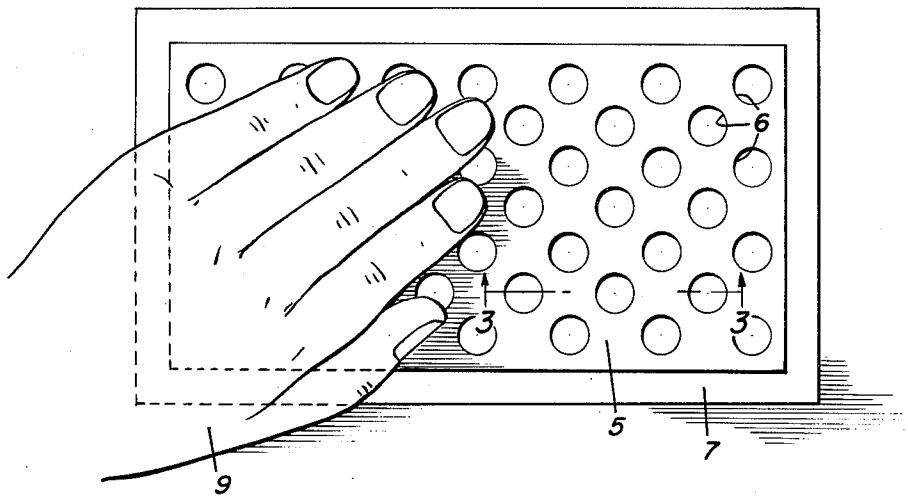
April 24, 1962 W. T. COSTELLO 3,030,742

SANDING PAD

Filed June 3, 1959

Fig. 1



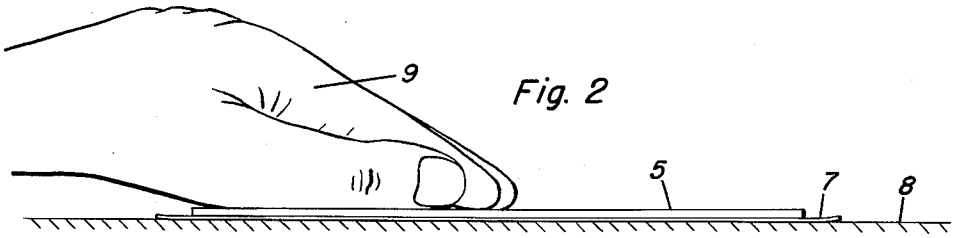


Fig. 2

Fig. 3

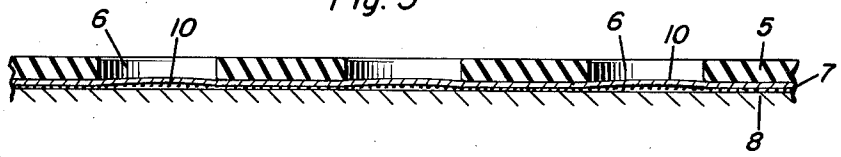
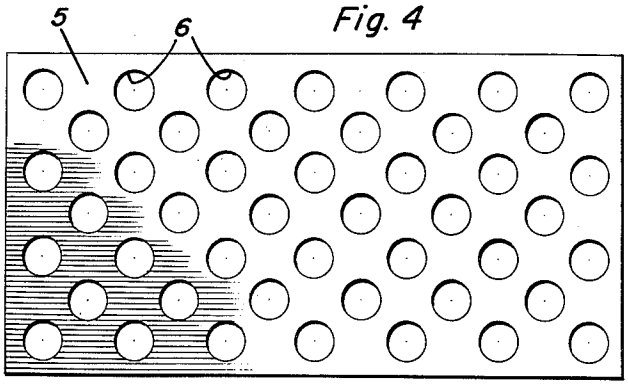


Fig. 4



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SANDING PAD

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This invention relates to new and useful improvements in sanding pads for use particularly although not necessarily, in automobile body paint shops, etc., where considerable hand sanding is done with abrasives and sandpaper, and has for one of its important objects to provide novel means for preventing the hand of the mechanic from becoming raw and sore from contact with the paper.

