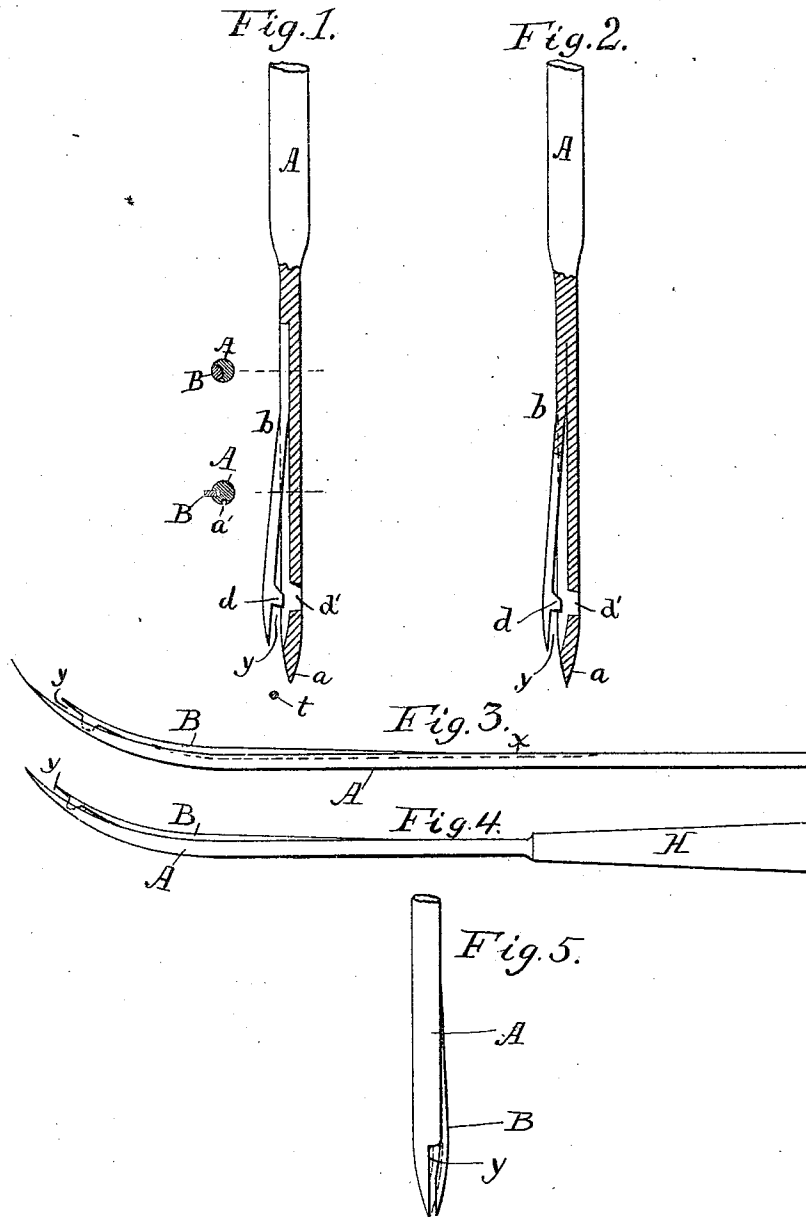


(No Model.)

H. A. BLANCHARD.
SEWING NEEDLE.

No. 500,556.

Patented July 4, 1893.



Witness
John H. Lilly
Chas. H. Court

Inventor
Helen A. Blanchard
by *S. N. Bates, atty.*

UNITED STATES PATENT OFFICE.

HELEN A. BLANCHARD, OF NEW YORK, N. Y.

SEWING-NEEDLE.

SPECIFICATION forming part of Letters Patent No. 500,556, dated July 4, 1893.

Application filed June 2, 1892. Serial No. 435,270. (No model.)

To all whom it may concern:

Be it known that I, HELEN A. BLANCHARD, a citizen of the United States, and a resident of New York city, New York, have invented an Improved Sewing-Needle, of which the following is a specification.

My invention relates to that class of sewing needles which are threaded near the point, as for instance the sewing machine needle, or needles for surgical use, or similar hand sewing.

My present improvements which are thus applicable to either sewing machine needles or surgical needles or needles for hand sewing in leather, for instance, are mainly designed on the one hand to avoid loss of time involved in the threading of a needle of the ordinary construction, and on the other hand to facilitate the withdrawal of the thread from the needle as the latter is withdrawn from the material through which the sewing takes place.

