

N. H. BALDWIN.

Improvement in Knitting-Machine Needles.

No. 128,274.

Patented June 25, 1872.

Fig. 1.

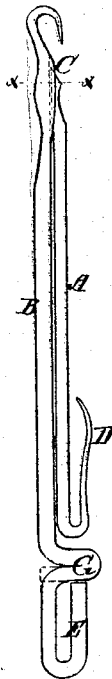
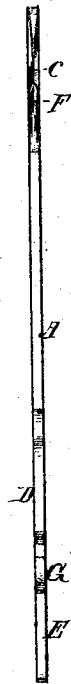


Fig. 2.



Witnesses:

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NATHAN H. BALDWIN, OF LACONIA, NEW HAMPSHIRE.

IMPROVEMENT IN KNITTING-MACHINE NEEDLES.

Specification forming part of Letters Patent No. 128,274, dated June 25, 1872; antedated June 18, 1872.

Specification describing certain Improvements in Knitting-Machine Needle, invented by NATHAN H. BALDWIN, of Laconia, in the county of Belknap and State of New Hampshire.

My invention consists in having the sliding latch run upon the front side of the needle, except for a short distance below the hook, where a shallow groove is provided by flanges rising from the front side to receive the point when drawn and carry the yarn over it, the point of the latch coming on the inside of the point of the hook of the needle and receiving the latter in a groove; the object being to enable me to avoid the deep groove in the needle, and the breadth thereof necessary to cover the point of the latch when arranged to go outside of the point of the hook, and thus allow of making the needles of this kind much finer than they have been heretofore made. In order to hold the latches thus arranged in position, I make a spring-shank on the lower part, which prevents the slides from turning and getting out of place in the machine, and also serves to close the point on the hook when in operation.

Figure 1 is a side elevation of my improved needle. Fig. 2 is a front elevation, and Fig. 3 is a cross-section on the line *xx* of Fig. 1.

Instead of having the slider A fitted in a groove in the front of the needle B, I propose, for making the needle as thin as possible for fine goods, to have it fit against the front side only, and only groove the front of the needle at C for a short distance to carry the yarn over the point, and this groove I form by slight flanges projecting forward from the front side of the needle. To keep the slider in position on the front of the needle I depend on the walls of the groove and the spring-shank D, which I apply to the lower end. This shank

also serves to keep the point of the slider from dropping away rearward from the point of the hook by throwing the upper end out in consequence of pressing the lower one back. In order to reduce the thickness of the needle from front to rear I have the point of the slider come up under the point of the hook, providing it with a groove, F, for receiving the hook, so that the yarn will pass over it. By this arrangement the point of the latch is at the inner side, so that the groove at C will, though very shallow, be deep enough to protect the yarn from said point. The groove at C being in V-form, the inner side of the slider is necessarily the reverse of it, and is therefore the best shape for having the groove A made in the point of the slider with the least thickness of metal thereat, all of which is favorable to the construction of fine needles. E represents a coil made at the lower end of the common shank G by a prolongation of the wire and a return bend, or a coil of one or more turns to get a bearing-surface behind to prevent the needle from tipping back to support it sideways, and to make greater bearing-surface at sides. This part of the needle is particularly applicable to machines known as footers, where a part of the stocking is knit flat on said footers by a forward-and-back motion.

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

The needle B having the projecting flanges at C to carry the yarn over the point of the slider, and the slider having the spring-shank D and groove F, combined and arranged together substantially as specified.

NATHAN H. BALDWIN.

Witnesses:

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