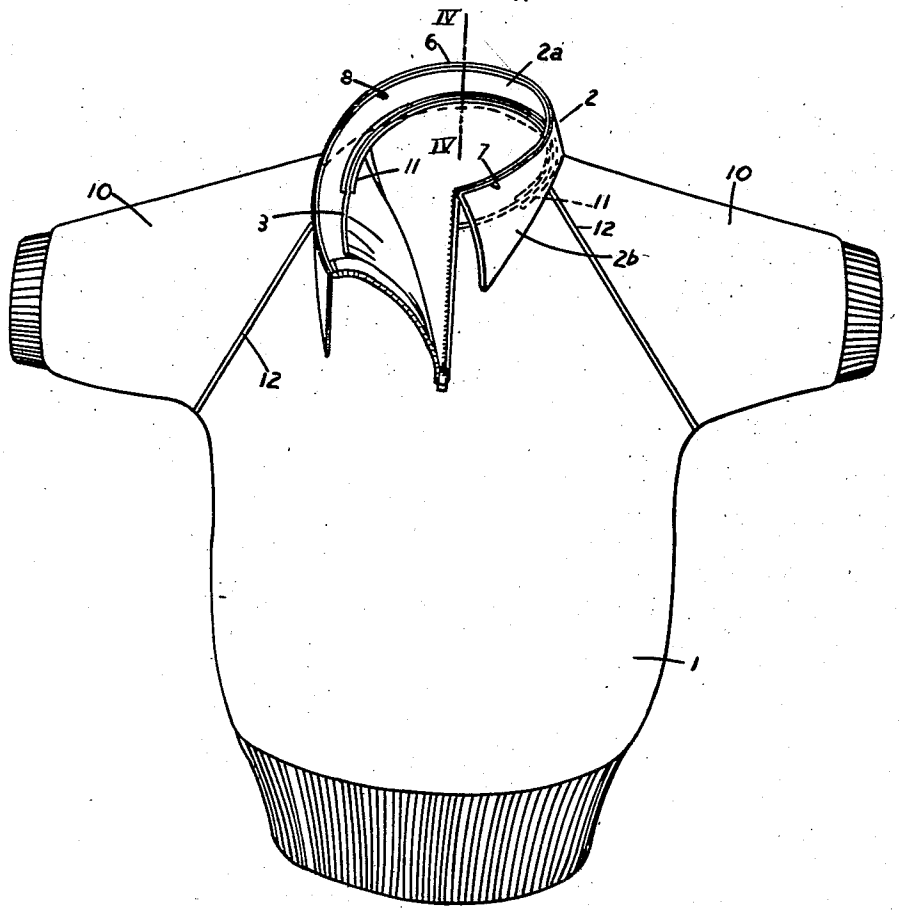
Feb. 5, 1952 F. W. BEVINS ET AL 2,584,834

TURNDOWN COLLAR

Filed Feb. 17, 1948

2 SHEETS—SHEET 1

FIG. 1.



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FIG. 2.

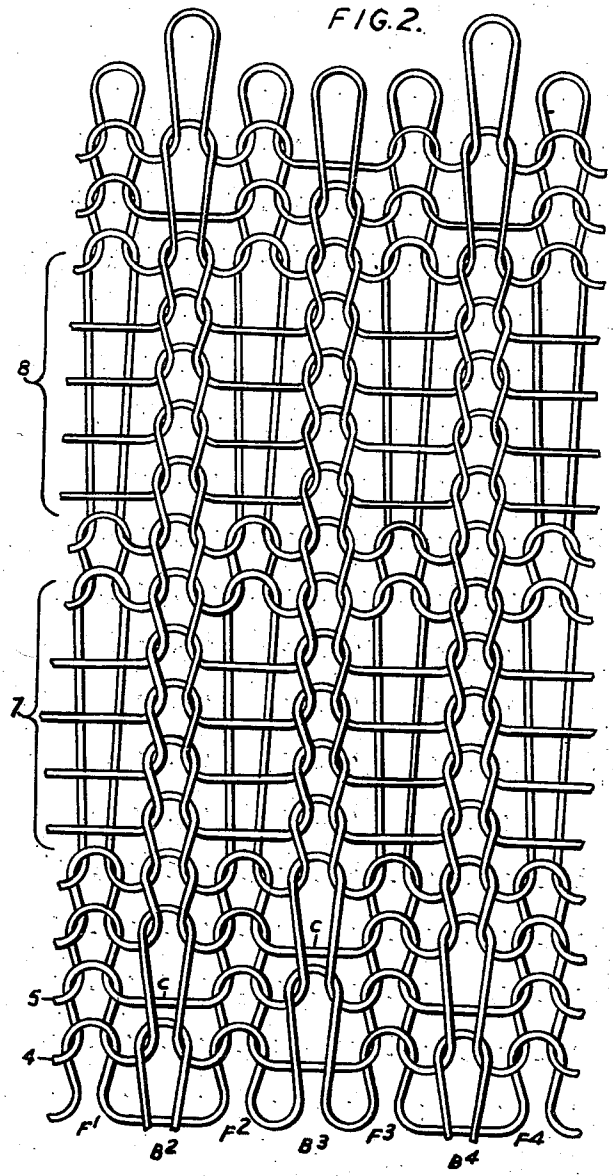


FIG. 4.

