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SANDING TOOL

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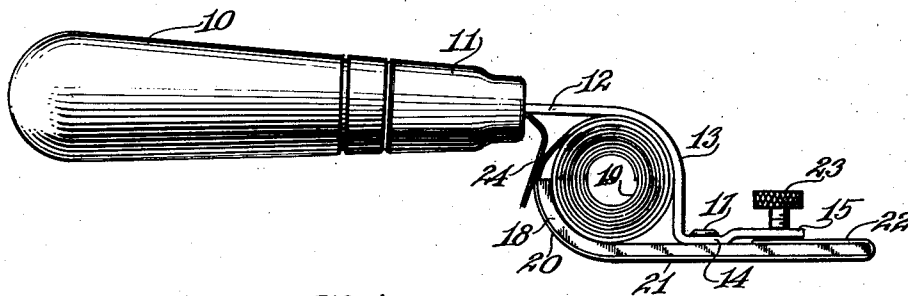


FIG. 1

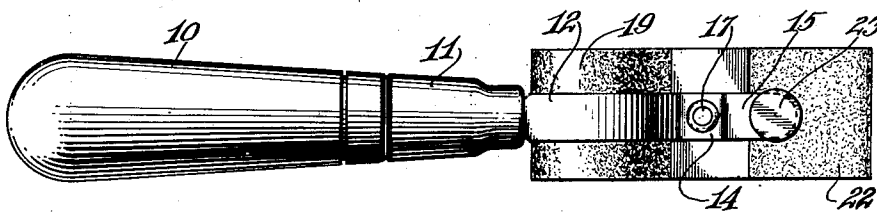


FIG. 2

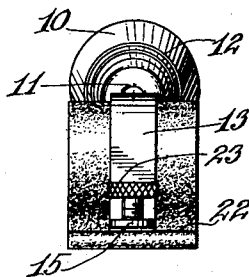


FIG. 3

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SANDING TOOL

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2 Claims. (Cl. 51-187)

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My invention relates to tools or implements for applying sandpaper or cloth to articles or objects in shops, offices and homes, and one of its objects is to provide a tool which is far superior to the sanding blocks commonly used for this purpose.

A further object is to devise a sanding tool which may be held with a full hand grip and therefore operated steadily and evenly.

Another object is to provide a tool of the above character which affords a hold at a distance above and to the rear of the work, so that the fingers do not touch the same to become soiled from dust formed by the sanding operation.

A still further object is to design the tool with an applicator which is low and permits the progress of the sanding operation to be easily noted.

An additional object is to feed the sandpaper or emery cloth from a supply roll of the same carried by the tool, enabling many renewals of the sanding medium in the zone of application to be made before a new supply of the same is required.

An important object is to construct the novel tool along lines of simplicity and durability.

With the above objects in view and any others which may suggest themselves from the description to follow, a better understanding of the invention may be had by reference to the accompanying drawing, in which—

Fig. 1 is a side elevation of the tool;

Fig. 2 is a top plan view; and

Fig. 3 is a front end view.

In accordance with the foregoing, specific reference to the drawing indicates the handle of the tool at 10, the same being of wood or plastic material and tapering in forward direction to receive a ferrule 11. A metal shank 12 projects in forward direction from the handle, the material of the shank being sturdy strap stock. The shank takes a rounded downward turn 13, then a short forward bend 14, and finally a somewhat raised forward extension 15 of the bend 14.

The shank 12 receives an elongated base plate 16 from below, the bend 14 resting on the plate and being rigidly secured to the same by a rivet 17, which terminates flushly in the bottom of the plate. The latter is also of heavy strap stock and considerably wider than the shank, as is evident from Fig. 2. The front end of the plate is plain, while the rear portion is curved upwardly, as indicated at 18, to combine with the shank turn 13 in the formation of an open, part-circular receptacle. The shank 12 is spaced from the plate portion 18 to define a passage for a strip of adhesive material, as hereinafter described.

