

(Specimens.)

J. W. PRIESTLEY.
CARPET.

No. 446,290.

Patented Feb. 10, 1891.

Fig. 1.

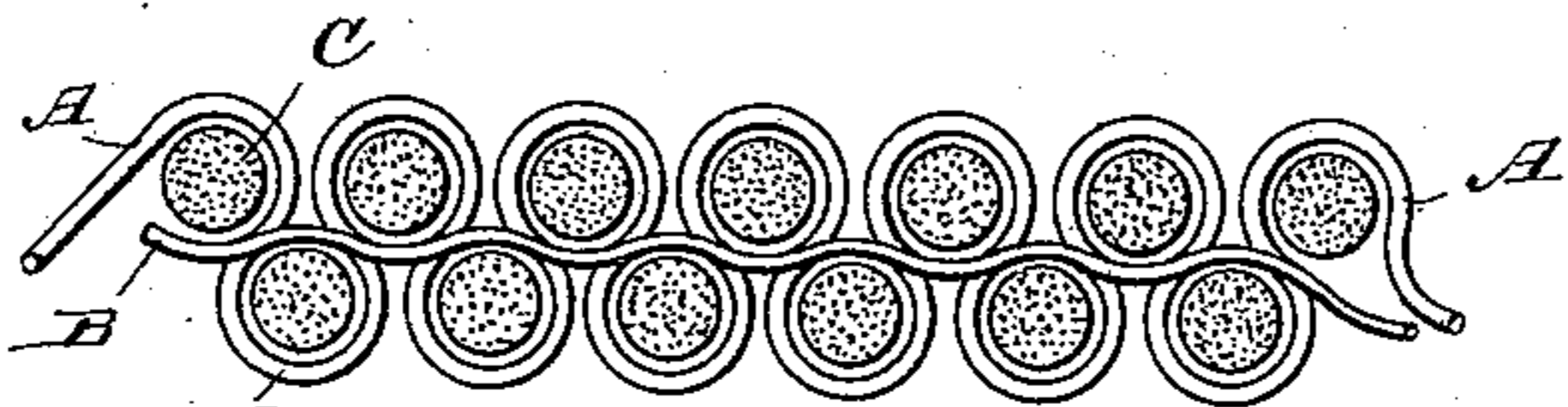


Fig. 2.

