

W. H. ABEL.

METHOD OF MANUFACTURING KNIT MITTENS.

No. 177,086.

Patented May 9, 1876.

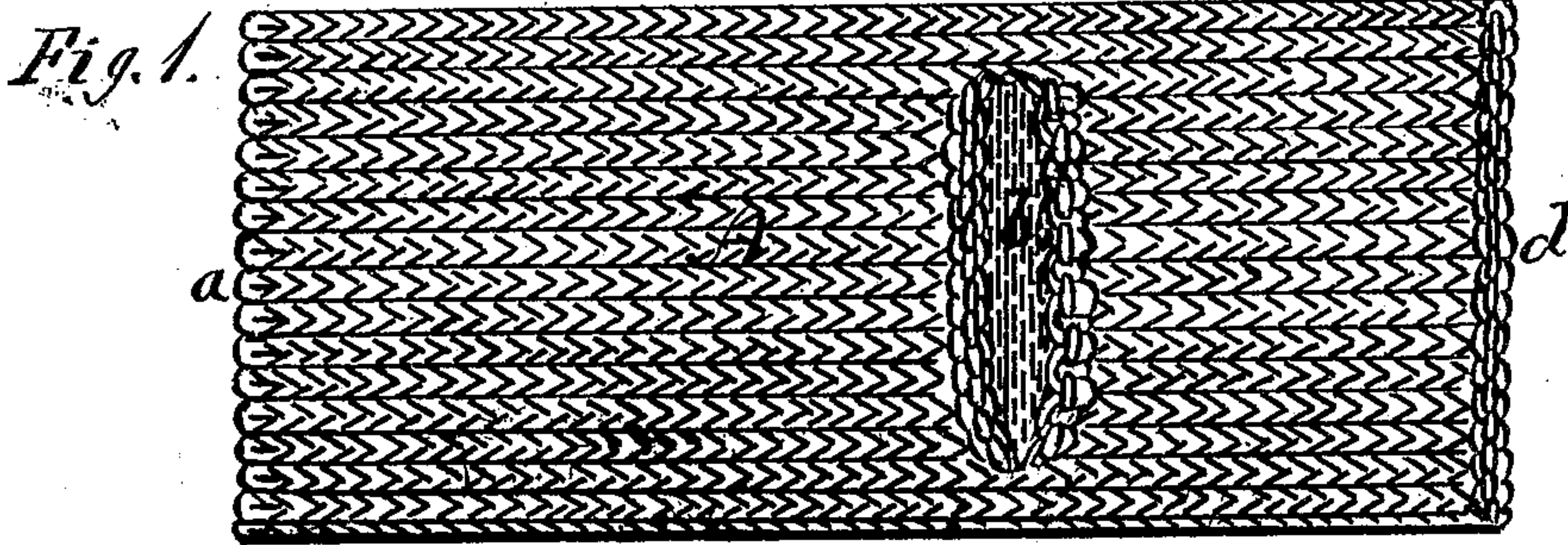


Fig. 2.

