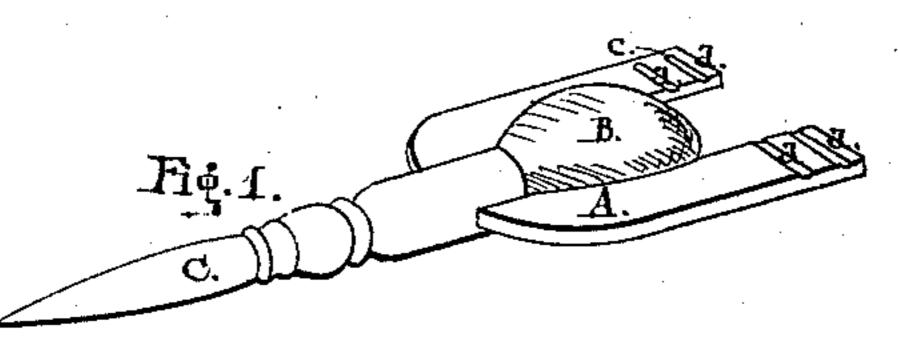
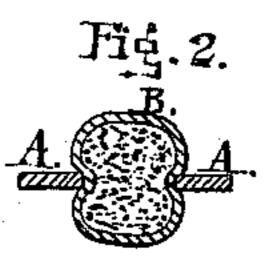
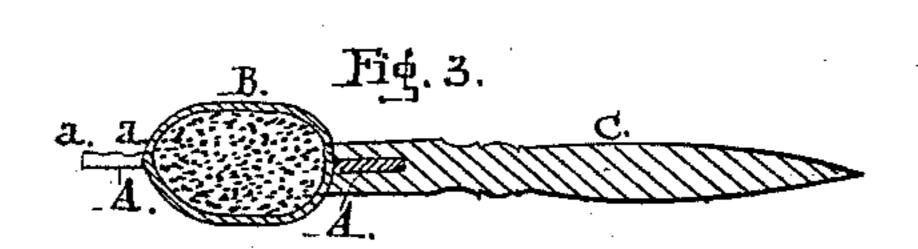
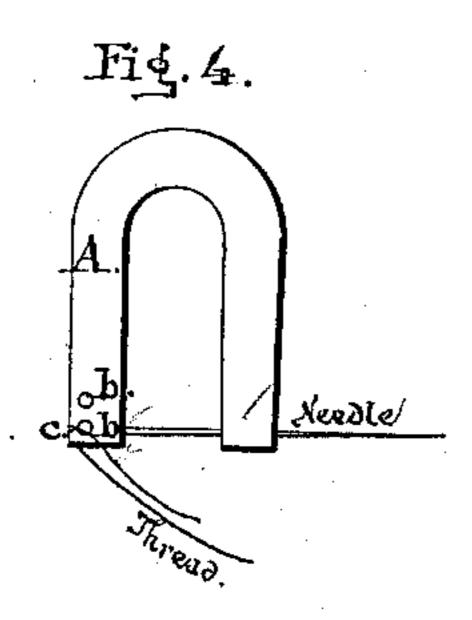
Patelled Feb. 9.1869.