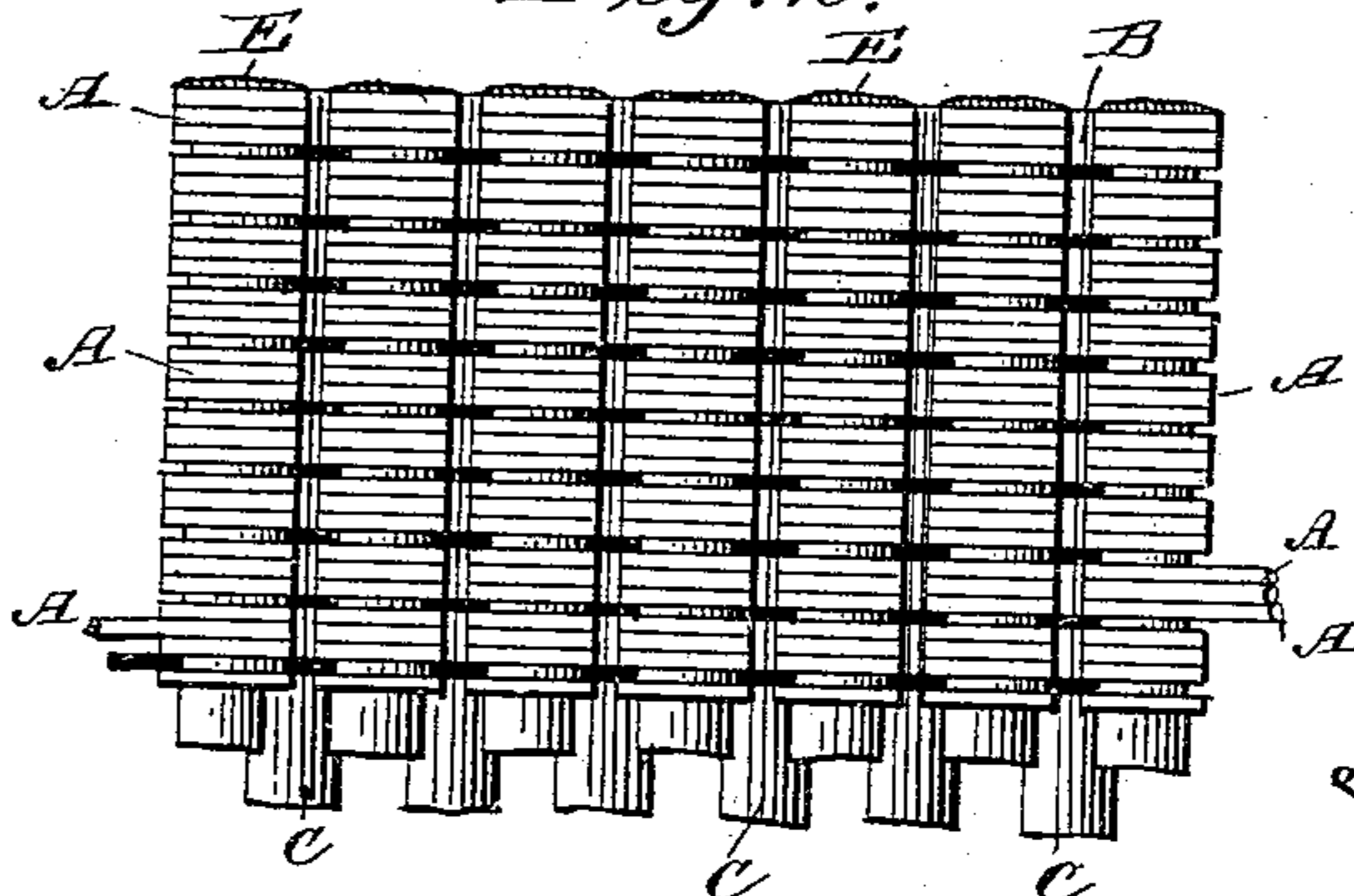


Fig. 3.

