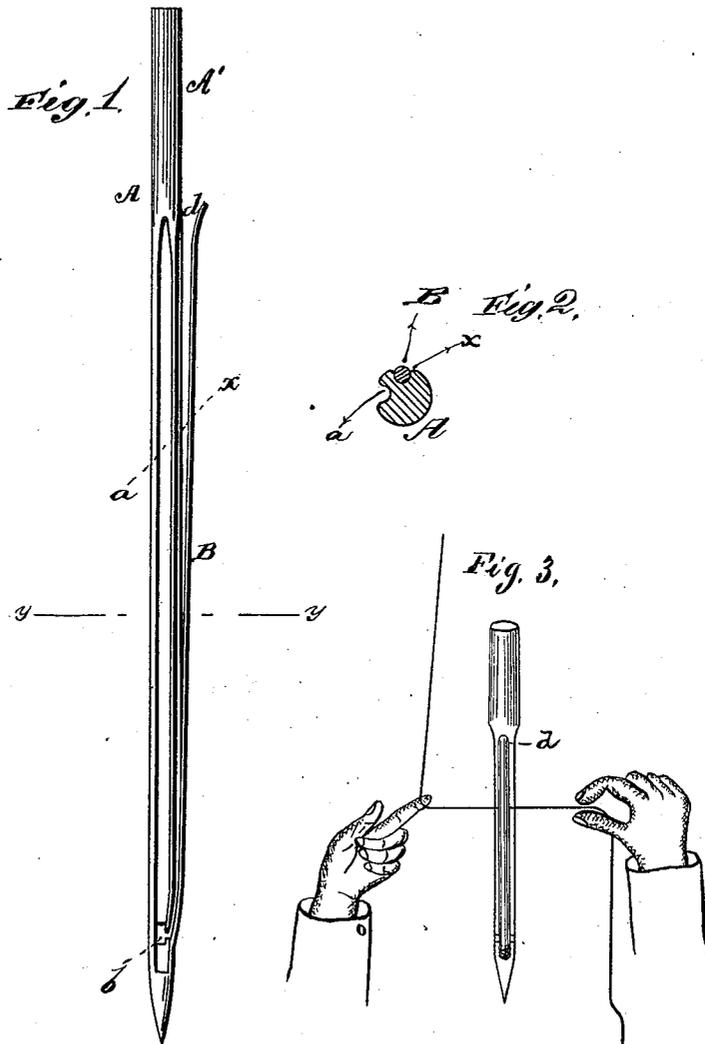


W. T. BERRY.
Sewing-Machine Needle.

No. 212,534.

Patented Feb. 25, 1879.



WITNESSES
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WILLIAM T. BERRY, OF MAYSVILLE, KENTUCKY.

IMPROVEMENT IN SEWING-MACHINE NEEDLES.

Specification forming part of Letters Patent No. **212,534**, dated February 25, 1879; application filed April 20, 1878.

To all whom it may concern:

Be it known that I, WILLIAM T. BERRY, of Maysville, in the county of Mason and State of Kentucky, have invented a new and valuable Improvement in Sewing-Machine Needles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention is designed as an improvement on that class of sewing-machine needles having a dividing passage or slit upon one side, affording a communication from an opening above to the eye below, so that the needle may be threaded by simply passing the bight or middle of the thread over the opening above, and then drawing it down into the eye; and the object is to protect a spring on the side of the needle in a groove or furrow in the body of the needle while it is in operation.

The improvement therefore consists in a sewing-machine needle of the class above mentioned, having an auxiliary groove or channel, into which a spring-arm attached to the lower or point end of the needle is buried, or partly so, whereby the said spring-arm is held in position while the needle is in operation, as will be hereinafter more fully set forth.

The annexed drawings fully represent the improvement.

A represents a needle for a sewing-machine, provided in the usual manner with the longitudinal groove *a* in the front, leading downward to and below the eye *b*, and A' is the enlarged head of the needle. The body of this needle is provided with an auxiliary or a second groove or furrow, *x*, leading from the upper outer side of the needle to and into the eye *b* of the needle.

B indicates a spring-arm, of round or oval shape in cross-section, and attached immediately below the terminus of the groove *x* and below the eye *b* of the needle in any of the well-known ways; or it may form a compo-

nent part of the needle. The upper end of the spring-arm is turned slightly outward, so as to form a convenient mouth or entrance at *d* for the thread. This spring-arm B, on the side of the needle, and having a rigid connection at the point end, is to have sufficient elastic pressure to bury or confine itself wholly or partially in the groove *x* in the needle, for the purpose of holding the same in position while the needle is in operation, and at the same time making the needle perfectly round and well formed, and of good finish, thereby making the sewing as neat and smooth as with the ordinary needle. Without this round surface on the spring and the groove in the needle for the same, as fully shown in Fig. 2 of the drawings, the work produced would be rough and unsightly, and the spring-arm would cut the material worked upon—occasioned by the sharp edges and too much play. Also, by this construction of needles the eye of the needle is made smaller than in the old style, which materially strengthens the needle at the point.

To thread this improved needle, it is only necessary to loop the thread in the opening *d* at the upper end, as is shown in Fig. 3; then draw the thread gently down through the passage between the needle and spring-arm toward the point and into the eye, thus facilitating the threading of the needle and saving time.

What I claim as my invention is—

A sewing-machine needle having an auxiliary groove or furrow, *x*, and a spring-arm, B, secured to the point end below the eye of the needle, and resting within the said groove or furrow while the needle is in operation, for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM THOMAS BERRY.

Witnesses:

GEO. W. SULSER,
JAS. H. HALL, Jr.