

(No Model.)

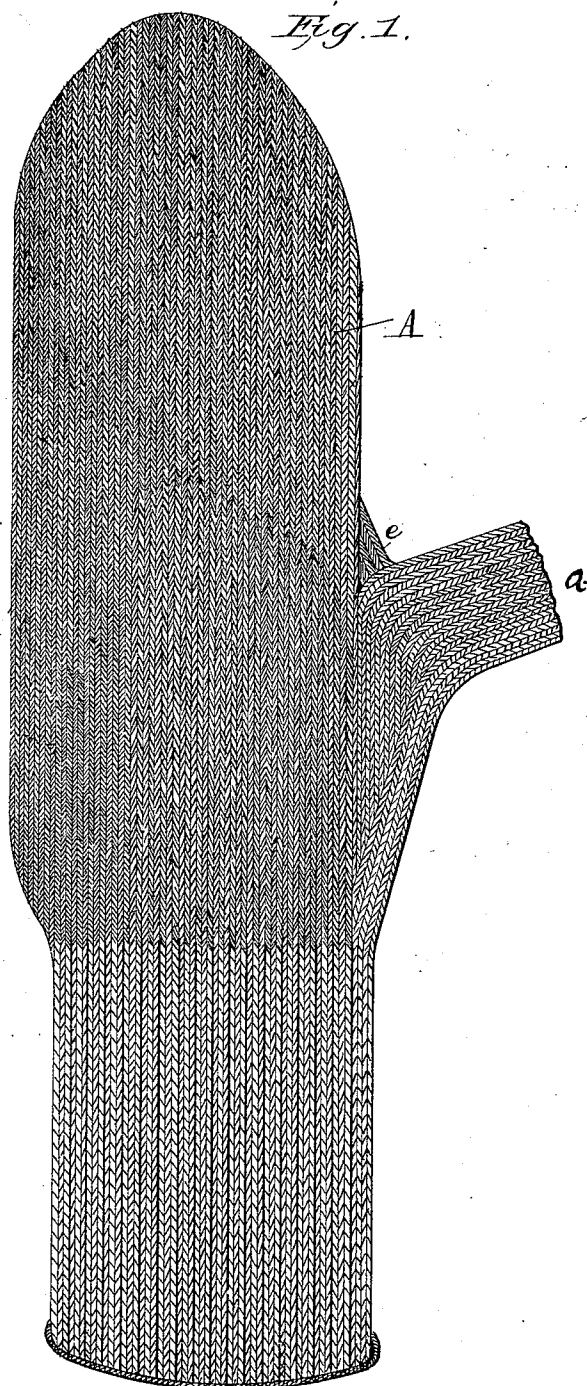
2 Sheets—Sheet 1.

J. C. FARNAM.

MITTEN AND METHOD OF KNITTING SAME.

No. 542,823.

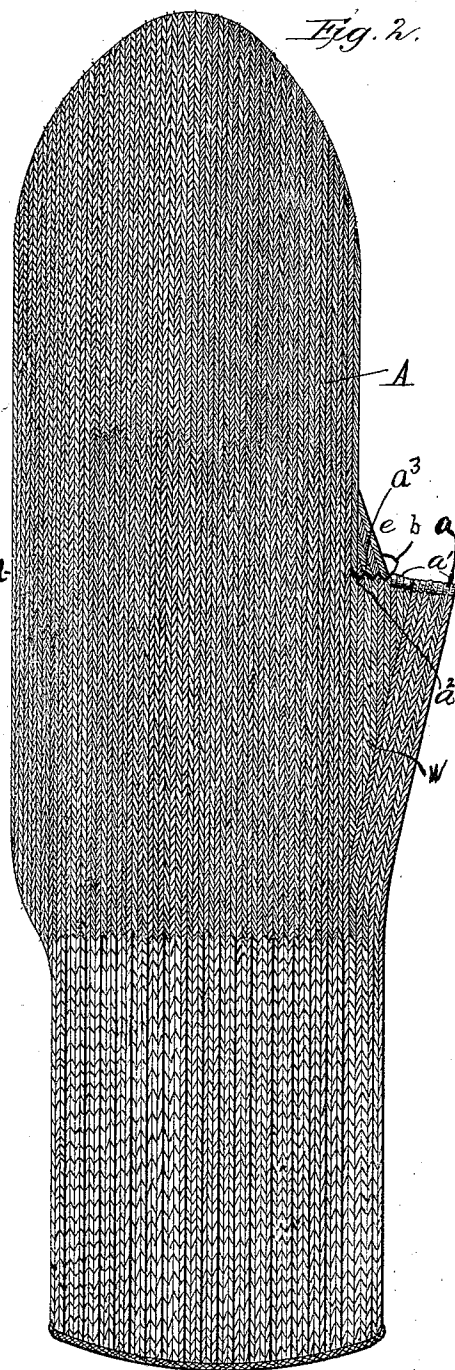
Patented July 16, 1895.



WITNESSES

F. L. Ouraud

Jos. Gregory



INVENTOR

Jean C. Farnam.

by J. Fred Kelly,
his Attorney.

