March 29, 1955 T. J. BOECKER 2,705,210

DECORATIVE PIPING STRIPS

Filed Sept. 5, 1952

Fig. 1.

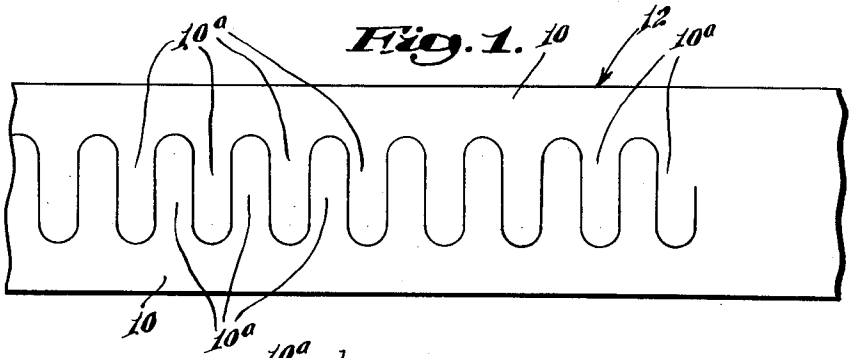


Fig. 2.

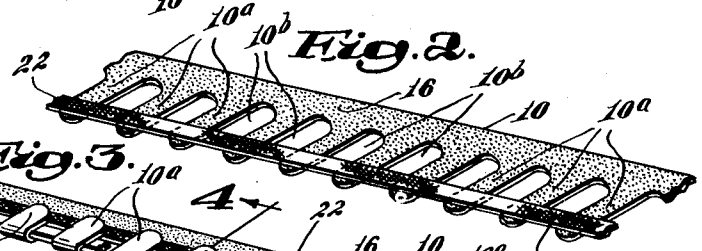


Fig. 3.

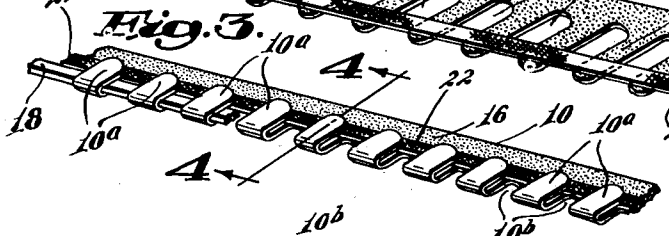


Fig. 4.

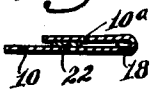


Fig. 5.

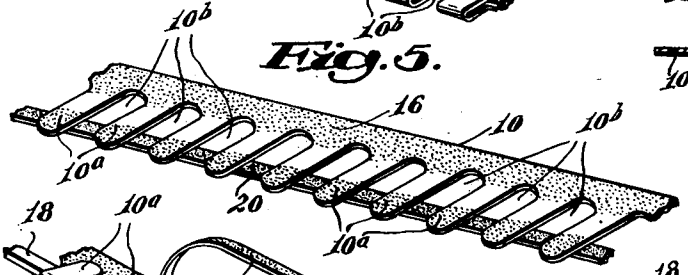


Fig. 6.

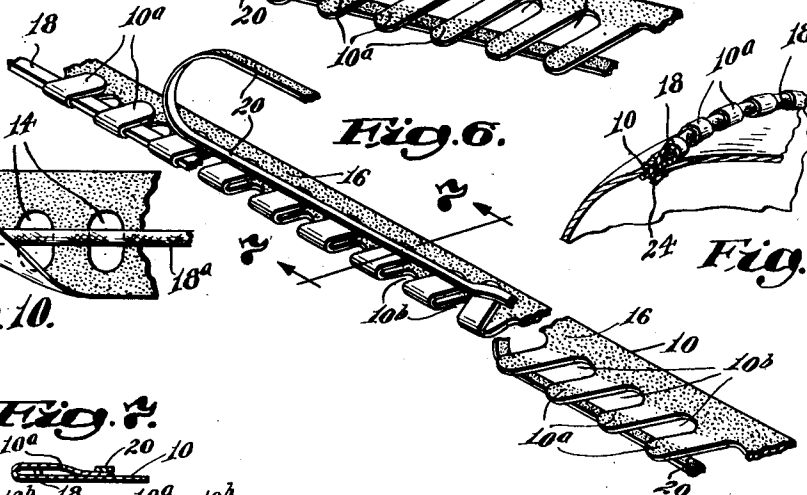
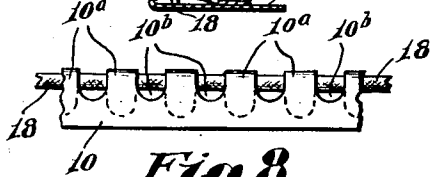


Fig. 9.

