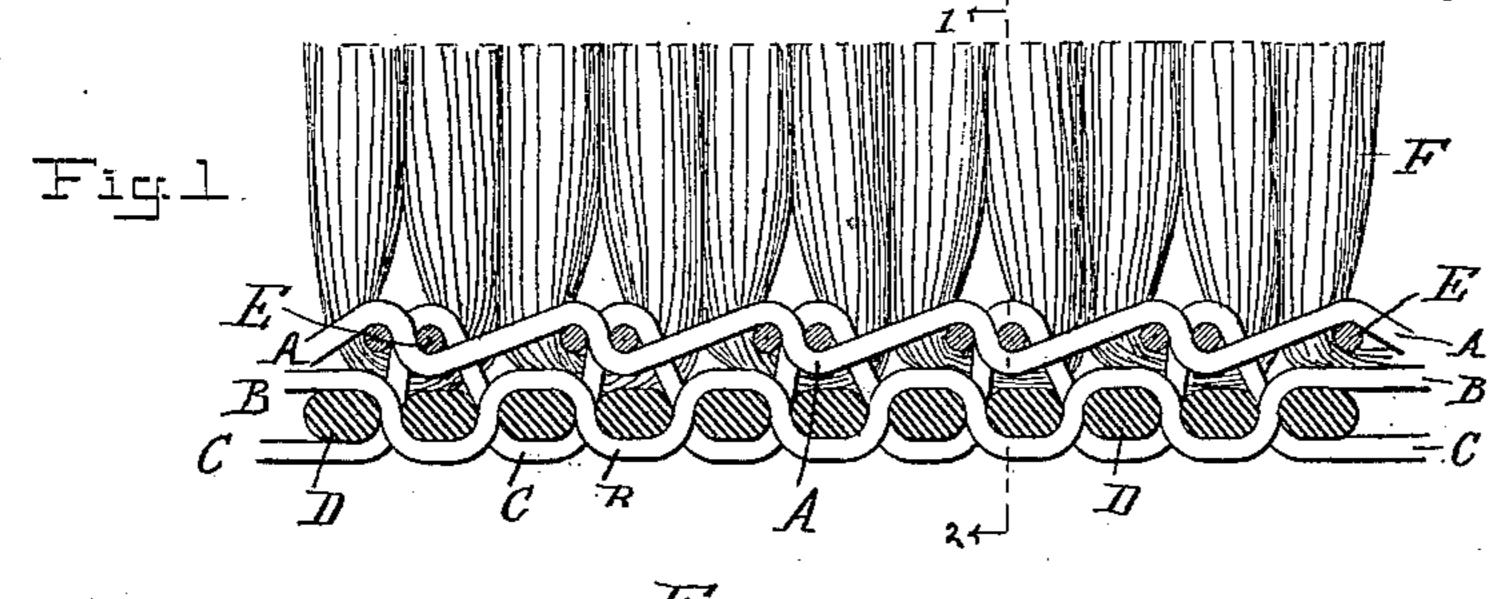
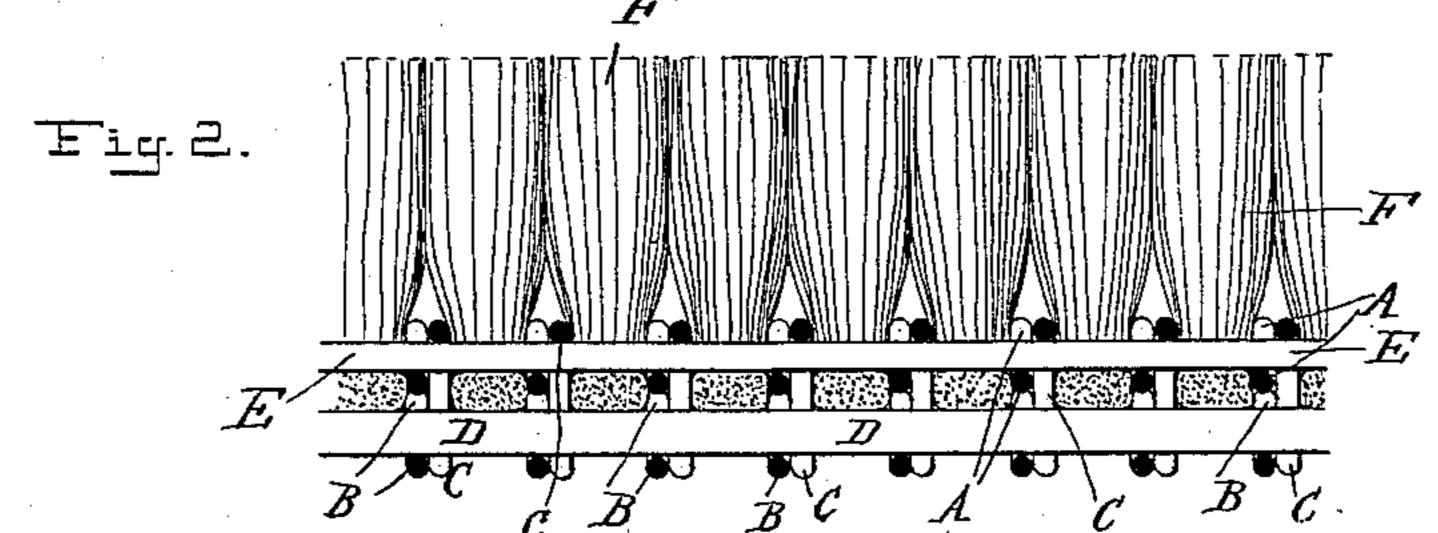
W. C. SANFORD.

