Abstract of the Disclosure

Tufted cord for rugs comprising at least one main core material, one side auxiliary core material extending parallel with the main core material, a plurality of wrapping or covering materials wound spirally around both the main core material and the side auxiliary core material tightly together to form a cord body, and a plurality of tuft-forming materials wound between the side auxiliary core material and the main core material and being held tightly theretwixt and extending outwardly from the side auxiliary core material and forming a plurality of tufts, the said plurality of wrapping or covering materials for the cord body and the said plurality of tuft-forming materials being alternately wrapped and wound at least one at a time around the side auxiliary core material.

This invention relates to improvements in cord for rugs, wherein fringe is formed around the outer periphery of a rug composed of brads or cords sewn up into a circinate, juxtaposed or other desired forms, or wherein pile is formed on the surface of a rug proper.

As regards the conventional means for forming fringe around the outer periphery of a so-called braided rug, tubular braided rug or wrap-a-round rug, there has hitherto been proposed and practiced a means of sewing or otherwise attaching to the outer periphery of a rug, a fringe which has been made in a separate production process, and which comprises fringe-forming yarns or threads woven or seamed otherwise to the base material for the fringe.

However, this conventional means is quite disadvantageous in that it not only requires the attaching to the outer periphery of a rug, of a fringe prepared separately, after the rug is sewn up, which inevitably causes difficulty of color matching between a rug proper and a fringe because of the separate preparation, but also the fringe tends to come off the rug proper, if the sewing is imperfect or the sewing threads are frictionally damaged or broken.

Moreover, in the described conventional construction, the sewn-on base of the fringe always appears on one side of the outer periphery of a rug proper, and therefore detracts considerably from the appearance of such sides of the rug where the base material for the fringe is stitched to the rug, and thus the rug cannot be used up-side down, if such a rug is to be reversible. Furthermore, it has seldom been proposed or practiced to use a pile construction in the production of braided rugs or the like rugs.

The primary object of this invention is to provide a tufted cord for rugs at low cost, which is capable of forming a looped form or a cut form of fringe around the outer periphery of a rug proper by integrally weaving the fringe thereinto in an easily feasible manner so as to greatly improve the external appearance of the rug, and which is also capable of forming a looped form or a cut form of pile on the surface of a rug so as to give an unusual appearance of the rug having a thick feeling to the hands and an attractive appearance to the eyes.

Another important object of this invention is to provide a tufted cord for rugs, which will hold tufts integrally even if the tufts of the fringe or of the pile are not stitched or otherwise reinforced at the base where they come out from the cord, and which accordingly will give an elegant external appearance and a suitability for the mass production of the rugs.

According to the invention, the tufted cord for rugs comprises at least one main core material, one side auxiliary core material extending parallel with the main core material, a plurality of wrapping or covering materials wrapped spirally around both the main core material and the side auxiliary core material, making a cord body, and a plurality of tuft-forming materials wound around the side auxiliary core material forming a number of looped tufts extending outwardly from the side auxiliary core material, and the said plurality of wrapping or covering materials and the said plurality of tuft-forming materials being alternately wrapped and wound at least one at a time around the side auxiliary core material. The said looped tufts on the cord may be cut or un-cut, in either case forming attractive and durable tufts for fringe or pile.

Thus, the tufted cord for rugs according to the invention has advantages in that the wrapping or covering materials for the cord body and the tuft-forming materials are so tightly held by each other through the intermediary of the side auxiliary core material that they are not likely to become loose even without sewing the base of the tufts for reinforcement. The dispensation with such a stitch not only makes possible mass production at low cost but also gives uniform and attractive appearance on both sides of a rug, in contrast with the conventional rug with a sewn-on fringe, which carries an unsightly seam for the fringe on one side of the outer periphery of the rug.

Furthermore, by using multi-colors for both the plurality of the wrapping or covering materials for the cord body and the plurality of the tuft-forming materials, there can be obtained an elegant tufted cord having a complex and colorful design or pattern. In this case, the color of the wrapping or covering materials for the cord body and the tuft-forming materials can be arranged to match each other, at least one each in a set, as they are wrapped and wound, thereby making the tufts look more trim and natural.

