No. 783,328. PATENTED FEB. 21, 1905.

C. C. STEWART.

WOVEN CARPET FABRIC.

APPLICATION FILED MAY 11, 1904.

Fig. 1.

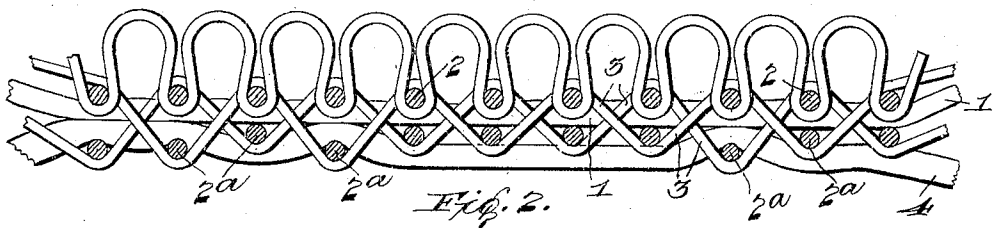


Fig. 2.

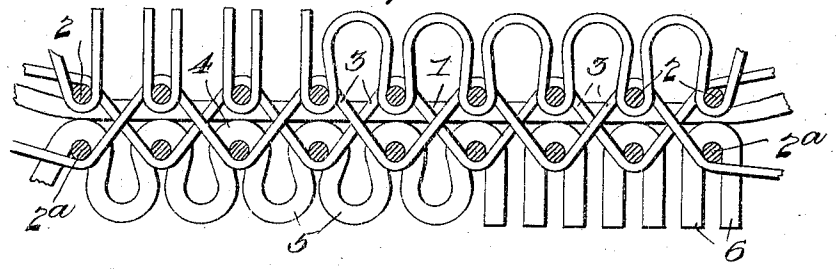


Fig. 3.

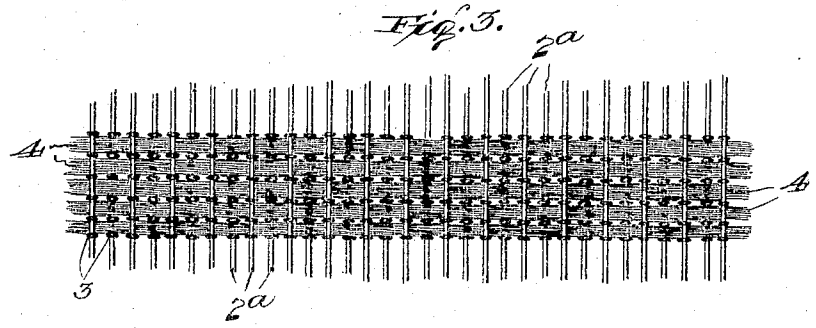
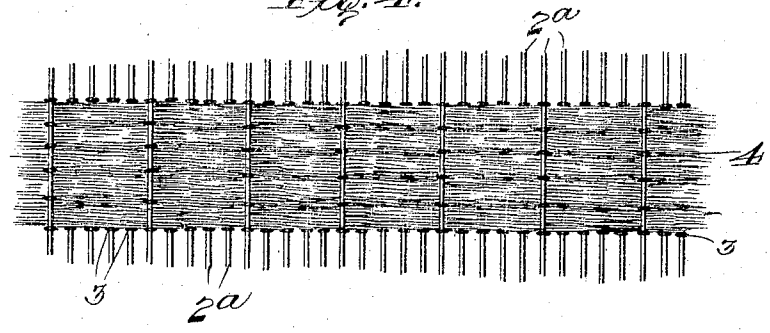


Fig. 4.



WITNESSES:

D. L. Moorhouse

Roy Q. Claflin

INVENTOR.

Charles Carroll Stewart

BY Edson Bros.

Attorneys

No. 783,328. Patented February 21, 1905.

UNITED STATES PATENT OFFICE.

CHARLES CARROLL STEWART, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ARCHIBALD T. JAMES, OF PHILADELPHIA, PENNSYLVANIA.

WOVEN CARPET FABRIC.

SPECIFICATION forming part of Letters Patent No. 783,328, dated February 21, 1905.

Application filed May 11, 1904. Serial No. 207,360½.