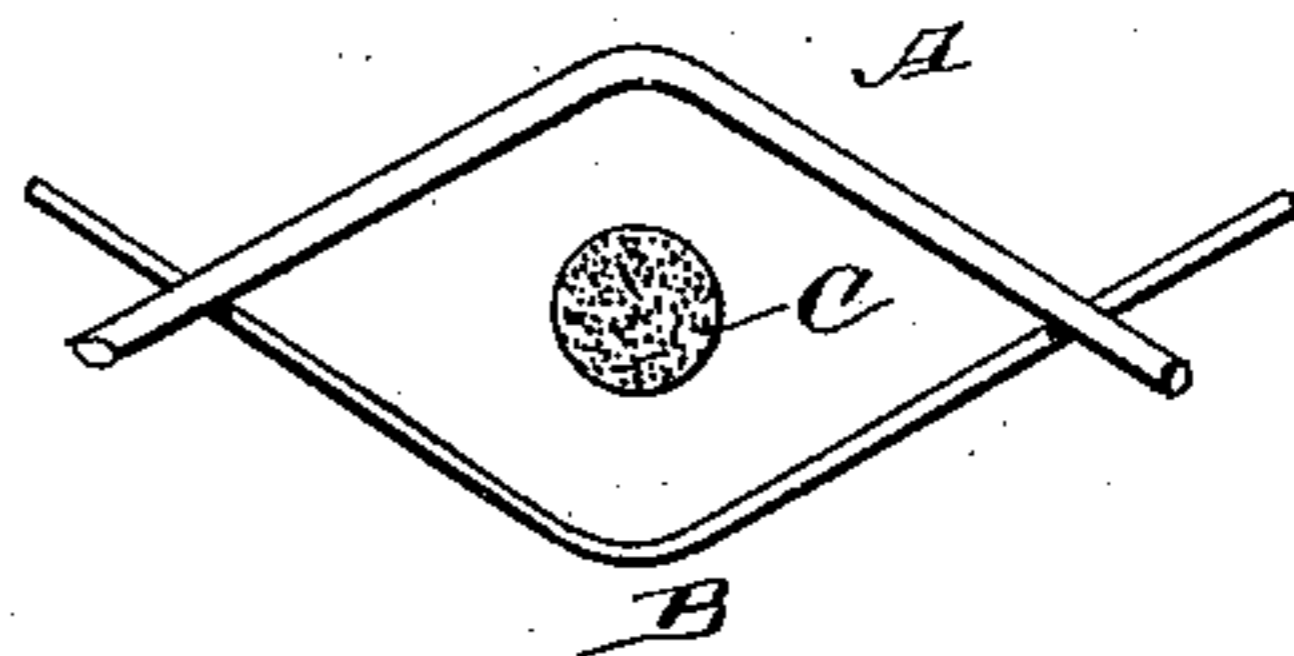


Fig. 4.

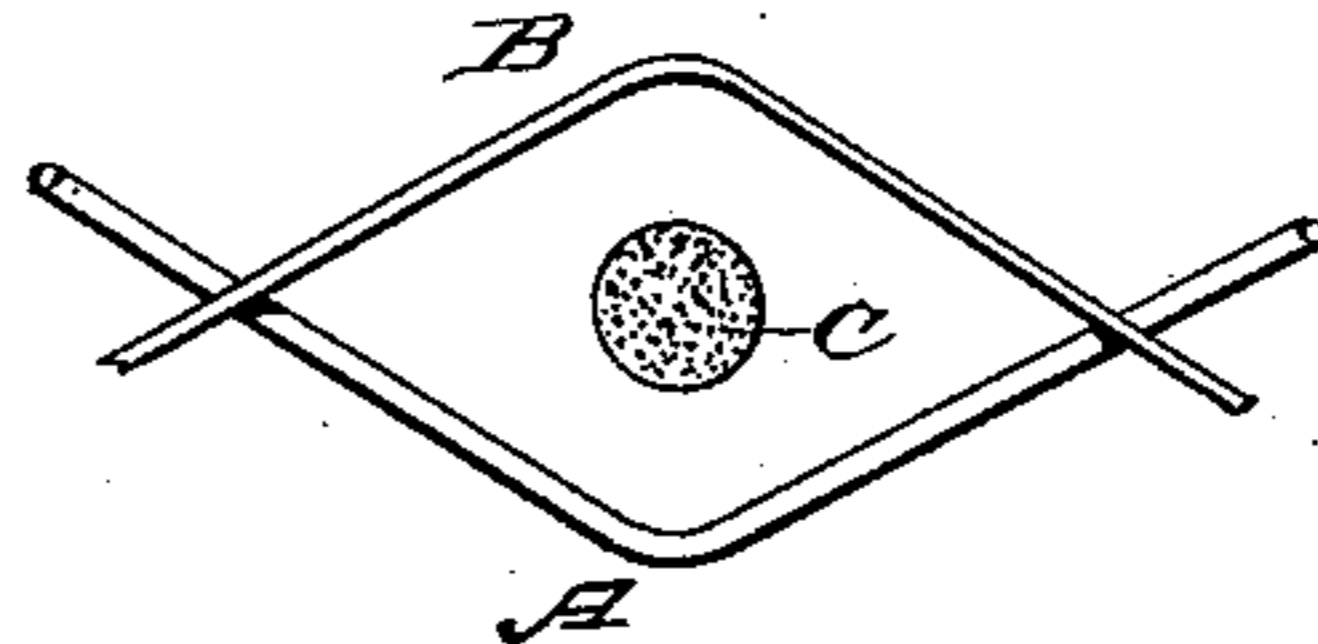


Fig. 5.