Having such advantageous features, as described above, the tufted cord for rugs of the present invention can conveniently be attached, either by sewing or in any other manner, to the outer periphery of a rug proper with the tufted portion laid horizontally outwardly from the rug proper to make a fringed rug, both sides of which may be attractive and reversibly used. In another application, there can also be constructed a pile rug having a thick feeling to the hands and an attractive appearance to the eyes with this tufted cord sewn up by using the tuft-bearing side upward and parallel. This feature contributes remarkably to the marketability of the rugs which have conventionally been flat and rather monotonous.

These and other objects will be better understood from the following specification and attached drawings, in which:

FIGURE 1 is a perspective view of an example of the tufted cord for rugs according to the invention, with part thereof shown unwrapped;

FIGURE 2 is a perspective view of another example of the tufted cord for rugs according to the invention, in which the free ends of the tufts in the form of loops as shown in FIGURE 1 are cut;

FIGURE 3 and FIGURE 4 respectively are perspective schematic views showing the fundamental construction of the tufted cord for rugs according to the invention;
FIGURES 5 through 10 respectively are sectional views showing alternative types of the tufted cord for rugs having a cut form of tufts according to the invention; FIGURES 11 through 15 respectively are schematic views illustrating the mode of use of the tufted cord for rugs according to the invention, of which FIGURES 11 and 12 respectively are schematic cross-sectional views showing the condition in which the tufted cord for rugs shown in FIGURES 5 and 6 is sewn to the outer periphery of a rug proper with its tufts laid horizontal to provide fringe; FIGURES 13 and 14 respectively are schematic cross-sectional views of pile rugs in which a plurality of tufted cords for rugs shown in FIGURES 5 and 6 are sewn up side by side so as to have their tufts held upward to provide pile; and FIGURE 15 is a schematic plan view in part, illustrating a rug with the tufted cord of the invention sewn or attached otherwise to the outer periphery of a circinate rug R in such a manner that its tufts are laid horizontal to form fringe.

Rugs made particularly to the drawings, the tufted cord for rugs as shown in FIGURE 1 comprises a heavy or thick main core material 1, a fine or thin side auxiliary core material 2, Wrapped around the main core material and the side auxiliary core material are six fine wrapping or covering materials 3. Also wound around the side auxiliary core material are six fine tuft-forming materials 4. In that case, the six wrapping or covering materials 3 and the six tuft-forming materials 4 are wrapped and wound alternately one at a time around the side auxiliary core material 2, the tuft-forming materials 4 forming a number of looped tufts 5 on one side of the body of the cord.

In FIGURE 1, the marks "- - - - - - - " and "xxx xxxxx" shown on the wrapping or covering materials 3 for the cord body and the tuft-forming materials 4 indicate the different coloring of these materials.

The materials and other features of the tufted cord for rugs according to the invention will hereinafter be described.

For the main core material 1 there can be used a long flexible soft cord of long or short fiber bundle, a synthetic resin tube, core-like sponge rubber, etc. For the side auxiliary core material 2 there can be used a tough and flexible yarn, for example, of high tenacity synthetic origin, jute, hemp and other strong suitable fibers or fine metallic wire.

The wrapping or covering materials 3 and the tuft-forming materials 4 are preferably yarns of wool, cotton, or other fibers which may be easily colored or dyed and which feel soft. In some cases, tape may be used therefore. Further, the wrapping or covering materials 3 for the cord body and the tuft-forming materials 4 may be of the same material, or they may be of different materials.

In this embodiment, the numerous looped tufts 5 made up of the tuft-forming materials 4 are so tightly secured and fastened to the cord body through the intermediary of the side auxiliary core material 2 and the wrapping or covering materials 3 for the cord body, that the looped tufts 5 would not be deformed or slipped off even without a stitch along the base of the tufts. However it might prove more desirable, under certain circumstances, to provide a stitch along the base of the tufts 5 with a sewing thread 6 or to bond the base of the tufts by a bonding agent, to definitely prevent deformation and/or slipping off of any tuft.

