May 11, 1937. W. A. ZIEVE 2,079,670

KNITTED FABRIC

Filed Feb. 7, 1935

Fig. 1.

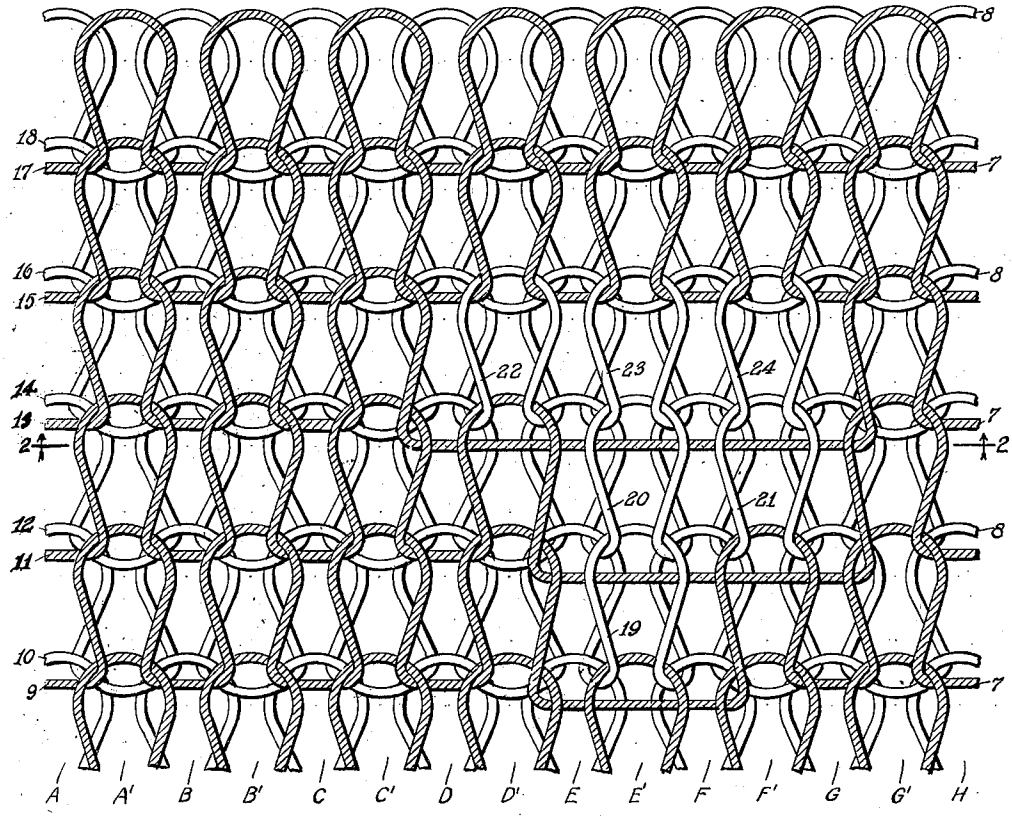
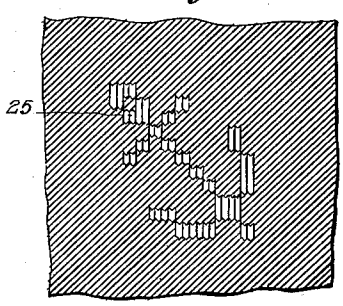


Fig. 2.



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KNITTED FABRIC

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Application February 7, 1935, Serial No. 5,339

2 Claims. (Cl. 66—196)

This invention relates to knitted fabrics of the character comprising two webs which are disposed in a back-to-back relation and are substantially independent of each other except for the fact that they are tied together or anchored to each other at certain intervals by so manipulating certain of the loop-forming yarns of the respective webs during the knitting operation that certain loops of one web tie in with certain loops of the other web.

An object of the present invention is to provide a knitted plural-web fabric, wherein certain loops of one web are so tied in with and bear such a relation to certain loops of the other web that the fabric presents on opposite sides a flat or undistorted surface at and in the vicinity of the point or points where the fabrics are anchored to each other.

A further object of the invention is to provide a knitted plural-web fabric, wherein the loops of one web, which are tied in with certain loops of the other web, are so predetermined as to present at one face of the fabric a definite design figure, composed of said predetermined loops and appearing in relief, regardless of whether the yarn peculiar to the design figure is of the same color as or is in contrast to the yarn of the web within which the figure is presented.

Other objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawing, in which—

Fig. 1 is an enlarged face view of the fabric, illustrating the manner in which the knitted webs of the fabric are tied together or anchored to each other; and Fig. 2 is a face view of the fabric, illustrating one of innumerable design figures that may be produced when carrying on the knitting operations embodying the present invention.

Referring to the drawing, the fabric embodying the invention is illustrated as consisting of two knitted webs, disposed in a back-to-back relation, and which, in certain instances and for the sake of convenience, will be hereinafter referred to as the "front web" and the "rear web", respectively. In order that the yarn of one web may be easily distinguished, in the drawing hereof, from the yarn of the other web, particular reference being had to Fig. 1, the threads 7 which are peculiar to the front web are shaded throughout, whereas the threads 8 which are peculiar to the rear web are unshaded.

