

S. PEBERDY.  
Knitting-Machine Needle.

No. 206,354.

Patented July 23, 1878.

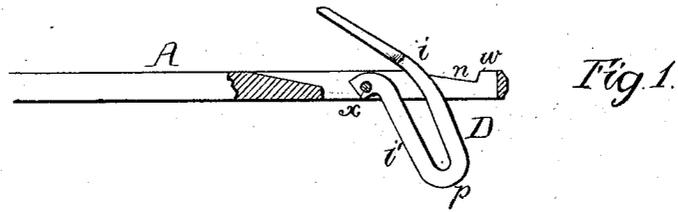


Fig. 1.

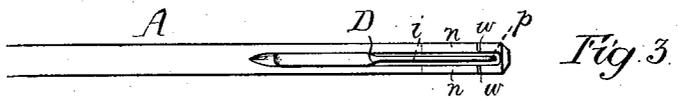


Fig. 3.

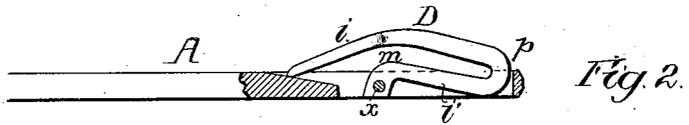


Fig. 2.

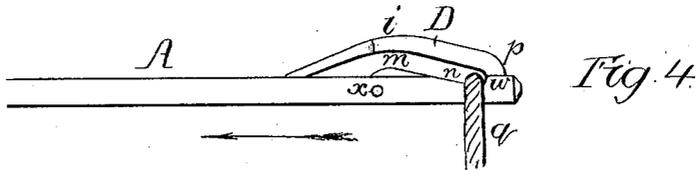


Fig. 4.

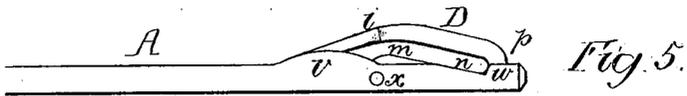


Fig. 5.

Witnesses,  
Henry Smith  
Henry Howson Jr.

Inventor  
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# UNITED STATES PATENT OFFICE.

SAMUEL PEBERDY, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN KNITTING-MACHINE NEEDLES.

Specification forming part of Letters Patent No. **206,354**, dated July 23, 1878; application filed June 27, 1878.

*To all whom it may concern:*

Be it known that I, SAMUEL PEBERDY, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Knitting-Machine Needles, of which the following is a specification:

My invention consists of certain improvements, fully described hereinafter, in the knitting-machine needle for which Letters Patent No. 191,709 were granted to me on the 5th day of June, 1877.

In the accompanying drawing, Figures 1 and 2 represent my improved needle in section, with the latch in different positions; Fig. 3, a plan view of Fig. 2; Fig. 4, a side view; and Fig. 5, a side view, showing a modification of the needle.

A is the stem of the needle, in a slot near the end of which is pivoted the latch-lever D, which is substantially the same as that described in my said patent, being composed of two arms, *i* and *i'*, united at the bend *p*, the arm *i'* being pivoted to the said stem at a point, *x*, between the outer end of the arm *i* and the bend *p*.

In my former patent the upper edge of the arm *i'* of the latch-lever, near the pivot *x*, coincided, or nearly so, with the upper edge of the stem A; but in my present invention it will be observed that the arm *i'* of the latch-lever has a projection, *m*, which extends above the upper edge of the stem when the said latch-lever is in the position, Fig. 2, the said projection *m* forming an inclined continuation of the notch or recess *n*, near the end of the stem of the needle, Fig. 4, so that when a loop, *g*, of yarn slides rearward in the direction of the arrow it will pass over the inclined projection *m* of the arm *i'*, and tend to open the latch-lever before the loop reaches the inclined end of the arm *i*, thereby relieving the said arm *i*, which is necessarily more or less slender, from the upward pressure of the loop.

In my former patent a recess was shown near the end of the stem where the bend of the latch-lever occurs; but this recess was not sufficiently abrupt.

It will be seen that in my present needle the recess *n* forms an abrupt shoulder, *w*, which should coincide, or nearly so, with the inner edge of the bend of the latch-lever, so that the strain on a loop lodged in this bend will not be exerted entirely on the latch-lever, but mainly on the shoulder *w* of the stem, which is better adapted to resist the strain than the lever.

In Figs. 1, 2, and 4 the stem is straight, with upper and lower parallel edges, excepting where the recess or notch *n* occurs; but in Fig. 5 there is an elevation, *v*, on the upper edge of the stem at and near the point where the end of the arm *i* of the latch rests. This elevation is to be preferred for two reasons: First, the loop in passing from the stem over the latch-lever has first to ascend the elevation, and consequently the strain of the loop on the arm *i'* of the said lever is lessened by this elevation; and, second, the elevation permits me to make the arm *i* of the latch-lever shorter than in Fig. 1, and therefore stronger.

The operation of the needle will be readily understood by those familiar with knitting-machines, and is so fully described in my former patent that a repetition here will be unnecessary.

I claim as my invention—

1. The combination, in a knitting-needle, of a stem, A, with a latch-lever, D, a portion of the arm *i'* of which forms an inclined projection above the upper edge of the stem when the said latch-lever is closed, all substantially as set forth.

2. The combination of the stem A, provided with the elevation *v*, with the latch-lever D, having an arm, *i*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL PEBERDY.

Witnesses:

HARRY A. CRAWFORD,  
HARRY SMITH.