May 16, 1933. W. G. DUNN 1,908,697

ABRASIVE AND HOLDER THEREFOR

Filed March 5, 1932

Fig. 1.

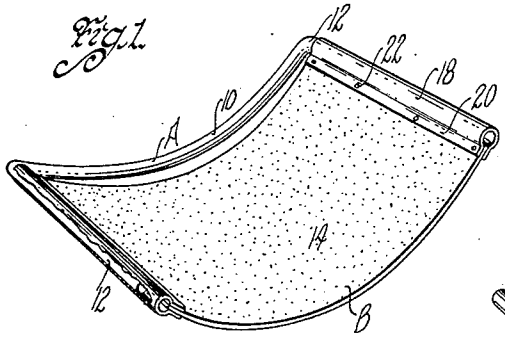
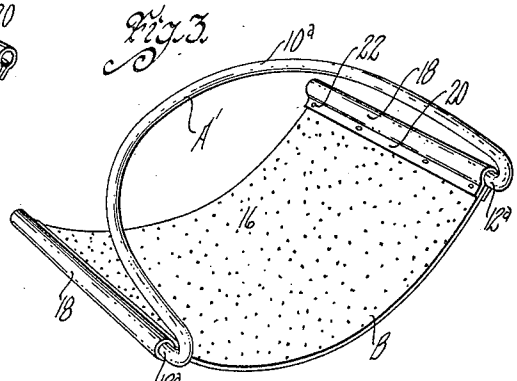


Fig. 3.



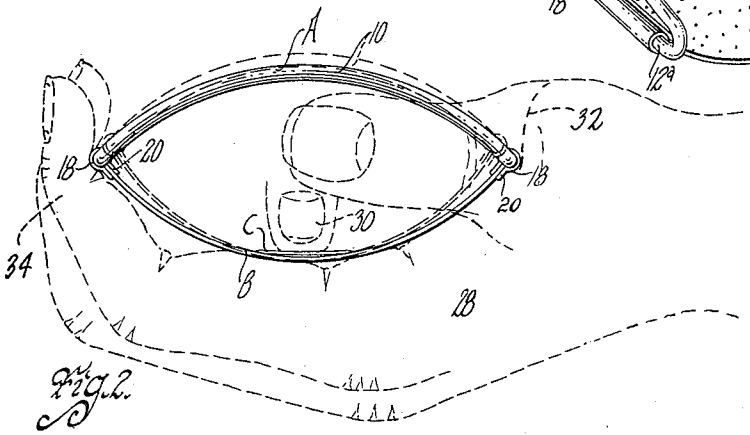


Fig. 2.

Fig. 5.

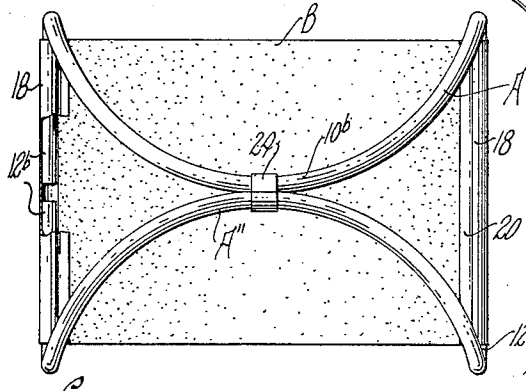
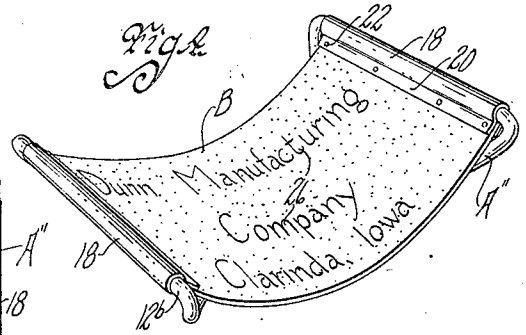


Fig. 4.



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UNITED STATES PATENT OFFICE

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ABRASIVE AND HOLDER THEREFOR

Application filed March 5, 1932. Serial No. 597,080.

An object of my invention is to provide an abrasive and a holder therefor which are particularly adapted for sharpening and stropping safety razor blades and which are, from a manufacturing standpoint, comparatively simple and durable as well as inexpensive.

A further object is to provide an abrasive and a holder, opposite edges of the abrasive being pivotally connected with supporting members of the holder, the supporting members being closer together than the distance between said edges of the abrasive so that the abrasive must assume a curved position when held in the holder, thus making it adaptable for safety razor blade honing and sharpening.

Still a further object is to form the abrasive of relatively thin stiff flexible material so that it will retain its curved position when held in the holder, the edges of the abrasive being pivotally connected with the holder so that such curvature can be reversed without removing the abrasive from the holder.

Still a further object is to provide an advertising novelty including an abrasive sheet of material with advertising printing printed on the abrasive surfaces thereof.

Another object is to provide a holder having a pair of spaced supporting members and one or more forms of rigid connecting members between the supporting members.

Still a further object is to form the holder of relatively rigid material such as iron wire, but which may nevertheless be manually reformed so as to vary the spacing between the supporting members of the holder and thereby vary the curvature of the abrasive so as to adapt the device to fit different widths of safety razor blades or those having different bevels on their sharpened edges.

With these and other objects in view my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of an abrasive and holder therefor embodying my invention.

Figure 2 is a side elevation of the same showing it in use.

Figure 3 is a perspective view of a modified form of holder.

Figure 4 is a perspective view of still another modified form of holder; and

Figure 5 is a bottom plan view of Figure 4.