(No Model.)

2 Sheets—Sheet 2.

J. C. FARNAM.
MITTEN AND METHOD OF KNITTING SAME.

No. 542,823.

Patented July 16, 1895.

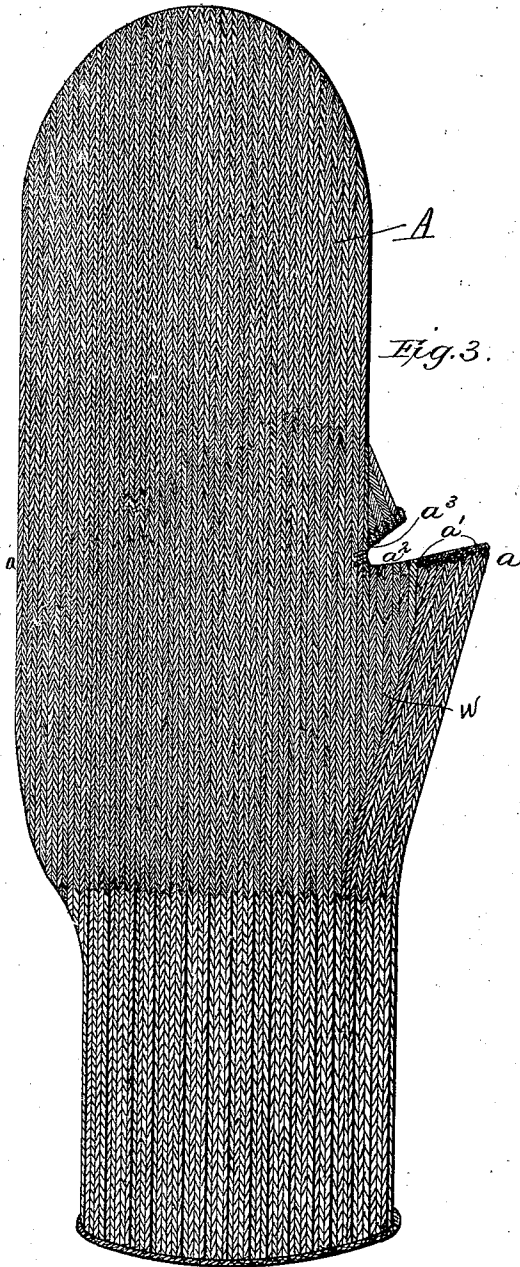


Fig. 3.

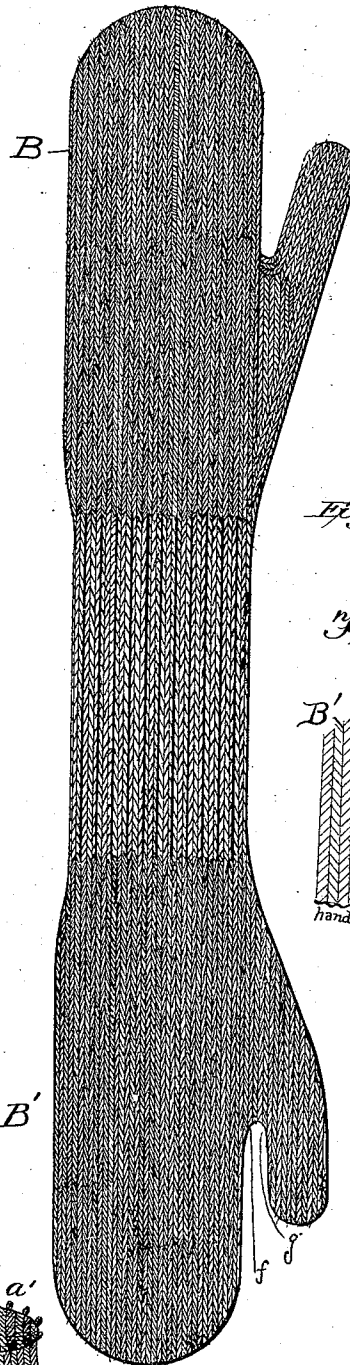


Fig. 4.

Fig. 6

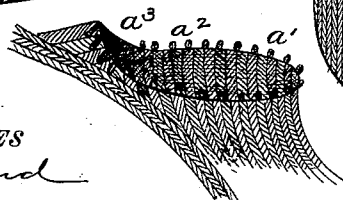
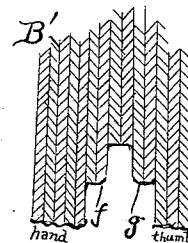


Fig. 5.

WITNESSES
F. L. Curand
Jas. Gregory

INVENTOR
Jean C. Farnam.
by J. Fred Keily,
her Attorney.

UNITED STATES PATENT OFFICE.

JEAN C. FARNAM, OF LA CROSSE, WISCONSIN, ASSIGNOR TO THE STAR
KNITTING COMPANY, OF SAME PLACE.

MITTEN AND METHOD OF KNITTING SAME.

SPECIFICATION forming part of Letters Patent No. 542,823, dated July 16, 1895.

