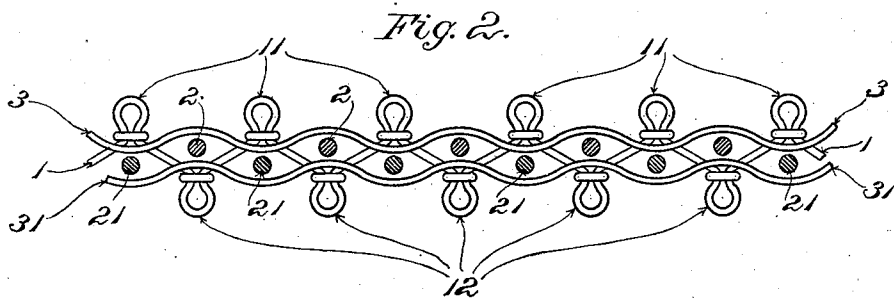
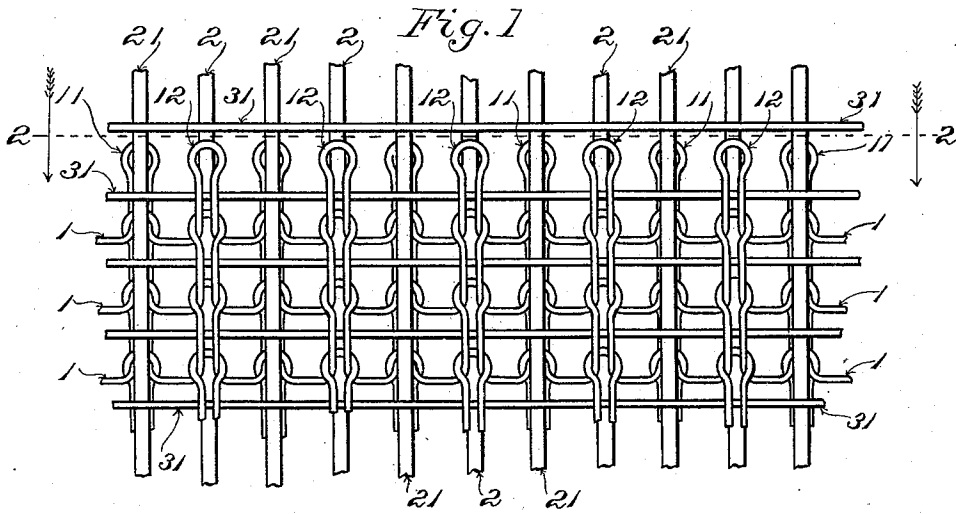


(No Model.)

W. ESTY.
KNIT FABRIC FOR HYDRAULIC HOSE, &c.

No. 567,308.

Patented Sept. 8, 1896.



Witnesses:

Oscar F. Gill

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UNITED STATES PATENT OFFICE.

WILLIAM ESTY, OF LACONIA, NEW HAMPSHIRE.

KNIT FABRIC FOR HYDRAULIC HOSE, &c.

SPECIFICATION forming part of Letters Patent No. 567,308, dated September 8, 1896.

Application filed July 11, 1896. Serial No. 598,790. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ESTY, a citizen of the United States, residing at Laconia, in the county of Belknap and State of New Hampshire, have invented certain new and useful Improvements in Knit Fabric for Hydraulic Hose, &c., of which the following is a specification, reference being had therein to the accompanying drawings.

10 The object of the invention is to produce a thick and strong knitted fabric which shall be adapted for use in the manufacture of cloth and hydraulic hose; furthermore, to produce a knitted fabric suitable for the purposes named and which shall be of uniform density and present smooth and compact surfaces, with no tendency to roll or curl in either direction.

20 The invention will be described first with reference to the accompanying drawings, and afterward the distinguishing characteristics thereof will be particularly pointed out, and distinctly defined in the claim at the close of this specification.

25 Figure 1 of the drawings is a view showing in elevation a portion of fabric embodying the invention, the threads being represented as separated from each other somewhat, the better to illustrate the construction. Fig. 30 2 is a view in section on the line 2 2 of Fig. 1, looking in the direction of the arrows at the ends of such line.

The fabric comprises a knitting-thread 1, warp-threads 2 and 21, and weft-threads 3 35 and 31. The knitting-thread 1 is knit in rib-stitch; that is to say, the alternate vertical wales or lines of stitches formed thereof are located on the opposite faces of the fabric, as is shown clearly in Fig. 2, the wales or lines 40 11 being at the one face of the fabric, while the wales or lines 12 are at the other face thereof. The set of warp-threads 2 is located between the wales or lines of stitches 11 of the one face of the fabric, while the set of warp-threads 45 21 is located between the wales or lines of stitches 12 of the other face thereof, the respective warp-threads of a given set thereof

alternating in position with the wales or lines of stitches of the corresponding face of the fabric. Thus the spaces between the ribs on 50 the opposite faces of the fabric are occupied and filled by the warp-threads. The warp-threads are held in place by the weft-threads 3 and 31, which latter lie at the two faces of the fabric outside of the warp-threads, and 55 in turn the weft-threads are bound by the loops or stitches of the knitting-thread 1, all as is shown clearly in the drawings.

As will be perceived from inspection of the drawings, my fabric is of uniform density 60 and the surfaces thereof are smooth and compact.

While I have shown and described but a single knitting-thread and two weft-threads, as embodied in the fabric, it will be under- 65 stood that in practice I contemplate producing the fabric on a knitting-machine having two or more knitting-feeds, at each of which will be supplied a knitting-thread and two weft-threads, as aforesaid. These additional 70 feeds will not change the construction of the fabric. In other words, for the sake of economy and to expedite the production of the fabric, I contemplate employing in the machines two or more duplicate feeds, each feed 75 comprising a knitting-thread 1 and weft-threads 3 31. This will be understood as being in accordance with the principles of modern practice in knitting, and involves no departure from the spirit of my invention. 80

I claim as my invention—

A knit fabric comprising a knitting thread or threads knit in rib-stitch, warp-threads alternating with the vertical wales or ribs and occupying the spaces between them, and weft- 85 threads outside of the said warp-threads and bound by the stitches of the knitting thread or threads, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM ESTY.

Witnesses:

WILLIAM A. COPELAND,
CHAS. F. RANDALL.