

(No Model.)

F. R. WOODWARD.

METHOD OF MAKING LATCH NEEDLES.

No. 259,969.

Patented June 20, 1882.

Fig: 1.

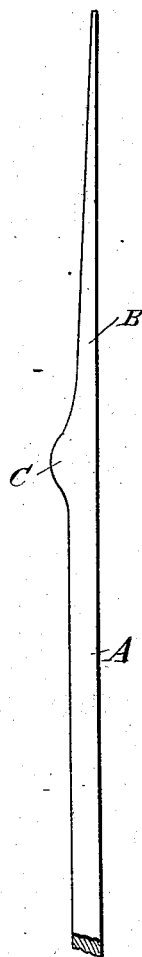
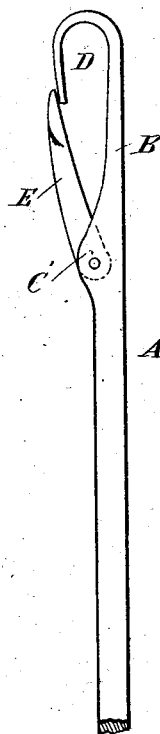


Fig: 2.



Witnesses:

Chas. Nida.

B. G. Underwood

Inventor:

F. R. Woodward.

by

Munn & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

FRANK R. WOODWARD, OF HILL, NEW HAMPSHIRE.

METHOD OF MAKING LATCH-NEEDLES.

SPECIFICATION forming part of Letters Patent No. 259,969, dated June 20, 1882.

Application filed February 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. WOODWARD, of Hill, county of Merrimack, and State of New Hampshire, have invented a new and useful Improvement in the Manufacture of Latch-Needles for Knitting-Machines, of which the following is a full, clear, and exact description.

Heretofore latch-needles for knitting-machines have been provided with a lug to which the latch is pivoted by reducing the thickness of the wire of which the needle is formed above and below the point at which the latch is to be pivoted. This method of providing the needles with the required lug and jaws is very laborious and expensive; and the object of my invention is to make the needles in a simpler manner, whereby they can be made much more rapidly at a reduced cost and of thinner wire.

The invention consists in upsetting the wire from which the needle is made a short distance from the end, whereby a lug will be formed to which the latch of the needle can be pivoted.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal side elevation of a latch-needle blank made according to my improved method. Fig. 2 is a longitudinal elevation of a latch-needle made according to my improved method, at right angles to Fig. 1.

A wire, A, is tapered or pointed at its end,

and at the lower end of the tapered part B the wire is upset in the ordinary manner of upsetting rods and wires, to form a projection or lug, C, on the edge of the wire, as shown. The tapered part of the wire is then bent to form a hook, D. The lug or projection is provided with a longitudinal cut or slit in its edge, whereby two jaws, C', will be formed, between which jaws the latch E, of the usual construction, is pivoted, this latch reaching over the lower end of the hook D, as shown in Fig. 2. If the needle is constructed in this manner, thinner wire can be used than has been used heretofore, as none of the wire need be filed off to produce the lug C, and the needle can be produced much more rapidly, as upsetting the wire requires but very little time in comparison to the time required to file off a considerable part of the thickness of the wire. By filing off part of the wire the same is weakened, whereas I strengthen the wire by upsetting it.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The improvement in the method of making latch-needles for knitting-machines, which consists in upsetting at a short distance from the pointed end the wire from which the needle is being made, and thus forming a lug for the attachment of the latch, as described.

FRANK R. WOODWARD.

Witnesses:

FRANK PROCTOR,
J. A. TAYLOR.