April 21, 1936. J. LANG 2,038,368

CARPET OR RUG MADE OF SPONGE MATERIAL

Filed Jan. 22, 1934

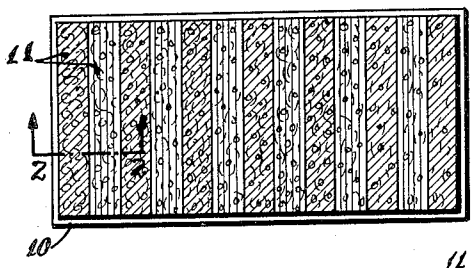


Fig. 1.

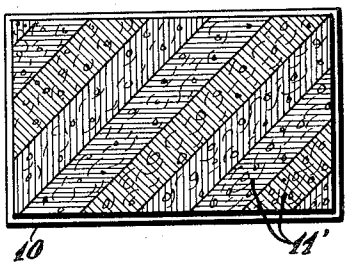


Fig. 3.

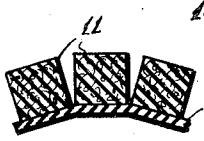


Fig. 2.

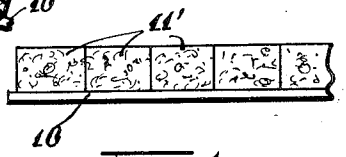


Fig. 4.

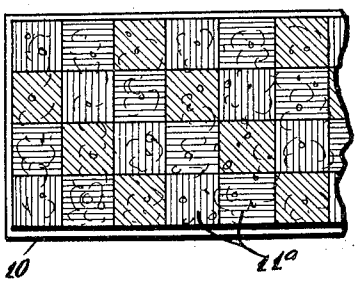


Fig. 5.

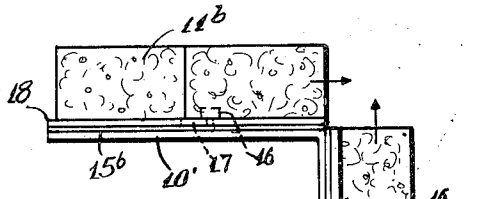


Fig. 7.

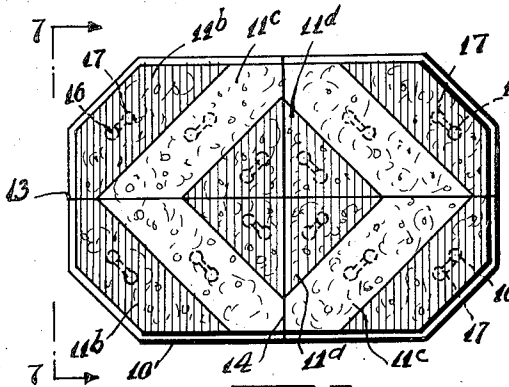


Fig. 6.

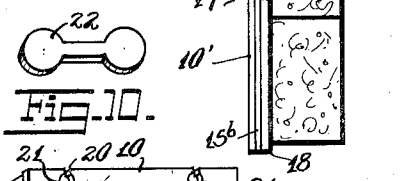


Fig. 10.

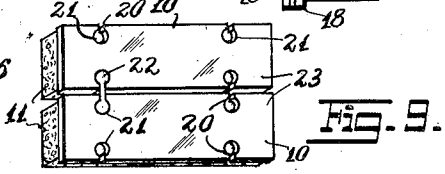


Fig. 9.

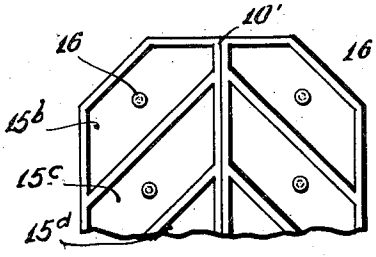


Fig. 8.

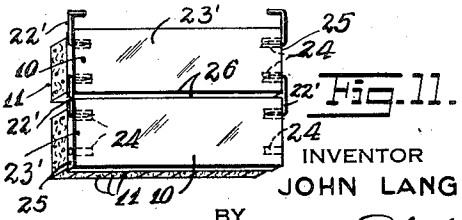


Fig. 11.

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Patented Apr. 21, 1936 2,038,368

UNITED STATES PATENT OFFICE

2,038,368

CARPET OR RUG MADE OF SPONGE MATERIAL

John Lang, Bronx, N. Y.

