

(No Model.)

J. F. RUSLING & E. E. ODELL.

SEWING NEEDLE.

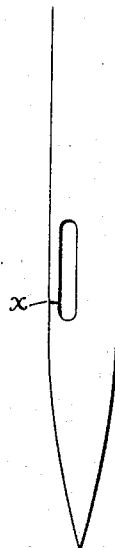
No. 278,459.

Patented May 29, 1883.

Fig. 1.



Fig. 2.



Attest:

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JOSEPH F. RUSLING AND EMORY E. ODELL, OF LAWRENCE, PENNSYLVANIA.

SEWING-NEEDLE.

SPECIFICATION forming part of Letters Patent No. 278,459, dated May 29, 1883.

Application filed July 17, 1882. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH FOWLER RUSLING and EMORY E. ODELL, citizens of the United States, and residents of Lawrence, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Sewing-Needles, of which the following is a specification.

Our invention is a needle constructed, as fully described hereinafter, so that the thread may be introduced laterally into the eye without unduly weakening the needle or in any way interfering with its working qualities.

Needles have heretofore been made with slots extending laterally from the eyes to one side, or with elastic tongues or lips permitting the lateral introduction of threads to the eyes; but in such cases the lateral channel or orifice is open, and thus catches upon the threads of the fabric in sewing, and also permits the point of the needle to bend laterally under longitudinal thrust-strains; or, where the spring-lips are employed, they have their bearing-faces inclined or approximately parallel to the shank, so as to afford no support in case of such strains. To secure the desired end and yet avoid the above-enumerated objections we split the needle transversely at one of the sides opposite the eye, thus affording a means of introducing the thread laterally into the eye, and at the same time securing flat transverse faces at right angles to the axis of the needle, constituting a positive unyielding bearing of one part of the needle upon the other, so that there is no opportunity for play or bending, and the needle is as capable of resisting pressure in the direction of the point as if it were solid upon both sides of the eye.

In the drawings, Figure 1 represents a sewing-machine needle having a side slot extending to the eye, as in needles heretofore made. Fig. 2 represents a needle with our improvement.

It will be seen that if a needle constructed as in Fig. 1 is thrust into a heavy fabric, the point unsupported at one side will be bent to that side to the position shown in dotted lines, impairing the efficiency of it not breaking the needle. When, however, the needle is merely split transversely along the line *x*, Fig. 2, there is no room for play, the faces of the divided parts are in direct contact, and thrust-strains will be resisted as effectively as if the needle were not divided. We have found that by looping the thread around the needle thus constructed, drawing it toward the axis of the needle, and sliding the loop toward the eye, it will enter the latter instantly upon reaching the split, the thin portion yielding or springing in to admit the thread and then resuming its position.

It will be obvious that this invention is applicable to hand-needles and loom-needles.

We claim—

A needle having a right-angular transverse slit extending from the eye to one side, whereby the thread may be introduced laterally into the eye, and the walls of said slit have bearing-faces at right angles to the axis of the needle, as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOSEPH FOWLER RUSLING.
EMORY E. ODELL.

Witnesses:

GEO. T. LOSEY,
W. P. RYON.