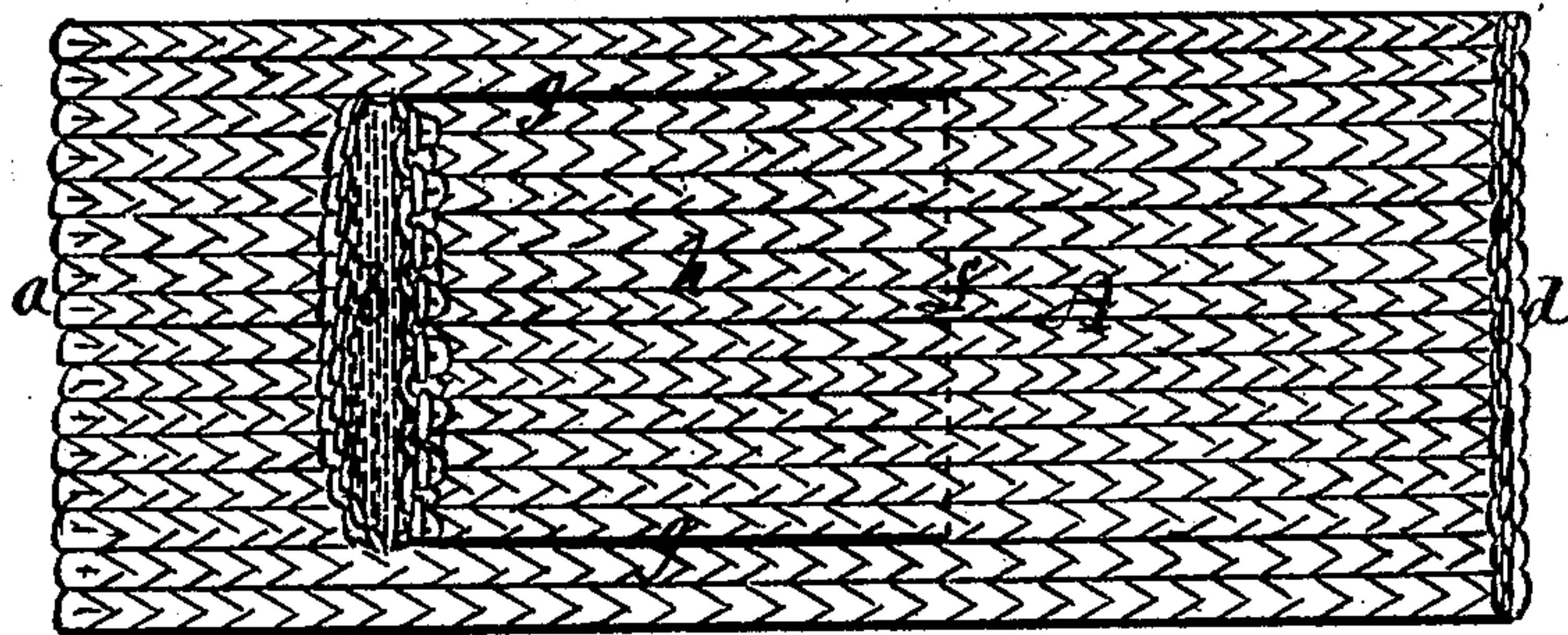


Fig. 3.

