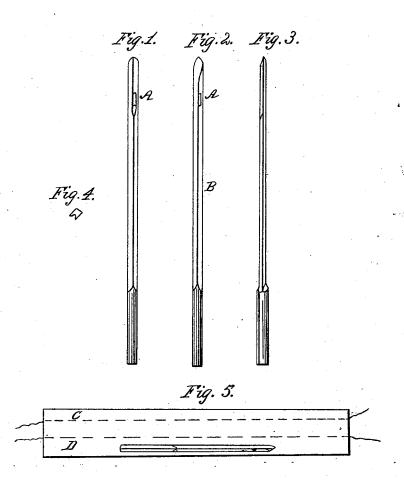
J. J. SIBLEY.

Sewing-Machine Needle.

No. 112,744.

Patented March 14, 1871.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN J. SIBLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWING-MACHINE NEEDLES.

Specification forming part of Letters Patent No. 112,744, dated March 14, 1871.

To all whom it may concern:

Be it known that I, JOHN J. SIBLEY, of New York city, in the county and State of New York, have invented a new and useful Improvement in Sewing-Machine Needles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to a sewing-machine needle adapted particularly to sewing leather, but also adapted to sewing other articles; and it consists in giving the body of the needle the form of a rhombus, or nearly so, from about opposite the eye to such a point above as will comprise all that portion of the needle that touches, in its reciprocations, the material. From about opposite the eye downward the point of the needle is flattened, and the body of the needle is provided with grooves, as shown.

Figure 1 shows the side of the needle having the short groove; Fig. 2, the opposite side; Fig. 3, an edge view. Fig. 4 is a sectional view above the eye, showing the form thereof; and Fig. 5 is a view of a line of stitching, D, produced by my needle, and a line, C, produced by a needle of ordinary construction.

In sewing, it is extremely desirable to make the hole for the thread as small as possible, in order that the material will itself close on the thread when the needle is withdrawn, and in sewing leather, &c., to bring the stitches close together and avoid the tendency of the needle cutting the material lying between the perforations made by it.

Needles have been made flat, so as to cut a

slit-like opening diagonally to the line of stitching; but such needles, above the eye, have always, as far as I am aware, been made cylindrical, or in the usual shape; and that portion of the needle above the eye, in passing through the material, acts to spread the material in a circular form, and with leather it compresses it, so that it does not spring back against the thread as though the slit form of the puncture was preserved; and, further, leather having a finished surface is broken unnecessarily. This class of needle is employed in the Singer machine, and, for reasons stated, I consider it objectionable.

My needle is grooved and flattened at the point in substantially the same way, but from the eye upward the acting surface is shaped like a rhombus, the gist of the invention being that the acute-angled portions of my needle having this shape lie in a line with the edges of the flattened point of the needle, and the sides of the needle act only to force the slit apart gradually.

I am aware that saddlers' awls have been shaped substantially like my needle, and that hand-needles have been made near their points triangular; but those I disclaim, as they could not be used for machine-sewing and to carry a thread.

Having described my invention, I claim— As a new article of manufacture, the sewing-machine needle herein described, having the form and grooved as set forth. JOHN J. SIBLEY.

Witnesses:

ELLIOTT P. WEST, FRANK GILLESPIE.