Fig. 10.

Fig. 7.

Fig. 8.



Inventor:
Theodore J. Boecker
By John H. McKenna
Attorney

United States Patent Office 2,705,210 Patented Mar. 29, 1955

2,705,210

DECORATIVE PIPING STRIPS

Theodore J. Boecker, Winchester, Mass., assignor to Boecker-Stuart, Inc., Cambridge, Mass., a corporation of Massachusetts

Application September 5, 1952, Serial No. 308,116

5 Claims. (Cl. 154—53.6)

This invention relates to improvements in decorative piping strips which are suitable for ornamenting or finishing upholstery and leather and imitation leather products but which have especial utility as decorative piping for moccasin type shoes and slippers. More particularly, the invention provides such piping strips which may be manufactured with a substantial saving of material as compared with the comparable piping strips produced according to prior procedures.

Decorative piping strips of the variety to which the invention relates have a bead strip of leather, woven cord, or other suitable material, exposed at intervals along that edge of the piping strip which is visible in a shoe or other article. The piping strip is wrapped around the bead strip but has spaced openings through which the bead strip is exposed.

Heretofore, the initial strip of material of which the piping strip is formed has been uniformly perforated with relatively large holes or cut-outs distributed uniformly throughout the length of the strip, and when this perforated strip is wrapped around a bead strip, portions of the latter are exposed where they cross the perforations, to provide a beaded edge having decorative character. However, the stock cut out to provide the substantial perforations is entirely wasted.

It is among the objects of the invention to provide decorative piping strips having all of the decorative attributes of the prior comparable strips, but which may be produced more economically without any wastage of material. According to the invention, two similar ramose strips simultaneously are cut or dinked in a manner to utilize all of the material of the initial strip, each ramose strip having uniformly spaced tongues adapted to be wrapped around a bead strip to produce the same decorative effect attained with the prior perforated strips.

Another object of the invention is to provide an intermediate product in the production of decorative piping strips comprising a ramose strip of flexible sheet material having relatively long uniformly spaced tongues whose end portions are connected together by a relatively narrow strip of flexible material adhered to one side of the end portions of all of the tongues, whereby the uniform spacing of the tongues is maintained as they are successively wrapped around a bead strip.

A further object of the invention is to provide a ramose strip of flexible sheet material having relatively long uniformly spaced tongues projecting from an intact marginal portion of the strip, the tongues being adapted to be wrapped around a bead strip in the manufacture of decorative piping strips, and the ends of all of the tongues being connected by a relatively strong strip adhered to the end portions of all of the tongues and adapted to be adhered to said intact marginal portion of the first mentioned strip when said tongues are wrapped around the bead strip, thereby to constitute a reinforcement through which stitches may pass when the decorative piping strip is being secured in a shoe or other article.

It is, moreover, my purpose and object generally to improve decorative piping strips, and the procedures of manufacturing such strips.

In the accompanying drawing:

Fig. 1 is a plan view of a strip of flexible sheet material showing how two of my ramose strips may be cut or dinked therefrom without wastage of any material;

Fig. 2 is a perspective of one of my ramose strips having adhesive material coating the upper surface thereof and having a relatively narrow strip of material adhered to the end portions of all of the tongues of the ramose strip;

Fig. 3 is a view similar to Fig. 2 showing the tongues of the ramose strip, with the narrow strip thereon, turned inward and adhered to the intact marginal portion of the ramose strip, the tongues being wrapped around a bead strip which is omitted excepting at the left hand portion of Fig. 3;

Fig. 4 is a cross-sectional view on line 4—4 of Fig. 3;

Fig. 5 is a view similar to Fig. 2 but showing the narrow strip adhered to the end portions of the tongues at their under sides, whereby this narrow strip may be stripped off after the tongues have been turned over a bead strip and adhered to the intact marginal portion of the ramose strip;

Fig. 6 is a view similar to Fig. 5 but showing the majority of the tongues after being turned inward and adhered, and showing the left hand end portion of the narrow strip in the process of being stripped from the tongues;

Fig. 7 is a cross-sectional view on line 7—7 of Fig. 6;

Fig. 8 is plan view of a fragment of a completed decorative piping strip embodying a cross-sectionally round bead strip;

Fig. 9 is a perspective of a portion of the forepart of a moccasin type shoe having my improved piping strip embodied therein; and

Fig. 10 is a plan view of a fragment of a prior comparable piping strip with its bead strip shown in partially wrapped condition.