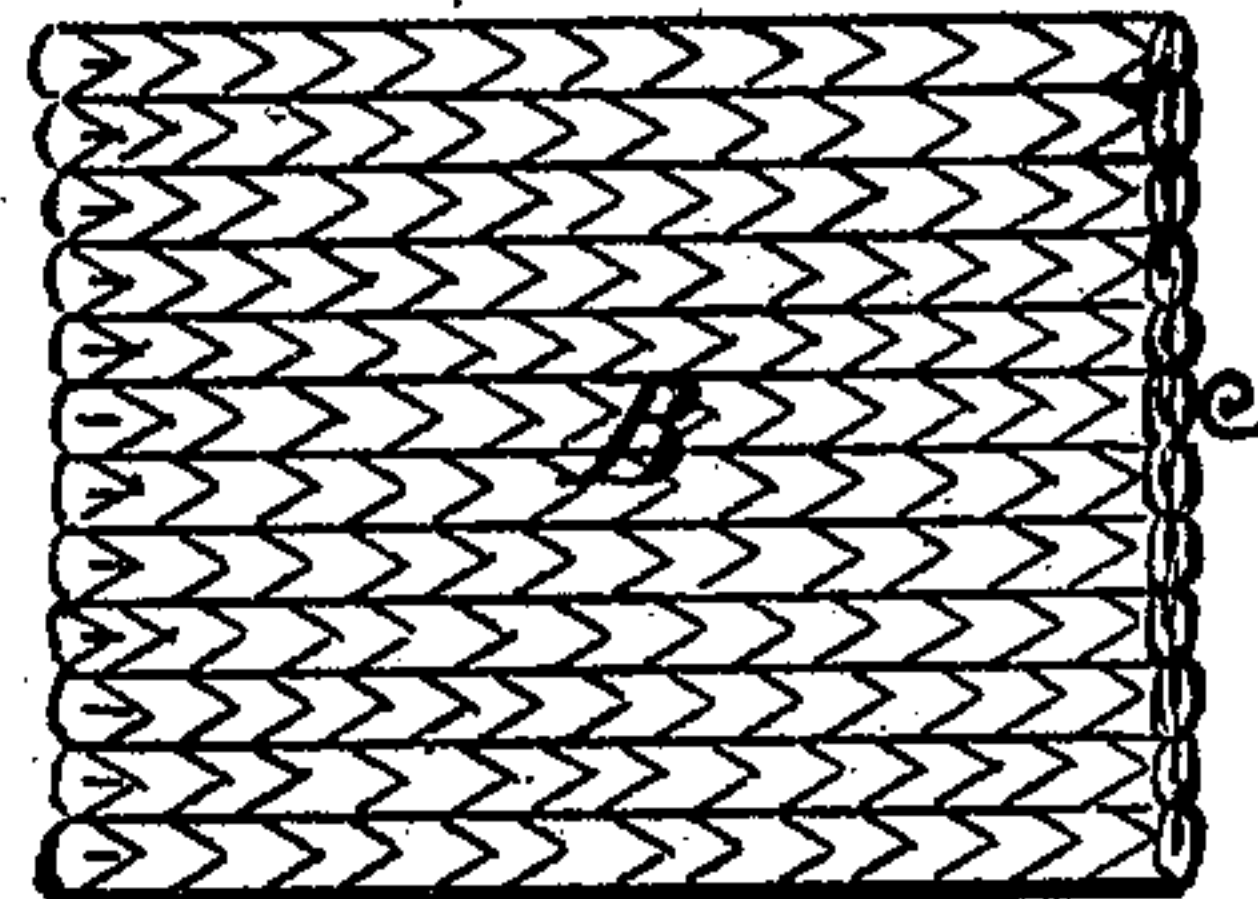
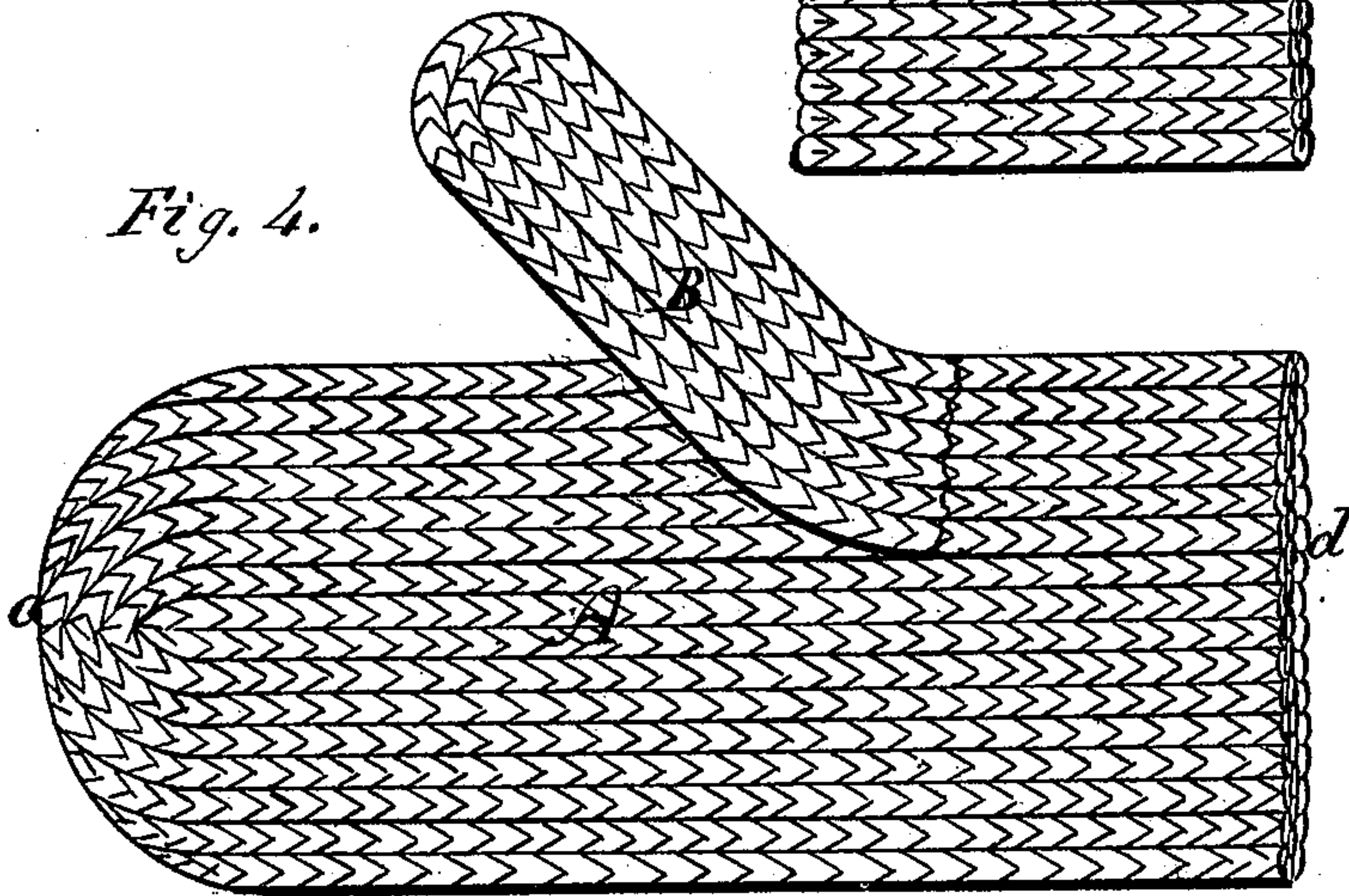


