

(No Model.)

H. A. BLANCHARD.
SEWING MACHINE NEEDLE.

No. 252,992.

Patented Jan. 31, 1882.

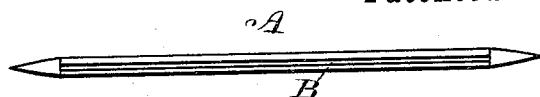


FIG. 1.

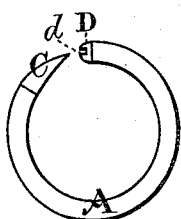


FIG. 2.



FIG. 3.



FIG. 4.

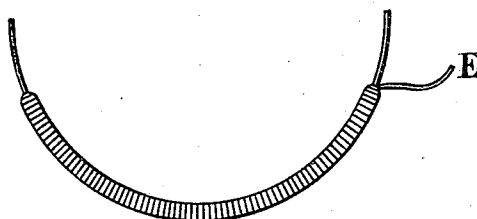


FIG. 5.

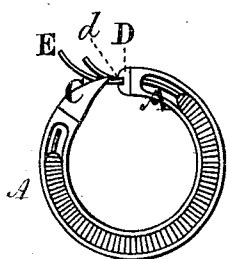


FIG. 7.

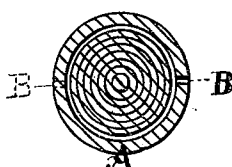


FIG. 6.

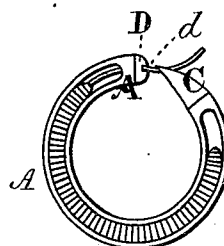


FIG. 8.

WITNESSES:

INVENTOR:

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UNITED STATES PATENT OFFICE.

HELEN A. BLANCHARD, OF PHILADELPHIA, PENNSYLVANIA.

SEWING-MACHINE NEEDLE.

SPECIFICATION forming part of Letters Patent No. 252,992, dated January 31, 1882.

Application filed November 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, HELEN A. BLANCHARD, of the city of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Sewing-Machine Needles, of which the following is a specification.

The object of my invention is to provide a hollow needle which will contain a considerable quantity of thread, and also to provide for filling such a needle with thread in a package.

In the accompanying drawings, which illustrate my invention, Figure 1 is a view of a straight hollow slotted needle pointed at both ends. Fig. 2 is a side elevation of my curved needle complete. Fig. 3 is a front elevation of the same. Fig. 4 represents a needle exactly like that shown in Fig. 1, except that it is slightly bent like a bow. Fig. 5 shows a bobbin composed of a small flexible wire wound with thread to be inserted into my needle. Fig. 6 is an enlarged section of my needle filled with thread, showing an extra slot, B, in dotted lines, which may be provided, if desired. Fig. 7 is a side elevation, partly in section, showing the needle with the thread-bobbin inserted. Fig. 8 is a similar view with the flexible wire drawn out and the needle left filled with a package of thread ready for use.

A indicates the tubular part of the needle, which may be formed of small coiled brass or other metallic tubes, and provided with a slot, B, the purpose of which is to enable the thread to be packed into the needle by the use of a pin, bodkin, or any other small instrument. The front end of the needle is provided with a steel point, C, and the rear end with a screw-plug, D, or any suitable cap, stop, or abutment having an eye or thread hole, *d*. The thread for filling this hollow needle may be prepared in suitable cops, bobbins, or packages by winding it on small flexible wire, as illustrated in Fig. 5, with the end E loose, so that it can be drawn off, in a manner somewhat like unraveling knit work, by a slight pull. The screw-plug D being removed, this thread package can readily be inserted into the hollow needle and pressed in until it

fills the internal cavity. Thus a very long line of thread can be inserted. The wire is then withdrawn and the end E is threaded through the eye-hole *d* of the screw-plug, and it is screwed into place in the rear end of the needle, and the needle is then ready to be applied in any suitable rotary sewing-machine.

I am aware that it is not new, broadly speaking, to wind yarn or thread upon a wire or piece of metal. This has been done to form bobbins, the central metal portion to act as an axis in the unwinding of the bobbins, and therefore being straight and rigid, and thus totally different from my flexible bobbin for filling a hollow needle, and incapable of serving its purpose, both on account of the necessary size and the rigidity of the central metallic core.

I am also aware that wires have been insulated for electrical purposes by being covered with a woven, wound, or knit coating composed of yarns or threads, and that wires have also been wound with threads to form hat and bonnet wires; but in such cases it is not contemplated that the wire shall be pulled out, nor can it be; and hence neither a bonnet-wire nor an electrical wire, even if cut up in short sections, would serve the purpose of my peculiar bobbin, which is so wound upon slight flexible wire as to permit the wire to be readily drawn out of the needle, leaving it packed with the thread only. Nor is an electrical wire or a bonnet or hat wire ever wound with sewing-thread. I therefore disclaim the rigid straight rotary bobbins referred to, and all covered wires for electrical purposes and hat and bonnet wires.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the coiled slotted tube A with the point at the front end and screw plug or cap at the rear end, substantially as described.

2. A bobbin for filling a hollow needle, consisting of a small flexible wire wound with thread, substantially as and for the purpose described.

3. The needle pointed at one end, and provided with an eye for the delivery of the thread from the coil of thread within it, and

with an abutment to retain the coil in position within the needle, substantially as described.

- 5 4. That improvement in the method of filling a hollow needle with a coil of thread which consists in winding the thread on a flexible core to form a bobbin, inserting the said bob-

bin in the hollow needle, and then withdrawing the flexible core, leaving the coil of thread therein, substantially as described.

HELEN A. BLANCHARD.

Witnesses:

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HARRY R. VIRGIN.