Referring to the drawing, the decorative piping strips of the invention are ramose strips **10**, of leather or other suitably flexible material, having the relatively long tongues **10a** extending in uniformly spaced parallelism, with each space **10b** between adjacent tongues complementary to a tongue **10a**, whereby two of the ramose strips **10** may be cut, as by a dinking die, from a single wider strip **12** (Fig. 1), without any of the material of strip **12** being wasted.

Heretofore, such decorative piping strips have been made, as illustrated in Fig. 10, by cutting or dinking spaced holes **14** in a strip **12a** which usually is 1⅛" or 1 3/16" wide. The stock cut out to form the holes **14** is wasted.

According to the invention, two of the ramose strips **10** are cut or dinked from a strip **12** which may have width as little, or less than 1½", and the entire strip **12** is utilized, with substantial saving in material as compared with the prior procedures.

The flesh side of each ramose strip **10**, assuming the strips to be of leather, is coated with a suitable adhesive which is indicated by the stippling at **16** in Figs. 2–6, adhesive on the prior strip of Fig. 10 also being indicated by stippling at **16a**. The adhesive **16** may be rubber cement, or latex or any other suitable adhesive, and it may be coated all over the flesh side of the ramose strips **10**, or may be coated only along the edge portion at the base of the tongues **10a** and at the tip portions of the tongues, as shown in Fig. 5. In either case, the tongues **10a** may be folded inward over a bead element **18** (Figs. 3, 6, 8 and 9) with the in-turned end of each tongue becoming adhered in its in-turned condition, and with the bead element **18** exposed at the regions where it crosses the spaces between tongues **10a**.

Referring more particularly to Figs. 5 and 6, an adhesive strip **20** is shown adhered to the grain or finished side of a ramose strip **10**, joining together the end portions of all of the tongues **10a** of the strip. The strip **20** may, for example, be a strip of scotch tape, or the like, which readily may be adhered to the tongues as in Fig. 5, thereby to aid in maintaining the spaced relation of the tongues and to facilitate inturning of the tongues to their secured positions of Fig. 6, after which the adhesive strip **20** may be stripped off. The bead element **18**, over which the tongues engage in spaced relation may be a strip of leather, as in Figs. 3 and 6, or may be a woven cord, or the like, as shown in Fig. 8. It should be understood that the adhesive strip **20** of Figs. 5 and 6 may be omitted, if desired, but its presence

facilitates in-turning of the spaced tongues 10^a by conventional or other in-folding machinery, or by hand.

Figs. 2 and 3 illustrate an adhesive strip **22** adhered across the end portions of the tongues 10^a at the flesh side or coated side of the strip and tongues, and this strip **22** becomes a permanent part of the ornamental piping strip inasmuch as it becomes engaged between the un-cut edge portion of the strip and the in-turned end portions of the tongues 10^a. Here again, the strip **22** serves primarily to facilitate in-turning of the tongues, especially when the in-turning is accomplished by machine. However, the adhesive strip **22** may be a fabric strip of a nature to reinforce and strengthen the securement of the piping strip in a shoe, in that the stitches at **24** (Fig. 9) may pass through this reinforcing strip **22**.

It will be apparent from the foregoing description, in connection with the drawing, that my improved decorative piping strips may be produced with substantial savings as compared with the prior comparable piping strips, and may be incorporated in shoes, and other articles, to serve in the same manner and with the same decorative effects as the prior more expensive piping strips. Also, when a reinforcing fabric strip **22** is employed, as in the Figs. 2 and 3 embodiment, the fabric strip **22** substantially strengthens the stitched securement of the piping strip in a shoe, or other article.

It is intended that the patent shall cover by suitable expression in the appended claims whatever features of patentable novelty exist in the invention disclosed.