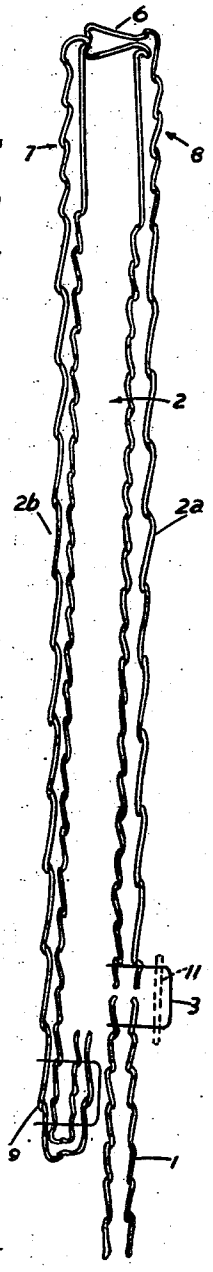
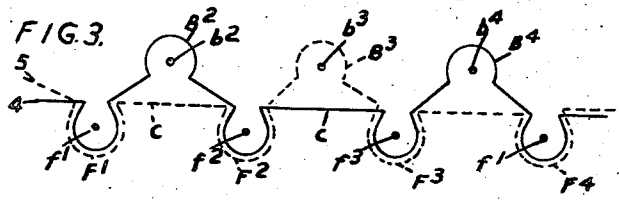


FIG. 3.



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UNITED STATES PATENT OFFICE

2,584,834

TURNDOWN COLLAR

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Application February 17, 1948, Serial No. 9,294
In Great Britain May 23, 1947

5 Claims. (Cl. 66—176)

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This invention concerns collars and shirts incorporating them and is particularly concerned with the turn-down collars of knitted sports shirts. The collars of knitted sports shirts as at present constructed do not have the tidy appearance which is desirable. Being themselves made of knitted fabric, they are limp and instead of standing properly around the neck of the wearer are apt to sag and crumple. Furthermore, the fold between the band of the collar and the exterior down-turned portion is not well defined and in use is apt to have a haphazard and uneven location. The present invention has among its objects to overcome or minimize these disadvantages.

The invention provides a turn-down collar constructed of double-knitted fabric, whereof the fabric at the inner face of the turn-down portion is less elastic than that of the outer face thereof. The decrease in elasticity may be provided by making the fabric at the inner face of a denser structure, preferably by an increase in the number of loops in a given unit length measured wale-wise, as contrasted with the outer face and this decrease in elasticity causes the collar to stand more rigidly than heretofore.

The invention further provides a turn-down collar of knitted fabric having a welted structure at the junction of the neck band and turn-down portion. By the expression "welted structure" there is meant a structure such as is commonly employed in the welts of the seamless half hose —or the like, that is to say a roll welt. This welted structure at the fold ensures that the latter has a fixed and invariable location. The roll welt is preferred, it being well known that a roll welt is produced by knitting a few courses on the needles of one bed of a rib knitting machine while the needles of the other bed temporarily hold their loops. In the present invention, these held loops appear in the interior corner between the neck band and the turn-down outer portion of the collar.

According to a further feature of the present invention, the collar has its raw edges turned inwards and secured by a seam covering stitch, such as may, for example be produced on that machine known as a Union Special Seam Coverer. Such a stitch is commonly used to cover a previously formed seam, but in the present invention this previously formed seam is dispensed with.

In order that the invention may be better understood, reference will now be made to the accompanying drawings in which:

Figure 1 is a perspective view of a sports shirt,

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of knitted fabric, embodying a collar according to this invention;

Figure 2 is a diagram showing the stitch structure of the collar;

Figure 3 is a diagram illustrating, in coventional form, a section of the fabric taken in a course-wise plane;

Figure 4 is a diagrammatic section, taken wale-wise through the collar (for example on the line IV—IV in Fig. 1).