Application January 22, 1934, Serial No. 707,648

3 Claims. (Cl. 154—49)

This invention relates to new and useful improvements in rugs or carpets.

The invention has for an object the construction of a rug or carpet made particularly of spongy material and characterized by the provision of a flexible sheet forming the bottom thereof and a plurality of elements attached upon the flexible sheet forming the top of the rug or carpet.

Still further the invention proposes an arrangement whereby the plurality of elements are arranged in transverse, longitudinal or oblique lines and the said elements are arranged adjacent to each other.

Still further the invention proposes the construction of an article as mentioned in which the flexible base sheet is of any size or shape, and the plurality of elements attached thereon of various sizes and designs.

Furthermore as another object of this invention it is proposed to provide an arrangement whereby the plurality of elements are detachably arranged upon the flexible sheet.

Another one of the objects of this invention is the arrangement of cooperative means releasably holding the elements upon the sheet in such a fashion that the elements can only be removed or engaged in place when the flexible sheet is bent in a certain manner.

Still further the invention proposes the construction of an article as mentioned which is simple and durable and which may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a plan view of a rug constructed according to this invention.

Fig. 2 is a fragmentary sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a plan view similar to Fig. 1 but showing a rug of a different design constructed according to a different invention.

Fig. 4 is an edge elevational view of Fig. 3.

Fig. 5 is a fragmentary plan view of another rug constructed according to another embodiment of this invention.

Fig. 6 is a plan view of still another rug constructed according to a modification of this invention.

Fig. 7 is a side elevational view of Fig. 6 as though looking in the direction of the line 7—7 but illustrating the rug bent along the longitudinal center thereof.

Fig. 8 is a plan view of the flexible base sheet per se of the rug shown in Figs. 6 and 7.

Fig. 9 is a perspective rear view of the rug, showing a further development of the invention.

Fig. 10 is a perspective view of the connecting members used in Fig. 9.

Fig. 11 is a similar view to Fig. 9, but showing a modified arrangement.

The rug according to this invention comprises a flexible sheet of material 10 forming the bottom of the rug and a plurality of elements 11 attached on the flexible sheet forming the top of the rug. The sheet of material 10 preferably should be made of rubber though other types of flexible sheets may be used with fairly good results. The elements 11 preferably should be made of spongy material, for example, sponge rubber and be constructed of sufficient thickness so as to give good body to the rug. These sponge rubber elements 11 are arranged adjacent each other in longitudinal, transverse or oblique lines. In Fig. 1 the elements 11 are shown transversely arranged and having adjacent faces contacting with each other. The adjacent faces of the elements 11 are shown flat but other constructions may be used as long as they interengage or engage each other.

In Figs. 3 and 4 a modified arrangement of the device has been disclosed wherein the elements 11′ are arranged at an inclination to the longitudinal length of the rug. In other respects this form of the invention is similar to the preferred form and similar parts may be recognized by corresponding reference numerals.

In Fig. 5 another embodiment of the invention has been disclosed wherein the rug comprises a flexible sheet of material 10 forming the base of the rug and a plurality of elements 11^a attached upon the flexible sheet forming the top of the rug. These elements 11^a are in the form of small blocks arranged with adjacent faces contacting with each other. As illustrated the blocks 11 are of cubic shape.

In Figs. 6–8 inclusive another embodiment of the invention has been disclosed, and particularly shows a flexible sheet of material 10′ of a shape having a number of straight sides at an inclination to each other. A plurality of elements 11^b, 11^c and 11^d are attached upon the flexible sheet forming the top of the rug. These elements have adjacent contacting faces. Furthermore the ele-

ments are so arranged that they meet with one of their ends upon the longitudinal center line 13. The rug is also provided with a transverse center line 14 and all of the elements at the center terminate at this line. The arrangement is such that the rug may be folded along these center lines, in that the flexible base 10' may readily bend and the elements upon the flexible base separate along these lines.

A novel construction is used for the attaching of the elements upon the flexible sheet of material in a manner so that they may readily be removed, and furthermore when in place to be maintained against possible accidental removing. More particularly beneath each of the elements there is situated a similarly shaped plate 15b, 15c and 15d. These plates are cemented or in any other manner attached upon the upper surface of the flexible sheet 10' so as to allow bending of the sheet as before described.

