

M. A. MUELLER.
KNITTED SWEATER.
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957,854.

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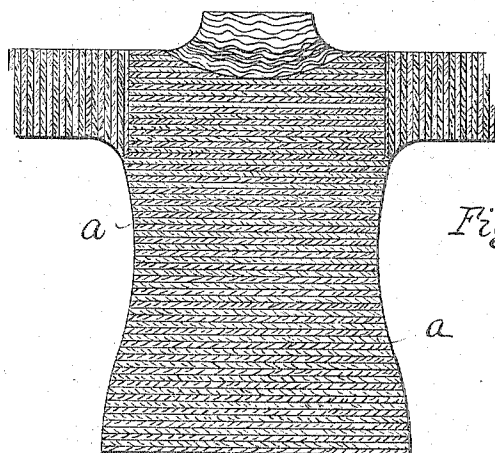


Fig. 1.

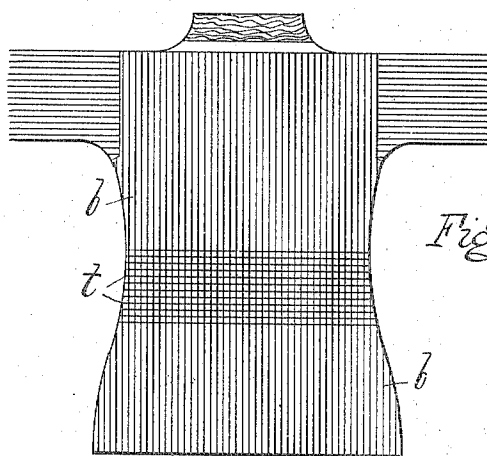


Fig. 2.

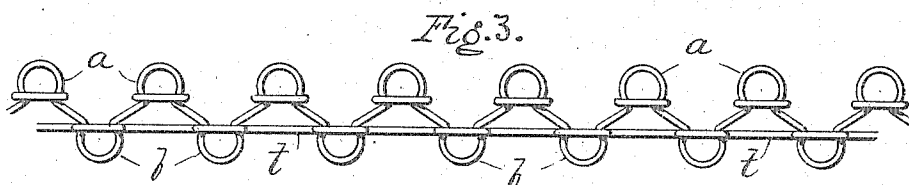


Fig. 3.

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KNITTED SWEATER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MAX ARTHUR MUELLER, a citizen of the United States of America, residing in the borough of Brooklyn, in the county of Kings, in the State of New York, have invented a certain new and useful Improved Knitted Sweater, of which the following is a specification.

My invention relates to knitted garments, and more particularly sweaters for ladies wear, and the object of my invention is to so construct such a garment that it may have and maintain a shaped or fashioned effect without seams and without showing on the exposed outer face the means by which that shaped or fashioned effect is secured. This object I attain by knitting the body of the garment on a machine having two sets of needles to form a ribbed inner face and any suitable outer face, provided the outer face loops are substantially as elastic as those forming the rib wales on the inner face, and then knitting into the inner rib wales only at intervals, where the waist of the garment is to be, rows of tying courses to tie the inner rib wales together and thereby limit the stretching of the garment at the waist, and this without the tying threads showing on the outer face. I prefer to knit the outer face of the garment of some ornamental stitch, such as "shell or honey comb stitch" or "rack stitch", etc., the formation of these being well understood in the art of knitting, but ordinary rib wales may be formed on the outer face alternating with the rib wales on the inner face.

In carrying out my invention I prefer to use a knitting machine of the well known Lamb type, having two sets of needles knitting a flat web, but I do not wish to limit myself to the use of any particular type of knitting mechanism,—flat or circular, provided there are two sets of needles adapted to produce loops on both faces.

In the accompanying drawings, Figure 1 is an outside view of the rear face of a sweater, showing a rack stitch outer face; Fig. 2 is an inner face view of the sweater, as if turned inside out; Fig. 3 is an enlarged section of a part of the fabric, showing the manner in which the tying courses unite the inner rib wales.

In the particular example shown in the

drawings, I have illustrated a sweater consisting of a single flat knitted web made up into a sweater without side seams, and preferably a jacket form of sweater. The outer face of the knitted fabric is indicated as knitted with elastic rack stitches *a*, while the inner face is knitted with vertical rib wales *b*, these two styles of stitches being of about equal elasticity and being produced by well known methods of operation of the two sets of knitting needles on a Lamb or other suitable machine.

When in the course of knitting the web for any given garment the waist line of the garment is reached, I knit into the inner rib wales only, at suitable intervals, courses of tying threads, using for this purpose only one set of needles which form the rib wales on the inner face of the fabric, while the needles carrying the loops of the outer face are temporarily held out of action. These tying courses, which I have indicated at *t* in Figs. 2 and 3, are thus in effect courses of plain knitting knitted into the rib wales only, the sinker wales of the plain knitting loops extending straight across between the rib wales on the inner face of the fabric, and thus limiting the natural elasticity of the fabric due to the use of the rib wales. In consequence, the finished garment will not be capable of being stretched so much at the waist line as at the other parts of the garment and therefore the sweater will have a "fashioned" effect, though made of a seamless web, and will maintain its shape notwithstanding the stretching and rough usage to which such a garment is usually subjected. Owing to the fact that these tying courses are knitted only into the inner wales, they will not show on the outer face.

The different parts of the web for the different parts of the sweater (breast, waist, hips) may be knitted of varying weights of yarns and of varying degrees of tightness or looseness. Thus the whole waist line may be knitted tight, while the breast and hip portions may be knitted loosely. So also I may use thicker or more elastic yarns for the breast and hips than for the waist.

I claim as my invention:

1. A knitted sweater, having on its inner face one set of loops forming rib wales and on its outer face another set of loops, with

tying courses at the waist line knitted into the inner rib wales only, as and for the purpose described.

2. A knitted sweater having on its inner face rib wales and on its outer face other and different ornamental but elastic knitting loops with tying courses at the waist line knitted into the inner rib wales only, as and for the purpose described.

3. A knitted sweater, having on its inner face one set of loops forming rib wales and on its outer face another set of loops, with tying courses at the waist line knitted into the inner rib wales only, the different parts of the sweater, breast, waist and hips, being knitted of varying weights of yarns and of varying degrees of tightness or looseness, substantially as described.

4. A knitted sweater having on its inner face rib wales and on its outer face elastic rack stitch loops with tying courses at the waist line knitted into the inner rib wales only, as and for the purpose described.

5. A knitted sweater, having on its inner face rib wales and on its outer face elastic stitch loops with tying courses at the waist

line, said tying courses consisting of plain knitting courses knitted into the inner rib wales.

6. A knitted sweater, having on its inner face rib wales and on its outer face elastic stitch loops, with tying courses at intervals at the waist line, said tying courses consisting of plain knitting courses knitted into the inner rib wales.

7. A knitted sweater, having on its inner face one set of loops forming rib wales and on its outer face another set of elastic loops with tying courses of plain knitting at the waist line, knitted into the inner rib wales, the sinker wales of the plain knitting extending straight across between the rib wales on the inner face of the fabric, as and for the purpose described.

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

MAX ARTHUR MUELLER.

Witnesses:

J. A. BOEPPLE,
CURT EHRENBURG.