March 11, 1947. J. L. FEILD 2,417,356

RUBBING, SANDING OR POLISHING BLOCK

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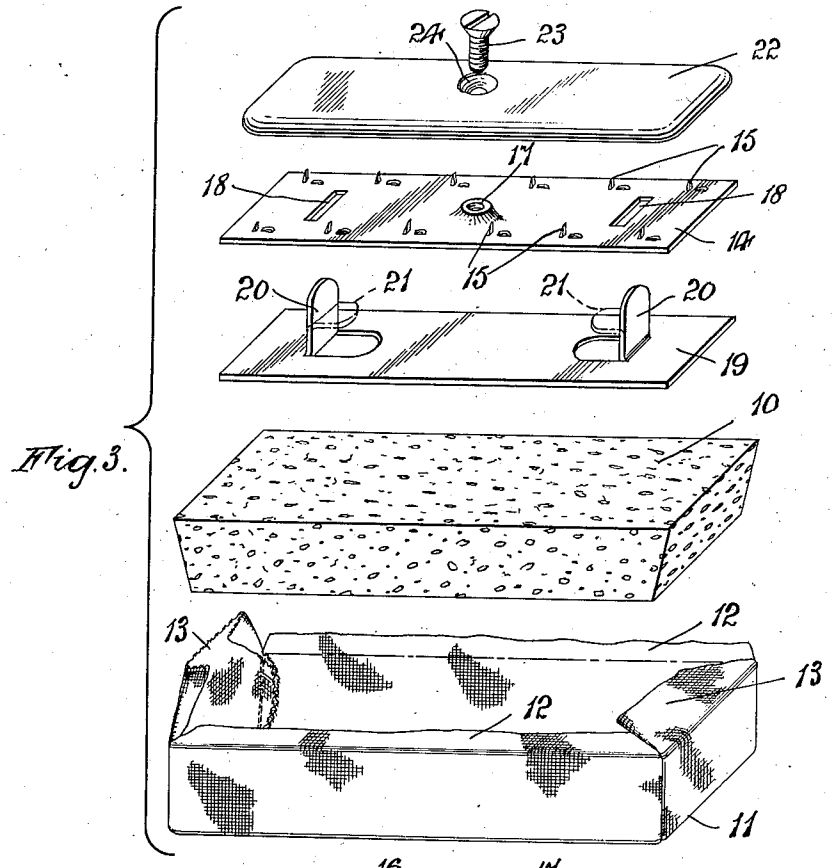


Fig. 3.

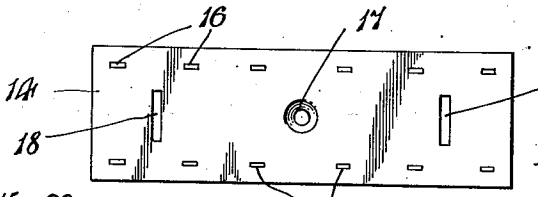


Fig. 4.

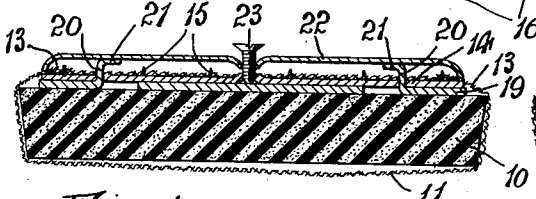


Fig. 1.

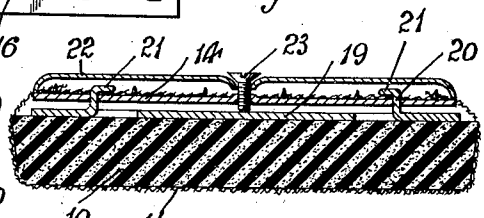


Fig. 2.

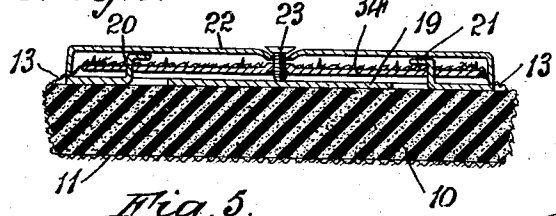


Fig. 5.

