(No Model.)

J. C. EGLY.

KNITTING MACHINE NEEDLE.

No. 342,739. Patented May 25, 1886.

Fig. 1.

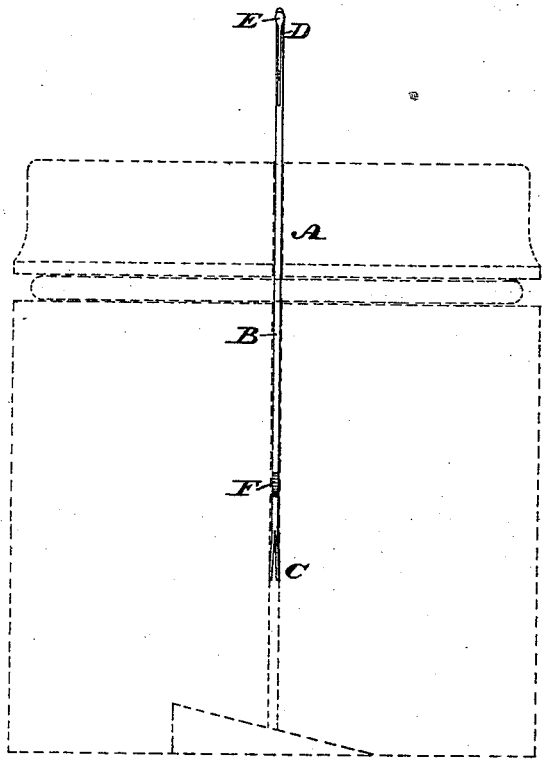


Fig. 2.

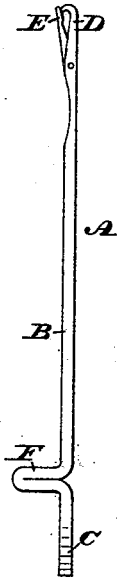
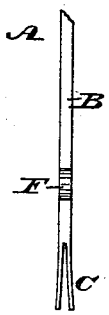


Fig. 3.



WITNESSES:
A. P. Grant.
W. F. Kirchner

INVENTOR:
John C. Egly
BY John A. Wiedersheim
ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN C. EGLY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THOMAS A. PEARCE, OF SAME PLACE.

KNITTING-MACHINE NEEDLE.

SPECIFICATION forming part of Letters Patent No. 342,739, dated May 25, 1886.

Application filed December 19, 1885. Serial No. 186,191. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. EGLY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Knitting-Machine Needles, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figures 1 and 2 represent side elevations of a knitting-machine needle embodying my invention, a needle-cylinder with a needle in position being shown in dotted lines, Fig. 1. Fig. 3 represents a view of the lower portion of the needle on an enlarged scale.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a knitting-machine needle having a double spring, whereby it retains its position, obviates the well-known bend in the needle, permits the use of a straight needle, and other advantages are possessed, as will be hereinafter fully set forth.

Referring to the drawings, A represents a knitting-machine needle, the same being formed with a shank, B, a spring, C, a hook, D, a latch, E, and heel or foot F.

The spring C is an integral part of the needle at the lower end thereof, and in the present case formed by dividing or bifurcating the metal of the needle at said end, thinning the divided parts and bending the same laterally, forming a double spring.

When the needle is within the groove of the needle-cylinder, the two springs bear in opposite directions against the walls of said groove, so that the combined action produces increased friction between the walls of the groove and the needle, whereby the needle is caused to remain in the position in which it is placed and prevented from being improperly moved. It will also be seen that the shank B is straight, thus avoiding the usual bend in the needle above the foot F, whereby the needle may be quickly and cheaply constructed, moves easily and rapidly in the cylinder when operated, and is more durable than the bent needle heretofore made. Furthermore, as the needle retains its position, owing to the action of the spring, should the thread break or the bobbin run out, the needle will be relieved of the stitches and prevented from flying up or down and being broken, avoiding breaking of the machine or injury to the parts thereof.

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

1. A knitting-machine needle having its lower end bifurcated and bent in opposite directions, forming a double spring, substantially as described.

2. A knitting-machine needle having a straight shank and a double spring at the lower end thereof, substantially as described.

3. A knitting-machine needle having its lower end bifurcated, thinned, and bent, forming a double spring, substantially as described.

JOHN C. EGLY.

Witnesses:
JOHN A. WIEDERSHEIM,
A. P. GRANT.