

1,381,832.

Patented June 14, 1921.

Fig. 1.

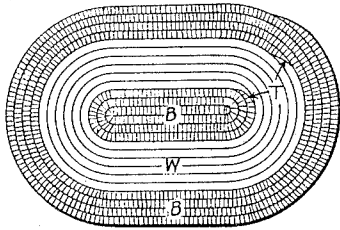


Fig. 2.

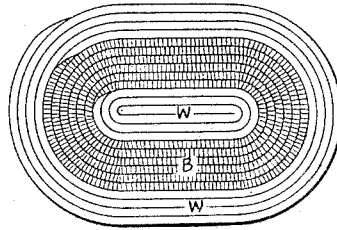


Fig. 3.

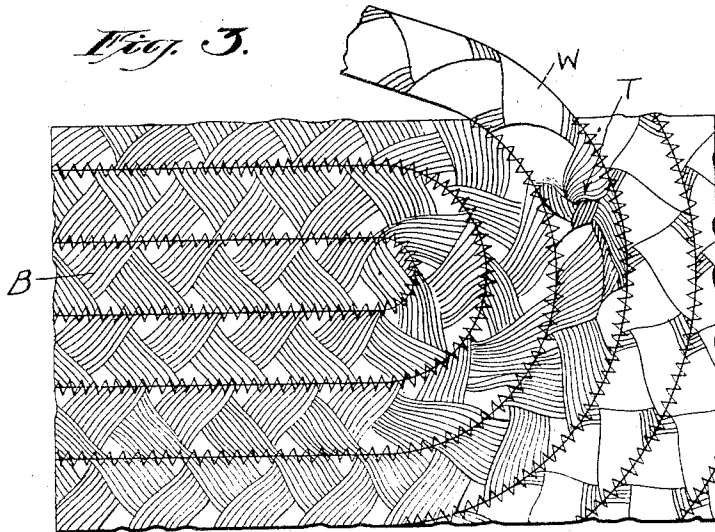


Fig. 4.

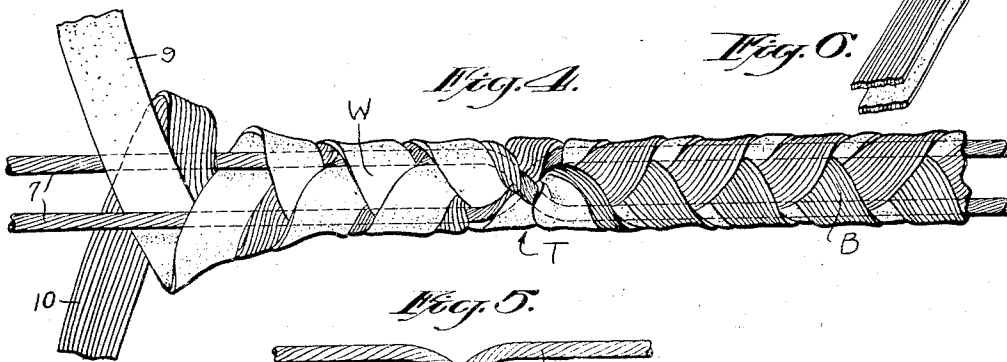
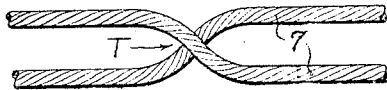


Fig. 5.



WITNESSES

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RUG.

1,381,832.

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To all whom it may concern:

Be it known that I, EMANUEL HEIDENHEIM, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Rug, of which the following is a full, clear, and exact description.

This invention relates to the textile industry and especially to the weaving of fabrics. More particularly the invention relates to an improved method of manufacturing rugs, and also relates to the particular construction of the rug or similar articles.

An object of the invention is to provide new and useful methods for manufacturing fabrics, and more particularly rugs, to the end that rugs may be more economically made, and that the color scheme of the rug may be so produced as to greatly facilitate the manufacture thereof.

It is also an object of this invention to provide new and useful manufacturing methods for the production of rugs which will enable the weaver to make a rug from a single strand or braid of material, and enable him to change the color of the rug to produce a finally completed article of manufacture having alternate bands or rings of colors to produce a rug of pleasing appearance.

