Jan. 19, 1943. R. E. WALLISER 2,308,577

RUG

Filed Sept. 12, 1940

Fig. 1.

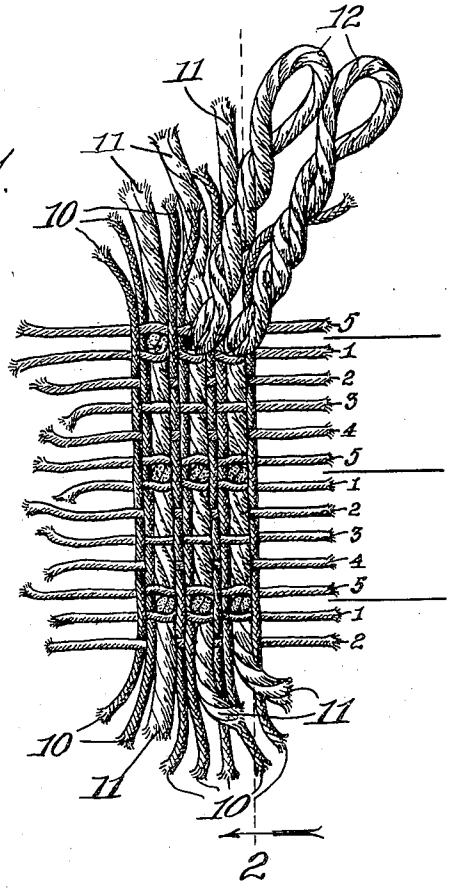
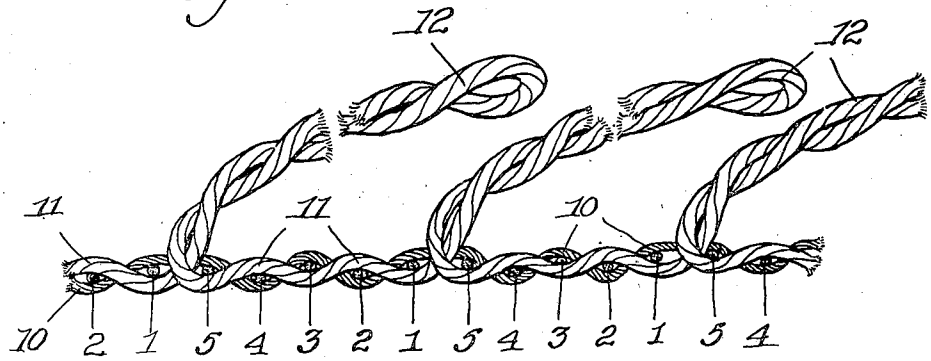


Fig. 2.



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2,308,577

RUG

Robert E. Walliser, Libertyville, Ill., assignor, by direct and mesne assignments, of one-third to Thor S. Johnson, Irvington, N. Y., as trustee, and one-third to William Stahl and one-third to Arthur Hanisch, both of Chicago, Ill.

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2 Claims. (Cl. 139—402)

This invention relates to a rug, and more particularly to a type of rug in which the upper body is formed by long, uncut, twisted loops.

A rug having long, twisted loops extending thereabove and providing a pleasing appearance, the long, twisted loops resembling what is known as bullion fringe, has long been in demand. By reason of the length of the twisted loops, it has always been felt necessary to form the loops separately and stitch them to a woven fabric base, a laborious and expensive operation. No one has attempted to form the long, twisted loops from integral portions of the woven rug because of the tendency of the loops, when formed in the manner in which cut, short-pile rugs are formed, to strip or pull out, forming unsightly threads.

I have discovered that by modifying the weaving operation, that a bullion twist rug can be formed integrally with the rug body, providing a sturdy and attractive product more pleasing in appearance than the rugs of this type heretofore formed.

An object of the invention is to provide a bullion twist form of rug in which the long loops are formed integrally with the rug body, a modification of the weaving operation being employed for securely locking the loops against being pulled out of place. Other specific objects and advantages will appear as the specification proceeds.

The invention is illustrated, in a preferred embodiment, by the accompanying drawing, in which—

Figure 1 is a broken top plan view of a fragment of the rug embodying my invention, some of the loops being cut off near their bases; and Fig. 2, a greatly enlarged sectional view, the section being taken as indicated at line 2 of Fig. 1.

