Feb. 13, 1940. A. FORSBLADE 2,189,980

HOLDER FOR SANDPAPER AND THE LIKE

Filed Aug. 15, 1939

Fig. 1.

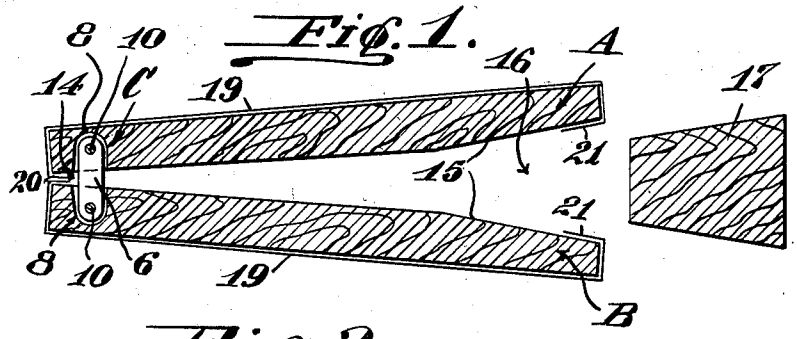


Fig. 2.

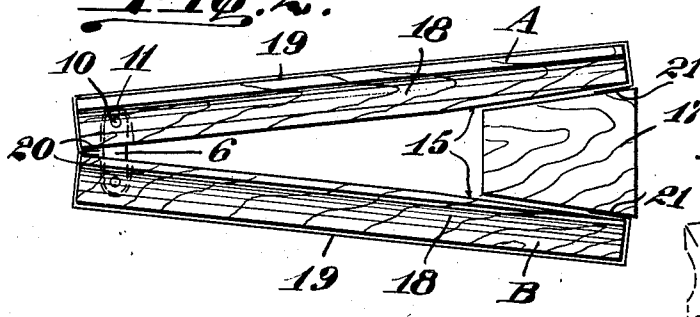


Fig. 4.

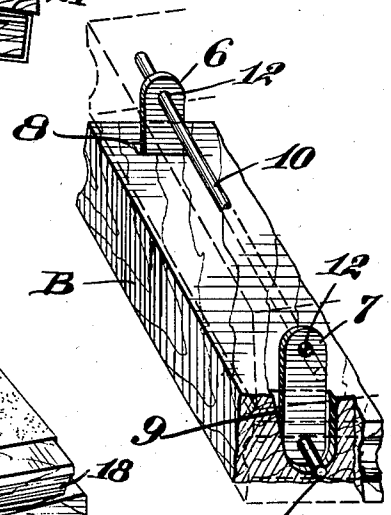
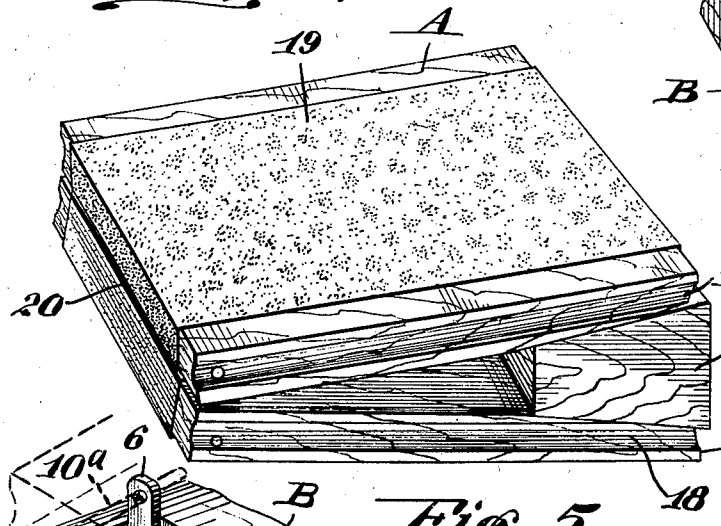


Fig. 3.



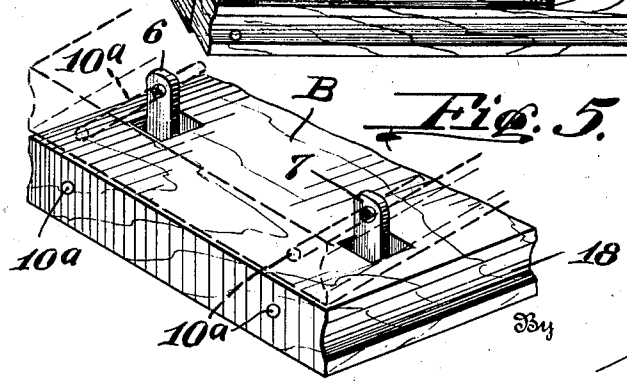


Fig. 5.

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HOLDER FOR SANDPAPER AND THE LIKE

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Application August 15, 1939, Serial No. 290,304

4 Claims. (Cl. 51—187)

This invention relates to a holder for sandpaper and other sheet abrasive and polishing material, and has as its primary object the provision of a holder of this character embodying a simple and effective means for fastening a sheet of abrasive or polishing materials on a supporting block in a manner that will permit ready removal and replacement of the sheet.

Another object is to provide a sheet supporting block adapted to be readily grasped in the hand for manual manipulation thereof in which means are provided for fastening sheets of abrasive or polishing materials on the block in a fashion to extend over opposite faces thereof and in a manner whereby sheets of different character may be arranged on the opposed working faces of the block.

Another object is to provide a block composed of a pair of hingedly connected members embodying a hinged joint so formed and arranged as to limit spreading movement of the members to a slightly limited extent relative to each other and embodying means for holding the members in their spread relation that will also serve as a means of fastening the sheets on the members and whereby the block will have a longitudinal taper as a whole when in its operative condition.