Another important object of the present invention is to provide, in a manner as hereinafter set forth, a protective pad of the aforementioned character which is operatively connected to the sandpaper by friction.

Still another very important object of the invention is to provide a sanding pad of the character described which embodies unique means for materially increasing the effectiveness of the paper.

Other objects of the invention are to provide a sanding pad of the character set forth which will be comparatively simple in construction, strong, durable, compact, of light weight and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a top plan view showing a sanding pad constructed in accordance with the present invention in use;

FIGURE 2 is a view in side elevation thereof;

FIGURE 3 is an enlarged fragmentary view in vertical longitudinal section, taken substantially on the line 3—3 of FIGURE 1; and

FIGURE 4 is a plan view of the device per se.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a rectangular sheet **5** of resilient rubber, plastic or other suitable material, which sheet includes identical opposite sides or faces. The sheet **5**, which may also be of any desired length, width and thickness, has formed therein a multiplicity of spaced, circular openings **6** of suitable diameter. As shown to advantage in FIGURE 4 of the drawing, the circular openings **6** are provided in substantially the entire area of the sheet **5**.

In FIGURES 2 and 3 of the drawing, reference character **7** designates a conventional sheet of sandpaper in position on the work to be sanded, as indicated at **8**. In use, the flexible, resilient sheet **5**, which is reversible side for side and end for end, is simply superimposed on the sandpaper **7** and held thereon by the hand of the operator, as indicated at **9**. The pressure to which the paper **7** is normally subjected during the sanding operation is ample to frictionally connect the sheet **5** thereto and prevent slipping. As indicated at **10**, portions of the paper **7** bulge or recess into the openings **6** to further insure against the slippage of the pad on said paper. Still further, in practice it has been found that the circular openings **6** enhance the effectiveness of the paper and accelerate the sanding operation, one-half of said openings increasing the abrading or cutting action, the other halves thereof causing a cleaning action.

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The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A sanding device comprising: a flexible abrading sheet for application to a surface to be treated, and a pad including a flexible, resilient sheet adapted to be superimposed on said abrading sheet for frictional contact therewith against slippage thereon, said resilient sheet being free of the abrading sheet and reversible side for side thereon, said resilient sheet having a plurality of spaced, preformed openings therein for the reception of the abrading sheet and of a diameter to receive therein the finger tips of an operator's hand.

2. A sanding device of the character described comprising: a flexible abrading sheet for application to a surface to be treated, and a pad including a resilient sheet of a material thickness adapted to be superimposed on said abrading sheet for frictional contact therewith, said resilient sheet having a plurality of spaced, performed circular openings for permitting the abrading sheet to bulge thereinto from one side of the sheet during the sanding operation and of a diameter to receive therein from the other side of said resilient sheet the finger tips of an operator's hand, said resilient sheet comprising identical opposite sides and being free of the abrading sheet and reversible side for side for selectively applying either of said sides to the abrading sheet.

3. As a new article of manufacture, a hand-operated sanding device comprising a flexible abrading sheet for application to a surface to be treated, and a pad comprising a resilient sheet to be superimposed on said abrading sheet and adapted to readily conform thereto and frictionally engage same by gravity, said resilient sheet being free of the abrading sheet and reversible side for side and end for end thereon and having therein a multiplicity of preformed circular openings for receiving bulged portions of the abrading sheet on either side of said resilient sheet and of a diameter to accommodate the tip portions of the fingers of an operator's hand on the other side of said resilient sheet.

4. A sanding device comprising a flexible abrading sheet for application to a surface to be treated, and a pad comprising a flexible, resilient sheet superimposed and resting on the abrading sheet by gravity, said resilient sheet being free of the abrading sheet, readily shiftable thereon and operatively connected thereto by friction, said resilient sheet having therein a plurality of preformed circular openings for receiving therein bulged portions of the abrading sheet and of a diameter to accommodate the tip portions of the fingers of an operator's hand.

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