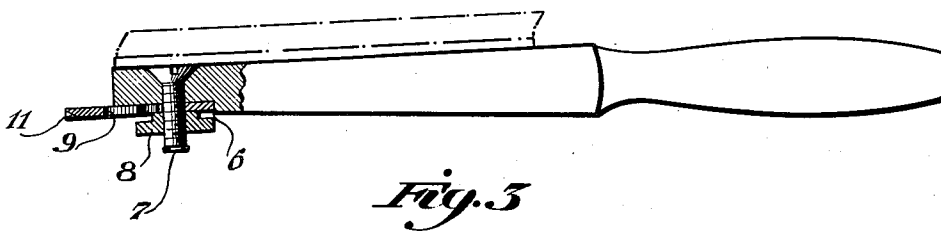
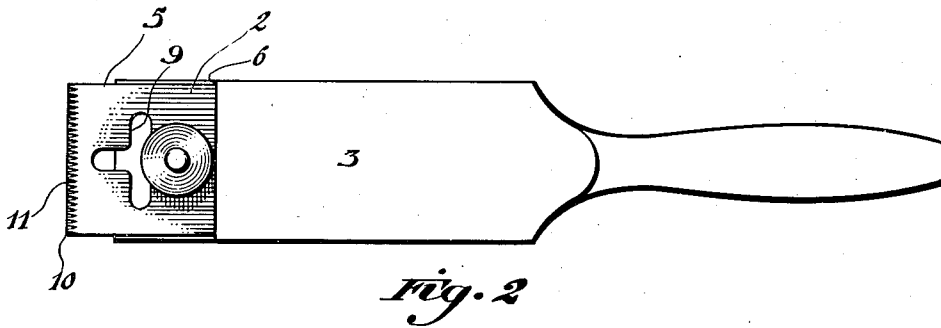
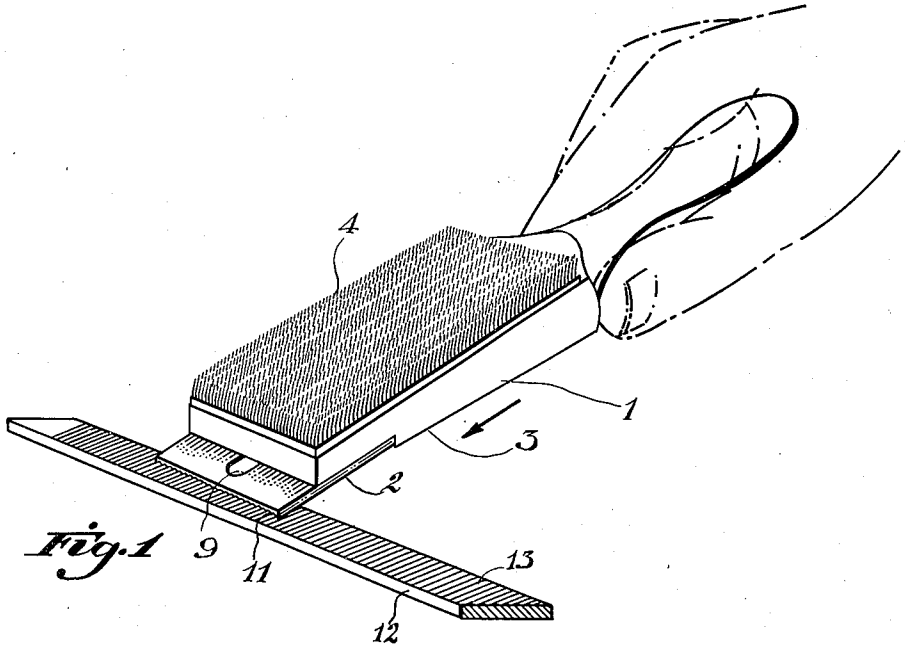


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FILE CLEANING DEVICE  
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## UNITED STATES PATENT OFFICE

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## FILE CLEANING DEVICE

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## 1 Claim. (Cl. 15—236)

This invention relates to a file cleaning device, which will be particularly disclosed as an attachment for a conventional file card, although the device is likewise adapted for use as a tool which is self-sufficient in and of itself.

A conventional file card used to brush or scrape the loose filings from the grooves of a file comprises, generally, a handle and a backing portion to which is affixed a plurality of steel bristles. These bristles may be imbedded at one end in a fabric strip, and this strip may then be secured to the backing by paste, glue, or some other adhesive; the resultant structure, except for the nature of the bristles, closely resembling an ordinary hairbrush.

The present invention contemplates a file cleaning device which will remove the metal particles which tightly adhere in the file grooves and, in this way, complement the utility of the file card. The device is adapted to be integrally attached to the card, preferably on the side of the backing opposite to that to which the bristles are attached.

The file cleaning device of the invention comprises, generally, a plate formed from some ductile metal, or other equivalent material which is softer than the tempered steel of the conventional file. One edge of the plate may protrude beyond the end of the backing, and it is this edge which functions as the actual file cleaner. This plate may be firmly secured to some portion of the file card—for example, the side of the backing opposite from that to which the bristles are secured, by adjustable means which permit the rotation of the plate and the change of positioning of the various edges, so that each edge of the plate may be used successively as the file cleaning instrumentality.

