(No Model.)

T. LAMB & J. D. MORLEY.

LOOP SURFACED FABRIC AND METHOD OF MAKING THE SAME.

No. 379,402. Patented Mar. 13, 1888.

Fig. 1.

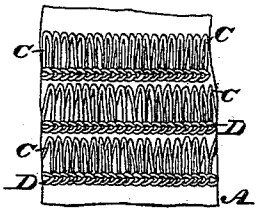


Fig. 2.

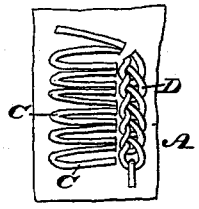


Fig. 3.

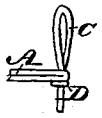


Fig. 4.

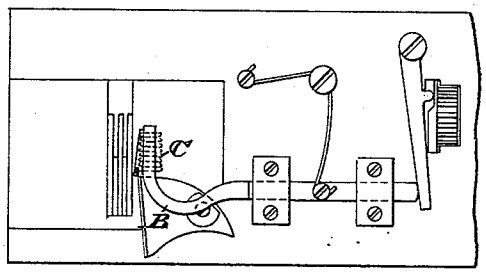


Fig. 5.

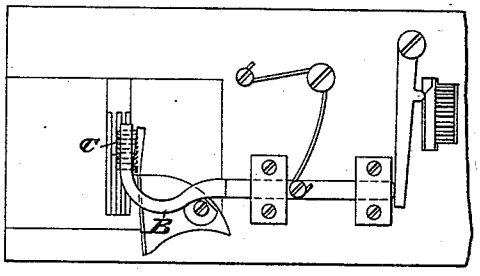


Fig. 6.

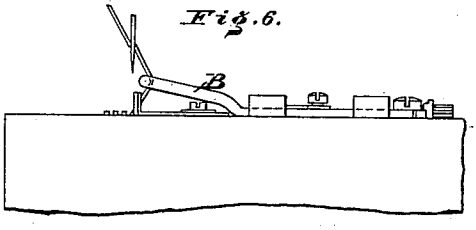
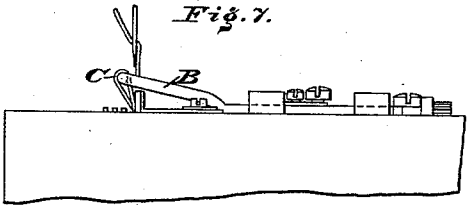


Fig. 7.



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UNITED STATES PATENT OFFICE.

THOMAS LAMB AND JOSEPH D. MORLEY, OF PHILADELPHIA, PENNSYLVANIA.

LOOP-SURFACED FABRIC AND METHOD OF MAKING THE SAME.

SPECIFICATION forming part of Letters Patent No. 379,402, dated March 13, 1888.

Application filed March 15, 1886. Serial No. 195,215. (No model.)

To all whom it may concern:

Be it known that we, THOMAS LAMB and JOSEPH D. MORLEY, both citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Puffed Surfaces for Garments, Fabrics, &c., which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a face view of a puffed surface embodying our invention. Fig. 2 represents another view of the same on an enlarged scale. Fig. 3 represents a side elevation of one of the loops of the puffed surface. Figs. 4 and 5 represent top or plan views of portions of a sewing-machine that may be employed to form the loops. Figs. 6 and 7 represent side elevations, respectively, of Figs. 5 and 6.

Similar letters of reference indicate corresponding parts in the several figures.

Our invention consists of a puffed surface which is produced by loops fastened by chain, lock, or other stitches formed of yarn or thread continuous of that of which the loops are produced. A surface thus constructed will be found serviceable for lining or facing stockings, leggins, gloves, and other garments, pieces of fabric, &c., for increasing the warmth and weight thereof, or serving as trimming, ornamentation, &c.

Referring to the drawings, A represents a part of a garment or piece of fabric having a puffed surface produced in accordance with our invention. The puffs which compose said surface are formed of loops which project or stand out from the fabric, &c., and are connected at their inner ends with the latter. We employ any desired sewing-machine and provide the same with a loop-forming device, which in the present case occupies a position on the top of the cloth-plate, and consists of a hook-shaped piece, B, which slides in opposite directions on said plate in a line at a right angle to the direction of the feed, and receives its motions from a cam and spring on the machine, the mechanism employed, however, forming no part of the present invention, it being illustrated at this time to show how the loops are produced. When the machine is in operation, the loop of yarn or thread on the needle is caught in the fabric on the cloth-plate and the needle rises as usual in sewing-machines. The piece B now advances against the yarn between the needle and the garment or fabric and passes under and beyond the point of the needle and the needle descends, whereby the yarn or thread is turned over the hook of the ~~piece B~~ and carried down to the fabric, forming a loop, ~~C, which~~ is retained on the hook. The yarn or thread is then formed into a stitch, D, on the fabric, thus sewing the loop to the fabric. The needle then rises (see Fig. 7) and the fabric is advanced, the loop following the fabric, after which the piece B returns to its first position, carrying with it the loop as formed, and then bearing against the yarn in a direction the reverse to that just above stated, (see Fig. 6,) whereby when the needle descends another loop is formed on the hook ~~and the stitch~~ at the base produced, said stitch sewing the second loop to the fabric, and thus further loops and stitches may be made, the loops being stripped from the end of the hook by the advance of the fabric.

It will be seen that a garment or fabric may be readily lined, faced, or covered with puffs, so that its warmth or weight is increased or an ornamental appearance presented, and said puffs being sewed to the fabric by yarn or thread of which the loops and stitches are continuous are prevented from becoming undone or disconnecting from the fabric, it being evident that as the loops and stitches are formed by continuous operation and by mechanical means the work will be uniform, and owing to the rapidity with which it is accomplished is inexpensive, and is moreover of a superior nature.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The method of forming a puffed surface on a fabric by means of projecting loops, said method consisting in first securing the thread of which the puffed surface is to be composed to the fabric, then forming a loop of the said thread, as set forth, then passing the unfastened end of the thread through the fabric, leav-

ing the outer end of the loop free, and forming a binding-stitch on the fabric at the inner end of the loop, and then forming successively loops and binding-stitches, as before, in adjacent rows, the stiches and loops being of one continuous thread, substantially as described.

2. A fabric having a puffed surface consisting of rows of projecting loops, with free outer ends and rows of binding-stitches at the inner ends of said loops, said stitches and loops being adjacent and formed of a continuous thread, all substantially as described.

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Witnesses:
JOHN WIEDERSHEIM,
A. P. GRANT.