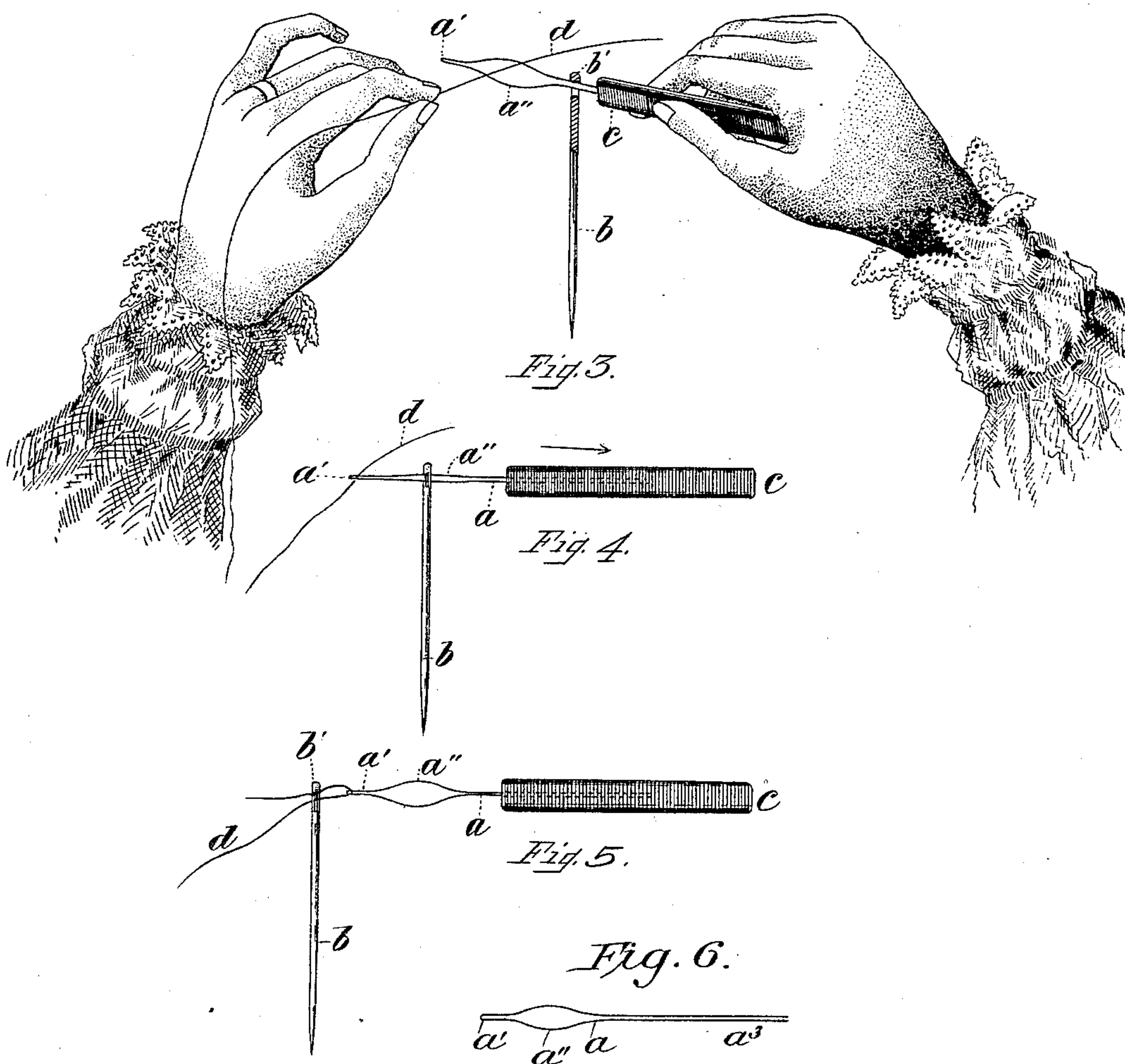
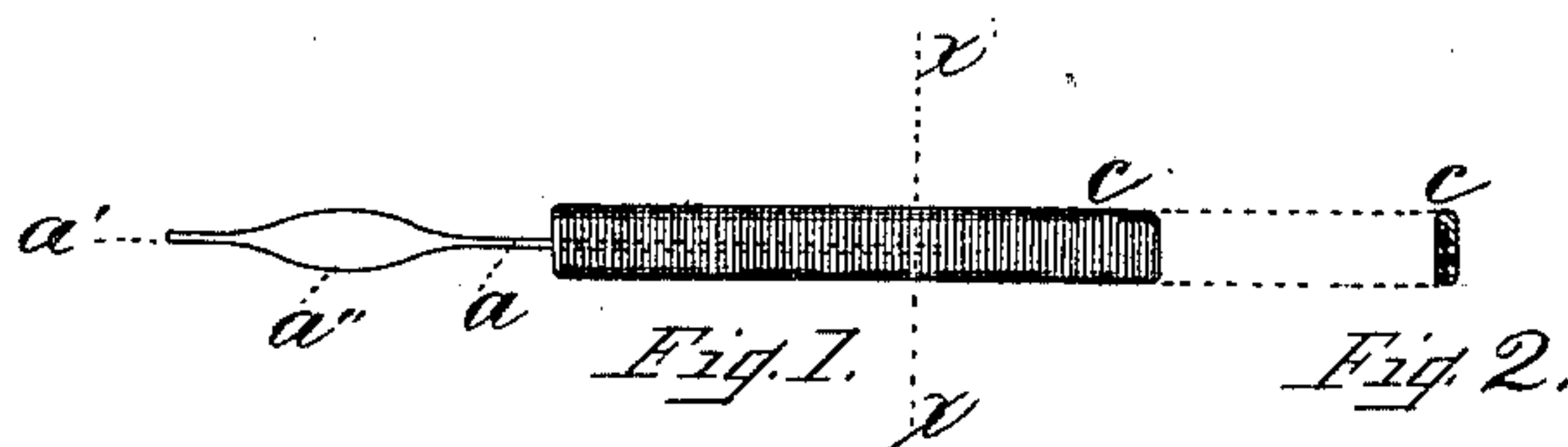