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RUBBING, SANDING, OR POLISHING BLOCK

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11 Claims. (Cl. 51—187)

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This invention relates to rubbing, sanding, or polishing blocks such as may be used for preparing, cleaning, or finishing of flat, rounded, or other surfaces, and has for its object to provide for a simple device characterized by a filler or core, preferably of a yielding nature, enclosed in a fabric or similar pocket with means for drawing the upper edges or flaps of the pocket over the upper surfaces of the core or filler in such a manner that slackness will be taken out of the pocket and a compact structure result which will lend itself to the carrying out of rubbing, sanding, polishing, and other similar operations with great facility and comfort to the operator.

More particularly, the said invention contemplates the combination with a filler enclosing pocket of a cover plate forming a major portion of the hand grip of the device and a closure plate for said pocket cooperatively coupled to the said cover plate to engage the marginal fabric of the pocket to tension the said fabric of the pocket about the enclosed core or filler.

Still further, the said invention contemplates the use, in cooperation with a back or cover plate for the device, a closure plate extending thereunder and provided with means for engaging the marginal portions of a core-enclosing pocket, together with a pressure plate extending over the back of the said core or filler, and means for effecting a separating movement of the two last mentioned plates in a manner effecting the tension of the material about the said core or filler.

Still further objects or advantages additional or subsidiary to the aforesaid objects, or resulting from the construction or operation of the invention as it may be carried into effect, will become apparent as the said invention is hereinafter further disclosed.

In carrying the said invention into effect, I may provide the novel construction and arrangement of parts hereinafter described, by way of example, having reference to the accompanying drawing, wherein:

Figure 1 is a longitudinal vertical section of a rubbing block, the parts being shown in a position occupied before tightening the pocket or cover about the rubber core;

Figure 2 is a similar view showing the position of the parts after tightening operation has been completed;

Figure 3 is a composite figure showing in perspective the several parts of the device disassembled;

Figure 4 is a plan of underside of the movable pocket-engaging or closure plate; and

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Figure 5 is a similar view to Figure 1 showing a somewhat modified form of the device.

Similar characters of reference indicate similar parts in the several figures of the drawing.

10 indicates a pad or core preferably, but not necessarily, of a resilient nature; and I prefer to use a fairly stiff form of sponge rubber for the purpose. 11 is a pocket or cover, which for general use I prefer to construct of canvas, duck, or similar fairly coarse woven material, the said pocket being of a size and shape calculated to readily receive the said filler or core 10; and the sides of the said pocket may be formed and permanently sewn together at the seams as the drawing indicates, although it may, of course, be simply folded from a flat sheet into such form about the core or filler at the time of assembly without such prefabrication, if so desired. It simplifies assembly of the device, especially by unskilled persons, if the sides of the pockets are prefabricated as suggested.

The sides and ends of the said pocket are characterized by their having extended flaps 12 and 13 which may be folded over the top of the core or filler after it is inserted into the said pocket; and, to engage these flaps, I provide a closure plate 14 having spikes 15 extending upwardly along the marginal portions thereof over which spikes the said flaps may be pressed and engaged as will be obvious from the illustration.

A very convenient way of providing for positioning of these spikes is simply to force staples 16 through the margins of these plates so that the bases of these staples will extend beneath the other side of the plate, as seen in Figure 4, and one of the legs of each staple may be pressed downwardly upon the upper surface of the plate to clamp the spikes firmly in position.

Located centrally of the closure plate is a threaded boss 17 and I further show the said closure plate as being provided with slots 18 which are illustrated as being toward opposite ends of the said plate.

Directly overlying the core or filler 10 is a pressure plate 19 provided with upstanding tongues 20 adapted to freely project through the slots 18 of the plate 14; and in assembling the device, the upper ends of these tongues 20 may be bent over as at 21 to prevent complete separation of the two plates thereafter by permitting their limited separation as will be apparent. The tongues 20 also serve to maintain the closure and pressure plates in reasonably matched alignment.