Inasmuch as the front and rear webs are of a knitted character, it follows that they each include a plurality of courses, certain of the courses of the front web being herein indicated by the numerals 9, 11, 13, 15, and 17 and certain of the courses of the rear web being herein indicated by the numerals 10, 12, 14, 16, and 18. The fabric as a whole includes, of course, a plurality of wales, the locations of some of which with respect to the front web are indicated by the reference characters A', B', C', D', E', F', and G', and the locations of others of which with respect to the rear web are indicated by the reference characters A, B, C, D, E, F, G, and H.

By following course 9 from left to right in Fig. 1, it will be noted that a loop-length is floated at wale-locations E, E', F, and that the loop-length so floated occupies a position intermediate the two webs of the fabric. The floating of the loop-length in course 9 permits the yarn of course 12 to be drawn up, as shown at 19, through a loop of a preceding course in the front web, so that at 19 the yarn from which the rear web is knitted will appear in the finished fabric when viewed from the front thereof, as in Fig. 1. If a portion of course 14 is to be drawn up, as shown at 20, through the loop 19 so as to further the design figure, in a direction lengthwise of the wales, of which design figure the loop 19 is a part, a loop-length is floated from course 11 in order to accommodate the loop 20 as described in connection with course 9, but if it is desired to extend the design lengthwise of the course 11 of which the loop 20 is a part at the same time the design is furthered lengthwise of the wales by producing the loop 20, a sufficient loop-length of the course 11 is floated between E and G to accommodate not only the loop 20 but also a similar loop 21 which is drawn up from the course 14 through a previously formed loop in course 9. When a loop-length is floated to permit the design figure to be furthered lengthwise of a wale and at the same time extended lengthwise of a course, as just described, a portion of the loop-length so floated, such as the portion EF, will occupy a position intermediate the interknitted loops of the design-forming portion of the rear fabric and a portion of the loop-length, such as the portion FG, will occupy a position intermediate the front and rear webs. From the description of the manner in which the design figure is thus far produced by floating appropriate lengths of the courses peculiar to the front web in order to accommodate and expose certain portions of the courses which are peculiar to the rear web, it will be understood that such figure may be furthered lengthwise of the wales and/or ex-

tended lengthwise of the courses according to the particular shape or outline desired, and for that reason it is deemed unnecessary to proceed further with a detailed description concerning the formation of the loops **22**, **23**, and **24** other than to mention the fact that they correspond to the design-forming loops **19**, **20**, and **21**, already described, are peculiar to the course **16** of the rear web and are accommodated to view by floating a portion of the course **13** as from D to G.

It will be appreciated that wherever a design figure is presented (one of innumerable possible design figures being shown in Fig. 2 and there indicated by the numeral **25**), the front and rear webs are effectively tied together or anchored to each other by reason of the fact that portions of the loop-lengths which are floated from certain courses, such as courses **9**, **11**, and **13**, respectively, of the front web, are confined intermediate the webs in the finished fabric. Moreover, it will be understood, especially from the disclosure of Fig. 1, that the manipulation of the yarn of the respective webs may be carried on in such a manner as to not only effectively tie the webs together but also produce innumerable design figures without bunching or distorting the yarn of any course, as is evident from the symmetry of one wale to another and as is further evident from the regularity of the loop formations when considered longitudinally of the several courses.

Although the yarn, of which the front web is composed, may be of the same size, character and color or colors as the yarn of which the rear web is composed, and yet obtain a distinct design figure by carrying out the foregoing procedure in the production of a fabric embodying the present invention, the most pronounced distinction between the design figure and the background or field area, which is presented by the front web, may be produced when yarns of different colors, regardless of size or character, are employed such, for example, as brown for the front web and yellow for the rear web, in which case the design figure will, of course, appear in yellow against a brown background.

Although only one form of fabric is herein shown, it will be understood that various modifications may be resorted to without departing from the spirit of the invention or the scope of the following claims.

What is claimed is:

1. A fabric comprising two knitted webs disposed in a back-to-back relation, the courses of one of which register with corresponding courses of the other and in said one of which predetermined lengths of loop-forming yarns peculiar to predetermined courses are floated at predetermined wale-locations so that a portion of said one web is devoid of loops and so that a portion of the other web appears in the form of a predetermined design through the loop-devoid portion of said one web, certain marginal loops of said design portion being interlooped with certain loops of said one web adjacent said design portion and certain portions of said lengths of loop-forming yarns being confined intermediate said webs and other portions of said lengths being confined intermediate the interknitted loops of said design portion.

2. A fabric comprising two knitted webs disposed in a back-to-back relation, the yarns of one of which are in contrast to the yarns of the other and the courses of one of which register with corresponding courses of the other and in said one of which predetermined lengths of loop-forming yarns peculiar to predetermined courses are floated at predetermined wale-locations so that a portion of said one web is devoid of loops and so that a portion of the other web appears through the loop-devoid portion of said one web in the form of a predetermined design contrasting with the face of said one web and with respect to which that face constitutes a background, certain marginal loops of said design portion being interlooped with certain loops of said one web adjacent said design portion and certain portions of said lengths of loop-forming yarns being confined intermediate said webs and other portions of said lengths being confined intermediate the interknitted loops of said design portion.

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