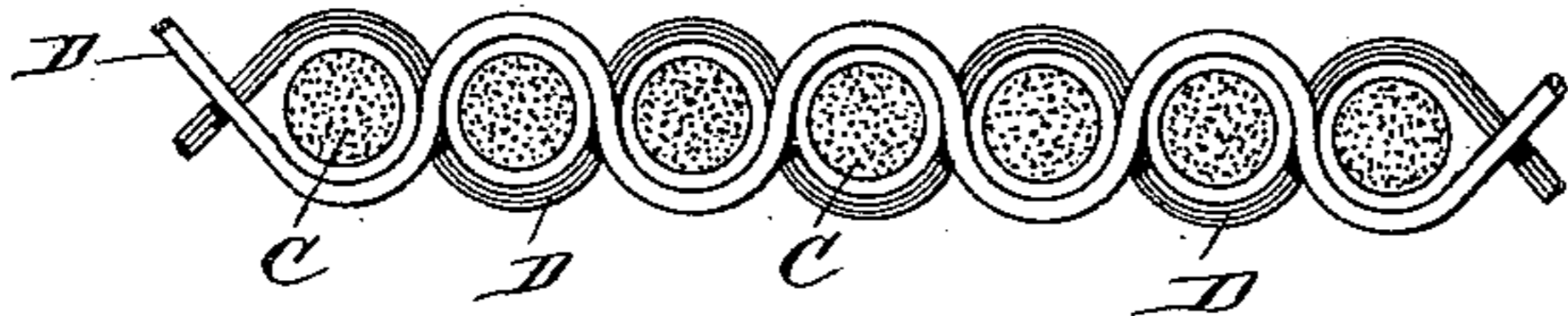
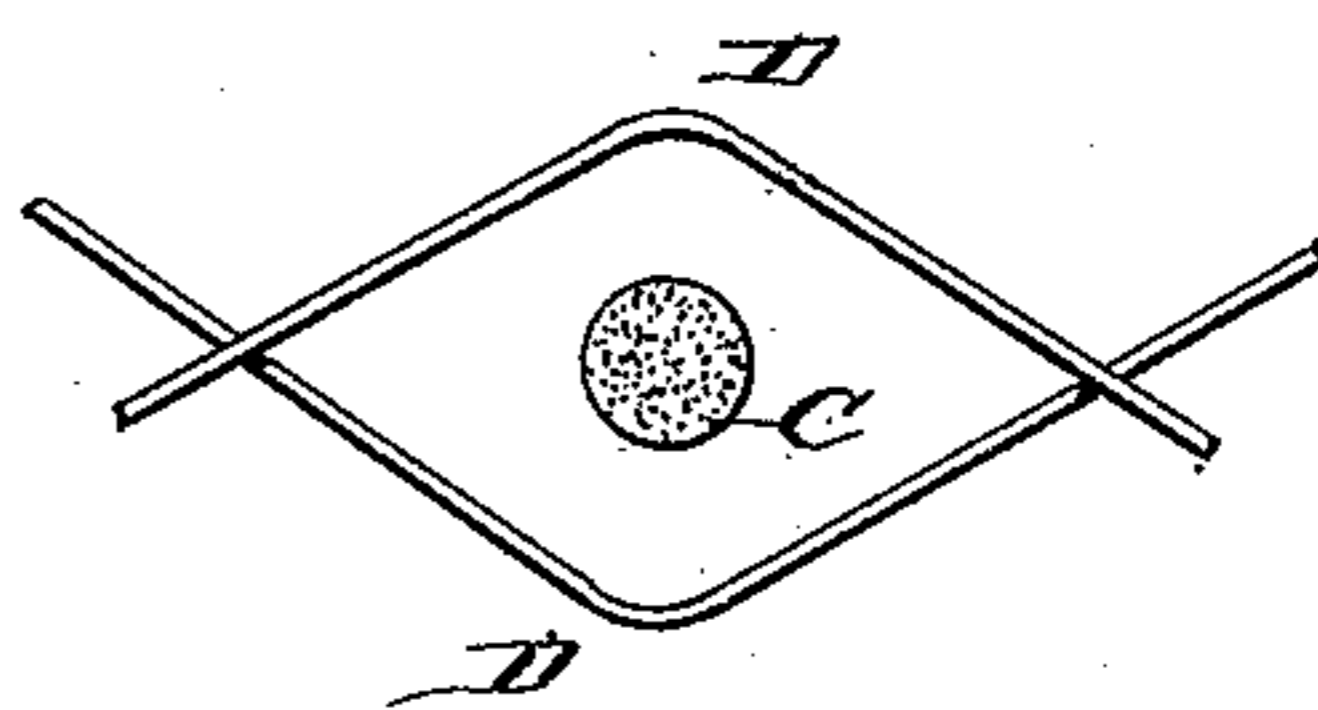


Fig. 6.