When the flaps 12 and 13 of the pocket have been engaged with the spikes of the closure plate

14 in the manner previously described, the upwardly dished cover 22 is applied to conceal the so-engaged flaps of the pocket and also to protectively house the spikes of the plate 14 and the locking screw 23 is passed through the provided opening in the said cover plate and through the threaded boss 17 of the closure plate 14 so that the lower end of the said screw will abut the pressure plate 19. Therefore, as the screw 23 is tightened it will cause the said closure plate 14 to be drawn upwardly from the pressure plate 19, thus drawing the fabric of the pocket 11 tightly about the bottom and sides of the core or filler 10 as shown in Figure 2. Any undesirable looseness of the pocket about the core or filler is thereby effectively taken up, and rubbing, sanding, polishing, or other similar operations may be comfortably and efficiently performed with the device.

Obviously, the material of the pocket may be treated or impregnated with any suitable abrasive or polishing material, or it may be covered with sand paper or emery cloth folded thereabout and similarly engaged with the spikes of the closure plate 14.

In the modified form shown in Figure 4, the closure plate 34 corresponding to the plate 14 is made smaller than the cover plate 22 so that, instead of engaging beneath the margins thereof as is the case of the assembly in Figure 1, it may freely enter the cover plate, thus drawing the flaps of the pocket thereinto, as shown, when the screw 23 is tightened to effect the separation of the said plates 19 and 34.

This invention may be developed within the scope of the following claims without departing from the essential features of the said invention as it may be carried into effect, and it is desired that the specification and drawing be read as being merely illustrative of a practical embodiment of the invention and not in a strictly limiting sense.

What I claim is:

1. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said pocket member, a closure plate extending over the upper surface of said filler, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and adjustable means for moving said closure plate upwardly from said filler to apply tension to the material of said pocket.

2. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said pocket member, a closure plate extending over the upper surface of said filler, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and adjustable means carried by said closure plate for moving it upwardly from said filler to apply tension to the material of said pocket.

3. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said closure plate, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and adjustable means for separately moving said closure plate from said pressure plate to apply tension to the material of said pocket.

4. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said closure plate, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and adjustable means extending between said closure and pressure plates for effecting their separating movement to apply tension to the material of said pocket.

5. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said pocket member, a closure plate extending over the upper surface of said filler, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and means attaching said cover plate to said closure plate, said means adjustably impinging said filler to move said closure plate upwardly from said filler to apply tension to the material of said pocket.

6. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said closure plate, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and adjustable means for separately moving said closure plate from said pressure plate to apply tension to the material of said pocket, said means also engaging said cover plate to effect its attachment to said closure plate.

7. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said closure plate, means on said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and a set screw carried by said closure plate and abutting said pressure plate to effect their adjustable separation whereby tension may be applied to the material of said pocket.

8. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said closure plate, means on said closure plate for engaging over-

lapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, and a set screw carried by said closure plate and abutting said pressure plate to effect their adjustable separation whereby tension may be applied to the material of said pocket, said set screw connecting said cover plate to said closure plate.

9. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said closure plate, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, adjustable means for separately moving said closure plate from said pressure plate to apply tension to the material of said pocket, and interlocking means limiting lateral and angular displacement of said closure and pressure plates.

10. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surfaces of said closure plate, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, adjustable means for separately moving said closure plate from said pressure plate to apply tension to the material of said pocket, and connecting means limiting the separation of said closure and pressure plates.

11. In a device of the class described, an upwardly opening pocket member, a filler within said pocket member, a pressure plate on the upper side of said filler, a closure plate above said pressure plate, said pocket member having marginal flaps on the side walls thereof for folding over the upper surface of said closure plate, means on the said closure plate for engaging overlapping flaps of said pocket, a cover plate superimposed over said closure plate and over the attached flaps of said pocket, adjustable means for separately moving said closure plate from said pressure plate to apply tension to the material of said pocket, and connecting means limiting the separation as well as lateral and angular displacement of said closure and pressure plates.

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