

J. P. BRIDGE.
Sewing-Machine Needle.

No. 216,141.

Patented June 3, 1879.

Fig. 1.

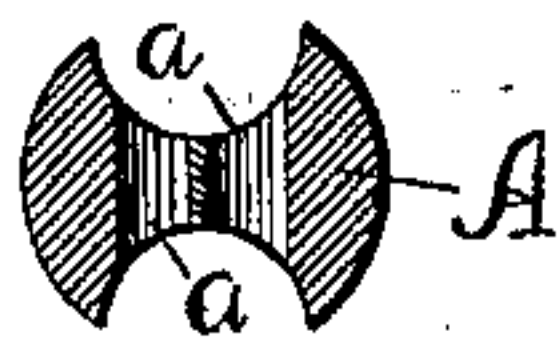


Fig. 2.

Witnesses.
H. C. Lodge.
H. Hummell.

Inventor.
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H. Curtis. Atty.

UNITED STATES PATENT OFFICE.

JAMES P. BRIDGE, OF TYNGSBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN SEWING-MACHINE NEEDLES.

Specification forming part of Letters Patent No. **216,141**, dated June 3, 1879; application filed January 3, 1879.

To all whom it may concern:

Be it known that I, JAMES P. BRIDGE, of the town of Tyngsborough, county of Middlesex, and State of Massachusetts, have invented certain new and useful Improvements in Sewing-Machine Needles, of which the following is a specification.

My present invention relates to needles for "double-thread sewing-machines," so called—that is to say, machines which employ two upper threads with a single needle, the needle itself having two eyes near its point, which receive the two upper threads of the machine, a thread in each eye.

My invention, which may be said to be an improvement upon the needle shown and described in Letters Patent of the United States issued to Joseph B. Blanchard on the 2d day of June, 1874, consists in arranging the two eyes side by side in a plane at right angles and upon opposite sides of the axis of the needle, the purpose in thus arranging the eyes being to separate the two threads as they enter the material to be sewed, and prevent them from overriding each other or changing from side to side, and compel them to observe a uniform position with respect to each other.

The drawings accompanying this specification represent in Figure 1 a sewing-machine needle, and Fig. 2 a cross-section of same through the eyes.

In these drawings, A represents a sewing-machine needle, and *a a* its two eyes near its point. These eyes are placed practically equidistant from the axis of the needle, and upon opposite sides thereof, and are opposite each other—that is, in a common plane at right angles to such needle-axis.

Heretofore in double-eyed needles for sewing-machines the two eyes have been placed one above the other, and as a consequence the loops of thread formed by the ascent of the

needle are of different length, and stand one below the other. Objection has been found to this differential altitude of the two eyes, for the reason that as the loops are of the same length and not in the same plane the shuttle of the machine does not as readily enter them, and a skipping of one or the other is liable to ensue, in addition to which one thread must slip upon the other in being taken up and drawn into the material.

By arranging the two eyes in the same plane, as shown in the drawings, the loops of the two threads are of uniform length, and are taken up and laid into stitches in the material without slipping one upon the other, and with a uniform tension, while the shuttle engages them more certainly, as they stand at the same altitude.

It is true that the needle must be somewhat increased in diameter to permit of my arrangement of the eyes; but this can be done without detriment.

I am aware that it is not original with myself to dispose the two eyes upon opposite sides of the axis of the needle, as this arrangement is shown in Letters Patent of the United States issued on the 9th day of April, 1878, to William C. Cross, and therefore I do not claim such arrangement of the eyes irrespective of their positions in other respects.

In the Cross needle the eyes are placed one above the other, and the specification explicitly provides that they are to be so disposed.

I claim—

A sewing-machine needle in which its two eyes are arranged at the same altitude and upon opposite sides of its axis, substantially as and for the purposes stated.

JAMES PITTS BRIDGE.

Witnesses:

WM. TURELL ANDREWS, Jr.,
H. E. LODGE.