Further, the tufted cord for rugs of the present invention may be sewn or otherwise attached, with its looped tufts 5 laid horizontally, to the outer periphery of a rug proper, whereby an attractive reversible rug with a looped fringe is made, or alternatively, the present tufted cord for rugs may be sewn up into a circinate, juxtaposed or other desired form with the looped tufts 5 held upward, whereby there is obtained a beautiful rug with pile which will give an unusual appearance to the rug having a thick feeling to the hands and an attractive appearance to the eyes.

FIGURES 16 and 17 show further versions of the embodiments of the tufted cord for rugs according to the invention, wherein the free ends of the tufts 5 in the form of loop shown in FIGURE 1 are cut to constitute a cut form of tufts 5'.

In these embodiments, the resulting rug will have a more trim and attractive fringe or pile, as the case may be, than the foregoing examples, in which the tufted cord for rugs of the present invention may be sewn or otherwise attached, as shown in FIGURE 11, with its cut tufts 5' laid horizontally, to the outer periphery of a rug proper, or the tufted cord for rugs of this invention may be sewn up into a circinate, juxtaposed or other desired form, with the cut tufts 5' held upward, as shown in FIGURE 13. In all other respects, i.e., materials, advantages, and modes of use, etc., this tufted cord for rugs is entirely identical to the embodiment described hereinbefore.

FIGURE 4 is still another version of the tufted cord for rugs of the present invention, wherein the mode of tuft-forming is different from that shown in FIGURES 1 and 3. According to this embodiment, the tuft-forming materials 4, after being wound around the side auxiliary core material 2, are twisted in a figure-eight form, thereby providing the advantage of further assuring the better anchoring of the tufts as compared with the embodiments described hereinbefore. Otherwise the features of this embodiment are all the same as those described hereinbefore.

FIGURE 6 shows yet another example of tufted cord for rugs with a cut form of tufts 5' formed by cutting the free ends of the looped tufts 5 shown in FIGURE 4. As shown in FIGURE 12, this tufted cord for rugs may be sewn or attached otherwise, with its cut tufts 5' laid horizontally, to the outer periphery of a rug proper, or as shown in FIGURE 14, this tufted cord for rugs may be sewn up into a circinate, juxtaposed or other desired form, with its cut tufts 5' held upward, either one of which will provide a rug with a better anchored fringe or pile as compared with the embodiments shown in FIGURES 11 and 13.

FIGURES 7 and 8 respectively show still other different embodiments of the tufted cord for rugs according to the invention, wherein thick cores of the substantially same size are used for both the main core material 1 and the side auxiliary core material 2, and the tuft-forming materials 4 are wound in the above-mentioned two different tuft-forming manners, respectively, to provide a cut form of tufts 5'.

FIGURES 9 and 10 respectively show still further different embodiments of the tufted cord for rugs according to the invention, wherein the side auxiliary core material 2 is larger in size than the main core material 1, and the tuft-forming materials 4 are wound in the above-mentioned two different tuft-forming manners, respectively, to provide a cut form of tufts 5'.