(No Model.)

C. E. VAN NORMAN.
NEEDLE THREADER.

No. 424,518.

Patented Apr. 1, 1890.



Witnesses:
Charles N. Goodrich
H. E. Rensick Jr.

Inventor
Charles E. Van Norman
by Wm. Audin his atty.

UNITED STATES PATENT OFFICE.

CHARLES E. VAN NORMAN, OF WALTHAM, MASSACHUSETTS.

NEEDLE-THREADER.

SPECIFICATION forming part of Letters Patent No. 424,518, dated April 1, 1890.

Application filed August 17, 1889. Serial No. 321,062. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. VAN NORMAN, a citizen of the United States, and a resident of Waltham, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Needle-Threaders, of which the following, taken in connection with the accompanying drawings, is a specification.

10 This invention relates to improvements in needle-threading devices, and it is carried out as follows, reference being had to the accompanying drawings, where—

15 Figure 1 represents a side elevation of the invention. Fig. 2 represents a cross-section on the line X X, shown in Fig. 1. Fig. 3 represents a perspective view showing the loop of the needle-threader passed through the eye of the needle and the thread passed through the said loop. Fig. 4 represents a view showing the threader being drawn with the thread through the eye of the needle, and Fig. 5 represents a view of the threader and the needle as threaded. Fig. 6 represents a side elevation of the improved needle-threader without an enlarged handle.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

30 The device consists of a very fine spring-metal wire *a*, which is doubled upon itself at *a'*, as shown, forming a pointed end adapted to be readily inserted through the eye *b'* of the needle *b*. Back of the doubled end *a'* an enlargement, swell, or loop *a''* is formed on the fine metal wire *a*, as shown, and the ends of the wire *a* are preferably confined or secured in a suitable manner to a handle *c*, the one shown in the drawings being made of a bent piece of metal, between the bent portions of which the ends of the wire *a* are confined.

45 After the wire threader is bent to the form shown in Fig. 1 it is preferably hardened; but this is not essential, as it may be made of suitable spring-wire, which will assume its required shape after being pushed through the eye of the needle that is being threaded.

In threading the needle the operator holds

it in one hand, and by taking the threader in the other hand introduces its pointed end 50 through the eye of the needle and pushes the threader far enough through the said needle-eye to cause the loop *a''* to come outside of the needle and expand, as shown in Fig. 3. The needle is then allowed to hang on the threader, as shown in said Fig. 3, and the operator introduces the thread *d* through said loop *a''* of the threader, after which the operator takes hold of the needle and draws the threader, with its thread, back through the 60 eye of the needle, in the direction shown by the arrow in Fig. 4, and thereby pulls the thread through the eye of the needle, as shown in Fig. 5, until the loose or short end of the thread is disengaged from the threader. 65

The invention is equally useful in threading sewing-machine needles.

By this arrangement a small metallic point is formed on the threader for readily inserting it through the eye of the needle, combined with an expansive loop, through which the thread can be quickly inserted for the purpose of threading a needle. 70

In the use of the invention an additional handle *c* (shown in Figs. 1, 2, 3, 4, and 5) is 75 not essential, as the parallel ends *a³* of the wire (shown in Fig. 6) may be used as a handle for the operator to take hold while threading a needle, without departing from the essence of my invention. 80

What I wish to secure by Letters Patent and claim is—

The needle-threader as described, consisting of a fine spring-metal wire *a*, doubled upon itself in the form of a point *a'*, and having a flexible loop, swell, or enlargement *a''*, and a handle, substantially as and for the purpose set forth. 85

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 10th day of August, A. D. 1889. 90

CHARLES E. VAN NORMAN.

Witnesses:

ROBT. N. RICHMOND,
ALBAN ANDRÉN.