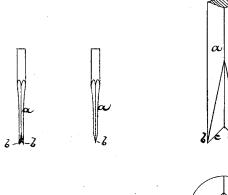
## T. KENNEY.

## Improvement in Awls.

No. 114,446.

Patented May 2, 1871.



bitnesses I. 73. Hidder L. H. Lating Thomas Kenney by his Attys. Corosty of Forest

# United States Patent Office.

## THOMAS KENNEY, OF LYNN, MASSACHUSETTS.

Letters Patent No. 114,446, dated May 2, 1871.

#### IMPROVEMENT IN AWLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Thomas Kenney, of Lynn, in the county of Essex and State of Massachusetts, have invented an Improvement in Awls; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates particularly to the construction of awls for that class of sewing-machines used for leather work, though the improvement is applicable to the entering-points of other piercing instruments.

In sewing-machine awls (which are used for piercing leather prior to the entrance of the needle-point, and to form the hole for such entrance, so that the piercing does not have to be effected by the needle-point) the awl is usually made with a point like the point of a common brad-awl, or with a straight edge extending diametrically across it.

Now, as the motion given to the awl-shank in its piercing operation is always in a straight axial line, and as the surface of the stock is more or less irregular and sometimes inclined from a plane right angular to the axis of the awl, the point of the awl often glances or is deflected as it enters the stock and does not pierce the hole in a straight axial line, the strain caused by such deflection also oftentimes resulting in breakage of the awls.

In my invention I entirely correct any possibility of such deflection by making the awl end with two or more salient points, connected by a cutting or entering-edge, so that when the awl strikes the leather one of these points will always strike and enter the work properly, and will be prevented from deflection by the immediate entrance of the other point or points.

It is in such an awl that my invention consists, or

in an awl having two or more entering-points, connected by a cutting-edge or edges.

The drawing shows a sewing-machine awl embodying the improvement, and an enlarged elevation and plan of the entering-end.

a denotes the awl-shank, made round, square, or of other sectional form, the drawing showing a shank made square in section.

At the entering-end or point the shank is made with two spurs or points, b, each of which is in line with the side of the shank, a notch being formed between and by the points, and the points being connected by the sharp edge c, which, though made angling by the points, presents a cutting or entering-edge differing only from the brad-awl edge of the common awl in the fact that, instead of extending straight across it, it is formed in the two parts, each leading from the side to the center and meeting at an angle, as shown in the drawing.

In the common construction of the awl and its arrangement with reference to the needle, one principal difficulty arising from deflection of the awl-point is that the hole made by the awl, not being in correct line with the axis of the awl, is, of course, out of line with the axis of the needle, so that when the needle-point follows it strikes the stock instead of entering the hole, and thus makes bad work.

#### Claim.

An awl, the entering-end of which is formed with two or more points, connected by a cutting-edge, (or edges,) substantially as shown and described. THOMAS KENNEY.

Witnesses:

FRANCIS GOULD, S. B. KIDDER.