Fig. 4.



WITNESSES
E. M. Gallahan.
F. B. Townsend

INVENTOR,
Wm. H. Abel,
By *J. S. Brown,* his Attorney

UNITED STATES PATENT OFFICE

WILLIAM H. ABEL, OF BRISTOL, NEW HAMPSHIRE.

IMPROVEMENT IN METHODS OF MANUFACTURING KNIT MITTENS.

Specification forming part of Letters Patent No. **177,086**, dated May 9, 1876; application filed June 21, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. ABEL, of Bristol, in the county of Grafton and State of New Hampshire, have invented an Improved Process of Manufacturing Knit Mittens; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a view of the body of the mitten cut for the reception of a strip to form the thumb thereof; Fig. 2, a similar view of a mitten-body cut in a manner somewhat different from that shown in Fig. 1; Fig. 3, a view of the thumb-piece before it is inserted in the body of the mitten; Fig. 4, a view of the mitten after the thumb-piece is inserted.

Like letters designate corresponding parts in all of the figures.

My invention consists in a process of forming mittens out of a continuous tubular knit web, the thumb being made from a separate strip of knit web, and attached to the body of the mitten in a cross-cut of the tubular knit web, substantially as herein specified.

The body *A* of the mitten is knit in a tubular web, and cut therefrom to the proper length, and the end *a* thereof is narrowed or shaped by cutting, and closed by crocheting or sewing, in any suitable manner. For the insertion or attachment of the thumb I make a cross-cut, *b*, Fig. 1, in the body of the mitten, in the proper position for the base of the thumb, this cut being as long as required to admit the proper size of thumb. The thumb itself is formed from a separate knit piece, *B*, Fig. 3, of the requisite width to form the circumference of the thumb, and of a length equal to the required length of the thumb. One end, *c*, of this strip is then crocheted or sewed to the upper one of the two edges of the cross-cut *b*, in the body of the mitten, and a portion of the adjacent side edges thereof are

in like manner joined to the lower of the said cross-cut edges, while the remainder of the side edges are joined together, the outer end of the thumb being shaped by rounding off the corners at the outer end of the thumb-piece. The mitten, then, when provided with a suitable binding or border, *d*, at the upper or wrist end, is finished, as shown in Fig. 4.

By the modification shown in Fig. 2, the cross-cut *b* is made nearer the tip or lower end of the mitten a distance equal to the length of the thumb from the line *f*, where the base of the thumb is to be. Then from the cross-cut the mitten is cut lengthwise along the two lines *g g* to the base-line *f*, thus setting free a thumb-strip, *h*, already joined to the body of the mitten, and the space left by cutting out said thumb-strip is filled by crocheting or sewing in another piece; or the thumb-strip may be of one-half width, and the inserted piece of double length, one-half filling the space, and the other half thereof forming one-half of the thumb, and the said strip *h* forming the other half of the same.

This method or process of knitting mittens is exceedingly rapid and cheap, and produces a mitten as strong and good, substantially, as the hand-knit mitten.

What I claim as my invention, and desire to secure by Letters Patent, is—

The method of forming knit mittens from a continuous circular knit web, as herein described, which consists in making a cut across the same, and attaching thereto the thumb *B*, which is formed from a separate knit piece, and inserted in the said cross-cut, as shown.

Specification signed by me this 2d day of October, 1874.

WM. H. ABEL.

Witnesses:

J. S. BROWN,
E. J. BROWN.