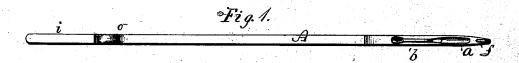
W. H. ABEL, Dec'd.

G. A. EMERSON, Administrator.

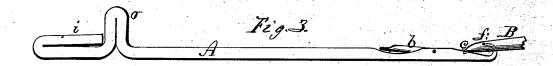
LATCH NEEDLE AND COVERING OR TRANSFERRING POINT FOR KNITTING MACHINES.

No. 382,675.

Patented May 8, 1888.







GMGSallaher. DP. Cowe.

Milliam A. Afol,
By S. Brown,
his attorney.

UNITED STATES PATENT OFFICE.

WILLIAM H. ABEL, OF LACONIA, NEW HAMPSHIRE; GEORGE A. EMERSON ADMINISTRATOR OF SAID WILLIAM H. ABEL, DECEASED.

LATCH-NEEDLE AND COVERING OR TRANSFERRING POINT FOR KNITTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 382,675, dated May 8, 1888.

Application filed March 22, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. ABEL, of Laconia, in the county of Belknap and State of New Hampshire, have invented certain new and useful Improvements in Latch-Needles and Covering or Transferring Points for Knitting-Machines, consisting, so far as this application is concerned, of the improvements in a latch knitting-needle and the same combined with to a transferring-point, as hereinafter specified,

and embraced in the appended claims.

The object of such parts of my new improvements as are described and shown in this application is to so construct and ar-15 range the needle and point that they can be readily and practically attached to the other parts of the machine, and when in operation the needles and points can be so united and disunited in the process of knitting as to per-20 form all the functions requisite to each in plain knitting and narrowing, or fashioning of fabrics in an economical and practical man-

I have filed separate applications for other 25 parts of my said improvements, in one of which—to wit, that one filed on the 29th day of July, 1876, (see Letters Patent No. 187,696, Reissue No. 8,779, and Reissue No. 10,112) may be seen a full illustration and descrip-30 tion of the parts herein described in connection with other parts of my improved knitting

machinery.

In the drawings, Figure 1 is a top view of my new knitting needle; Fig. 2, a view of 35 the covering or transferring point made to work with my new needle; Fig. 3, a side view of the new needle and point in position for transferring the loops from the needle to the point or from the point to the needle.

My said inventions relate to mechanism for knitting and "fashioning" "regular" knit-ted fabrics by the use of latch-needles, and my new knitting needle is so constructed and arranged as to be used in the fabrication of 45 such goods both in the plain or regular knitting process and in the fashioning and nar-

rowing process.

The needle A is constructed with an eye or enlarged slot, a, in that portion front of the 50 latch-pivot and back of the hook, so formed as to readily and practically receive the covering or transferring point when the point is brought onto the needle preparatory to trans-

ferring of the loops. Said needle also has a regulating bar or tail-piece, i, extending be- 55 yond the butt or heel a of the needle, which in some constructions aids materially in keeping the needle steadily in position during the process of narrowing. In other constructions this bar or tail-piece can be dispensed with 6c without affecting the other parts and operation of the needle.

The covering or transferring point B terminates in a pointed end, c, so formed as to enter and fit well into the eye or slot a of the 65 needle, the other end being formed to unite with the proper part of the machine. Immediately back of this pointed end c, on the under side, an eye or cavity, d, is formed to fit over and cover the hook portion f of the 70 needle A when united with it, for the purpose of transferring the loops. This point when brought down upon the needle covers the hook of the needle, and its point c (see Fig. 3) becomes embedded in the eye or slot 75 a of the needle in such a way and to such an extent as to form a connection that will allow the loops to pass freely and without strain from one to the other and back, and also to so lock the two together as to steady and securely 80 hold them during this operation in the narrowing. Constructions of this kind when properly made, arranged, and adjusted will admit of rapidity and perfection of operation and effect and with great economy.

I claim-

1. A latch knitting-needle having the eye or enlarged slot therein between the latchpivot and hook for the reception of the covering or transferring point, substantially as 90 shown and described.

2. A latch needle having the eye or enlarged slot therein between the latch pivot and hook and the regulating-bar or tail-piece, as shown

and described.

3. The covering or transferring point constructed as shown and stated, in combination with the latch needle having the eye or enlarged slot therein between the latch-pivot and the hook for the reception of said covering or 100 transferring point.

WM. H. ABEL.

Witnesses: WM. H. WATSON, WM. A. ABEL.