May 23, 1939. R. T. PITT 2,159,634

PACKAGE OF ABRASIVE STRIPS

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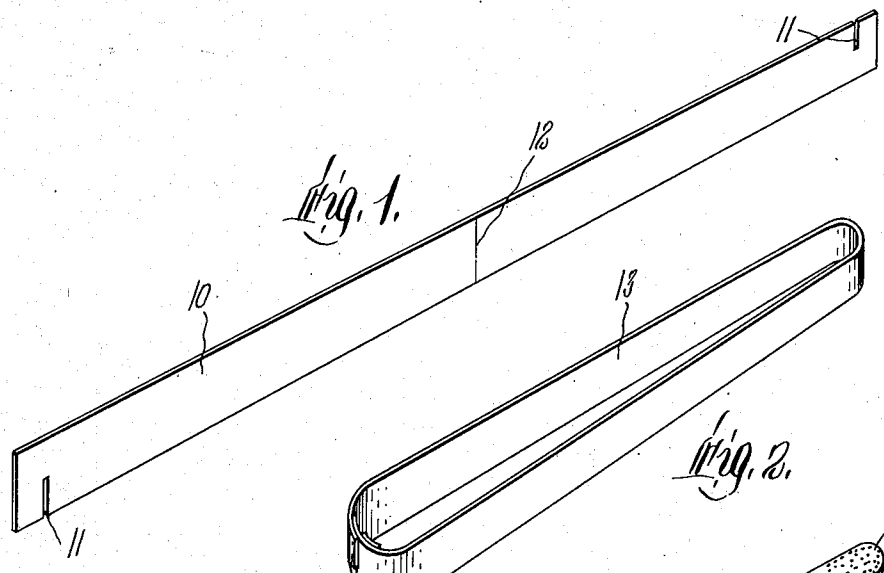


Fig. 1.

Fig. 2.

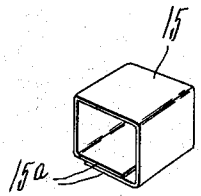


Fig. 4.

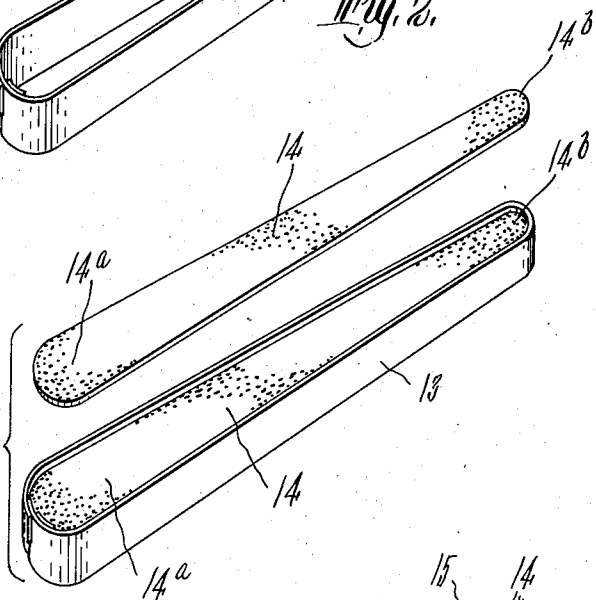


Fig. 3.

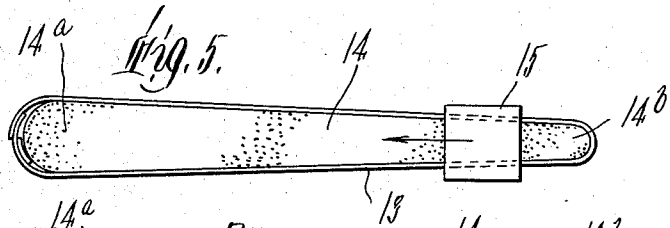


Fig. 5.