In the practice of my invention, I prefer to employ two kinds of warp threads, namely pile warp and ground warp, and one kind of weft or filling thread. In the drawing, the weft threads are indicated in series of five's by the numerals 1 to 5 inclusive, while the ground warp threads are indicated by the numeral 10. The pile warp is indicated by the numeral 11, and the twisted loops by the numeral 12.

The weft or filling threads 1 to 5 inclusive, as well as the ground warp threads 10, are preferably tightly twisted to form a sturdy tight body for gripping the pile warp. The pile warp in the illustration given is a two-ply structure, each ply being first slack-twisted and then brought together and over-twisted. The over-twist substantially takes out the slack-twist in the individual plies, and the resulting twisted warp thread is bulky in appearance and relatively soft. Such pile warp 11 is tightly gripped between the closely drawn weft threads and ground threads and securely held in position where at least five weft threads are employed between each loop. By employing long loops which extend well beyond the space between loops and by spacing the loops closely together in a lateral direction, that is, in the direction of the weft threads, I provide a pile body which completely covers the underbody structure, giving a very attractive appearance while at the same time providing loops which will not be drawn from the rug body in the use of the rug. Because of the short pile heretofore used in the making of rugs, it has been customary to employ only a few weft threads between each row of loops, and with such a structure it was impossible to employ long, twisted loops of the type now shown. However, in the practice of my invention where long loops are employed tending to bridge over and cover the spaces between the rows of loops, it is possible to use at least five weft threads between each row of loops and thus securely lock the threads against drawing. The softeness or the loosely-woven character of the warp threads not only provide a more attractive rug from the standpoint of appearance, but also cooperate with the tightly-drawn and twisted weft and ground threads for locking the pile warp against longitudinal movement under strain. While the large number of weft threads between the rows of loops has heretofore seemed prohibitive by reason of the open space left, I find that the long loops employed more than cover such surface and conceal it sufficiently to render the rug attractive in appearance. It will be understood that seven weft threads between rows and a larger number of weft threads between the spaced rows result in an extremely attractive and sturdy rug. With less than five rows, I find that a usable and workable rug cannot be produced.

By means of the above rather simple steps, I find that it is no longer necessary to stitch the individual loops to a woven fabric body and that, instead, a very sturdy rug which will stand up under the use to which rugs are put, can be produced much more cheaply and with less loss than such former rugs while at the same time having the entire rug integral. The rug can be laundered and passed through a wringer without injury thereto and without distortion of the loops forming the upper portion of the rug body.

While in the foregoing description, I have set

forth certain details, it will be understood that such details are given for the purpose of illustration only and that it will be obvious to men skilled in the art that changes in such details may be made without departing from the spirit of my invention.

I claim:

1. A rug of the class set forth, consisting essentially of ground and pile warp threads interwoven with weft threads, the pile warp threads being formed of over-twisted ply-yarn, each of the plies of which is slack twisted, each of the pile warp threads being spaced apart from the next adjacent pile warp threads by a pair of ground warp threads, one of said pair of ground warp threads being in the same shed with the pile warp threads whereby the weft threads pass on the same side of the pile warp thread and one of the ground warp threads and on the opposite side of the other of the pair of ground warp threads, the pile warp threads at spaced intervals being drawn from the woven fabric to form long spirally twisted loops constituting the upper body of the rug, the loops being of greater length than the distance by which they are spaced apart, each loop being drawn upwardly between two next adjacent weft threads, one of said pair of ground warp threads passing over said two weft threads.

2. A rug of the class set forth, consisting essentially of ground and pile warp threads tightly interwoven with weft threads, the pile warp threads having a relatively high twist and being soft and bulky and the weft and ground warp threads being tightly twisted and relatively hard, each of the pile warp threads being spaced apart from the next adjacent pile warp threads by a pair of ground warp threads, one of said pair of ground warp threads being in the same shed with the pile warp threads whereby the weft threads pass on the same side of the pile warp thread and one of the ground warp threads and on the opposite side of the other of the pair of ground warp threads, the pile warp threads at spaced intervals being drawn from the woven fabric to form long spirally twisted loops constituting the upper body of the rug, the loops being spaced apart by not more than five weft threads and being of a greater length than the distance by which they are spaced apart, each of the loops being drawn upwardly between two next adjacent weft threads, one of said pair of ground warp threads passing over said two weft threads.

ROBERT E. WALLISER.