One of the objects of the invention, therefore, has been to provide a file cleaning device adapted to be attached to a file card and to be used in conjunction with the card in the cleaning of tempered steel files.

Another object of the invention has been to provide a file cleaning device comprising a metal plate adjustably secured to a backing, the metal plate being formed from untempered steel or other metal, or like material softer than that of the conventional file.

Another object of the invention has been to provide a file cleaning device formed from a plate having a number of file cleaning surfaces or edges, the plate being adjustable on a backing, so that the surface used in the file cleaning operation may be changed from time to time.

Another object of the invention has been to provide a file cleaning device formed from a plate having a number of different surfaces or edges adapted for file cleaning, each surface being particularly intended for the cleaning of a file of a particular size or grade.

Other objects and further features of the invention will be apparent from the more detailed description which follows, and from the accompanying drawing, in which a preferred embodiment of the invention is illustrated. In the drawing—

Figure 1 is a perspective view of the device of the invention, attached to a file card, and illustrates an actual file cleaning operation.

Figure 2 is a plan view of the under or back side of the file card, showing the attachment of the invention positioned thereon.

Figure 3 is a side elevation of the file card.

In the preferred embodiment disclosed in the drawing, the device of the invention is shown as an attachment for a file card, indicated generally at 1. The attachment comprises an adjustable metal plate 2 affixed to the side of the backing 3, opposite to that to which the bristles 4 are secured, and, as previously stated, is intended to have a utility which is complementary to that of the card itself. The plate 2, which is the essence of the invention, may be rectangular, as illustrated, and is formed from a sheet of metal softer than that of the conventional file. Cold rolled steel is a metal which is admirably adapted to the purpose of the invention, and may be considered as the preferred type of metal from which the plate may be constructed. The outer edges of the plate such as 5 (Fig. 2) are, in the first instance, smooth and approximately perpendicular to the front and back surfaces. The plate is secured to the back of the file card 1, preferably resting in a recess or groove 6 formed there for this purpose, and maintained in position by the screw 7 and screw head 8. (See Fig. 3.) The groove or recess presents a shoulder against which the plate may be firmly positioned.

The plate has various screw supporting slots, such as 9, to permit its adjustment for the successive exposure of each of the four sides of the rectangular plate illustrated. These slots which, in the preferred embodiment, form a cross in the plate, may be varied in size or shape, depending on the exact type of file card to which the device is attached, or depending on the number of sides of the plate.

The cross-shaped slot which is in reality a pair

of interconnected slots is particularly advantageous in a structure such as that disclosed here because when the outer edge of the plate, such as 10, is worn away in a file cleaning operation and it is desired to reverse the plate and expose the opposed edge, the worn away edge would not be supported by the shoulder presented by the recess 6 unless a slot of this type were provided. In the use of a rectangular blade the cross-shaped slot permits an adjustment of this sort in all cases. It is highly important to support the blade in the recess firmly because considerable pressure is exerted in the file cleaning operation.

In the operation of the device, the plate 2 is affixed firmly to the handle or backing 3 by tightening the screw head 8 so that one edge 10 will protrude beyond the end of the backing of the card. The file is held flat on the bench, and the plate edge 10 is forcibly engaged against the file with the edge disposed crosswise to the file grooves, and is moved parallel to the grooves, thus impressing the contour of the teeth in the plate edge. The file being harder than the plate, the grooves of this particular file will become impressed in the exposed edge of the plate and the device will then be adapted for the future cleaning of this particular file, the pattern of which has been impressed in the file cleaning surface, as indicated at 11. Other file patterns may be impressed in each of the other surfaces of the plate by simply rotating the plate around the end of the file card, successively exposing a different surface or edge of the plate.

In the file cleaning operation, the plate prepared as hereinabove outlined is adjusted until the surface exposed is the one adapted to clean the particular file, the cleaning of which is desired. The plate is then manually scraped over

the exposed pattern of the file 12, as shown in Fig. 1, and the grooves 11 in the plate being complementary to the ridges 13 in the file, the plate edge will remove from the file the filings and metal dust which tend to become tightly imbedded between the file teeth. After the filings have been loosened by the plate, they may be brushed away by the card bristles.

The provision of a plate having a plurality of surfaces adapted to be exposed for file cleaning is likewise advantageous even where only one size or type of file is in use, as the life of the device is thereby greatly prolonged. Obviously, the plate may be maintained in position on the back of the file card by means other than the screw and screw head disclosed as the preferred embodiment.

The device is extremely simple and cheap to construct, but is of determined utility for the purpose intended.

Having fully described my invention, I desire to be limited only by the following claim:

A file cleaning device comprising a backing having a recess therein presenting a shoulder, a rectangular plate of ductile metal removably positioned in the recess with one edge protruding beyond the end of the backing and the opposed edge supported by the shoulder, the said plate having a plurality of interconnected slots therein, and an adjustable fastening element secured to the backing and extending through one of the slots, said slots being constructed and arranged relative to the shoulder and the end of the backing in such manner that, upon the wearing of any exposed edge, the plate may be reversed to expose the opposed edge, and the worn edge be supported against the shoulder presented by the recess.

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