It is a purpose to produce an article of manufacture, such as a rug, having a novel and improved weave or braid which enables the manufacturer to periodically reverse the side of the braid to vary the alternate color bands or rings of the rug.

It is an additional purpose to produce an article of manufacture, such as a rug, in accordance with the manufacturing methods constituting a part of my invention, which will enable the construction of rugs having a periodic color change without the necessity of changing the material.

With the above principal objects and others in view, the invention has relation to the certain manufacturing methods and article as set forth in the appended claim defining this invention, and one particular example of which is presented in the following specification and portrayed in the accompanying drawings, wherein:

Figure 1 diagrammatically represents one side of the rug; and Fig. 2 diagrammatically

represents the reverse side of the rug shown in Fig. 1.

Fig. 3 shows a detail view of a section of rug material broken away and removed from the rug to illustrate how the braid is reversed to change the color thereof.

Fig. 4 represents a detail view of the braid employed in making the rug. Fig. 5 shows the warp threads of the braid crossed to illustrate their position when the braid is reversed by the manufacturer.

Fig. 6 shows a fragmentary perspective view of two dissimilarly colored woof bands, with one band partly overlapping the other to facilitate an understanding of how the woofs are platted across the warps.

A rug, or fabric material, constructed in accordance with the plans of this invention is made up of a single braid, the said braid having two predominant colors. The braid itself is woven by using a pair of warp threads or strands which carry a pair of transversely woven or platted woof bands. Two woof bands are used, each of which is different in color from the other. For the purpose of the present specification, and in order to disclose the color arrangement employed in this invention, it is to be assumed that a blue and a white woof band will be used for making up the braid. The blue woof band is represented in the shaded portions of the drawings, while the white woof band is usually represented in the unshaded parts thereof or in the stippled parts of the drawings. The woof bands are so woven as to expose the major portion of the blue band on one side of the braid, while the white band is exposed on the other side of the braid. This mode of weaving produces a strand of material having a blue color on one side and white on the reverse side.

In presenting a more detailed disclosure of the invention, there is shown in Figs. 1 and 2 a single rug. These figures are made in diagrammatic form to simplify the disclosure of the method of weaving the rug. The figures illustrate the two sides of a rug, that is to say, Fig. 1 shows the top of the rug and Fig. 2 shows the reverse side thereof. It is to be observed how the central portion B of one side of the rug predominates in blue, while this same central portion of the rug on the reverse side thereof is white, as shown at W. The blue center

is immediately followed by a white band or ring W, and, likewise, the white ring or band W is followed by another blue band B. This is the case, except conversely in color arrangement, with the other side of the rug, as shown in Fig. 2.

The particular feature which characterizes this invention, and which enables the manufacturer to produce rugs having the alternate arrangement of colors as above described, resides in the novel method of producing the braid so as to make one side of the braid blue and the other side thereof white. I am aware that it is not new to manufacture rugs simply having an alternate color arrangement, whereby there is consecutively woven a blue and white ring, one around the other, to make a rug; but I do claim as new the method of producing the alternate color rings or bands by using first one side and then the other of a braided material so as to bring out the alternate color bands or rings.

Another feature which characterizes rugs made in accordance with plans of my invention, resides in the alternate arrangement of the color scheme to form both a blue and a white center on a single rug, where the blue is on one side thereof and the white on the reverse side thereof. Likewise, the white band W changes to a blue band B when the rug is observed from the other side. Therefore the colors B and W are adjacent one the other in the single rug, as seen by observing first one side of the rug and then the other.

A description will now follow of the manner of weaving a single braid having such novel characteristics as enables the manufacturer to produce a rug of the type above described. And then will follow a description of how the braid is joined together to make the rug.

With particular reference to Figs. 4 and 5, there is shown a pair of warp threads or strands 7. These threads or strands may be made of any suitable material, such as yarn, cotton or fiber. The warp strands 7 may be made by twisting together a number of smaller threads to produce a warp of suitable size and body. The warp threads 7 are held in a suitable weaving machine in parallel relation to receive and support a pair of transversely woven or platted woof bands.