Each of the plates is provided with a headed pin 16. These pins 16 are adapted to engage into bayonet openings 17 in plates 18 cemented or in any other manner attached upon the bottom sides of the elements 11b, 11c and 11d. The bayonet slots 17 are arranged so that the large openings thereof are remote from the longitudinal central line 13. This arrangement prevents any of the elements from being accidentally removed from the flexible material 10b in that they must move towards each other and since they are in intimate contact such motion is impossible.

To remove the elements 11b, and 11c and 11d it is necessary that the flexible sheet 10' be first bent along the longitudinal line 13 into the position shown in Fig. 7, that is, in which one half of the flexible sheet is bent along the lines 13 through an angle of 90°. With the flexible sheet in this condition the elements 11b, 11c and 11d may be moved over the bend of the sheet 10' to positions in which the large portions of the bayonet slots may pass over the heads of the headed elements 16.

A feature of a rug or carpet constructed according to this invention is that it is possible to better wash and clean it since the upper surface of the rug is formed from the elements secured upon the flexible sheet. It is possible to bend the flexible sheet so that any individual element is free at the sides. Thus the sides and the top of the element are exposed so that the element can readily be saturated with chemically treated water to wash it. Carpets or rugs may be made of one piece of sponge rubber and without a bottom sheet. But in order to provide a smooth bottom surface it may be coated with a layer of rubber. The rug constructed according to this invention has the feature that the portions thereof are better exposed to be washed. For this reason it may be better washed with effort equal to that of other types of rugs.

A still further feature of constructing the rug as described in this invention is that it is better adapted to be rolled or folded. The old types of rug of sponge rubber could be rolled or folded only as permitted by the flexibility of the entire mass of the rug. A rug constructed as described in this specification can be rolled or folded as permitted by the flexibility of the base sheet thereof since the elements mounted thereon are separate elements they give no resistance to bending or folding. Therefore when the base element or flexible sheet is bent or folded the rug itself is bent or folded. It is therefore possible to roll or fold the rug into a smaller compass when constructed according to this invention.

A still further feature of the invention is the removability of the elements forming the top of the rug. The advantage of a construction of this type is that should any element or group of elements be permanently ruined by the spilling of injurious liquids or other substances thereon, the particular elements may be removed and replaced. The particular construction for holding the elements upon the flexible sheet is of extreme advantage in that the elements cannot be displaced when the rug is laid flat upon the floor, but at the same time allow the elements to be easily and quickly removed merely by bending the flexible material into a certain position so as not to obstruct certain motion of the elements which are necessary for their removal.

In Fig. 9 the sheet material 10 is formed with grooves 20, terminating in enlarged circular shapes 21. These grooves are adapted to receive connecting plugs or links 22 preferably made of flexible material such as rubber, leather, cord, etc., for joining the rug sections 23 together.

In Fig. 11 another forming means 22' is indicated in the form of a U-shape metallic link which engage in holes 24 extending from edges 25 of the flexible sheet materials 10 in the vicinity of the adjacent edges 26 of rug sections 23'.

The forms shown in Figs. 9 and 11 permit the interlinking of a plurality of rug sections of the type heretofore described and illustrated so as to form a comparatively large size carpet of any desired shape.

While I have illustrated and described the preferred embodiment of my invention it is to be understood that I do not limit myself to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by United States Letters Patent is:

1. In a rug or carpet, a plurality of flexible sheets of material in edge engagement with each other forming the bottom of the rug or carpet, and a plurality of elements attached on the flexible sheets forming the top thereof, said elements having adjacent faces in contact with each other, and connecting plugs extending through grooves in adjacent edges of said flexible sheets and having enlarged ends for fixedly joining the sheets together.

2. In a rug or carpet, a plurality of flexible sheets of material in edge engagement with each other forming the bottom of the rug or carpet, and a plurality of elements attached on the flexible sheets forming the top thereof, said elements having adjacent faces in contact with each other, and flexible connecting strips extending through grooves in adjacent edges of said flexible sheets and having enlarged ends for fixedly joining the sheets together.

3. In a rug or carpet, a flexible sheet of rubber backing material and a plurality of sponge rubber blocks attached to the upper surface of said rubber sheet, the adjacent faces of said blocks contacting each other and free, with the border of the rug similarly made of separate sponge rubber blocks whereby said rug is flexible throughout and the vertical faces of said blocks will return to normal position upon being displaced laterally.

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