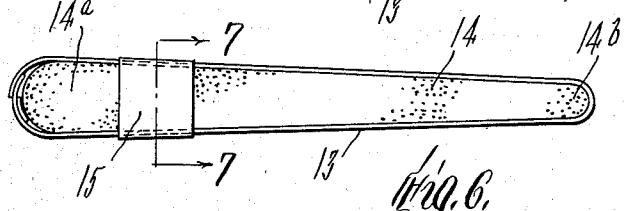


Fig. 6.

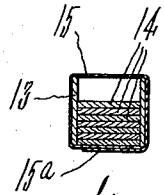


Fig. 7.

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PACKAGE OF ABRASIVE STRIPS

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Application July 19, 1938, Serial No. 219,982

2 Claims. (Cl. 206—46)

This invention relates to a package of abrasive strips and more particularly strips useful for such purposes as manicuring or "filing" fingernails.

The package of the present invention is characterized not only by its compact structure and neat appearance but also by the ease and economy with which it is made. It presents the further advantages that the strips may be readily removed individually therefrom and that it can be kept intact until the supply of strips has been exhausted. Generally stated, the package comprises a stock of abrasive strips each of diminishing width from one end to the other end thereof, an open frame encompassing the stack at its edges so that each strip is freely removable from the stack through the frame opening, and a band or ring encompassing the frame transversely of the stack and slidable from the narrow-end portion to the wide-end portion of the stack to engage and bridge the frame edges firmly and thereby to maintain the strips as a stack within the frame. When an abrasive strip is to be removed from the package, it is necessary only to slide the cross-band or ring to the narrow portion of the stack, as this releases or loosens the frame from the edges of the strips and hence permits one or more strips to be freely withdrawn from the stack. Thereupon, the cross-band or ring may be slid back to the wide-end portion of the stack to reengage the frame firmly against the strip edges and to hold the strips together as the desired package.

With the foregoing and other features and objects in view, the present invention will now be described in further detail with particular reference to the accompanying drawing, wherein,

Figure 1 shows in perspective a band to constitute the open frame for the package hereof.

Figure 2 depicts the band after it has been formed up into the frame or holder for the abrasive strips.

Figure 3 shows the frame as it is being filled up with strips in stacked relationship.

Figure 4 depicts the cross-band or ring for the package hereof.

Figure 5 is a plan view of the package with the cross-band or ring at the narrow end portion thereof.

Figure 6 is a similar view after the cross-band has been moved to the wide-end portion of the package and is thus capable of maintaining the stack of strips firmly in place.

Figure 7 is a section through the package on the line 7—7 of Figure 6 after a few strips have been removed therefrom.

The band 10 appearing in Figure 1 may consist of paperboard or paper of appropriate thickness and stiffness, namely, such as not to buckle at its edges when engaged firmly by the cross-band or ring of the package hereof. A transverse slit 11 may be cut approximately midway into the band from its opposite longitudinal edges near each of its end edges. The end portions of the band may be interlocked so that the edges of the slit or cut 11 at one end portion hooks or engages over the intact band portion immediately in line with the slit at the other end portion. By providing a transverse crease or line of score 12 in the band substantially centrally of its end edges, interlocking of the end portions of the band develops the elongated open frame 13 shown in Figure 2. The internal girth of such frame 13 is preferably only slightly greater than the total edge length of the abrasive strip to be engaged thereby.

The abrasive strips to be packaged accordant with the present invention are each shaped to simulate the usual steel finger-nail file. Thus, as illustrated in Figure 3, each strip 14 is of progressively diminishing or tapering width from one end portion to the other, the wide-end portion 14*a* preferably being rounded at its edges and the narrow-end portion 14*b* also being shown rounded at its edges but, if desired, being pointed. In some instances, it may be desirable to create in one of the side edges of the strip a curved or arcuate recess corresponding to the curved or arcuate recess usually occurring in one of the side edges of the usual steel manicuring file near its wide-end portion. The strip 14 may be cut from sandpaper, emery cloth, or other suitable abrasive sheet material either or both of whose faces carry bonded thereto abrasive grain of suitable size or fineness.