Application filed November 14, 1893. Serial No. 490,881. (No model.)

To all whom it may concern:

Be it known that I, JEAN C. FARNAM, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Mittens and Methods of Knitting the Same; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an integral gusset knit by machinery for mittens, single or double, and knit gloves, the gusset being provided between the hand and the thumb by a peculiar process or method on the ordinary machine without altering, changing, or adding thereto.

The improvement relates more particularly to the method or manner of forming the gusset integral with the article and without seams, and simultaneously with the knitting of the body of the article without adding materially to the cost of manufacture.

In the accompanying drawings, illustrative of the invention, Figure 1 is a view of a mitten embodying my invention. Fig. 2 is a view of a mitten, showing the manner of forming the gusset. Fig. 3 is a detail view showing a further stage in the operation of forming the gusset. Fig. 4 shows a double mitten embodying the invention. Fig. 5 is a detail view illustrating how the thumb-hole is opened to knit the thumb thereon, and Fig. 6 is an enlarged detail view of the portion of the inner mitten which takes the place of the gusset.

The machine used in the manufacture of the mitten or similar article is of ordinary construction, that generally used being the Lamb knitting-machine, the operation of which is well understood in the knitting of mittens.

In carrying out the present invention the operation of the ordinary machine remains unchanged, the novelty consisting in the steps necessary to produce the gusset with the stitches identical with the stitches of the main portion of the hand.

As shown in Fig. 2, the mitten is knit to the point *a* in the ordinary manner. A portion of the stitches at this point are the loops of new wales *w* that have been begun at different points for the purpose of widening the mit, so as to form a base for the thumb, of which said stitches (those marked *a'*) are now taken off on to the ordinary thumb-comb and the needles pushed down out of the way, so that they will not engage the next round of the yarn. During the next round, commencing at a point about four or six stitches from the end adjacent to the thumb or at the beginning of the remaining thumb-stitches *a*², the yarn of which the mitten is being formed is removed and a different thread or yarn *b* is knit in to the end and back again about the same distance, when the original thread or yarn is again taken up and knit into the hand and fingers. During the rounds immediately following the insertion of the new and removable thread the mitten is narrowed in the usual manner adjacent to the thumb or upward from those stitches upon the removable thread, which will thus form the gusset, and will also narrow the hand to the desired size. After the hand *A* is finished the thread *b* is removed and the stitches *a*² and *a*³ connected thereby, and the stitches *a'*, which were on the thumb-comb, are placed on the needles of the machine and the thumb is knit up thereon by operating the machine in the usual way. In this manner the stitches of the gusset are identical with the stitches of the main portion of the hand and avoid the necessity of having a portion of them formed of selvage-stitches, as must be done if the additional stitches to form the gusset upon the hand side are set up or cast upon the needles, and it also avoids the necessity of forming the selvage-stitches between the hand and the gusset, as must be done where the rows or courses of stitches of the hand adjacent the gusset are formed by knitting backward and forward.

In forming the double mitten, as shown in Fig. 4, the thumb is first knit by setting it up at the tip and knitting toward the base, the last round or two of the base being widened by increasing the number of stitches in the courses, as shown at *g*, after which the thumb

is taken off the machine with the thumb-comb and laid aside, and the main portion or part B' is set up at the tip or ends of the fingers, and the mitten is knit toward the hand until the portion is reached which takes the place of the gusset between the thumb and the hand. The mitten is then widened by adding as many additional stitches, as shown at *f*, to the courses of stitches as desired between the hand and the thumb. Additional needles are then drawn into action and the thumb is placed on these needles and the courses of stitches of the thumb and hand are continued in the usual manner, the courses of stitches being narrowed preferably on the thumb side to form the wrist-portion of the mitten. After the wrist has been formed, which may be of a different style of stitches—as, for instance, what is known as “rib-stitches”—the wrist portion of the other portion B of the mitten is commenced by continuing the stitches of the portion B'. In this manner the two mittens are joined together around the wrist, so that when they are turned one within the other there will be no seam or place of union between the two portions of the mitten.

The portion B of the double mitten is knit in the usual manner, the gusset being formed in the manner first above described. The part B' is turned within the part B to form a double mitten.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. The herein described method of knitting mittens and similar articles with a gusset in which the stitches are identical with the stitches of the main portion of the hand which consists in first knitting the article to the thumb; secondly, knitting a round of a less length than the last round and forming a portion of it out of a different and removable thread; third, then finishing the hand and forming the gusset by narrowing the courses adjacent the thumb portion; fourth, removing the removable thread, and finally knitting the thumb upon the stitches formed thereby and upon the stitches in the base of the thumb, substantially as set forth.

2. As a new article of manufacture, a knit mitten having a gusset in which the stitches are identical with the stitches of the main portion of the hand, consisting of the wales between the thumb and the hand and having the base of the thumb formed upon the stitches of these wales and upon the stitches of a portion of the wales of the hand above these wales, substantially as set forth.

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

JEAN C. FARNAM.

Witnesses:

WM. S. BURROUGHS,
AND. D. HJELLE.