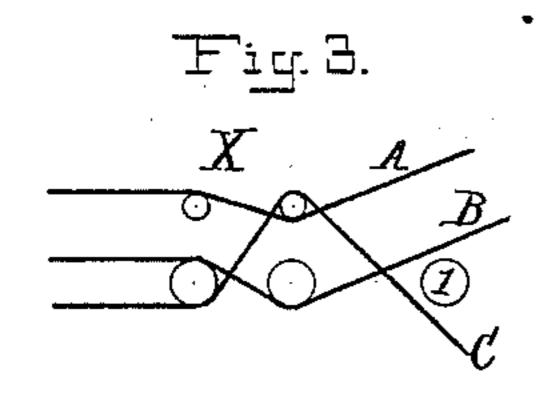
AXMINSTER OR MOQUETTE CARPET FABRIC.

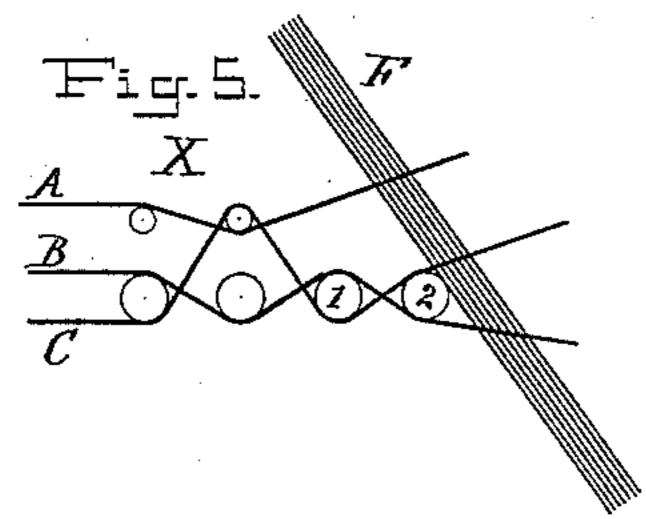
No. 428,022.

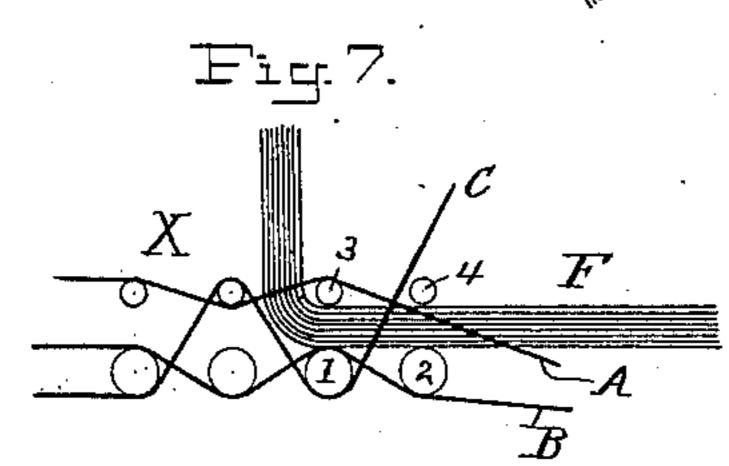
Patented May 13, 1890.