In forming the package hereof, the strips 14 are stacked one above the other in the frame 13 as it rests on a table or support until the frame is filled from its bottom to its top edge. The frame assumes substantially the configuration of the strips, which are of a stiffness to expand the frame walls within which they fit with very little clearance. The work of thus stacking the strips is extremely light and simple and can be quickly done by unskilled female labor. The package hereof is completed so as to prevent the strips from falling out of the frame openings by slipping over the stacked frame a cross-band or ring 15 of the character shown in Figure 4, which band 15 is of dimensions or internal girth to engage firmly the wide-end portion of the stacked

frame and to bridge the frame openings transversely and thereby prevent the abrasive strips from falling out of the frame openings. The band or ring 15 may be readily and economically made by adhesively securing the end portions 15a of a paper band into overlapping relationship. It is preferable that the paper of the band 15 be of somewhat less thickness and stiffness than that of the frame 13, for this means that such band may be made to encompass firmly the wide-end portion of the frame with little tendency to bend or distort the upper frame edges unduly even when, as shown in Figure 7, the strip supply or stack within the frame has been partially exhausted, or when the strip supply is largely or completely exhausted.

The band or ring 15 is assembled with the stacked frame by being first slipped over the narrow-end portion of the frame, as illustrated in Figure 5, and then being pushed or slid to the wide-end portion of the frame until it engages such latter portion tightly, as shown in Figures 6 and 7, and can go no farther without being torn or ruptured. In such latter position, the ring 15 causes the frame 13 to engage frictionally or hug closely the edges of the stacked strips and to keep the strips from falling out of the frame. When it is desired to remove an abrasive strip from the frame 13, the ring 15 is slid to the narrow-end portion of the frame, thereby releasing the frame wall from its tight or close frictional engagement of the strip edges and enabling a strip to be removed from the stack most readily in a direction away from the narrow-end portion of the package, that is, in the direction of the arrow appearing in Figure 5. When one or more strips have thus been removed from the package, the ring 15 may be returned or slid back to its position indicated in Figures 6 and 7 and thus serve to maintain in the desired packaged or assembled condition the remaining strips of the stack.

The package hereof may, if desired, be wrapped in "Cellophane", paper, or other suitable wrapping material for shipment and sale. Because of its compactness and integrity, it lends itself nicely to being carried in a pocket or pocketbook. It is to be understood that the package hereof is subject to change or modification while falling within the spirit or scope of the present invention, as defined by the appended claims. For instance, it is possible to form up the frame 13 from a paper or paperboard band whose end portions, rather than being interlocked as hereinbefore described, are adhesively or otherwise secured. Again, the band or ring structure 15 may be of seamless structure and be made of suitable flexible material other than paper, for instance, such flexible sheet or film material as "Cellophane" or its equivalent. The use of suitable paper as the material of construction for the frame 13 and the ring 15 has, however, been found to be economical and quite satisfactory in actual practice.

I claim:

1. A package of abrasive strips comprising a stack of such strips each of diminishing width from one end portion to the other end portion, an open frame encompassing said stack of strips at their edges, and a band encompassing the frame transversely of said stack and slidable on said frame from its narrow-end portion to its wide-end portion, said band being engageable firmly with the wide-end frame portion to maintain the strips as a stack within said frame.

2. A package of abrasive strips comprising a stack of such strips each of diminishing width from one end portion to the other, a paper band encompassing said stack of strips at their edges, each of said strips being freely removable from said stack through the top and bottom openings defined by said band, and another band of flexible material encompassing said first-named band transversely of said stack, said second-named band being slidable from one end portion to the other end portion of the stack and being adapted to bridge and engage firmly said first-named band at the wide-end portion of said stack and thereby to maintain said strips as a stack within said first-named band.

RALPH T. PITT.