A pair of woof bands 9 and 10 are platted upon the parallel warp threads 7. The white woof band 9 and the blue woof band 10 are so woven as to produce a braid predominantly white on one side and predominantly blue on the other side. The braid herein referred to is drawn in detail in Fig. 4 and represents the platted or woven warp threads and woofs, making the completed strand of material, usually about the width

as shown in Fig. 4 and of indeterminate length, from which rugs are made. The woof bands 9 and 10 are laid together in parallel relation with one band slightly overlapping the other band. For example, the white and blue woofs are started on the warps 7 by lapping the blue woof 10 partly over the white woof 9, as shown in Fig. 6. The woofs are carried across the parallel warps by inserting them first over one warp and under the next, weaving and winding the woof bands back and forth until a completed braid is made to appear as that shown in Fig. 4.

The woofs are so woven as to expose the blue band 10 on one side of the braid and the white band 9 on the other side of the braid. This is carried out through the agency of a braid machine employed for the purpose of weaving the braids, and which constitutes subject matter apart from the present application. The particular character of the weave, whereby blue is obtained on one side and white on the other, is effected by pushing the blue band 10 ahead of the white band when the woofs are thrown across one side of the warps during one cycle of the weaving operation, and by pushing the white band ahead of the blue band during the next cycle of the operation when the woofs are passed across the warps on the other side thereof.

The platted braid made as above described predominates in blue B on one side of the braid, and predominates in white W on the other side of the braid. This feature is disclosed in Fig. 4, where at T the braid is twisted to expose the blue side B and the white side W. Where the twist T occurs, the braid may be flattened and pressed out to remain the same width at the point T as along the entire body of the braid. The twist, therefore, does not mar the appearance of the braid since the warps and woofs are soft and pliable and may be pressed down to form a flat surface. Fig. 5 is presented to disclose the two warp threads 7 separate from the woofs to illustrate the manner of crossing the warps over at the twist T in order to reverse the sides of the woofs carried upon the warps.

Having thus described the method of producing the flat braid B—W, a description will now be given of how this novel braid is employed in the manufacture of rugs. The braid B—W is manufactured in any suitable lengths, it being preferable to make the braids as long as practical on the weaving machines. A rug is started by lapping a braid back on a portion of itself, as shown in Figs. 1 and 2. The braid is wound around the lapped portion in the form of a spiral until a blue center B, Fig. 1, is made. The braid may be spiral and wound around several times until the blue center B has as-

sumed the desired size, whereupon the side of the braid is reversed to expose the other color thereof. This is shown in the drawings at T, which points out the places where the braid is twisted to change the color thereof. The braid is now wound upon the blue center B until the desired width of the white band W is obtained, whereupon the braid is again twisted or reversed to change the color of the rug being made. This manner of twisting or reversing the side of the braid is carried out any number of times to produce the desired color scheme comprising the alternate color rings. After the rug is completed, one side thereof will have the appearance as shown in Fig. 1, while the other side thereof will be the reverse in color scheme and appear as in Fig. 2.

Fig. 3 discloses an enlarged detail of a fragment of the rug removed from near the center thereof to facilitate an understanding of the scheme employed to reverse the color pattern. In Fig. 3 it is noted how a portion thereof predominates in blue, or any dark color, and at the point T the braid is twisted over to reverse the color to show the white W, or any light color, side of the

braid. The adjacent braids are sewed together in any suitable manner, such as is shown in this figure, either by hand or by machine. At the point the braid is reversed or twisted, as at T, the braid is pressed down to make a smooth surface, and is likewise sewed to make a substantial, well appearing piece of textile work, such as the rug shown in the drawings.

Having thus described my invention, I desire to claim and secure by Letters Patent:

The method of manufacturing rugs which consists of forming a strand of two parallel cords of material, two strands of material of different color braided around and through said parallel cords in such a manner that the color of one of said strands predominates on one side of the finished product and the other color predominates upon the opposite side of said finished product, and subsequently wrapping said strand to form the rug, said strand being twisted at different points to form areas of different colors throughout the finished product.

EMANUEL HEIDENHEIM.