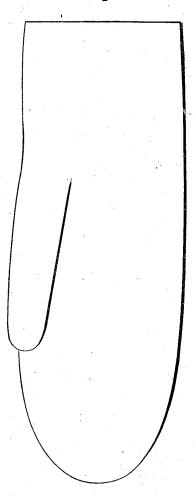
A.C.Carey, Fabric.

NO. 54,108.

Faterited Apr. 24.1868

Fig. 1.



The Shot of Thursbulum & Ryatty. and Swighton,

## United States Patent Office.

AUGUSTUS C. CAREY, OF MALDEN, MASSACHUSETTS.

## IMPROVEMENT IN MACHINE-MADE KNITTED MITTENS.

Specification forming part of Letters Patent No. 54,108, dated April 24, 1866.

To all whom it may concern:

Be it known that I, AUGUSTUS C. CAREY, of Malden, in the county of Middlesex and State of Massachusetts, have invented or discovered a new and useful Improvement in the Manner of Knitting the End and Thumb of a Mitten; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification.

My invention consists in the production of a knit mitten the thumb of which is knit on, beginning at the end or point thereof, and knitted up toward the wrist as the body of the mitten is knit in that direction, as will be explained.

Ipropose to knit the mittens in question upon a machine substantially such as patented to me on the 18th April, 1865, made with two straight parallel rows of independent needles placed in a horizontal position and opposite to each other, with the ends of the needles pointing to the center of the machine, and the ends of the needles in the two independent rows pointing toward each other. The first needle on one row, when thrown forward, passes between the first and second needles of the opposite row of needles.

In knitting straight tubular work the yarn is knit first upon one row of needles and then upon the other row. These needles being thrown forward by a jacquard, it will be obvious that any number of needles, or any particular needle or needles, can be thrown forward at any given time by cutting or punching the face of the jacquard to the desired pattern.

I commence a mitten at the tip of the thumb and knit the whole thumb, when the needles that did that special work are thrown out of

action by the jacquard. Then, using the same thread, I commence knitting the tip of the body of the mitten, and continue to knit until that part of the mitten that covers the fingers is knit up. Then all the needles—those that knit the thumb and those that knit the fingerswork together and knit a tubular piece for the hand and wrist, and of such size as the jacquard may have been specially cut for. When the mitten has been knit to the wrist, then both rows of needles are thrown forward at one motion and they both knit the same thread once across. This knits the tubular work together lengthwise and crosswise, and these loops so knit form the beginning for the next tip. Then three, four, or more needles are thrown forward at the center of the last-named stitches and increased gradually in numbers by one, two, or more until they are all at work, or sufficient to knit the desired size of tube or cylinder for the thumb, when they cease knitting and the tip of the fingers is commenced and knit up to the thumb. Then all is knit up to the wrist, and so on.

Having thus fully described my invention, what I claim as a new article of manufacture is—

A machine-knit mitten, the thumb of which is first commenced at its tip and knit up to where it is to be joined to the body of the mitten and there stopped until the body is knit up and joined to said thumb portion, and then both united and knit on, in a cylindrical form, to the wrist, by means of needles and a thread automatically operated by a jacquard pattern, substantially as described.

AUGUSTUS C. CAREY.

Witnesses:

A. B. STOUGHTON, EDM. F. BROWNE.