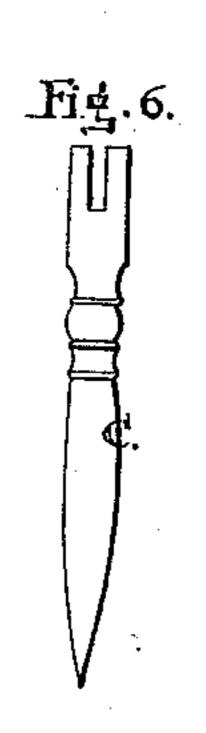


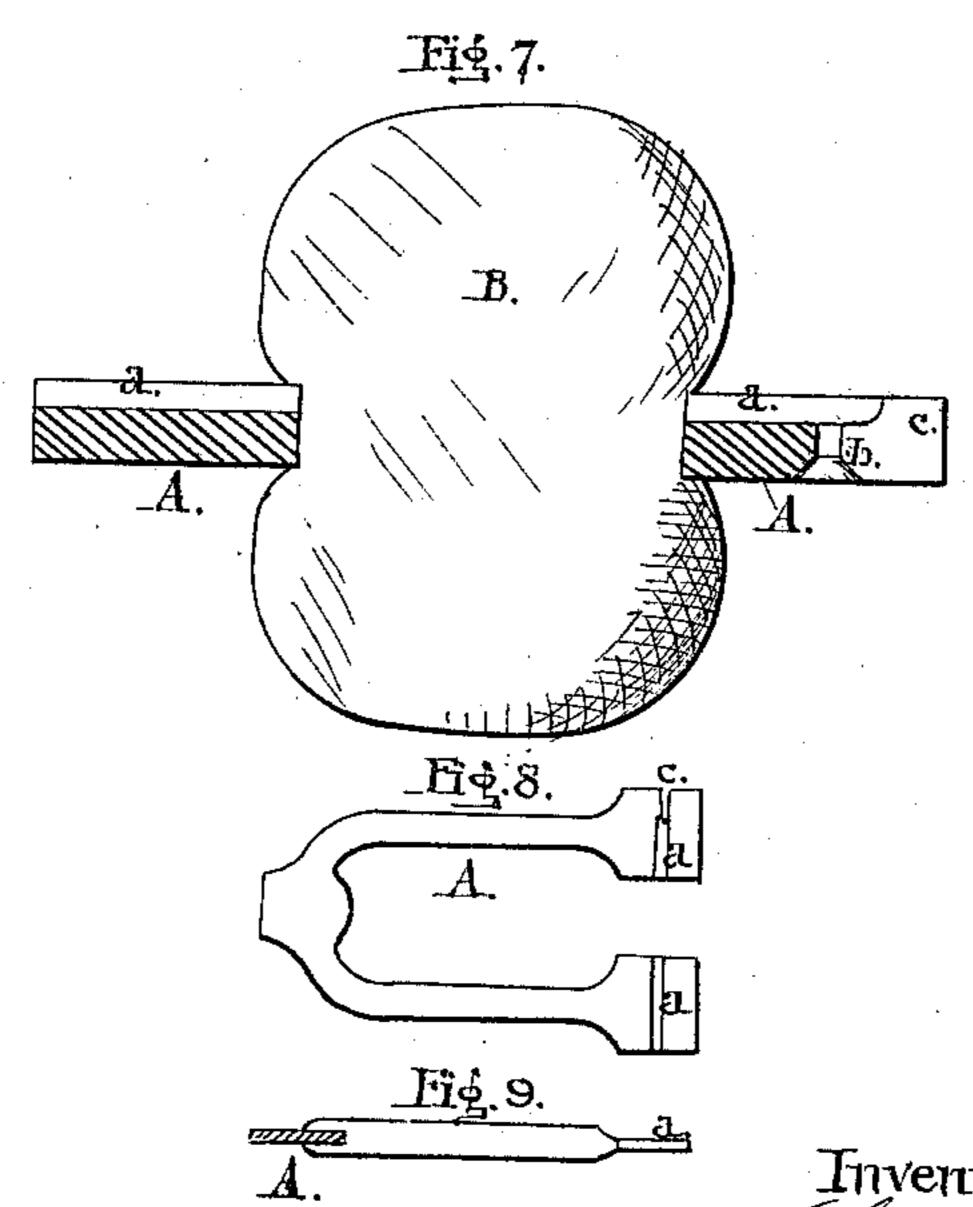












Inventor: Oliver Cox, and, Hencel Stairence Attorneys.



OLIVER COX, OF ALEXANDRIA, VIRGINIA.

Letters Patent No. 86,647, dated February 9, 1869.

IMPROVEMENT IN NEEDLE-THREADERS

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, OLIVER Cox, of Alexandria Post Office, Alexandria county, State of Virginia, have invented an Improved Needle-Threader; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the improved needle-threader, with stiletto and emery-cushion combined therewith.

Figure 2 is a transverse section through the needle-threader.

Figure 3 is a longitudinal section of the parts shown in fig. 1.

Figures 4, 5, and 6, are details composing the combined needle-threader, stiletto, and emery-cushion.

Figure 7 is an enlarged sectional view through the threading-hole or eye of the needle-threader.

The same letters of reference, in the several figures, indicate corresponding parts.

