May 28, 1946. C. A. HEIN 2,400,929

CABINET FINISHING TOOL

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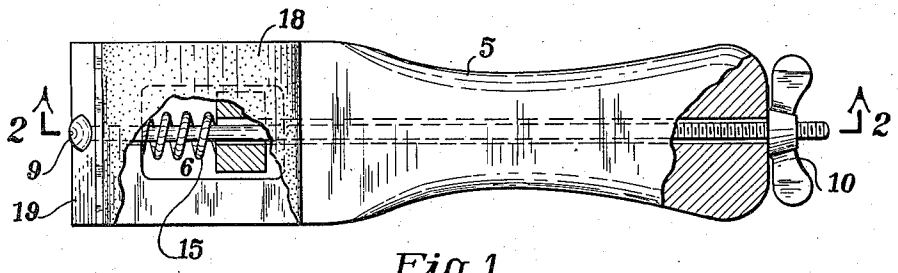

Fig. 1

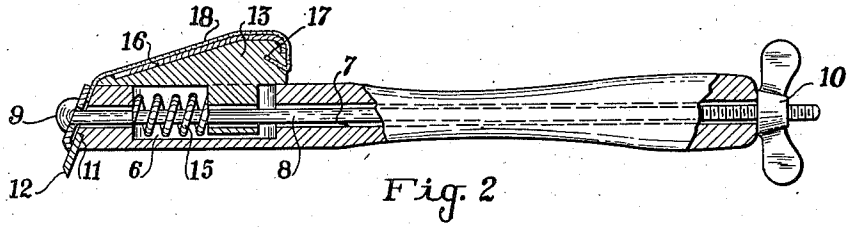

Fig. 2

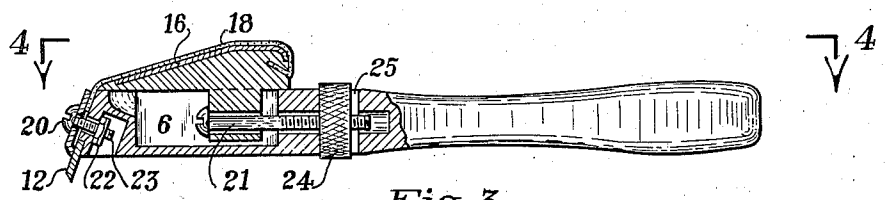

Fig. 3

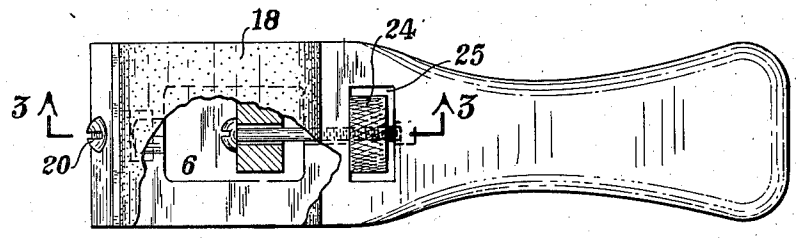

Fig. 4

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CABINET FINISHING TOOL

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4 Claims. (Cl. 51—187)

This invention relates to improvements in cabinet finishing tools and has reference more particularly to a combination scraper and sander.

Woodworkers find a frequent need of scrapers and sanders in giving a surface a smooth finish. Scrapers and sanders are companion tools and are nearly always used in quick succession, for which reason they should both be readily available.

It is the object of this invention to produce a simple and efficient tool comprising both a scraper and a sander, attached to a single handle and so related and arranged that either may be brought into operative position by a slight twist of the hand.

It is a further object of this invention to produce a sander in which the sandpaper can be readily attached and removed and in which the tension of the sandpaper can be manually controlled.

The above and any other objects that may hereinafter appear are obtained by means of a construction and an arrangement of parts.

That will now be described in detail, reference for this purpose being had to the accompanying drawing in which the invention has been illustrated and in which:

Figure 1 is a top plan view of a cabinet finishing tool, a portion thereof being broken away to better disclose the construction.

Figure 2 is a section taken on line 2—2 Fig. 1.

Figure 3 is a view showing a modified form of the invention, partly in side elevation and partly in section taken on line 3—3 Fig. 4, and

Figure 4 is a top plan view of the modified form shown in Fig. 3, a portion being cut away to better disclose the construction.