To all whom it may concern:

Be it known that I, CHARLES CARROLL STEWART, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Woven Carpet Fabrics; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to carpet fabrics, and has for its object to do away with the use of the ordinary carpet-linings and provide a carpet with a soft stuffer-thread woven in at the back of body Brussels, Wilton, as well as tapestry carpet. Even the best grades of carpet-lining are uneven in thickness, owing to the fact that the filling between the usual paper-sheets is composed of short pieces of yarn, jute, cotton, &c., and scraps, separately or in combinations, which are not evenly distributed between the sheets or if so distributed thereafter collect in lumps, and thereby make the surface of the carpet uneven and cause it to wear thin in places.

My invention insures an even surface to a carpet or at least a substantially uniform distance from the top of the carpet to the floor on which it rests. In other words, the carpet and its lining are in one piece, are of uniform thickness, and follow the contour or convolutions of the surface of the floor, whereby a soft tread is given to the carpet. Its life is increased, and the trouble of securing a lining in place and of replacing it when displaced is avoided.

To these ends my invention consists in adding soft cushioning-warps at the back of the carpet below the yarn.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a sectional view showing straight tufts of cushioning-warps. Fig. 2 is a like view showing looped tufts. Fig. 3 is a view of back of carpet, showing the cushioning-tufts caught over every second weft; and Fig. 4 is a similar view showing said tufts caught over every sixth weft.

Referring more particularly to the drawings, 1 are the ordinary backing or stuffer warps. 2 2^a are the wefts, and 3 are the binding warp-threads. My additional soft filling or cushioning warps 4 are woven in below the backing or stuffer warps 1 above the lower wefts 2^a. Said cushioning-warps may be caught over each weft, every third one, every sixth one, and so on, to suit any requirements. It may be drawn taut, so that it will lie flat, as in Fig. 1, or it may be formed loosely over wires, leaving loops or tufts 5, as shown in Fig. 2. In the latter case the loops or tufts may be cut, as at 6, like the pile in a velvet carpet. It is obvious that these cushioning-warps may pass under every weft, leaving space between the weft for them to be cut and project, as in a velvet carpet. It would be impractical to cut the yarn, however, when the tufts are longer, as they would leave spaces between them.

It is obvious that the soft filling or cushioning warps may be made of any desired weight and any desired number of strands may be used between adjacent warps. By the simple addition of this soft material as a lining, forming part of the carpet itself, the use of separate linings is dispensed with, while the cost of a fabric with my addition will be very slight over that of the ordinary carpet without it. This soft addition also prevents sprouting of the yarns and cutting off of the colors.

My invention is particularly applicable to rugs, especially when used on hard-wood or tile floors. If an ordinary lining is used on a tile floor, it must be glued down in order to hold it in place, and unless the rug is glued to the lining it will slide off the lining. Even when the rug is glued to the lining it will pull away in a comparatively short time, as the edges stretch. On hard-wood floor if pins and sockets are used when the edges give and stretch the pins must be taken up and new holes made in the floor, and if tacks are used they mar the appearance of the rug. All these disadvantages are overcome by the use of my invention, in which the lining is a part of the carpet itself.

In applying my invention to body Brussels or Wiltons the yarn forming the lining of the carpet is woven in at the back by having the strands of the yarn pass under the desired number of wefts at the desired intervals, as hereinbefore explained in applying my improvement to other styles of carpets.

I am aware that changes may be made in the construction herein shown and described without departing from the spirit or sacrificing the advantages of my invention. I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

1. In a carpet fabric, the combination with upper and lower wefts, binding warps and pile, of soft cushioning-warps woven in above some of the lower wefts at the back of the carpet.

2. In a carpet fabric, the combination with upper and lower wefts, binding warps and pile, of soft cushioning-warps woven in at the back of the carpet, said cushioning-warps caught over some of the lower wefts and skipped under others.

3. In a carpet fabric, the combination with upper and lower wefts, binding warps and pile, of soft cushioning-warps woven in above the lower wefts to form tufts at the back of the carpet.

4. In a carpet fabric, the combination with warp-threads, upper and lower weft-threads, and backing or stuffer warps, of cushioning-warps arranged between said stuffer-warps and lower weft-threads.

5. In a carpet fabric, the combination with warp-threads, upper and lower weft-threads and backing or stuffer warps, of cushioning-warps arranged in loops or tufts between said stuffer-warps and lower weft-threads.

6. In a carpet fabric, the combination with warp-threads, upper and lower weft-threads and backing or stuffer warps, of cushioning-warps arranged in cut loops or tufts between said stuffer-warps and lower weft-threads, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES CARROLL STEWART.

Witnesses:

WM. H. THORNLEY,

J. FRED DE HART.