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J. DISPENSIERE  
ABRASIVE SHEET HOLDER  
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2,428,618

Fig 1

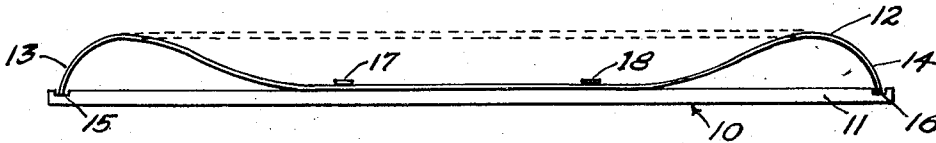


Fig 2

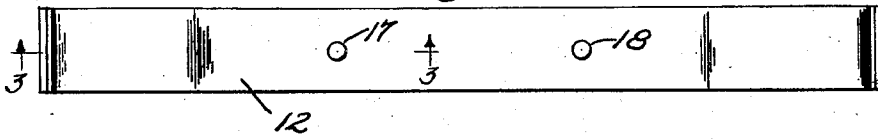


Fig 3

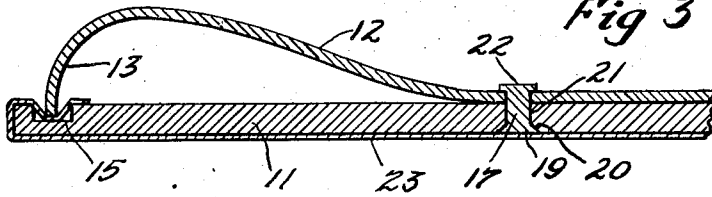


Fig 4

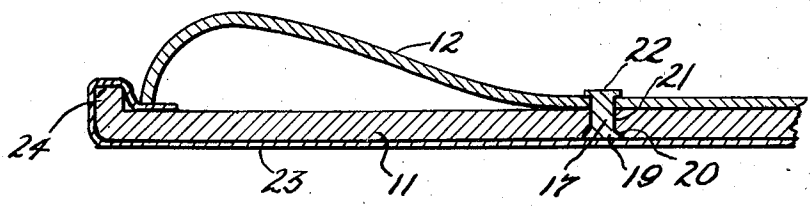


Fig 5

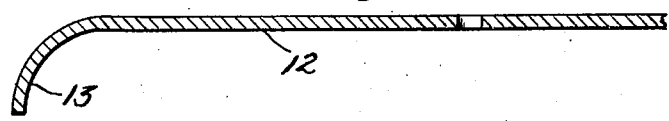
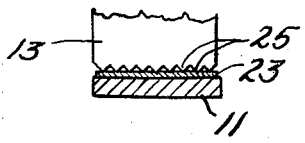


Fig 6



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# UNITED STATES PATENT OFFICE

2,428,618

## ABRASIVE SHEET HOLDER

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2 Claims. (Cl. 51-187)

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The present invention relates to an abrading tool. More particularly the present invention relates to an abrading tool adapted to securely hold in place a sheet of emery cloth, sandpaper or the like and providing a means for conveniently grasping the same for application to work held in a lathe or vise.

Various tools or handle members for holding sandpaper or the like are known. In general, however, these devices are rather complicated and do not hold an ordinary sheet of emery cloth, or sandpaper securely. It has, therefore, been the practice in shop work, to rely on the old method which consists in positioning a strip of emery cloth about a file and holding the emery cloth and file against the work. Shoemakers, when using sandpaper also at present tack a sheet of paper to a block of wood in order to support the same and similar makeshifts are used in many crafts.

It is one of the objects of the present invention, therefore, to provide a convenient tool capable of securely holding a sheet of abrasive material.

A second object of the present invention is to provide a tool comprising an elongated bar of mild steel or the like and a single spring member suitably riveted to the bar and capable of firmly holding in cooperation with the bar member a sheet of abrasive material.

A third object of the present invention is to provide an elongated bar member having one side unobstructed to form a backing for a sheet of abrasive material and another side having means at each end thereof cooperating with a single constantly tensioned spring member to form grasping means for a sheet of emery cloth or the like.

A fourth object of the present invention is to provide a tool for holding abrasive sheet material composed essentially of two parts held together by suitable means, one of said parts comprising a bar member forming a backing for the sheet material and the other part comprising an elongated leaf spring having a central portion fastened to the bar member and end portions bearing against the bar member to retain the end of a sheet of abrasive material.

Other objects and advantages of the present invention will become apparent from the description and figures of the drawing wherein

Figure 1 is a side view of the tool of the present invention with the untensioned position of the spring member indicated in dotted lines.

Figure 2 is a plan view of the tool of Figure 1.

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Figure 3 is a section taken on the line 3-3 of Figure 2.

Figure 4 is a section similar to Figure 3 of a modification.

Figure 5 is a longitudinal section of the spring member.

Figure 6 is a detail partly in section of another modification.

Referring to the drawing and particularly Figure 1 thereof, the abrading tool of the present invention is indicated in general at 10. The tool consists simply of two principal parts, an elongated bar member 11 and a leaf spring 12. As indicated in the dotted line portion and in Figure 5, the leaf spring 12 is originally an elongated member having two downwardly turned end portions 13 and 14 respectively fitting into grooves 15 and 16. When the tool is assembled the two rivets 17 and 18 hold the central portion of the spring snugly against the bar 11 and force the ends of the spring 12 against the bottom of the respective grooves 15 and 16. The rivets 17 and 18 are provided with conical heads one of which is shown in Figure 3 and indicated at 19. The conical heads are fitted into countersunk portions as indicated at 20 of the opening 21 of the bar 11. As shown at 22 the heads of the rivets serve to retain the spring 12 against the bar 11 and to tension the spring. Obviously screws or other means of fastening the spring and bar as spot welds may be used.

In utilizing the tool the spring end portion 13 is bent away from the bar 11 and a strip of emery cloth or sandpaper indicated at 23 is positioned over the bar and under the spring end whereupon it is securely held by the spring end fitting in the groove.

In the modification of Figure 4 instead of a groove there is provided an upwardly turned portion 24 of the bar 11. This upwardly turned portion 24 also aids in holding emery cloth or paper on the bar member.

In the modification of Figure 6 the end of spring indicated at 13 is provided with sawlike teeth 25. These teeth dig into the surface of the emery cloth 23 and hold the same against the bar member 11. In this modification the grooves of Figures 1 to 3 and an upwardly turned portion of the bar as in Figure 4 may be dispensed with.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An abrading tool comprising an elongated bar member forming a backing and support for a sheet of abrasive material and a leaf spring

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member having a central portion fastened to said bar member and in contact therewith for a substantial length and said leaf spring having a pair of downwardly turned ends bearing substantially perpendicularly against said bar member to retain said material on said bar member and with portions connecting said downwardly turned ends and central portion, said central portion and connecting portions being of the shape of an inverted centrally flattened arch.

2. An abrading tool comprising an elongated bar member forming a backing and support for a sheet of abrasive material, a leaf spring member having a central portion fastened to said bar member and in contact therewith for a substantial length and said leaf spring having a pair of downwardly turned ends bearing substantially perpendicularly against said bar member to retain said material on said bar member with portions connecting said downwardly turned ends

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and central portion, said central portion and connecting portions being of the shape of an inverted centrally flattened arch, and a pair of grooves formed in the bar member adjacent each end thereof each positioned to receive an end of the spring member.

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