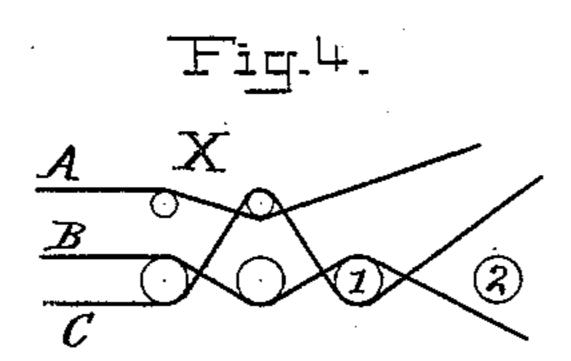


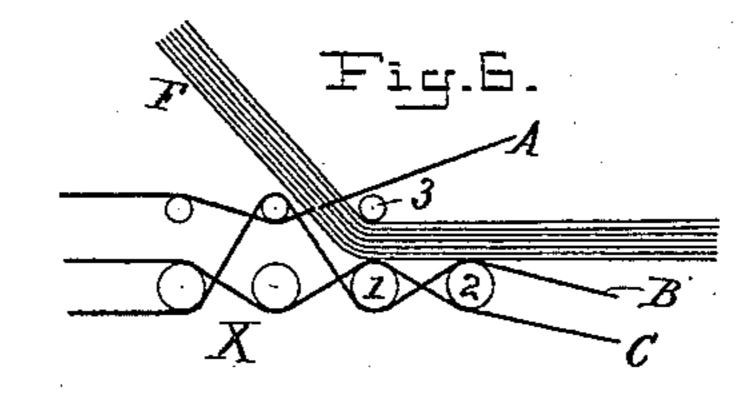


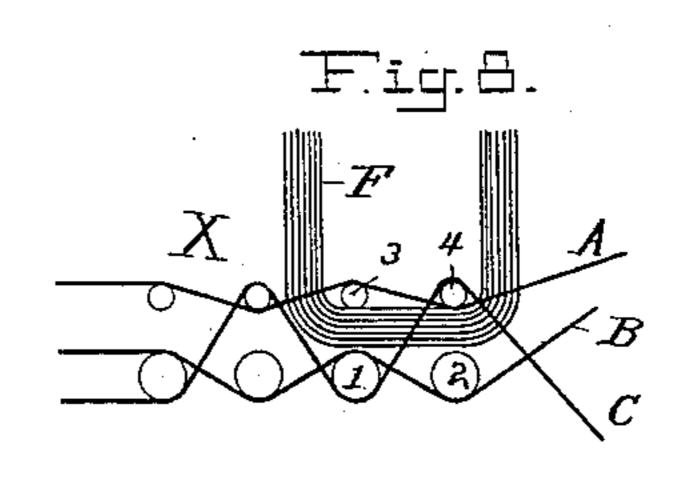












WITNESSES: nge Bannann. INVENTOR William G. Sanford BY However and Howen his ATTORNEY.

United States Patent Office.

WILLIAM C. SANFORD, OF AMSTERDAM, NEW YORK.

AXMINSTER OR MOQUETTE CARPET FABRIC.

SPECIFICATION forming part of Letters Patent No. 428,022, dated May 13, 1890.

Application filed September 28, 1889. Serial No. 325,367. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. SANFORD, a citizen of the United States, and a resident of Amsterdam, Montgomery county, New York, have invented Improvements in Axminster or Moquette Carpet Fabrics, of which the following is a specification.

My invention relates to that class of carpets which are sometimes called "Moquette carpets" and sometimes "Axminster carpets," and which comprise as characteristic features rows of tufts of wool or yarn forming the face of the fabric and bound down by binding wefts or shots to a backing of coarser wefts—such as jute or hemp—with warps or chains extending longitudinally through the fabric and tying in the wefts with the tufting.

