

S. PEBERDY.
Knitting-Machine Needle.

No. 206,354.

Patented July 23, 1878.

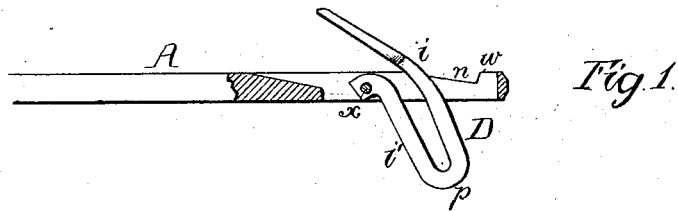


Fig. 1.

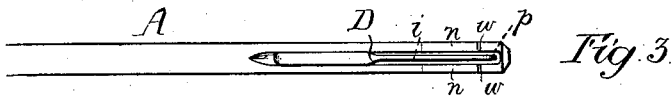


Fig. 3.

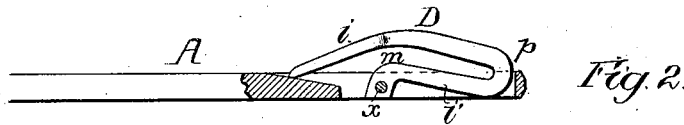


Fig. 2.

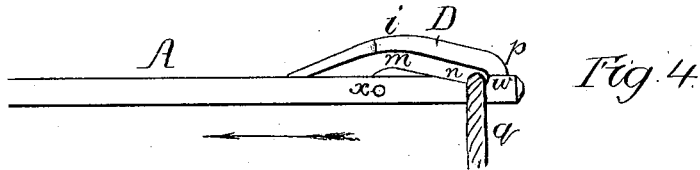


Fig. 4.

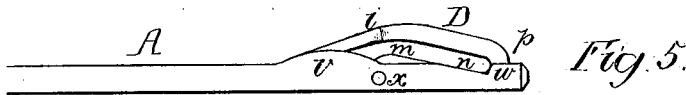


Fig. 5.

Witnesses,
Harry Smith
Henry Howson Jr.

Inventor
Samuel Peberdy
by his Attorneys
Howson and Son

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, *q*, 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.