In each of the above embodiments, six wrapping and covering materials for the cord body and six tuft-forming materials have been wrapped and wound alternately one at a time, but the number of these materials to be used and the number of them to be wrapped and wound at a time are not limited thereto but can be varied for example, ten or twenty each of the wrapping or covering materials for the cord body and the tuft-forming materials could be wrapped and wound alternately one, two or more at a time around the side auxiliary core material, or six of the wrapping or covering materials for the core body and an increased number of the tuft-forming materials such as twelve could be wrapped and wound alternately at the ratio of 1 to 2 around the side auxiliary core material.
Furthermore, in sewing up a rug into a pile rug form of a circinate, juxtaposed or other desired form, a shaggy pile rug with fringe, which is not illustrated herein, can be obtained, if the tufted cord for rugs of the present invention, which carries comparatively longer tufts, is used for sewing rugs at a suitable interval, such as every two or three rows of the conventional braids or cords, with said tufts held upward, and if the tufted cord for rugs of this invention is sewn or attached otherwise to the outer periphery of said pile rug proper, after such a pile rug proper is sewn up. Since the pile is arranged at a certain suitable interval on the surface of a rug, and said pile is made comparatively longer, the tuft legs assume random angular positions in all directions on the surface of the rug proper to present a shaggy effect of the pile and the ground pattern of the rug comes in sight through said shaggy pile, both of which factors will give an unprecedented bulky yet shaggy character in this type of the rugs, particularly when incorporated with the fringe arranged at the outer periphery of the rug.

While the invention has been described with reference to the principal embodiments, those are only for the purpose of illustration and the invention is not limited thereto, and many changes and modifications other than those described above may be made by a person skilled in the art. However, it is to be understood that it is intended to cover all such changes and modifications so long as they do not depart from the scope of the invention as defined in the appended claims.

What is claimed is:

1. Tufted cord for rugs comprising at least one main core material, one side auxiliary core material extending parallel with the main core material, a plurality of wrapping or covering materials wrapped spirally around both the main core material and the side auxiliary core material and holding the main core material and side core material tightly together to form a cord body, and a plurality of tuft-forming materials wound between the side auxiliary core material and the main core material and being held tightly therebetween and extending outwardly from the side auxiliary core material and forming a plurality of tufts, the said plurality of wrapping or covering materials being alternately wrapped and wound at least one at a time around the side auxiliary core material.

2. Tufted cord for rugs as claimed in claim 1 in which the tuft-forming materials are spirally wound on the auxiliary core material and are in the form of looped tufts.

3. Tufted cord for rugs as claimed in claim 1 in which the tuft-forming materials are twisted in figure-eight form on the auxiliary core material and are in the form of looped tufts.

4. Tufted cord for rugs as claimed in claim 1 in which said side auxiliary core material is smaller in size than said main core material.

5. Tufted cord for rugs as claimed in claim 1 in which said main core material is substantially the same in size as said side auxiliary core material.

6. Tufted cord for rugs as claimed in claim 1 in which said main core material is smaller in size than said side auxiliary core material.

7. In combination, a rug, and a tufted cord attached to the outer periphery of the rug, said tufted cord comprising at least one main core material, one side auxiliary core material extending parallel with the main core material, a plurality of wrapping or covering materials wrapped spirally around both the main core material and the side auxiliary core material and holding the main core material and side core material tightly together to form a cord body, and a plurality of tuft-forming materials wound between the side auxiliary core material and the main core material and being held tightly therebetween and extending outwardly from the side auxiliary core material and forming a plurality of tufts, the said plurality of tufts extending horizontally outwardly from the rug proper to provide a fringe, the said plurality of wrapping or covering materials for the cord body and the said plurality of tuft-forming materials being alternately wrapped and wound at least one at a time around the side auxiliary core material.

8. A rug comprised of a tufted cord comprising at least one main core material, one side auxiliary core material extending parallel with the main core material, a plurality of wrapping or covering materials wrapped spirally around both the main core material and the side auxiliary core material and holding the main core material and side core material tightly together to form a cord body, and a plurality of tuft-forming materials wound between the side auxiliary core material and the main core material and being held tightly therebetween and extending outwardly from the side auxiliary core material and forming a plurality of tufts, the said plurality of wrapping or covering materials for the cord body and the said plurality of tuft-forming materials being alternately wrapped and wound at least one at a time around the side auxiliary core material, the cord being arranged with the lengths thereof side by side with the tufts extending upwardly to form a pile.

References Cited

UNITED STATES PATENTS

2,322,060 6/1943 Samuels
3,153,366 10/1964 Iwal

FOREIGN PATENTS

701,642 1/1931 France.
5,557 9/1892 Switzerland.

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