March 30, 1943. R. R. WARD 2,315,360

STEP SHIMMING STRIP

Filed Oct. 23, 1940

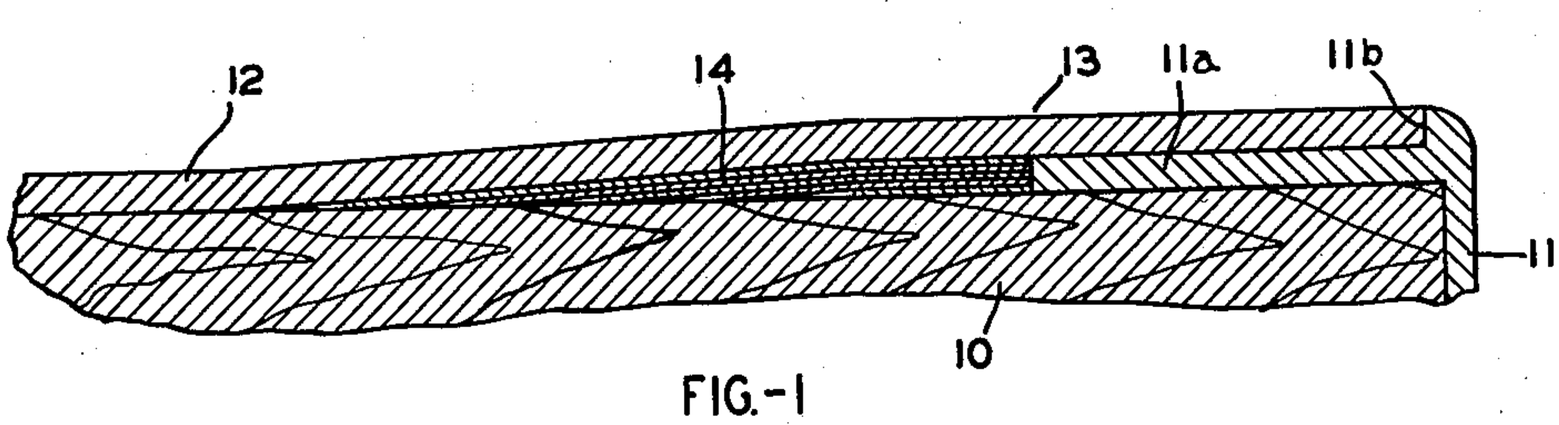

FIG.-1

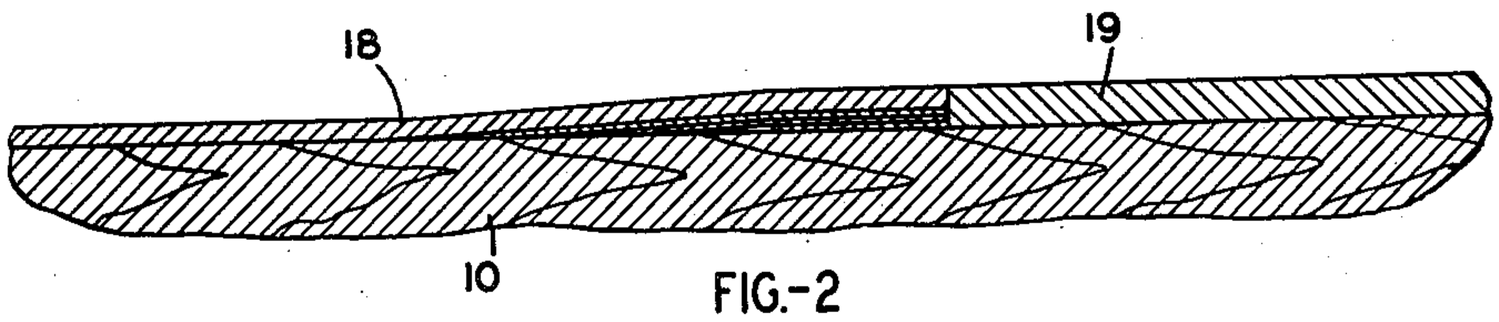

FIG.-2

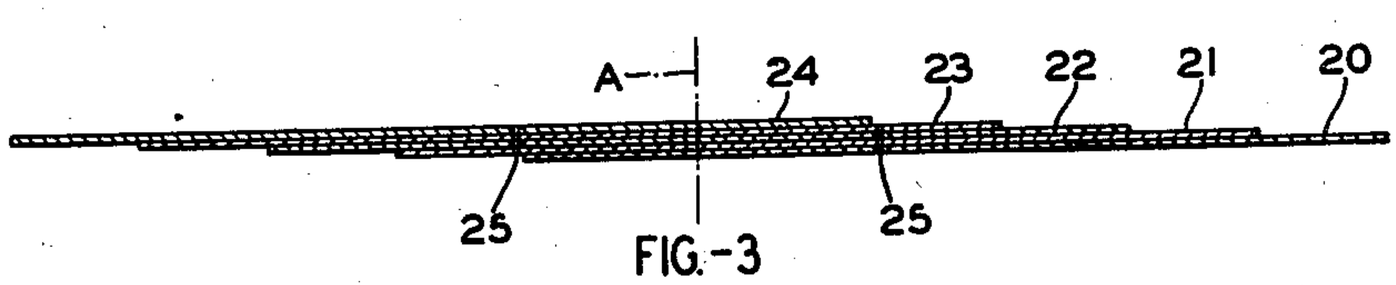

FIG.-3

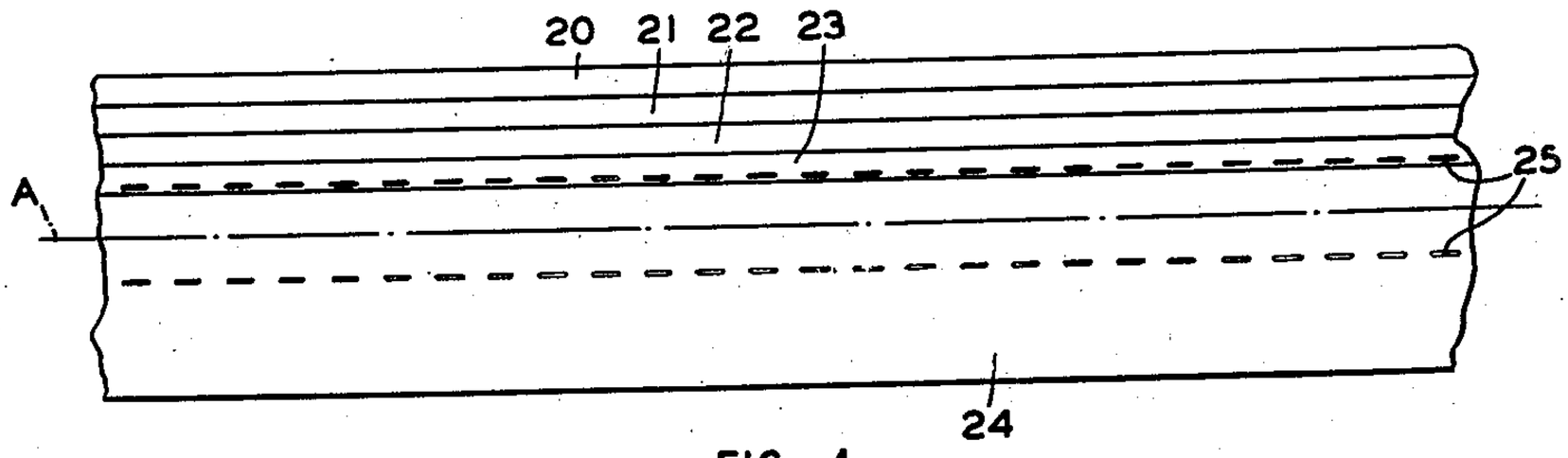

FIG.-4

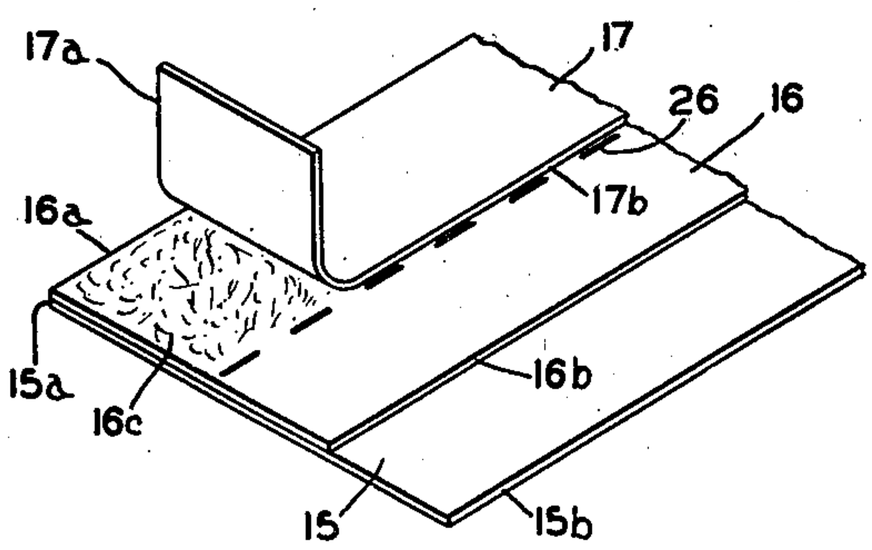

FIG.-5

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STEP SHIMMING STRIP

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6 Claims. (Cl. 311—107)

This invention relates to improvements in shimming strips intended to be sold as an article of manufacture in continuous lengths and to be cut up as required by the customer for the purpose of shimming up uneven surfaces as, for instance, in the disclosed embodiment, the levelling up of linoleum surfaces.

An object of the present invention is to provide a cheap but efficient shimming strip of step construction, which is easy to manufacture and to use for the intended purpose.

Another object of the invention is to provide a novel method of making the improved strip so as to cheapen the manufacture thereof.

Other objects and advantages of the present invention will appear from the accompanying drawing and specification, and the essential features thereof will be set forth in the claims.

In the drawing Fig. 1 is a partial sectional view, showing my improved shimming strip utilized in connection with a metal finishing strip adapted for use with linoleum covers for table tops, drain boards, and the like; Fig. 2 is a partial sectional view showing a manner of shimming