I claim as my invention:

1. A decorative piping strip comprising a ramose strip of flexible sheet material having relatively long tongues of the flexible material extending in spaced relation from an integral substantially intact marginal portion of the ramose strip, a bead element disposed along the ramose strip and crossing the spaces between said tongues in substantially spaced relation to said marginal portion of the ramose strip, all of said tongues being turned inward over said bead element, and means securing the in-turned end portion of each tongue to said substantially intact marginal portion of the ramose strip, whereby said bead element is secured to the ramose strip and has exposed extent between adjacent in-turned tongues in the said substantially spaced relation to said marginal portion of the ramose strip.

2. A decorative piping strip comprising a ramose strip of flexible sheet material having relatively long tongues of flexible material extending in spaced relation from an integral substantially intact marginal portion of the ramose strip, each space between adjacent tongues being complementary to a said tongue whereby each said space may be formed by removal therefrom of a tongue of a second ramose strip, a bead element disposed along the ramose strip and extending across all of the tongues thereof and across all of the spaces between the tongues in substantially spaced relation to said marginal portion of the ramose strip, a relatively narrow strip of flexible material adhered to end portions of all of said tongues, said end portions of all of the tongues, with said narrow strip thereon, being turned inward over said bead element and secured to said substantially intact marginal portion of the ramose strip with said bead element exposed between said tongues in its said substantially spaced relation to said marginal portions of the ramose trip.

3. A decorative piping strip comprising a ramose strip of flexible sheet material having relatively long tongues of the flexible material extending in spaced relation from an integral substantially intact marginal portion of the ramose strip, an adhesive substance on one side of said ramose strip, a relatively narrow strip of flexible material adhered to end portions of all of said tongues at that side thereof which has the said adhesive substance thereon, a bead element disposed along the ramose strip and extending across all of said tongues and across all of the spaces between tongues at that side of the ramose strip which has said adhesive substance thereon, the said bead element being in substantially spaced relation to said marginal portion of the ramose strip, said relatively narrow strip, which has the end portions of all said tongues adhered thereto, being turned over upon the adhesive-coated substantially intact marginal portion of the ramose strip thereby to wrap said tongues in spaced relation around said bead strip, with portions of the bead strip exposed in the spaces between adjacent tongues and in the said substantially spaced relation to said marginal portion of the ramose strip.

4. A decorative piping strip comprising a ramose strip of flexible sheet material having relatively long tongues of the flexible material extending in spaced relation from an integral substantially intact marginal portion of the ramose strip, an adhesive substance on one side of said substantially intact marginal portion of the ramose strip and on the end portions of all of said tongues, whereby the ends of the tongues may be turned inward and be adhered to said substantially intact marginal portion of the ramose strip, a relatively narrow strip of flexible material adhered to the end portions of all of said tongues at that side thereof opposite the side having said adhesive substance thereon, a bead element disposed along the ramose strip and crossing all of the spaces between said tongues at that side of the tongues which has said adhesive substance thereon, the said bead element being in substantially spaced relation to said marginal portion of the ramose strip, all of said tongues, with said narrow strip secured thereon, being turned inward over said bead element and adhered to said substantially intact marginal portion of the ramose strip with said narrow strip exposed at outer surfaces of the in-turned tongues in position to be stripped from the secured tongues, and with said crossing portions of said bead element exposed between the tongues in said substantially spaced relation to the marginal portion of the ramose strip.

5. In a decorative piping strip, a ramose strip having spaced tongues projecting from an intact marginal portion of the ramose strip and having each space between adjacent tongues complementary to a said tongue whereby two similar ramose strips may be died simultaneously from a wider strip with utilization of all of the material of said wider strip, said tongues of the ramose strip being turned inward and having their end portions secured to said intact marginal portion of the ramose strip, thereby to provide spaced loops of the strip stock outward of said intact marginal portion through which loops a linear element may be passed with portions thereof exposed between the said loops in spaced relation to said intact marginal portion of the ramose strip.

References Cited in the file of this patent

UNITED STATES PATENTS

1,808,259	Schemmel	June 2, 1931
1,837,775	Howard	Dec. 22, 1931
1,969,970	Dunbar	Aug. 14, 1934
2,371,566	Williams	Mar. 13, 1945
2,630,772	Ederer	Mar. 10, 1953