It is the principal object of my invention to so construct a carpet fabric of this character that the tufting material will be held firmly in place and will not be liable to be pulled or swept out.

In the accompanying drawings, Figure 1 is a sectional view of a portion of the carpet fabric, taken longitudinally of the warp-threads. Fig. 2 is a corresponding sectional view taken longitudinally of the weft-threads and on the line 12, Fig. 1. Figs. 3 to 8, inclusive, are diagrams illustrating the successive steps in the weaving of the fabric and the tying in of the tufting.

Heretofore in the manufacture of carpets of this class it has been customary to bind the tufting down by a single weft for each row of tufting; but in all such Axminster or Moquette carpet fabrics the tufting has been found to be held insecurely, so that portions are apt to be brushed or pulled out in sweeping.

The main characteristic feature of my invention is the construction of the carpet, with two fine separated wefts tying down each row of tufting to the backing, which latter is made up of heavy wefts, two to each row of tufting, these two heavy wefts being separated by some of the warps passing between them, so that the tufting will be held with all the security necessary to prevent its being pulled out in sweeping or other handling of the carpets.

Referring to Figs. 1 and 2, it will be seen that the backing wefts or shots D are of heavy solid

material and preferably uniformly spaced, while the binding wefts or shots E for the tufts F are of finer material, and there are 55 two fine binding-wefts for each row of tufting. Combined with these are three sets of warps, A, B, and C, one set of warps A passing under and over the successive fine bindingwefts and tying these together, while another 60 set of warps pass under and over the successive heavy backing-wefts and tie them together. The third set of warps C pass under alternate backing-wefts D and over alternate tuft-binding wefts E, thus firmly binding the 65 two sets of wefts with the face-tufting together and making a tufted fabric of a firm and solid but simple construction.

In the weaving of the fabric, supposing a short length of plain fabric X to have been 70 woven, as in the diagram, Fig. 3, and the weaving of the tufted portion about to commence, the warps C are depressed and the warps A and Braised. The first heavy backing-weft 1 is then thrown in the shed thus 75 formed and is tied by raising the warps C and depressing the warps B for a new shed, into which is shot the second heavy backing-weft 2, as shown in Fig. 4. The end of the tuftingyarn F is then pushed through the warps (as 80) indicated, for instance, in Fig. 5,) and the warp C being depressed and the warps A having remained elevated during these operations the first fine binding-weft 3 for the tufting is shot in, Fig. 6, and is then tied by the 85 depression of the warps A and the elevation of the warps C, as shown in Fig. 7. The second fine binding-weft 4 is then thrown in and tied by the warp C and the elevation of the warp A, Fig. 8. The end of the tufting-yarn 90 is turned up around the wefts 3 and 4, the tufting-yarn is cut off, and then the abovedescribed operation is repeated for the next row of tufting. The wefts are beaten up at each shot; but this is not attempted to be 95 shown in these diagrams. In Figs. 1 and 2 the fabric is shown as if woven somewhat more open and loose than is the case in the fabric itself.

I claim as my invention—
1. An Axminster or Moquette carpet comprising rows of tufting, two fine wefts binding down each row of tufting, heavy wefts forming a solid backing, two such heavy wefts

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to each row of tufting, and warp-threads to tie the fine wefts to hold the same and the tufts to the backing-wefts, the two heavy wefts of each row being separated from each 5 other by the warp-threads passing between them, all substantially as described.

2. An Axminster or Moquette carpet fabric comprising tufting, backing-wefts, fine wefts to bind down the tufting with two wefts bind-10 ing each line of tufting, and three sets of warps, one tying the backing-wefts together, another tying the binding-wefts together, and

ing-wefts, substantially as described.

the third tying the binding-wefts to the back-

3. An Axminster or Moquette carpet fabric

...

comprising tufting, backing-wefts, fine wefts to bind down the tufting with two bindingwefts to each row of tufting, and three sets of warps, one for the binding-wefts, another for the backing-wefts, and the third passing 20 under alternate backing-wefts and over alternate binding-wefts, all substantially as described.

In testimony whereof I have signed my name to this specification in the presence of 25 two subscribing witnesses.

WILLIAM C. SANFORD.

Witnesses:

EDITH J. GRISWOLD, JOHN REVELL.