up a sheet of lesser thickness to the level of a sheet of greater thickness; Fig. 3 is a transverse sectional view through a process strip built up in such a manner as to provide a cheap step in the manufacture of two finished strips; Fig. 4 is a top plan view of the strip of Fig. 3, but drawn to a smaller scale; while Fig. 5 is a perspective view of the end of a strip having a smaller number of layers and indicating one manner of securing the layers together.

While my improved shimming strip is capable of many uses, I have illustrated in Figs. 1 and 2 the application of the strip in the laying of linoleum.

For instance, in Fig. 1 a drain board, table, or the like is shown at **10**, having a metal finishing strip **11** secured thereto along one edge. In the usual manner, a piece of linoleum indicated at **12** is secured to the top of the member **10** lying upon the flange **11***a* of the finishing strip and abutting against the shoulder **11***b* of the finishing strip. Where the linoleum overlies the edge of the flange **11***a* at the point **13**, there would ordinarily be a hump. To shim up the linoleum from the level of the member **10** to the level of the top of the flange **11***a*, I utilize my improved shimming strip, which is indicated at **14**. This strip, as more clearly seen in a slightly different form in Fig. 5, comprises a plurality of layers of sheet material secured together in overlapping step relationship. For most purposes the layers will have parallel longitudinally extending side edges. For instance, in Fig. 