With the foregoing objects in view, together with such other objects and advantages as may subsequently appear, the invention is carried into effect as illustrated by way of example in the accompanying drawing, in which:

Fig. 1 is a view of the block as seen in longitudinal section with parts thereof separated relative to each other to illustrate the manner of applying sheet materials thereto;

Fig. 2 is a view in side elevation of the block showing it as assembled in its operative condition;

Fig. 3 is a perspective view of the block depicting the manner of equipping the block with a pair of abrasive sheets;

Fig. 4 is a perspective view illustrating the manner of forming the hinged connection between the block members;

Fig. 5 is a detail in perspective illustrating a modified form of the hinged connection.

Referring to the drawing more specifically, A and B indicate a pair of complementary block members which are of substantially rectangular outline and are hingedly connected together in overlying relation to each other by a hinge C so formed and arranged as to limit outward swinging movement of the members A and B relative to each other. The hinge connection C is here shown as embodying a pair of links 6 and 7 which have their end portions disposed in recesses 8 and 9 formed in the adjacent faces of the block members A and B which are pivotally connected to the ends of the links by pivot pins 10 that are positioned in openings 11 formed in the block members to receive them and which pins project through openings 12 in the links. The pins 10 are driven into the openings 11 in the block members in a fashion to securely bind the pins in place, while the pins are loosely engaged in the links so that the block members and links may freely swing relative to each other.

The pivotal connections between the links and block members are spaced inwardly from an end margin of the blocks so as to afford an unobstructed gap 14 between the hingedly connected ends of the blocks as particularly shown in Fig. 1; the pivotal connections between the ends of the links and the block members being such as to space the blocks apart when disposed in parallel relation to each other so as to afford the gap 14 and permit of relative outward swinging movement of the block members a distance that is limited by the adjacent end edges of the hinged end portions of the block members meeting each other on swinging the block members A and B outwardly on the links.

In the construction shown in Fig. 4 the links 6 and 7 are arranged to be connected to pivot pins 10*a* that extend transversely of the blocks and in which arrangement the links 6 and 7 are disposed in parallel relation to each other and are carried on the pivot pins to swing circumferentially around the axes thereof.

In the construction shown in Fig. 5 the pivot pins 10*a* are driven into the ends of the blocks into engagement with the openings in the links which openings are formed of a diameter exceeding that of the pivot pins so that the links may rock on the pins in the direction of the lengths thereof.

The free end portions of the block members are formed with bevels 15 on their adjacent faces having a long taper thereby forming a wedge shape space 16 between the outer ends of the block members.

A loose wedge 17 is provided having opposed inclined faces such as to substantially conform to the tapers 15 on the block members on positioning the wedge 17 in the space 16.

The side margins of the block members are formed with longitudinally extending grooves 18 to facilitate grasping and holding the block in the hand.

Each of the block members is designed to receive a sheet 19 of abrasive or polishing character which sheet is formed with return bends 20 and 21 at its opposite ends adapted to encompass the end portions of the block members in conformity thereto when the sheets 19 are positioned to extend over the flat outer faces of the blocks.

In the operation of the invention a sheet 19 is positioned on either one or both of the block members with the inturned end portion 20 thereof overlying the under side of the block member in the gap 14 and with its inturned end portion 21 overlying the taper 15 at the outer end of the block member as particularly shown in Fig. 1. The wedge 17 is then pressed into the space 16 so as to force the outer ends of the block members outwardly relative to each other and thereby swing the inner ends thereof toward each other so as to abut against and pinch the inturned end 21 of the sheet in tightly clamped engagement between the hinged ends of the block members. The wedge 17 will then engage the inturned end 21 of the sheet so as to clamp and securely hold such end against the inner face of the outer end portion of the block member.

Manifestly the block may thus be equipped with sheets on the opposite sides thereof of either like or dissimilar character, such for example, to provide a sheet of coarse sandpaper on one side of the block and a sheet of fine sandpaper on the other side thereof. In like fashion a sheet of emery cloth and polishing sheets may be applied to the block members.

By the construction shown the assembled block will be tapered in the direction of its length thereby facilitating grasping and manipulation thereof since it naturally fits the hand, and the sheets 19 thereon will be securely held in place subject to being readily removed and replaced.

I claim:

1. A holder for sandpaper and the like comprising a pair of sheet supporting block members, a hinge connection between said block members adjacent to but spaced inwardly from an end edge thereof and arranged to act in cooperation with said end edges to limit the extent of spreading of said block members, and a wedge insertable between the free ends of said block members; the hinged ends and the free ends of said block members being adapted to receive inturned ends of sheets disposed to overlie the outer faces of said block members; said wedge engaging the ends of the sheets at the free ends of the block members and effecting spreading of the latter so as to cause the hinged ends thereof to grip the other ends of said sheets therebetween.

2. The construction called for in claim 1 in which the hinge connection embodies a plurality of links spaced apart transversely of the block members, and pivot pins connecting the end portions of said links to said block members.

3. A holder for sandpaper and the like comprising a pair of rectangular block members arranged face to face, a hinge connection between said block members at an end thereof on which said members are movable toward and away from each other, means for spreading the free ends of said block members relative to each other on said hinge connection, and means for limiting the spread of said block members.

4. A holder for sandpaper and the like comprising a pair of rectangular block members arranged face to face, a hinge connection between said block members at an end thereof on which said members are movable toward and away from each other, said block members being formed with beveled faces on the adjacent sides of the free end portions thereof, a wedge block insertable between the free ends of said block members and engageable with the beveled faces to effect spreading of said block members relative to each other on said hinge connection, and means for limiting the spread of said block members.

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