F. J. VOLZ.

FLEECED KNITTED FABRIC.

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1,067,952.

Patented July 22, 1913.

Fig. 1.

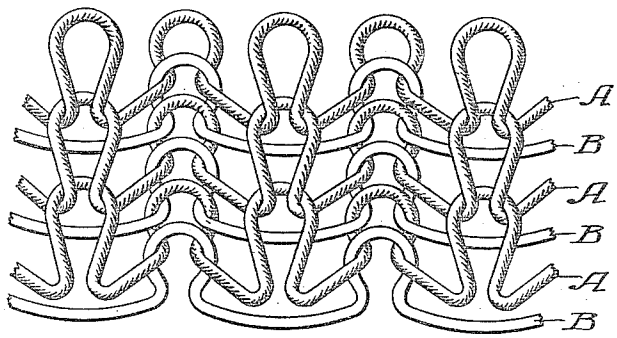


Fig. 3.

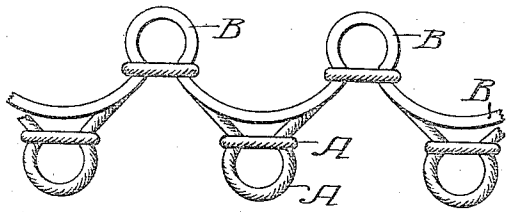


Fig. 2.

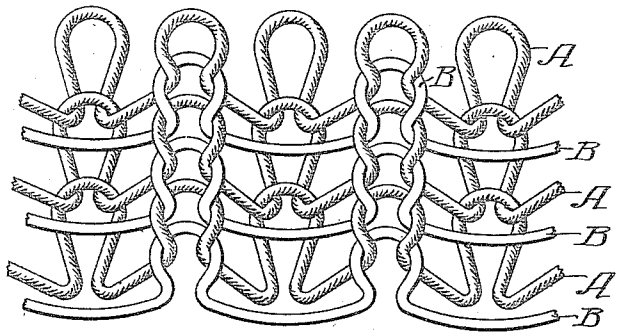
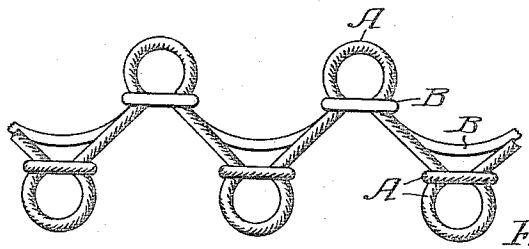


Fig. 4.



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UNITED STATES PATENT OFFICE.

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FLEECED KNITTED FABRIC.

1,067,952. Specification of Letters Patent. Patented July 22, 1913.

Application filed November 28, 1911. Serial No. 662,904.

To all whom it may concern:

Be it known that I, FRANK J. VOLZ, a citizen of the United States of America, residing in the city of Albany, in the county of Albany and State of New York, have invented a certain new and Improved Fleeced Knitted Fabric, of which the following is a specification.

The object of my invention is to produce a ribbed knitted fabric which will present on the outer side the usual regular ribbed face, while presenting on the inner side a face specially adapted for the production of a thick, soft fleece when brushed. This object I attain by knitting the fabric ribbed on both faces and throwing into one face, viz., the inside or back face, supplemental loops, preferably at every other feed or course, so that there will be twice as many knitted loops on the inner face as there are on the outer face, thus presenting a closely-knit surface which is well adapted to produce, by brushing, a thick soft fleece without taking from the loops enough fibers to weaken the body of the fabric. At the same time, the regular ribbed face appearance on the other side is maintained.

In the accompanying drawing, I have shown in four diagrams the knitting on an enlarged scale, and in which, for convenience merely, I have indicated the ribbing courses A as if of a dark yarn, while the supplemental inside face courses B are as if of a white yarn.

Figure 1 is a view looking at the fabric from the outer or front face of the fabric; Fig. 2 is a similar view looking at the inner side or back; Fig. 3 is a plan view of the fabric after a course B has been made; and Fig. 4 is a similar view after a course A has been made and showing a course B "cast off" the dial and cylinder needles but showing loops formed by the dial needles.

It will be readily seen that the outer face will show the usual ribbed face (of dark yarn, in the case illustrated), while on the inner side or back there will appear a combination of dark and light loops, this side presenting accordingly twice as many loops as on the outer face. This construction may be produced by feeding two separate and independent yarns A and B alternately to the dial and cylinder needles of a ribbed knitting machine. The one feed of yarn, which is the dark feed A in the example illustrated, is fed and knitted by the cylinder and dial needles in the usual manner of ribbed knitting. The alternate feed B, indicated in white in the drawing, is also fed to both series of needles but in such manner that there is no loop knitted by the cylinder needles, the loop being "cast off" without being engaged by the hooks of the cylinder needles and before another feed of the dark yarn. In other words, if we assume a two-feed machine, the cylinder and dial needles are so actuated by their cams at feed No. 1 as to trap the yarn (course A) supplied in the hooks of both cylinder and dial needles and then draw loops of that yarn to the opposite faces of the fabric through the previously formed loops now cast off those needles, as in ordinary rib knitting. At feed No. 2, (course B), the dial needles are so actuated by the cams as to trap the yarn supplied in the hooks of the dial needles, but the cylinder needles are there so actuated that the yarn (B) will not be caught in the hooks of the cylinder needles but will be laid back of the latches of the cylinder needles and held there until at feed No. 1, these loops of yarn (B) will be cast off the cylinder needles with the loops of yarn A and so thrown into the space between the front and back wales, as shown in the drawing. The result is a ribbed knit fabric having an equal number of wales on its two faces, but the fabric will have knitted courses which form parts of the wales on one face of the fabric but do not appear on the other face, floating behind the wales of said other face. Where, as in the specific form illustrated, these courses alternate with the regular ribbing courses, one face of the fabric will have twice as many knitted loops as the opposite face, since each wale on the inner or dial side will have twice as many knitted loops as in each wale on the other or cylinder side of the fabric, and it is this inner or dial face which is to be fleeced.

I claim as my invention—

A ribbed knit fabric for fleeced underwear, having an equal number of wales on its two faces and having supplemental knitted courses the loops of which form parts of the wales on one face but do not

appear on the other face of the fabric, floating behind the wales on said other face, said supplementary loops being spaced sufficiently closely together in the wales to form a substantially continuous reinforcement of the regular body fabric loops of the wales on one face for fleecing purposes.

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

FRANK J. VOLZ.

Witnesses:
JOHN BARNEWITZ,
JAMES E. LAWLER.