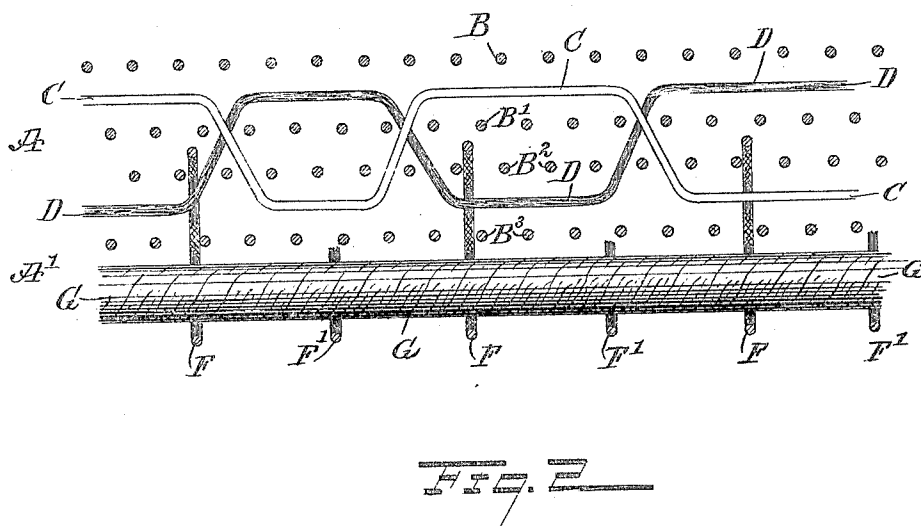
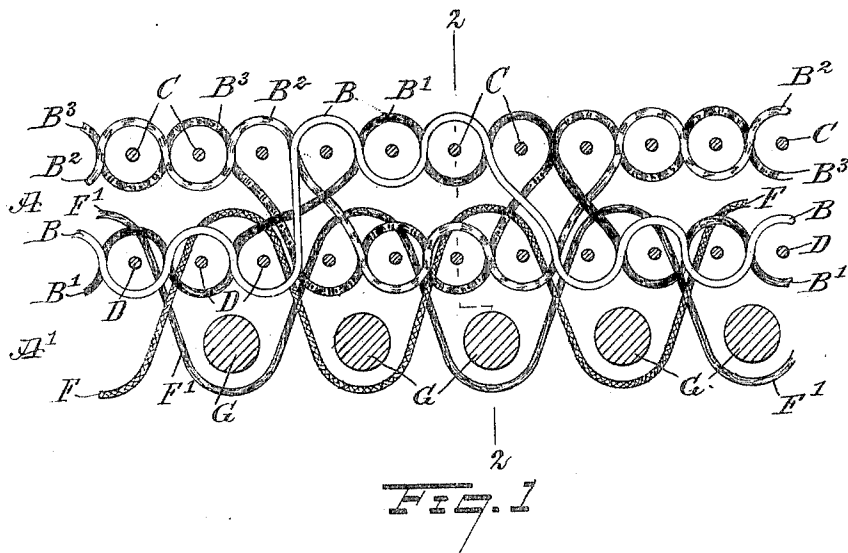


No. 820,825.

PATENTED MAY 15, 1906.

H. SARAFIAN.
WOVEN FABRIC.

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WITNESSES:

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WOVEN FABRIC.

No. 820,825.

Specification of Letters Patent.

Patented May 15, 1906.

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To all whom it may concern:

Be it known that I, HOVCEP SARAFIAN, a citizen of the United States, and a resident of Yonkers, in the county of Westchester and State of New York, have invented new and Improved Woven Fabrics, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved woven fabric designed for use as carpets, rugs, and the like and arranged with an exceedingly strong back to give the desired lateral stiffness to the fabric and to insure a soft tread.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a longitudinal sectional elevation of the improvement, and Fig. 2 is a cross-section of the same on the line 2 2 in Fig. 1.

The woven fabric consists, essentially, of a face weave A and a reinforcing bottom or back weave A', and the said face weave A is preferably a multiply weave of the ingrain type. For instance, as shown in the drawings, it is composed of sets of warps, each set consisting of, say, four differently-colored warps B, B', B², and B³ and sets of wefts, each set containing the differently-colored wefts C and D interwoven with the said warps B, B', B², and B³. The wefts C and D cross each other in an up-and-down direction, and each weft spans a plurality of adjacent warps between successive crossings, as plainly indicated in Fig. 2, the wefts having alternately single upper and lower wefts instead at the crossings.