The main feature of my improved needle consists of a laterally movable latch, which when open forms a notch or recess closed toward the head of the needle but normally open toward the point, the said notch or recess being formed by a shoulder or projection which extends entirely across the space between the free end of the latch and the shank of the needle when the latch is open. The upper end of the latch connects with the needle preferably near its head and the shoulder or projection is located near the point so that the lower or free end of the latch is capable of considerable lateral motion. The thread is received in the open notch or recess at the point of the needle, the shoulder or projection preventing it from being drawn up between the stem of the latch and the shank of the needle. The latch is then closed to confine the thread and the needle with the thread is introduced into the material. When the needle is withdrawn from the material, the loop of thread is allowed to slip from the notch or recess of the needle and to remain on the opposite side of the material from that at which it was introduced.

I illustrate my invention by means of the accompanying drawings in which—

Figure 1 is a vertical sectional view of a sewing machine needle constructed in accord-

ance with my invention, but drawn to an enlarged scale. Fig. 2 is a vertical section of a modification. Fig. 3 is an enlarged view of a surgeon's needle constructed according to my invention. Fig. 4 is a view of a modification of the same, and Fig. 5 illustrates further a modification of my invention.

Referring to the application of my improvement to a sewing machine needle, as illustrated for instance in Figs. 1 and 2, A is the main body or shank of the needle of any suitable form, and constructed to be held in the needle bar in the usual manner.

Instead of providing this needle with the usual eye near its point *a* for the passage therethrough of the thread, I provide a laterally movable latch B, which I connect with the shank or body of the needle at a point near the upper end of the sewing portion of the needle as at *b* the latch resting in a groove formed in the shank so that when the latch and the shank are closed together they will form a smooth unobstructed shaft. I prefer to connect the latch with the shaft in such a manner that the stem of the latch will act as a spring to hold the latch normally open but it is evident that the latch can be pivoted or otherwise connected with the needle or it may be formed in one piece with it as shown in Fig. 2., but however it is connected to the shank of the needle, this latch is free to have a limited lateral movement. A shoulder *d* on the latch at a short distance back from the point of the latch forms the closed head or end of the notch or recess for the reception of the thread, the shoulder *d* entering a recess *d'* in the shank of the needle when the latch B is closed, or such shoulder may, if desired, be formed upon the needle, as shown for instance in Fig. 5. It is necessary that the shoulder *d* whether formed on the latch or on the shank should extend entirely across the space or opening between the latch and the needle when the former is open so that the notch *y* may be always closed toward the head of the needle to prevent the thread from slipping up.

The body of the needle may be provided with the usual side groove *a'* for the thread as shown in Fig. 1.

In using a sewing machine needle of this construction in a sewing machine, the needle will catch a loop of the thread *t* in the notch

or recess *y* as the needle is about to enter the material to be sewed. Provision may be made for temporarily closing the latch toward the stem of the needle to confine the thread as the needle passes through the goods, but as the needle returns and is about to be withdrawn the thread will slip out of the notch or recess the latch having been opened for the purpose.

- 10 In applying my invention to needles for surgical use, I prefer to make the latch in a separate piece and detachable from the main body of the needle in order that after it has been used it may be more conveniently
15 cleansed with antiseptics. In the construction shown in Fig. 3, the latch B, it will be seen, is made separate from the stem or body of the needle, and the latter may be provided with a longitudinal groove *x* into
20 which the stem of the latch can be fitted for use. The latch may however be detachably secured to the stem of the needle in other ways, and instead of holding the needle in forceps it may be held permanently or detach-
25 ably in a permanent handle H, as shown in Fig. 4. The manner of using this surgical needle is similar to the operation of sewing with such a needle in a sewing machine.

30 Although I have shown my invention as applied mainly to ordinary straight needles, it should be understood that my improvement is applicable to almost all constructions of

eye-pointed needles, there being great variations of shape, particularly for surgical work, and for hand sewing of leather, rubber goods, &c.

I claim—

1. A sewing needle having a spring latch secured at its upper end to the shank of the needle, its lower or free end being normally open or sprung away from said shank, and a shoulder or projection extending entirely across the space or opening between the shank and the free end of said latch when the latter is open to form a thread receiving notch or recess, substantially as described.

2. A sewing needle provided with a laterally movable latch connected at its upper end with the shank of the needle, the free end of said latch being provided with a shoulder or projection extending entirely across the space or opening between it and the shank of the needle when the said latch is open, the shank of the needle being provided with a recess to receive said shoulder or projection, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HELEN A. BLANCHARD.

Witnesses:

HUBERT HOWSON,
HARRY SMITH.