5 the bottom layer **15** has the parallel longitudinally extending edges **15***a* and **15***b*. In a like manner the side edges of the layers **16** and **17** have been given similar reference characters. In the finished strip, the edges **15***a*, **16***a*, and **17***a* are in alinement while the edges **17***b*, **16***b*, and **15***b* are in step relationship due to the fact that each layer beneath the top one is of greater width than the layer above it. Preferably, but not necessarily, the steps may be made substantially equal, that is to say, the distance from the edge **15***b* to the edge **16***b* may be equal to the distance from the latter edge to **17***b* so as to give a gradual slope transversely of the finished strip. Preferably, as shown in Figs. 1 and 2, the strip will be laid with the widest layer on top so as to give a smoother support beneath the linoleum. The strip used for the shimming purpose in Fig. 1 has five layers, but it will be understood that the number of layers depends upon the purpose to be fulfilled.

In Fig. 2 a shimming strip of three layers similar to that shown in Fig. 5 is utilized for the purpose of shimming up a thin piece of linoleum **18** so that its top surface is level with an adjoining piece of linoleum **19** which is thicker. Obviously, a strip of the improved character here shown brings the level of the piece **18** up very gradually, particularly if the layers of the shimming strip are of thin material. I find that a fairly heavy paper is an ideal cheap material for this purpose.

