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SANDING BLOCK

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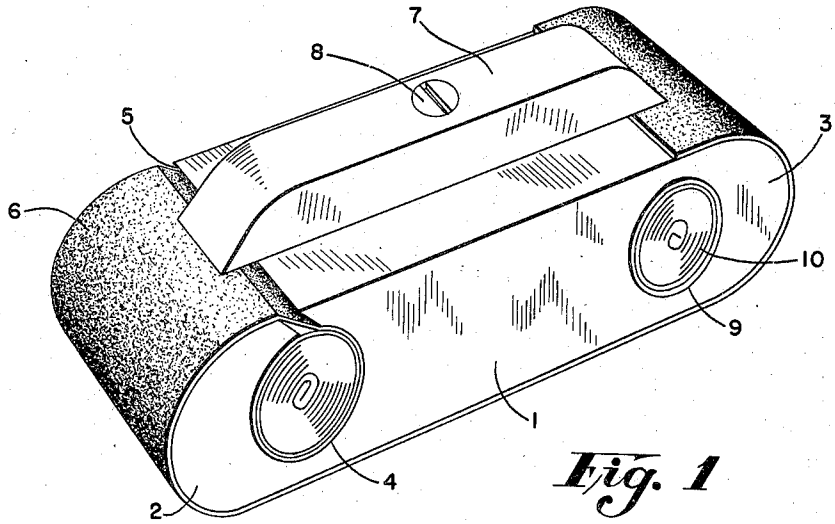


Fig. 1

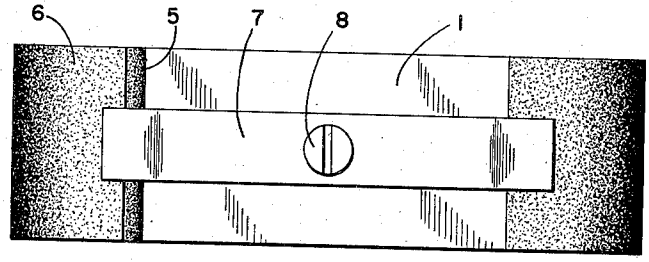


Fig. 2

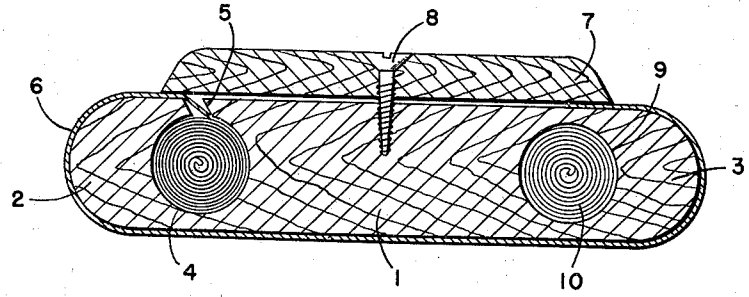


Fig. 3

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SANDING BLOCK

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2 Claims. (Cl. 51—187)

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This invention relates to a sanding block and, in particular, it relates to a block adapted to support a strip of sand paper upon which the sand paper is held in clamped position, and including a cavity in which a continuous length of sand paper may be stored while maintaining its continuity in operative position relative to the block.

It is recognized that various blocks have been devised for supporting sand paper. However, in all such prior adaptations, the mechanism involved in supporting and clamping the paper in position defeats the utility and simplicity of the article by reason of its complications. The essential requirement of a sand paper block of this character lies in its simplicity and durability resulting from its structure.

In accordance with the practice of my invention I provide a solid block of rectangular shape having curved ends over which the sand paper is looped back over the top surface of the block and retained in such position by means of a clamping bar removably attached to the main body of the block. Also incorporated within the main body of the block is a large aperture extending transversely through the block and having a connecting passageway between the top of the aperture and the top of the main block. The purpose of this aperture is to store a quantity of sand paper in roll relationship so that the sand paper may extend from the roll and around on the underside of the block without disturbing the continuity of the sand paper.

Among the objects of my invention are to provide a block of a size and shape readily adaptable to be manually grasped during use. A further object is to provide a sand paper block in which an additional supply of sand paper is self-contained and in which the sand paper, supported by the block, forms a continuous strip with a reserve supply. Another object is to provide a clamping means which is easily and quickly operable and in which the clamping means includes a spring action for gripping the sand paper. A still further object is to provide a sanding block in which the clamping means forms a part of the device against which manual pressure may be exerted during its use. An additional object is to provide a block of sufficient height to constitute an adequate tool for manually grasping the same, and to permit the inclusion of additional apertures extending transversely therethrough for the retention of additional supply rolls of sand paper.

These and other objects and advantages will appear more fully in the following detailed description when considered in connection with the accompanying drawing, in which:

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Figure 1 is a perspective view of an embodiment of my invention;

Figure 2 is a plan view thereof; and,

Figure 3 is a side elevational view, in section, taken along lines III—III of Figure 2.