In the drawing reference numeral 5 designates a handle which may be made from wood, plastic or any other suitable material. The handle is provided in one side with a cutout or recess 6. In the embodiment shown in Figs. 1 and 2 the handle has a hole 7 extending from one end to the other for the reception of a long thin bolt 8, having one end provided with a head 9 and the other end threaded for the reception of a wing nut 10. It will be observed that the end to the left in the drawing, is inclined with respect to the sides of the handle and that it has a rabbet 11 in which is positioned a scraper blade 12.

A wedge shaped block 13 is positioned over the cutout 6 and has its under surface provided with a lug 14 that projects into the cutout or recess and which has an opening through which the bolt 8 passes. A spring 15 surrounds the bolt and is positioned between the lug and the end wall of the recess. Spring 15 is under compression and exerts a force tending to move the block towards the right. The inclined outer surface of block 13 has secured thereto a layer 16 of felt. The thick end of block 13 has a slot 17 that is upwardly inclined, as shown in Figs. 2 and 3. One end of a piece of sandpaper, or emery cloth, 18 is positioned in slot 17 and the other end laps the inclined end wall. A clamping plate 19 is carried by the bolt and has its lower edge curved slightly and positioned to engage the scraper blade. The other edge of the clamping plate engages the end of the sandpaper.

When nut 10 is turned to put the bolt under tension, plate 19 is forced against the scraper blade and against the end of the sandpaper and holds both in operative position. Before tightening the nut against the paper spring 15 is compressed and the force exerted thereby holds the paper taut.

In Figs. 3 and 4 a slightly modified construction has been shown. The long bolt has been replaced by two short ones, which have been designated by numbers 20 and 21. Screw or bolt 20 passes through plate 19 and engages nut 22 that is positioned in recess 23, and serves to force the clamping plate against both the blade and the paper. Bolt 21 engages a round knurled nut 24 that is positioned in opening 25 and serves to tighten and loosen the paper in such a way as to dispense with the need of a spring. With the nut 24 and the bolt 23 the paper may be tensioned to any degree desired and block 13 will be held in a firm and rigid manner. With the construction shown in Figs. 3 and 4 the end of the paper, and the blade can be more conveniently fastened than when the spring is employed because the block 13 does not have to be under pressure while the end of the sandpaper is clamped.

From the above it will be apparent that the tool which has been described herein and illustrated on the drawing is simple and convenient to operate. The scraper blade and the sandpaper can be readily positioned, removed, and adjusted. The sandpaper and the scraper are readily available and either may be brought into position by merely turning the handle.

Particular attention is directed to the construction of the sandpaper holder, which comprises the wedge shaped block and to the manner in which it is adjustably secured to the handle, also to the manner in which the abradant sheet is secured in place and tensioned.

What I claim is:

1. A cabinet finishing tool, comprising, an elongated body having an opening adjacent one end, the other end comprising a hand grip portion, a block positioned for sliding movement along the surface and over the opening, the block having a lug projecting into the recess and of smaller dimension than the recess, in the direction of the length of the body, whereby a limited relative movement may be effected between the block and the body, means at the end of the body for clamping a strip of sanding material to the movable block at the end nearest the hand grip, a strip of sanding material having one end attached to the end of the body and the other to the block, and means for moving the block away from the clamping means to put the sanding strip under tension.

2. A cabinet finishing tool in accordance with claim 1 in which the block is wedge shape with its thin end adjacent the clamping means.

3. A cabinet finishing tool comprising an elongated body having one end wider than the other, the narrow part forming a hand grip, the wider end having a recess, a block of substantially wedge shape positioned over the recess with its thinner end towards the wide end of the body, the block having a lug extending into the recess, the lug having a smaller dimension in the direction of the length of the handle than the recess, whereby a limited relative movement may be effected in the direction of the length of the body, the lug having an opening in the direction of the length of the body, means for movably attaching the block to the body, comprising a bolt passing through the opening in the lug and into an opening in the body, means at the wide end of the body for clamping one end of a sanding strip thereto, a strip of standing material attached to the body and to the block by the above means, and means for exerting a force on the block, tending to move it away from the wide end of the body, to tension the sanding strip.

4. A cabinet finishing tool in accordance with claim 3 in which the means for exerting a force on the block comprises the bolt and a nut operatively connected therewith.

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