On the accompanying drawing, I have used the reference character A to indicate a holder and B an abrasive. The holder A has a connecting member 10 terminating in supporting members 12. The holder A as disclosed, may be made of heavy wire and the portion 10 thereof is preferably curved as shown.

The abrasive B is a sheet of fiber or other suitable material, the surface 14 of which is adapted for stropping a razor. The reverse surface (16) is coated with abrasive material so that the surface 16 may be used for honing a safety razor blade.

Tubular eye members 18 extend along opposite edges of the abrasive B and are provided with flanges 20 pressed against the abrasive. By means of a center punch or the like, depressions 22 can be formed in the flanges 20 to positively retain the tubular eye members 18 in their desired positions on the edges of the abrasive B.

The eye members 18 receive the supporting members 12 of the holder A and the supporting members are spaced closer together than the initial distance between the eye members—that is, when the abrasive sheet B is flat. This causes the abrasive sheet to assume a curved position.

The abrasive sheet B is of comparatively thin flexible material having sufficient stiffness to retain it in its curved position even though slight pressure may be applied against it.

In Figure 3, I have shown a modified form of holder A′ for the abrasive. It has parts 10*a* and 12*a* corresponding to the parts 10 and 12 of the holder A. The difference of construction lies in the connecting portion 10*a* which instead of curving directly from

one supporting member 12*a* to the other one, curves also across the face 16 of the abrasive sheet B. In side elevation, however, the appearance would be substantially as shown in Figure 2.

In Figures 4 and 5, I have shown a modified form in which the holder A'' comprises a pair of members with supporting ends 12*b* and connecting portions 10*b* which curve toward each other and may be secured together by a clip 24. In side elevation, this holder would also be substantially similar to Figure 2.

An abrasive sheet of this character lends itself readily as an advertising novelty and accordingly advertising printing 26 may be directly applied thereto, as shown in Figure 4.

The printing is inked on the abrasive surfaces and does not affect the honing and stropping characteristics of the sheet.

In Figure 2, I have shown the abrasive and holder in use. The abrasive B is reversed in this figure relative to its position in Figures 1 and 4 and the same as its position in Figure 3. The abrasive is formed of comparatively thin stiff flexible material so that force can be applied thereto to buckle it from the curvature of Figure 1 to the reverse curvature of Figure 2, the members 18 pivoting on the members 12. The user's hand is indicated at 28 and the holder is held between the heel 32 of the hand and the fingers 34 as illustrated. A safety razor blade is indicated at C and may be held against the abrasive by a finger 30 on the other hand of the user. With slight pressure applied, the blade can be reciprocated lengthwise relative to the abrasive sheet.

As shown by dotted lines in Figure 2, the radius of curvature of the connecting member 10 of the holder A may be reduced, or the holder may be otherwise manually reformed to space the supporting members 12 closer together and thus reduce the radius of curvature of the abrasive sheet B. Inversely, the spacing between the members 12 can be increased for increasing the radius of curvature of the sheet B where the character of the blade requires it.

Some changes may be made in the construction and arrangement of the abrasive sheet and the holder with respect to each other without departing from the real spirit and purpose of my invention. It is therefore my intention to cover by my claims, such modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

1. An abrasive of flexible material and a holder therefor comprising a pair of spaced supporting members coacting with opposite edges of said abrasive to support it, said supporting members being closer together than the normal distance between said opposite edges whereby said abrasive assumes a curved position, the space between said supporting members being unobstructed whereby said abrasive may be reversed without removal from said holder and means for rigidly connecting said supporting members together.

2. An abrasive and a holder comprising a pair of spaced supporting members coacting with opposite edges of said abrasive to support it and means for rigidly connecting said supporting members together, said supporting members being closer together than the distance between said edges of said abrasive whereby the abrasive assumes a curved position and said means being clear of the abrasive to permit its reversal without removal from the supporting members.

3. An abrasive and a holder comprising a pair of spaced pintles pivotally coacting with opposite edges of said abrasive to support it and means for rigidly connecting said pintles together, said means being manually bendable to vary the space between said pintles.

4. An abrasive and a holder comprising a pair of spaced pintles pivotally coacting with opposite edges of said abrasive to support it, means for rigidly connecting said supporting members together, said pintles being closer together than the distance between said edges of said abrasive whereby the abrasive assumes a curved position and said means being manually bendable to vary the space between said pintles.

5. An abrasive comprising a sheet of material and a holder therefor connected with opposite edges of said abrasive, said abrasive being curved when so connected with said holder and being formed of stiff flexible material whereby to retain its curvature and whereby the curvature may be reversed without removal of said sheet from said holder.

6. An abrasive comprising a sheet of material and a holder therefor connected with opposite edges of said abrasive, said abrasive being curved when so connected with said holder and being formed of stiff flexible material whereby to retain its curvature, said connections each being of pivotal character whereby the curvature of the abrasive may be reversed without removing the abrasive from the holder.

7. An abrasive of flexible sheet material having fine and coarse grain surfaces and a holder therefor, opposite edges of said abrasive sheet coacting with said holder and the abrasive sheet being supported thereby in curved position, each coaction being pivotal and the holder being so formed whereby said curvature can be reversed while the abrasive sheet remains in the holder without said holder interfering with such reversal.

8. An abrasive comprising a sheet of abrasive material and a holder therefor comprising supporting members coacting with opposite end edges of said sheet for holding the sheet in curved position and means rigidly connecting said supporting members together, said means being curved to position adjacent the plane of curvature of said abrasive sheet and arranged along one side edge thereof.

WILLIAM G. DUNN.