With reference to the drawing, I show a preferred embodiment of my invention consisting essentially of a main body or block 1. This block is approximately 6⅜" long, 2" wide, and 1⅜" high. I refer to these dimensions because they are critical in respect to the operation of the device. The height and width are particularly critical and they are such as to permit an easy grasp by the hand for manual operation. Both the height and width, however, may be varied within reasonable limitations; for example, plus or minus one-half inch. The end portions 2 and 3 of the block are curved to the extent that they are radial in which the radius is equal to one-half of the height of the block.

In composition, the block is preferably made of wood. Although it is to be understood that other materials are equally applicable. For example, it may be made of any of the well known plastics or it may be formed of metal, such as aluminum.

An aperture 4 extends transversely through the side of the block 1, and located near its end portion 2. The diameter of this aperture is as large as possible consistent with the structural characteristics of the block. Preferably, the diameter of the aperture 4 is equal to from one-half to three-quarters of the height of the block 1.

Extending from the upper surface of the aperture 4 is a slot 5 out through the wall of the block from the top surface of the block to the aperture 4. This slot is out at an angle of approximately 60 degrees as measured from the top surface of the block 1, the slot at the top of the block 1 being nearer to the end portion 2 than the opening of the slot into the aperture 4. A strip of sand paper 6, or other abrasive material such as emery cloth, is retained in roll form within the aperture 4 and extends in a continuous strip out through the slot 5, around the end portion 2, adjacent to the bottom of the block 1 and around the end portion 3 to the top surface of the block 1.

In order to maintain the sand paper 6 in the position as described, a clamping bar 7 is attached to the top of the block 1 by means of a wood screw 8. This clamping bar is of a length equal to substantially the length of the flat portion at the top of the block 1. This clamping bar is approximately one-half to three-quarters inch square in

its cross-sectional dimension, and its ends are beveled and edges rounded to present smooth surfaces because of the hand pressure which is exerted thereagainst. Because of the thickness of the sand paper, there is a space existing between the underside of the bar 7 and the top of the block 1 and, because the bar engages the sand paper at its ends only, there is a resilient or spring action resulting due to the clamping of the bar at its central location. This is advantageous in that it prevents crushing of the sand paper by the clamping action and, also, does not require a careful adjustment of the wood screw.

Similar to the block 1, the clamping bar 7 may be formed of wood, conventional plastics, or metal. It is to be understood, however, that a machine screw may be used in place of the wood screw 8 in the event the material composition of the block 1 is not suitable for a wood screw application.

The clamping bar 8 serves a dual purpose in that it supports the hollow of the hand during its manual grasp while the sanding block is in use.

An additional aperture 9 is formed in the block 1 and in the region of the end portion 3. Proportionally, this aperture is similar to the aperture 4. The purpose of the aperture 9 is to store an additional roll of sand paper 10, or other abrasive material. Preferably, the sand paper 10 is of different grade or size than the sand paper 6 so as to permit a ready supply of paper for different uses. The width of the sand paper 6 is equal to the full width of the block 1. When it is necessary to replace the used portion of the sand paper at the bottom of the block 1 it is merely necessary to loosen the screw 8 and pull out an additional quantity of sand paper from within the aperture 4 and tear off the unwanted portion. Thereafter, the clamping bar 7 is tightened in place and the sanding block is ready for use.

As thus shown and described, it is believed apparent that I have provided a novel, efficient and economical form of sanding block having a wide use of applications, and while I have shown a preferred embodiment of my invention it is to be understood that it is susceptible of those modifications which appear obviously within the spirit of the invention and as appearing in the scope of the appended claims.

Having thus described my invention, what I claim and desire to protect by Letters Patent is:

1. A sanding device comprising, a main body forming a substantially rectangular solid block including a top and bottom surface and having its ends curved from the top side of the block to the bottom side, said main body having an aperture extending transversely therethrough at a point near one end of the block and parallel with the axis of said curved ends, said body having a slot communicating with said aperture along its length and with the top side of the block, a strip of abrasive material extending around one of the curved ends, around the bottom of the block and around the opposite curved end to said slot and terminating in convolutions within said aperture, a clamping bar positioned at the top of the block with its ends in engagement with the abrasive strip, and means at the center of the clamping bar for securing the bar to the main body.

2. A sanding device comprising, a main body forming a substantially rectangular solid block including a top and bottom surface and having its ends curved from the top side of the block to the bottom side, said main body having an aperture extending transversely therethrough at a point near one end of the block and parallel with the axis of said curved ends, said body having a slot communicating with said aperture along its length and with the top side of the block, a strip of abrasive material extending around one of the curved ends, around the bottom of the block and around the opposite curved end to said slot and terminating in convolutions within said aperture, a clamping bar having a length equal to substantially the length of the flat portion at the top of said block as measured from the beginning of the curved portion, the ends of said clamping bar being in engagement with the abrasive strip, and means at the center of the clamping bar for securing the bar to the main body.

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