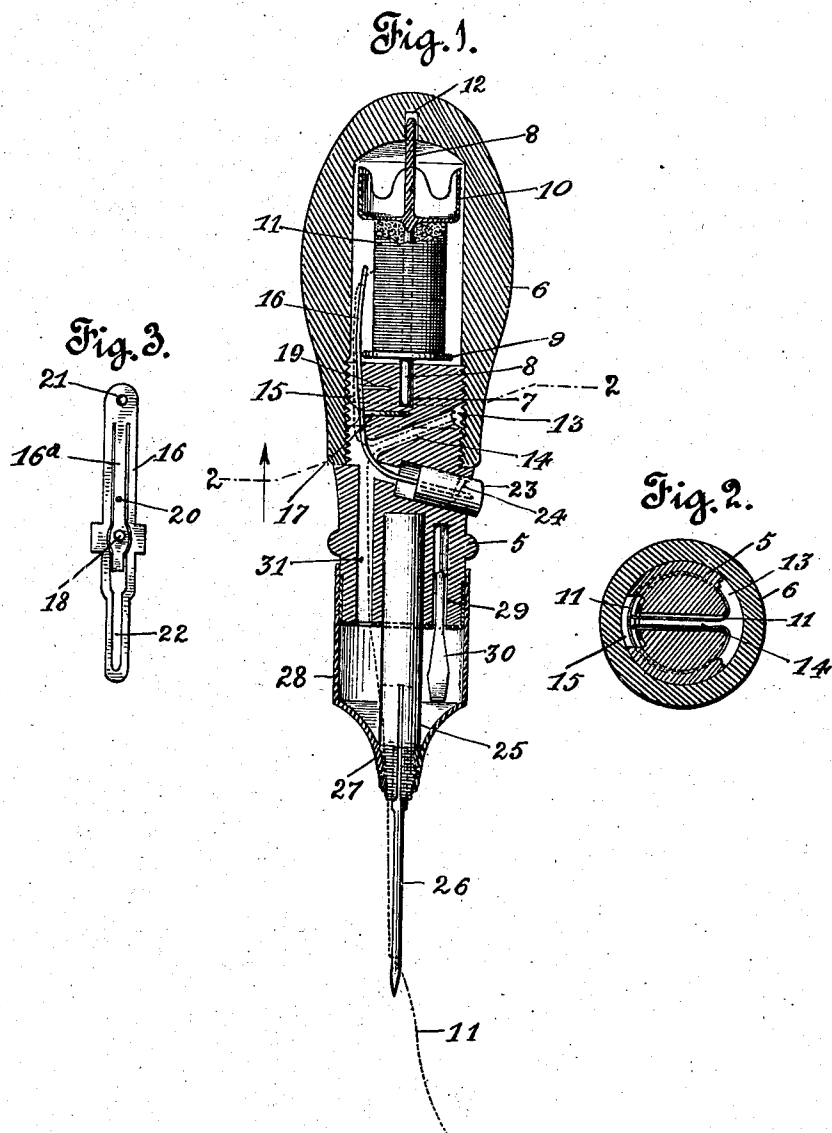


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C. STEWART.
SEWING AWL.

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Witnesses.
Edouard
S. B. Austin.

Inventor.
Charles Stewart.
By *Edouard*
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES STEWART, OF LOS ANGELES, CALIFORNIA.

SEWING-AWL.

No. 893,206.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES STEWART, a citizen of the United States, residing at Los Angeles, county of Los Angeles, State of California, have invented new and useful Improvements in Sewing-Awls, of which the following is a specification.

My invention relates to that class of sewing awls whose handles are provided with a chamber in which the thread is held and from which it passes to the eye of the needle secured in the end of the handle, and is drawn off as required and the object thereof is to provide a sewing awl with an automatic tension for the thread, so that the stitches may be drawn as tightly as required, and the tension can be quickly and easily released.

I accomplish this object by the awl described herein and illustrated in the accompanying drawings in which:

Figure 1 is a longitudinal central section. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a plan of the spring blank before the same is bent for use in the handle.