My present improvement relates especially to the magnetized needle-threader, patented to me on the 14th of June, 1864; and

The nature of the invention which I now present consists—

First, in intersecting the threading-hole, or eye, of the needle-threader by a kerf or open slot, extending from the margin or outside edge of the grooved plate, and terminating in the threading-eye, or hole, thereof, whereby the thread, after being passed through the eye of the needle, can be passed laterally through the slot, or kerf, from the threading-eye, instead of requiring to be drawn longitudinally through the said threading-hole, or eye, and whereby, also, the necessity of breaking the cotton away from the fabric being sewn is avoided.

Second, in combining an emery or other cushion with the needle-threader, whereby the needle-threader is made more useful, it answering both for threading and also sharpening or improving the points of needles.

Third, in the combination of an emery-cushion with a needle-threader and a stiletto, whereby a threefold office is performed by the one implement, viz, threading needles, and sharpening their points, and perforating fabrics which require to be eyeleted.

In the accompanying drawings—

A represents a plate, similar in form to the well-known horse-shoe magnet. This plate is cut or stamped from untempered cast-steel by means of a die, or it may be made from round steel wire, before it is tempered, the wire being cut into proper lengths, bent, and its ends swaged down, so as to give the desired width and flat surface for the formation of the groove or grooves, and the threading-hole or holes, or it may be made by recasting cast-steel, or in any of the well-known ways of working out similar-shaped pieces of metal, and its form may be varied in any way which

will not interfere with its answering the purpose intended.

The shape of the plate, and its magnetic character, are not the things sought to be protected under this patent, as my former patent covers "a magnetized needle-threader."

The plate A may have one or more open grooves, a a, formed in the upper surface of its arms, as shown, said grooves extending entirely across one arm, and only partly across the other.

At the termination of those grooves which do not extend entirely across one of the arms, holes, b b, are drilled through this arm, so as to be intersected by the grooves. The holes are of funnel-shape, as represented.

I have shown two grooves and two funnel-shaped holes, but I think one groove, of a V-shape, would answer for different sizes of needles, and therefore I may make the threaders with only one groove and one funnel-shaped hole.

In making the horse-shoe-magnet threaders, the grooves may be dispensed with entirely on one of the arms, but I prefer to have grooves on both arms.

The plate, before being tempered, is finished as just described, and after being finished, is tempered along its whole length, or from the ends of the arms to a point beyond the grooves and threading-holes.

The tempered portion is then magnetized in any of the well-known ways of magnetizing metals.

As an improvement in the threader itself, I saw, or cut, or otherwise make, one or more open slots, c, in the outer edge of one of the arms of the horse-shoemagnet plate, such slots or kerfs intersecting the funnel-shaped threading-holes.

This construction allows the thread, after it has been passed through the eye of the needle, to be passed laterally from the funnel-shaped holes $b\ b$

If there are two threading-holes, there, of course, will be two kerfs, or slots, as each threading-hole is furnished with a slot, or kerf.

In the drawings, I have shown two threading-holes and only one kerf, as I deem one kerf, or slot, sufficient to illustrate my invention.

B is an emery-cushion, made of proper shape to be introduced between the arms of the magnet-plate, as shown. It is confined in place by grooving it, and wedging it in between the arms, so as to bear against the curved part of the plate, and retained firmly in place by the application of glue, or other fastening.

In grooving the cushion, I compress the emery very compactly by pliers or tweezers, and thus, when the cushion is in place, it is sustained by the upper and lower surfaces of the arms, and its form is solidly re-

C is the stiletto, with its attaching end slotted or birfurcated, to admit the curved portion of the threader, so that the two parts may be fastened together by glue, or rivet, or in any practical manner. The style and

shape of this stiletto may be in accordance with the fancy of the trade, and it may be either of wood, bone, ivory, or metal.

By Figures 8 and 9, I intend to show how the needle-threader may be made by bending round wire into horse-shoe form, and flattening down the middle and end portions of said wire.

What I claim as my invention, and desire to secure

by Letters Patent, is—

1. The slot c, intersecting the threading-eye b of the needle-threader, for the purpose described.

2. The cushion B, in combination with a needle-threader A, substantially as described.

3. The combination of the emery-cushion B with the needle-threader A and stiletto C, substantially as described.

OLIVER COX.

Witnesses:

J. N. CAMPBELL, E. W. ANDERSON.