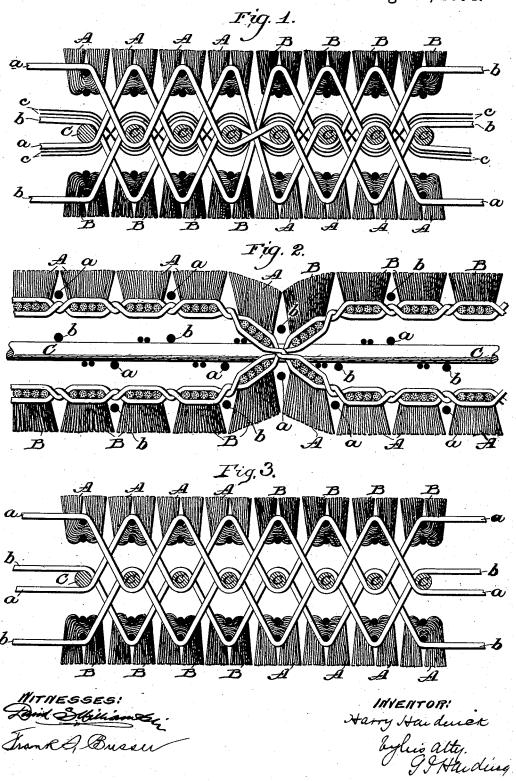
## H. HARDWICK. WOVEN FABRIC.

No. 524,321.

Patented Aug. 14, 1894.



## UNITED STATES PATENT OFFICE.

## HARRY HARDWICK, OF PHILADELPHIA, PENNSYLVANIA.

## WOVEN FABRIC.

SPECIFICATION forming part of Letters Patent No. 524,321, dated August 14,1894.

Application filed February 26, 1892. Serial No. 422,836. (Specimens.)

To all whom it may concern:

Be it known that I, HARRY HARDWICK, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Woven Fabrics, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this ro specification.

The specific object of my invention is to produce a substitute for cut-pile fabrics, and by my improvement cause the chenille weft to remain on the face on which it appears 15 and be prevented from mingling with the

chenille on the other face.

In carrying out my invention, I use a chenille weft for the threads of both faces, and between the threads of the faces, a weft of 20 some other material, and, in weaving this fabric, change the chenille weft from one face to the other the center or stuffer weft remaining always in the center, or between the plies, and the warps which bind the face wefts 25 pass around the center weft, the center or stuffer weft thus acting to hold the chenille weft of one face on that face, and prevents it from mingling with the chenille on the other face.

In the drawings:—Figure 1 is an exaggerated section across the wefts, of a fabric embodying my invention, and showing the independent warp for binding the wefts of the central plane of wefts. Fig. 2 is a like view 35 of the fabric shown in Fig. 1 but taken across the warps; and Fig. 3 is a view similar to Fig. 1, the independent binding warps shown in Fig. 1 being omitted, and the ordinary warps being differently disposed with rela-40 tion to the three planes of wefts.

In the fabric shown in the drawings, the chenille wefts are represented by A and B and the stuffer or center weft by C, A being a red chenille weft, and B a white chenille weft.
45 In the figures, two changes are shown, in one place the red chenille being on the face and white chenille B on the back, and at another place the white chenille weft B on the face and red chenille A on the back.

a and b are the warps which bind the che- 50 nille firmly to the stuffer weft. As may be seen, the warp of one face passes respectively over the chenille weft on that face and under the center or stuffer weft, while the warp of the other face passes respectively 55 under the chenille weft of that face and over the stuffer or center weft. The chenille wefts A being red, and the chenille wefts B being white, by changing the wefts from one face to the other, patterns will be produced upon 60 both faces at the same time, one weft forming the ground of the pattern, and the other weft forming the figure.

In the fabric shown herein, the pattern

would have a ground of one color and a fig- 65 ure of another color; but it will be evident that there may be two or more colors on either ground or figure by using two or more chenille wefts in the ground or figure wefts and introducing these wefts successively, as in or- 70 dinary weaving; or either or both chenille wefts may be composed of many different

By my construction of fabric, I am enabled to obtain a substitute for a cut-pile fabric in 75 an economical and satisfactory manner, and by the use of the center or stuffer weft, bound as described, the chenille weft of both faces are held firmly and said weft caused to stand out prominently from the body of the fabric, 80 and kept in the face where it is thrown and from mingling with chenille on the other face.
If desired, I can use warp in addition to

the face warps to bind the center or stuffer weft, so as to hold said weft more firmly and 85 enable it to perform its functions to better advantage. These warps are shown, in Fig.

Having now fully described my invention, what I claim, and desire to protect by Letters 90 Patent, is-

1. A fabric composed of warp threads and chenille figuring wefts in two planes and a stuffer weft between the two chenille weft planes, the warp threads passing from the 95 two sides of the fabric in an opposite direction to and around said stuffer weft.

2. A fabric composed of warp threads and

chenille wefts in two planes, and a center or stuffer weft of different material.

3. A fabric composed of warp threads and chenille figuring wefts in two planes, and a stuffer weft between the two chenille weft planes, the warp threads passing from the two sides of the fabric in an opposite direction to and around said stuffer weft, and in-