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The receptacle just referred to forms a retainer for a roll 19 of emery cloth from which a strip 20 is trained around the curved rear portion 18 of the base plate 16 to extend forwardly underneath the same as indicated at 21. The strip terminates with a return fold 22 over the forward end portion of the plate, and is held fast to the same by a set screw 23 directed downwardly through the shank extension 15. A spring blade 24 from the handle bears against the roll 19 and holds the same fast as the strip 21 is drawn taut before it is folded and made fast by the set screw. The blade 24 is arranged in trigger-like relationship with the handle, whereby an operator may grasp the handle with one hand while releasing the blade 24 with a finger of the same hand in a similar manner to the operator of the trigger of a pistol lock. This feature permits the operator to roll or unroll the emery cloth with the other hand as for example when it is desired to tighten the cloth across the bottom surface of the plate or to draw an unused section of the cloth into position across the bottom of the plate.

With the tool constructed as just described, it is ready for a sanding application to any suitable article or object, the plate 16 forming a firm applicator for this purpose. At the same time, the hand is not over the applicator, as in a sanding block, to interfere with the view of the sanding operation and subject the fingers to soiling from the dust which is formed. The handle 10 positions the hand well to the rear and at an elevation from the zone of operation. Also, the handle affords a full grip for the hand to hold the tool firmly and steadily. While a substantial length of the emery cloth is provided beneath the applicator, the roll 19 stores a plentiful supply of the cloth in readiness for the drawing of a new length of sanding strip whenever required, so that the tool may be used over a long period or on many occasions with a fresh sanding medium before the emery cloth roll will have to be replaced. As each length of sanding strip is drawn, the roll expands by its own tension, filling the receptacle until the roll reaches its last turn.

The simplicity of the novel tool is also significant. Thus, the shank 12 not only forms a support for the base, but also requires no extra part to form the emery cloth roll receptacle. Further, the single rivet 17 in the center of the base suffices to secure it firmly to the shank, while a possible tendency for the base to turn is counteracted by the pressure of the set screw 23 and spring blade 24 through the emery cloth against the correspondingly-located end portions of the

base. Further, the receptacle for the emery cloth roll, by its enclosing form, is capable of retaining a roll without the need of a spool or core for the same. Further, the spring blade 24 performs the dual function of packing the roll 5 firmly in the receptacle and pressing the issuing strip tightly against the rear end of the base plate. Needless to say, a slight retraction of the blade will release the roll and strip from pressure 10 when a length of emery cloth is to be drawn forward. Further, the low base enables the tool to reach into short cavities, such as occur in dies. Finally, the novel tool—shown full-size in the drawing—is a small and handy accessory capable 15 of being kept in a bench or desk drawer and used with facility by the average person.

While I have described the invention along specific lines, various minor changes or refinements may be made therein without departing from its principle, and I desire to consider such changes and refinements as coming within the scope and spirit of the appended claims. 20

I claim:

1. An abrading tool comprising a plate with an applicator surface on the bottom thereof, a shank fixed to said plate intermediate its ends 25 against movement toward and away from said plate, said shank and plate having portions defining a receptacle for an associated roll of abrasive material, said receptacle being open at its rear extremity to afford a passage for a portion of said material to be drawn across said surface, a substantially rigid element on said shank 30 extending forwardly of its connection from said plate and spaced from the latter to define a slot for the free end of said material, a member in threaded engagement with said element and adapted to clamp said end against the top of said plate, a trigger-like spring blade carried by said shank and extending downwardly therefrom to 40 clamp the material against said plate at a point beneath said passage, and a handle on said shank extending rearwardly from said receptacle, whereby an operator may grasp said handle with

one hand while releasing said blade with a finger of said hand.

2. An abrading instrument comprising a bottom member having a rearward portion extending upwardly, a shank member securely attached to said bottom member intermediate the ends thereof, said shank member extending upwardly and rearwardly from the point of attachment to the bottom member and terminating in a handle member, said bottom member and shank member forming therebetween a chamber for the reception of a roll of strip abrasive material, an elongated spring member supported at one end by the handle member and biased toward and against the rear portion of the bottom member to secure a portion of the abrasive strip thereto, and a clamping means adjacent the forward end of the bottom member to clamp the free end of the strip of abrasive material thereto.

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