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METHOD FOR MANUFACTURING PLAITED WORK

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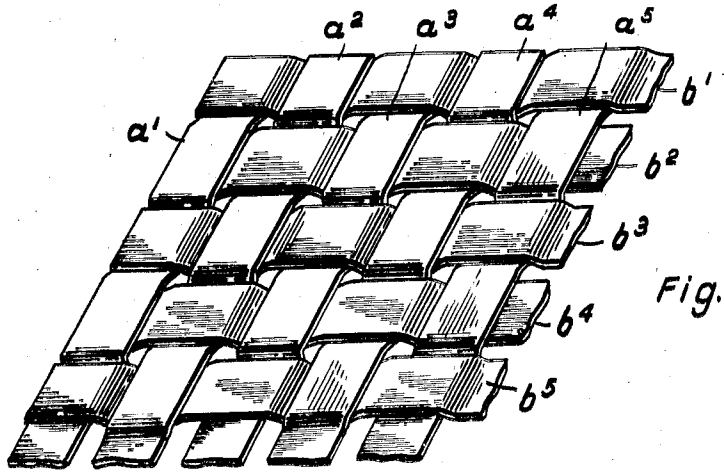
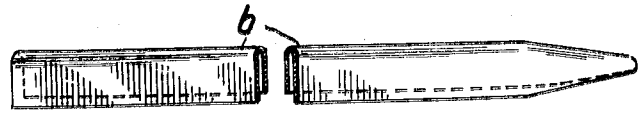


Fig. 1.

Fig. 2.



Fig. 3.



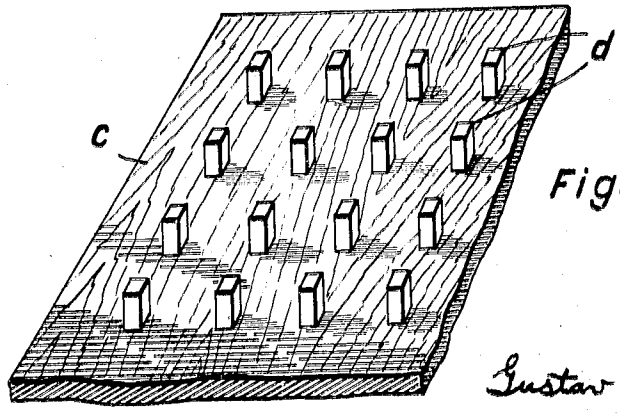


Fig. 4.

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METHOD FOR MANUFACTURING PLAITED WORK

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2 Claims. (Cl. 28—1)

This invention relates to a method of manufacturing plaited work and plaiting implements therefor.

It is evident that the handling of band-form, unvulcanized rubber bodies is extremely difficult on account of their stickiness. For this reason it has not been possible heretofore to manufacture plaited work from such band strips.

It is the main object of my present invention to make it possible to manufacture such plaited work without difficulty and to make thereby a very cheap article, adapted to be used for different purposes.

The invention is based on the fact, that it is possible to place by far the greater number of the bands adjacent one another and upon one another in the form of warp and weft, while avoiding the necessity of drawing these bands through one another, and that then only a few bands need to be drawn through in order to obtain perfectly regular plaited work, the individual bands of which are absolutely firmly united together by subsequent vulcanization.

In a preferred form of carrying out the process, a plaiting board provided with guide blocks thereupon and also a pull-through needle of U-shape cross section will be used. The guide blocks ensure not merely the exact positioning of the individual bands, but also produce through-way openings in the plaited work, the said openings being very advantageous in such plaited work.

As already said the new plaited work produced according to this process can be used for many different purposes. For example, it can be used for mats, runners or the like, more particularly also as supporting surfaces for beds and lounge furniture, instead of the spring wire mattresses hitherto employed, but this does not by any means exhaust the fields of its application.

Referring to the accompanying drawing,

Figure 1 shows the new plaited work diagrammatically.

Figures 2 and 3 show in section and side elevation the pull-through needle and—

Figure 4 shows the plaiting board diagrammatically.

In the manufacture of the plaited work, the procedure will be such, for example, that first of all the bands a^1, a^3 and a^5 are set out on the plaiting board c, whereupon on the said bands, there are placed the bands b^1, b^3 and b^5, and in turn, on the latter, there are placed the bands a^2 and a^4. Then, of the 10 bands shown, eight have already been placed in the absolutely correct position relatively to one another, and only the bands b^2 and b^4 have still to be drawn through, the troublesome work of drawing the bands through being thus reduced to one fifth of the bands. The operation of drawing the bands through is still further substantially facilitated by inserting the sticky bands into the U-shaped pull-through needle, by means of which they can be drawn through very easily. The needle is then simply withdrawn.

The guide blocks d provided on the plaiting board c produce openings between the bands through which air can pass upwardly and dirt can pass in the opposite direction.

Since the band strips are united together very intimately and permanently, it is also possible to omit the plaiting and drawing of the strips, the said strips being merely placed upon one another and vulcanized together after the manner of a fence.

It is also an advantage of the invention that the through-way openings are produced without any waste of material.

Apart from natural and synthetic rubber, rubber-like materials, such as gutta-percha, and balata, as well as textile materials which have been impregnated with one of these materials are also suitable for the new plaited work and its process of manufacture.

I claim:

1. A method for the manufacture of plaited work consisting in that first of all a number of unvulcanized bands are placed in spaced apart relation adjacent to one another and upon one another in the direction of warp and weft, after which the remaining bands for completing the plaited work are drawn into the intermediate spaces and the formation then vulcanized.

2. The method of making plaited work which consists in laying unvulcanized bands in spaced apart relation to form a warp, laying unvulcanized bands in spaced apart crossed formation above the previously placed bands to produce a weft, placing other bands in the intermediate spaces on top of the spaced weft formation, passing other bands through the intermediate spaces of the weft formation so that said bands are in alternate top and bottom contact with the successively disposed bands of the warp, and finally vulcanizing the crossing bands to unite the same.

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