In the drawings 5 is the body of the handle which is preferably constructed of wood. The upper end of the body is exteriorly threaded for the reception of the hollow cap 6, which has the lower end thereof interiorly threaded and screws upon the upper end of the body. In the center of the upper end of the body is a longitudinal recess 7 in which is received the projecting end of rod 8 of the bobbin. The bobbin is composed of a central rod 8 near the end of which is disk 9 and near the other end of which is a cup 10 in which wax may be placed for waxing the thread 11 which is wound on the central rod between the disk and the cup. The other end of rod 8 is received in a recess 12 in the end of the cap. Near the top of the body is an annular thread groove 13 and extending at an angle from the thread groove is a transverse thread channel 14 which extends preferably at an angle through the body and terminates in the spring channel 15 which is cut in one side of the upper portion of the body from the top thereof down to the end of channel 14 and then turns at an angle as shown in Fig. 1. In this spring channel and extending up into the cap is tension relieving spring 16. This spring has a central tongue 16^a as best shown in Fig. 3, and the spring is secured to the body by a screw 17 which passes through a hole 18 in the tongue and screws into the body as shown in Fig. 1. A

small nail 19 is driven through hole 20 into the body which aids in holding the spring to the body and prevents the same from turning or twisting. The upper end of the spring is provided with an eye 21 through which the thread passes. The lower end of the spring is provided with a slot 22 and the lower end is bent as shown in Fig. 1 to pass into the lower end of the spring channel which is enlarged as shown in Fig. 1, for the reception of a cap or head 23 which is secured upon the lower end of the spring by a pin 24, which passes through the cap or head and through the spring. In the lower part of the body is the chuck 25 in which the sewing awl 26 is held, being secured by means of the chuck nut 27 to which is secured a jacket or cap 28 which surrounds the chuck and a portion of the handle as shown in Fig. 1. In the lower portion of the body are longitudinal recesses one of which 29 is shown in Fig. 1. These recesses together with the chuck cap house different tools which can be inserted in the chuck in the place of the sewing awl. One of these tools a screw driver 30 is shown in Fig. 1.

In the use of my tool after the thread is wound upon the bobbin the free end of the thread is passed through the eye of the tension relieving spring, it is then passed downwardly through the thread channel 14 in the body and thence wound around the body in the thread groove 13 passing over itself, then passed back through the thread channel 14, thence down through the tension relieving spring channel 15, then through a longitudinal thread channel 31 which extends through the body, thence through the chuck cap and chuck and through the eye of the needle. After the needle is threaded cap 6 would be screwed upon the body when the tool is ready for use. The needle carrying the thread would be passed through the material to be sewed and partially drawn back so as to form a loop of the thread, through which loop a second thread would be passed, which second thread would be upon a shuttle or other suitable device. The needle would then be completely withdrawn and as strong a pull given to the thread as desired. The next stitch would be formed in like manner. Whenever it is desired to have more thread from the bobbin the operator would press upon the spring cap which would move the spring outwardly from the body thereby carrying that portion of the thread which passed across the portion

of the thread extending from the eye in the spring to channel 14 so that it would no longer bind this descending portion when the required quantity of thread is drawn off the bobbin and pressure on the spring cap is then relieved and thereafter the tension on the thread is again restored.

It will be observed that as the thread passes around the body in the thread groove it also passes over the descending portion of the thread which passes from spring eye downwardly and through channel 14, so that the pull on the thread after it is secured in the work automatically binds the thread against being withdrawn from the bobbin, and it is only necessary to relieve this tension as before explained whenever additional thread is required in sewing. If desired the cap which chambers the thread could be made of spun metal.

Having described my invention what I claim is:—

1. A sewing awl provided with a handle having a body portion, said body portion being externally threaded on the upper part thereof and having an annular groove and a transverse channel, one end of which registers with said groove, said body also having a tension relieving spring channel extending longitudinally at the upper end of the body and then transversely through the body and a longitudinal thread channel extending from the spring channel to the lower end of the body; a tension relieving spring having a tongue secured to said body in said spring channel, said spring having an eye in the upper part thereof; a head secured upon the outer end of said spring, said spring being

secured to said body through the tongue thereof; a hollow cap secured upon the upper end of said body; a chuck secured in the lower end of said body; a needle secured in said chuck; and thread holding means in the cap.

2. A sewing awl having a handle provided with a thread chamber therein and a tension relieving spring channel extending first longitudinally and then transversely and having an annular groove in the interior crossing the spring channel and having a longitudinal channel extending from the spring channel to the other end; a chuck in the end of said handle; a needle in said chuck; a tension relieving spring having an eye in one end thereof and a tongue, said spring being in the spring channel and secured to the handle by the tongue and extending upwardly into the thread chamber; and thread carrying means in said chamber.

3. A sewing awl having a handle provided with a thread chamber therein and with longitudinal and transverse channels and an annular groove therein so arranged that when the same is threaded the thread crosses upon itself and a spring arranged to relieve the tension of the thread crossing upon itself when desired; thread holding means in said chamber; a chuck in the lower portion of said handle; and a needle in said chuck.

In witness that I claim the foregoing I have hereunto subscribed my name this 11th day of March, 1908.

CHARLES STEWART.

Witnesses:

G. E. HARPHAM,
ELMER HARPHAM.