A method of forming two strips at once in a cheap manner is disclosed in Figs. 3 and 4. Here, the bottom strip **20** is first laid down. A second layer **21** is then secured thereto in vertically superposed, but laterally offset, relationship as indicated. In a like manner, the strips **22**, **23**, and **24** are secured in position in a like manner until one has built up the number of layers desired. The layers are secured together in a suitable manner. A cheap and satisfactory construction results from coating the surface of one layer, as for instance the stippled portion **16***c* of the layer **16** in Fig. 5, with an adhesive such as glue. It is a simple matter then to moisten adjacent strips and secure them together over their entire contacting surfaces. When the process strip of Figs. 3 and 4 has been built up in the manner there indicated, it may be then cut along the line indicated at A in the center of the strip, thus giving two finished strips of the type illustrated in Fig. 1.

For the purpose of providing a strip adaptable for use where different numbers of layers may be desired for different jobs, I have indicated a manner of perforating the strip longitudinally so that unnecessary layers may be torn off when that is desirable. For instance, in Figs. 3 and 4, the composite strip has been shown tearably perforated along the lines **25** which are parallel to the longitudinal side edges of the strip and substantially along the overlapping edge of one of the layers. When the strip is torn along the perforations, the result is a shimming strip one or two layers less in thickness than the original strip. A similar line of perforations is indicated at **26** in Fig. 5, and it will be obvious that if the left hand portion of the strip, including the layer **17** and the portions of the underlying layers therebeneath, is thrown away, the result is a strip of two layers in place of the original strip of three layers.

I have thus disclosed a new article of manufacture, namely, a composite shimming strip of step construction adapted to be made and sold in continuous lengths and to be cut up by the customer as required for the individual job.

What I claim is:

1. As an article of manufacture, a composite strip comprising a plurality of layers of sheet material of different widths, each layer having parallel longitudinally extending edges, and said layers being secured together with the widest layer at the bottom and the layers being progressively narrower toward the top, all of said layers having one of their longitudinally extending side edges substantially in alinement.

2. A composite strip as in claim 2, wherein said strip is tearably perforated at approximately the width of one of said layers.

3. In combination with a base having on a marginal portion thereof an element of uniform thickness which terminates in an abrupt shoulder overlying said base and a covering for said base and the element thereon, a shim member comprising a plurality of layers of sheet material secured together with each layer of less width than the layer next below it so as to provide a shim member of step form, said layers having one set of aligned edges in contact with the shoulder of said element and the combined thickness of all layers corresponding to the thickness of said element, the thickness of the shim strip being progressively stepped down from that of said element to the thickness of a single layer, whereby the covering is gradually raised from the base to a height sufficient to overlie said element.

4. As an article of manufacture, a composite strip comprising a plurality of layers of sheet material of uniform width and having parallel longitudinal edges, said layers being secured together one upon another in stepped relation and with their longitudinal edges generally parallel, whereby said composite strip has a middle portion of uniform thickness and longitudinal edge portions of progressively stepped down form, the steps of one longitudinal edge portion being on one face of said composite strip and the steps of the other longitudinal edge portion being on the other face thereof.

5. As an article of manufacture, a composite strip comprising a plurality of layers of sheet material of uniform width and having parallel longitudinal edges, said layers being secured together one upon another in uniformly stepped relation and with their longitudinal edges generally parallel, whereby said composite strip has a middle portion of uniform thickness and longitudinal edge portions of uniformly progressively stepped down form, the steps of one longitudinal edge portion being on one face of said composite strip and the steps of the other longitudinal edge portion being on the other face thereof.

6. As an article of manufacture, a composite strip comprising a plurality of layers of sheet material of different widths, each layer having parallel longitudinally extending edges, said layers being secured together with the widest layer at the bottom and the layers being narrower toward the top, all of said layers having one of their longitudinal extending side edges substantially in alinement, said strip being tearably perforated at approximately the width of the topmost narrowest layer.

RAYMOND R. WARD.

CERTIFICATE OF CORRECTION.

Patent No. 2,315,360. March 30, 1943.

RAYMOND R. WARD.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, first column, line 36, for the claim reference numeral "2" read --1--; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 8th day of June, A. D. 1943.

(Seal)

Henry Van Arsdale,
Acting Commissioner of Patents.