Each of the warps B, B', B², and B³ is first interwoven with a plurality of adjacent upper or lower wefts and then with a plurality of lower or upper wefts. For instance, as shown in Fig. 1, the warp B, starting from the left to the right, is first interwoven with three adjacent wefts D, then rises and is interwoven with three upper wefts C, and then passes down and is interwoven with three lower wefts D, and so on throughout the length of the fabric, it being understood that the warps B, B', B², and B³ pass to the face of the fabric by the action of the jacquard as

often as required, according to a predetermined pattern, the corresponding weft immediately below such face-warp being of the same color as this face-warp. By the arrangement described a simple and durable face weave A is produced, the component members of which are preferably of a good quality of woolen, worsted, or cotton yarns.

The reinforcing bottom weave A' consists of sets of warps F and F' and heavy thick filling-wefts G, made of jute or like material. The warps F and F' are interwoven with the filling-wefts G and with the lowermost wefts of the face fabric A, so as to attach the reinforced and bottom weave A' to the back of the face weave A. By this arrangement the desired lateral stiffness is given to the fabric to render the same sufficiently heavy to properly lie on the floor without danger of wrinkling, at the same time insuring a soft smooth tread.

The filling-wefts G are less in number than the wefts C or D. For instance, as shown in Fig. 1, there is one filling-weft G for every two wefts C or D, and each warp F or F' is interwoven with each filling-weft and with two adjacent bottom wefts C or D of the face weave A. By the arrangement described neither the warps F or F' nor the filling-wefts G are visible on the face of the fabric, so that the design or pattern thereof is not marred in the least by the reinforcing bottom weave A'.

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

1. A woven fabric comprising a multiply face weave and a reinforcing bottom weave having its whole warp interwoven with the weft of the lowermost ply of the said face weave.

2. A woven fabric comprising a double face weave having sets of wefts arranged one above the other and sets of warps interwoven with the said sets of wefts, and a bottom weave having heavy filling-wefts and binding-warps each interwoven with the said heavy wefts and with the wefts of the lowermost set of wefts of the said face weave.

3. A woven fabric comprising a double face weave having sets of wefts arranged one above the other and pairs of warps interwoven with the said sets of wefts, each warp progressively engaging first a plurality of adjacent wefts of one set of wefts, and then en-

gaging a plurality of adjacent wefts of the other set of wefts, and a bottom weave having heavy filling-wefts and binding-warps interwoven with the said heavy filling-wefts and
5 with a plurality of wefts of the lowermost set of wefts of the said face weave.

4. A woven fabric comprising a double face weave having sets of wefts arranged one above the other and pairs of warps interwoven with the said sets of wefts, each warp
10 progressively engaging first a plurality of adjacent wefts of one set of wefts, and then engaging a plurality of adjacent wefts of the other set of wefts, and a bottom weave having
15 heavy filling-wefts and binding-warps interwoven with the said heavy filling-wefts and with a plurality of wefts of the lowermost set of wefts of the said face weave, each heavy filling-weft corresponding to at least two of
20 the said wefts of the lowermost set of wefts of the said face weave.

5. A woven fabric comprising a double face weave having sets of wefts arranged one above the other and pairs of warps interwoven with the said sets of wefts, each warp
25 progressively engaging first a plurality of adjacent wefts of one set of wefts, and then engaging a plurality of adjacent wefts of the other set of wefts, oppositely-disposed wefts
30 of the said weft-threads crossing each other alternately in an up-and-down direction, and a bottom weave having heavy filling-wefts and binding-warps interwoven with the said heavy filling-wefts and with a plurality of
35 wefts of the lowermost set of wefts of the said face weave.

6. A woven fabric comprising a double

face weave having sets of wefts arranged one above the other and pairs of warps interwoven with the said sets of wefts, each warp
40 progressively engaging first a plurality of adjacent wefts of one set of wefts, and then engaging a plurality of adjacent wefts of the other set of wefts, each weft of the said sets of weft-threads spanning a plurality of adjacent
45 warps, and a bottom weave having heavy filling-wefts and binding-warps interwoven with the said heavy filling-wefts and with a plurality of wefts of the lowermost set of wefts of the said face weave.
50

7. A woven fabric comprising a double face weave having sets of wefts arranged one above the other and pairs of warps interwoven with the said sets of wefts, each warp
55 progressively engaging first a plurality of adjacent wefts of one set of wefts, and then engaging a plurality of adjacent wefts of the other set of wefts, oppositely-disposed wefts of the said sets of weft-threads crossing each other alternately in an up-and-down direction and each weft of the said sets of weft-threads spanning a plurality of adjacent
60 warps, and a bottom weave having heavy filling-wefts and binding-warps interwoven with the said heavy filling-wefts and with a
65 plurality of wefts of the lowermost set of wefts of the said face weave.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HOVCEP SARAFIAN.

Witnesses:

THEO. G. HOSTER,
EVERARD B. MARSHALL.