

H. WALKER.
NEEDLE.

No. 22,140.

Patented Nov. 23, 1858.

Fig. 1.



Fig. 2.



City of London Aug 27th - 1858.

H. Walker

[Signature]

Witness

Cosmas Nunn

Consulate. U. S. A. London

My law

by Gracechurch St. London

UNITED STATES PATENT OFFICE.

HENRY WALKER, OF LONDON, ENGLAND.

MANUFACTURE OF SEWING-NEEDLES.

Specification of Letters Patent No. 22,140, dated November 23, 1858.

To all whom it may concern:

Be it known that I, HENRY WALKER, of Alcester, Warwickshire, and Gresham street, in the city of London, England, have invented, made, and applied to use a certain new and useful Improvement in the Manufacture of Needles; and I do hereby declare that the following is a full, clear, and exact description of the nature of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1, is a side and end view of a common sewing needle considerably magnified, and Fig. 2, is a similar side and end view of my improvement, which relates to the eye of said needle.

Needles are usually made with grooves or indentations commonly called "gutters" B, which join the eye C; the part D, being formed also as a groove in which the threads lie in sewing; needles have also been made without the groove B, and are called "grooveless." Needles however with or without grooves have a disadvantage, which arises from the metal immediately before the eye being considerably reduced in thickness, so that the circular hole, as made in the material being sewed, by the passage of the body (A) of the needle, is not kept open for the thread to pass through; and this flattening is produced by the operation of the dies or bits of the stamper in forming the eyes.

The nature of my said invention consists in forming the dies or bits in such a manner that the cylindrical shape of the needle is nearly or entirely preserved, so that a circu-

lar hole is left for the thread to be drawn into and this I accomplish by the formation of a double groove on each side of the needle, commencing near the sides of the eye (C) and running around in a horseshoe, conical V or Y form, as shown at E, Fig. 2. By this means the cylinder of the wire is left as high or nearly so within the aforesaid groove as it was originally or it may even be slightly raised, and be reduced in the subsequent process of scouring: This double groove gives sufficient hold to the dies or bits of the stamper to strike the needle well, and leaves the metal before the eye to strengthen the same, and make it pass more easily through the cloth than the usual character of needle. The shape of this double groove may be varied at pleasure and continue all the way to the eye, or stop short thereof, so long as the cylinder of wire is preserved in its original shape at or near the side of the eye (C) next the point; the part D, being grooved as usual to contain the thread in sewing.

What I claim as my invention and desire to secure by Letters Patent is—

Forming the eyes of needles in the cylinder of the wire, without flattening the same, by means of the double grooves (E) substantially as and for the purposes specified.

In witness whereof I have hereunto set my signature this twenty seventh day of August 1858.

H. WALKER.

Witnesses:

JOSHUA NUNN,
W. Y. FEW,