In one construction according to this invention the sports shirt 1 is constructed in the main from one and one rib fabric. It has a turn-down collar 2 comprising a neck band 2*a* and an outer turn-down portion 2*b*, the neck band being seamed as at 3 to the body of the shirt at the neck opening. The neck band 2*a* and the turn-down portion 2*b* are produced integrally and preferably the fabric is that known as bird's eye jacquard. Such a fabric presents the appearance of one and one rib on one face and this is the face that is employed as the outer face of the turn down portion 2*b* so that it matches the body of the garment. By virtue of the particular knitted structure adopted, the fabric at the inner face of the turn-down portion is much stiffer so that the collar is not prone to crumple.

It may here be mentioned that bird's eye jacquard fabric is produced on a rib knitting machine with the needles disposed in a one and one arrangement. All the needles of one bed knit on every course but in every second course only the odd needles of the other bed knit and the even needles of said other bed knit in the intervening courses. Therefore, the fabric which is produced on the needles of said other bed has the appearance of one and one rib but the fabric produced on the needles of the first bed is substantially stiffer. Thus referring to Figs 2 and 3, the needles of one bed are indicated at b^2, b^3, b^4 etc., and the wales knitted on them at B^2, B^3, B^4 etc., while the needles of the other bed are indicated at f^1, f^2, f^3 etc., and the wales knitted on them at F^1, F^2, F^3, etc. It will be seen that in the course that has the yarn 4 all needles f^1 etc. of one bed knit loops F^1 etc., but only the even needles b^2, b^4 of the other bed knit. At the next course 5, all the needles of the first bed knit but the even needles b^2, b^4 of the other bed miss (but hold the loops of course 4) while the odd needles b^3 etc. knit. It will be seen that, as a result, the wales F^1, F^2, F^3 etc. at the inner face of the turn-down portion 2*b* have twice as many loops (in a given length of fabric) as do the wales B^2, B^3, B^4 etc. at the outer face of the turn-down portion. These

wales B^2, B^3, etc. present the appearance of 1×1 rib fabric, and therefore match the body of the garment, while owing to the float threads indicated at *c* the wales at the other face do not.

At the turn or fold 6 between the neck band 2*a* and the down-turned portion 2*b*, a roll welt structure 7 is produced. To do so, the needles f^1, f^2 etc. of the first mentioned bed are caused to hold their loops for a few (e. g. four) courses while the needles b^2, b^3 etc. of the other bed continue to knit at every course. This arrangement has the advantage hereinbefore described. If desired, after one or more rib courses on all the needles of both beds, the roll welt structure may be repeated at 8.

The raw edges of the collar are turned inwards and are secured by a three-thread seam covering stitch, as indicated diagrammatically at 9 in Fig. 4.

The shirt is preferably provided with raglan sleeves 10, either long or short, the advantage of raglan sleeves being the entire absence of any seam on the top of the shoulder.

The seam 3, between the neck band 2*a* and the body of the garment is reinforced across the back and across the top of the raglan sleeves, as far as the front sleeve-seams 12, by a piece of tape which is included in the overlocking as diagrammatically illustrated at 11 in Figs. 1 and 4.

We claim:

1. A turndown collar, having a neck-band and a turndown outer portion integral with it, both of which portions are made of knitted fabric, and having in the region of the folded juncture between them roll welt comprising held loops in the interior corner between the two portions.

2. A turndown collar having a neck-band and a turndown outer portion integral therewith both of which portions are constructed of double knitted fabric having the fabric at the inner face of the turndown portion less elastic than that at the outer face thereof by virtue of a greater number of loops, in a given unit length measured wale-wise, in the wales at the inner face, and having roll welt in the region of the fold between the two portions which structure comprises held loops disposed in the interior corner between the two portions.

3. A turndown collar according to claim 2, wherein the fabric is that known as bird's eye jacquard and the roll welt incorporated held loops in those knitted wales which extend between the outer face of the neck-band and the inner face of the outer portion.

4. A turndown collar, having a neck-band and a turndown outer portion integral therewith both of which portions are made of double knitted fabric having the fabric at the inner face of the turndown portion less elastic than that at the outer face thereof, and a roll welt structure in the region of the folded juncture between the two portions, which collar has inturned raw edges secured by a covering stitch.

5. A turn-down collar, having a neck band and a turn-down portion integral with it, both of knitted fabric, and having a roll welt structure in the region of the juncture between the two portions.

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HERBERT JOHN BEVINS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
933,673	Scott	Sept. 7, 1909
951,033	Steber	Mar. 1, 1910
1,643,497	Hesse	Sept. 27, 1927
2,119,378	Berger	May 31, 1938
2,120,665	Crimmins	June 14, 1938
2,153,423	Lougtin	Apr. 4, 1939
2,286,659	Wagenhorst	June 16, 1942
2,325,078	Shelmire	July 27, 1943

FOREIGN PATENTS

Number	Country	Date
12,284	Great Britain	June 22, 1893