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UNITED STATES PATENT OFFICE.

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CARPET.

SPECIFICATION forming part of Letters Patent No. 446,290, dated February 10, 1891.

Application filed May 29, 1889. Renewed June 17, 1890. Serial No. 355,715. (Specimens.)

To all whom it may concern:

Be it known that I, JOHN W. PRIESTLEY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have made a new and useful Improvement in Carpets, of which the following is a specification, and which, when taken in connection with the accompanying drawings, gives such a full, clear, and accurate description thereof as will enable others skilled in the art to practice the same.

My invention relates to carpets of the class which have a ribbed surface on both sides and ornamented with patterns which appear on both sides of the goods, the patterns on the two sides being substantially alike and approximately adjacent to each other.

A carpet made according to my invention can be used first on one side and then used on the other side, and during both periods of use the same ornamental figure will be presented to the eye.

Referring to the accompanying drawings, Figure 1 shows a section of a portion of my carpet made in line with the warp-threads. Fig. 2 illustrates a face view thereof. Figs. 3 and 4 are diagrammatic illustrations of the sheds through which the weft is shot. Figs. 5 and 6 show an alternative construction, which will be described further on.

Same letters of reference refer to similar parts throughout the several views.

In carrying out my invention I proceed as follows: I first arrange in the loom a series of warp-threads, which have been previously dyed so as to present them properly combined in the desired pattern. Warp-threads thus dyed have been hitherto used in making tapestry Brussels carpets, and the manner of dyeing the same is well known and need not be here described. These warp-threads form the surface of the carpet on both sides. In connection with these printed or dyed warps which form the desired pattern I use filling-wefts, which, in lieu of being of uniform color throughout, are party-colored—that is to say, are printed or dyed with short sections of different colors—which colors approximate those which predominate in the pattern formed by the warps—as, for example, in a pattern in which white or gray, crimson, yellow, or buff

and brown predominate the colors will alternate in the weft, as follows: say a short section of white, then one of crimson, then white or gray again, then buff, then white or gray, and so on. This is most material to the appearance of the finished fabric, because in this character of fabric the weft is necessarily more or less apparent, the consequence being that when it is of a uniform color not only an unpleasing pronounced tone is imparted to the coloring, but the pattern itself is rendered hazy and indistinct, and presents in many instances a faded, washed appearance. Not only this, but the selvage presents an unbroken line of color, so that when breadths of carpet are sewed together by the selvages a prominent unbroken line of color appears at the seam, which detracts much from the appearance of the carpet. But by the use of party-colored weft such as indicated all these objectionable effects are suppressed, the pattern is perfectly distinct, the objectionable prevailing tone due to the employment of uniform colored wefts disappears, and the seam at the selvages is much less prominent and pronounced, and, in fact, is little noticeable, the result being that this carpet will compare advantageously with tapestry carpet.

In Figs. 1, 2, 3, and 4 the warp-threads are shown at A. With the warp-threads are also placed in the loom a binder-warp, the binder-warp being used for every second, third, fourth, or fifth body-warp A, as may be desired.

In Figs. 1, 2, 3, and 4 the binder-warps are shown at B. These binder-warps are usually made of some strong material smaller in dimension than the body-warps A. When these threads have been properly adjusted in the loom, the weaving proceeds as follows: All the body-warps A are raised and all the binder-warps are depressed—for example, as shown in Fig. 3, where the body-warps A are shown as raised and the binder-warps B are shown as depressed. With the threads in this condition the previously printed or dyed party-colored filling-weft C is shot through the shed, being carried by a shuttle in the usual manner. After this has been done a new shed is formed—as, for example, in Fig. 4—with all the binder-warps up and all the body-

warps down, and in this condition the shuttle is thrown through the shed, carrying another party-colored filling-weft C, and the operation is then repeated, and so on continuously in the formation of the carpet.

When the fabric is beaten up by the lay of the loom, it will present approximately the appearance shown in Fig. 1, and the dyed body-warps A will show a pattern which is substantially alike on both sides of the fabric. The binder-warps B will hold the party-colored filling-wefts C in position in connection with the body-warps A, and a firm and strong fabric will be the result, having a pattern on both sides substantially alike.

Another way of carrying out my invention is shown in Figs. 5 and 6, in which C are the party-colored filling-wefts and D body-warps, dyed as indicated in the previous part of this specification. In this modification the body-warps are shed for each passage of the shuttle half up and half down, as shown in Fig. 6, and no binder-warps are used. The resulting fabric is less firm and does not present as good an appearance as the fabric shown in Fig. 1; but it embraces, broadly, my invention, for it includes a series of party-colored filling-wefts C and a series of body-warps previously dyed and so woven as to produce like pattern on the two sides of the goods, with ribs on the two surfaces or faces.

In the use of dyed warps in tapestry Brussels carpet patterns could be produced on one side of the fabric and all such fabrics have but one wearing-surface.

In Brussels carpet where the pattern is formed from different-colored threads a jacquard has to be used for the purpose of producing the pattern, and this is expensive and involves the use of a much more expensive apparatus than is required in the production of my carpet, while at the same time only a single-face piece of goods is produced. With my invention no jacquard is necessary, the pattern being produced from dyed warps, and the resulting fabric being ribbed and double-faced with the same pattern substantially on its two sides. I am also enabled to make good selvage edges, as my weft-threads turn at the edges of the fabric, as at E, Fig. 2, and these selvages have not a continuously uniform color, but are party-colored, the different colors into which the selvages are broken up harmonizing with the body-colors of the fabric.

I am one of the inventors named in Patent 312,220, dated February 10, 1885, granted to Priestly and Kunkler. In this patent is described a carpet having a double face and ribbed, and in which a design is presented on both faces; but in the fabric there described

good selvage edges cannot be made, the pattern is not alike on both sides, and it is not an easy carpet to weave. My present invention presents numerous advantages over and above the fabric described in the above-enumerated patent, and in this application I do not claim anything that is there described. In the said patent, before referred to, two sets of weft-threads are employed, the warp-threads pass around both sides of the large weft-thread, and the weft-threads are not party-colored.

It will be noticed that in the construction of the fabrics shown herein no binder-wefts are necessary, and the absence of such threads is very advantageous, both in the structure of the fabric and in the method of making the same. According to my present invention but a single shuttle is necessary. The party-colored filling-wefts are preferably large, so as to give considerable rib on each face, and in the preferred form (shown in Figs. 1, 2, 3, and 4) the entire set of dyed body-warps are carried above and below each alternate party-colored filling-weft, as is clearly seen in Fig. 1.

What I claim, and desire to secure by Letters Patent, is—

1. A ribbed woven carpet fabric presenting the same pattern on both faces and having pattern-dyed body-warps, which form the pattern, surrounding party-colored filling-wefts, substantially as described.

2. A double-faced ribbed carpet fabric having the like pattern substantially on both faces, having pattern-dyed body-warps, which form the pattern, and are all of them carried alternately above and below the successive party-colored filling-wefts, substantially as described.

3. A double-faced ribbed carpet fabric having party-colored filling-wefts and pattern-dyed body-warps, the said body-warps, which form the pattern, being carried alternately above and below the successive party-colored filling-wefts, and a binder-warp, substantially as described.

4. A double-faced ribbed carpet fabric having pattern-dyed body-warps, which form the pattern, all of them carried alternately above and below the successive party-colored filling-wefts, and binder-warps passing on the side of each party-colored filling-weft opposite to that on which are the body-warps, substantially as described.

In testimony whereof I have hereunto signed my name this 27th day of May, A. D. 1889.

JOHN W. PRIESTLEY.

Witnesses:

M. BAILEY,
EWELL A. DICK.