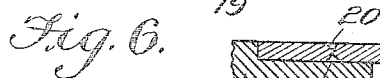
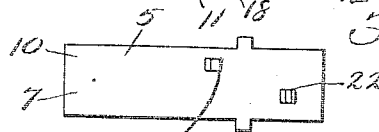
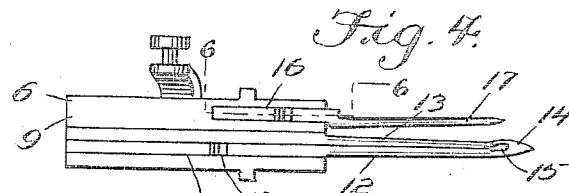
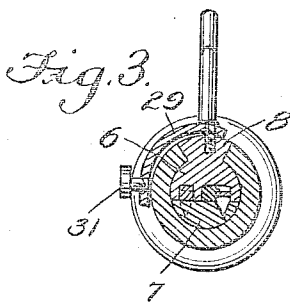
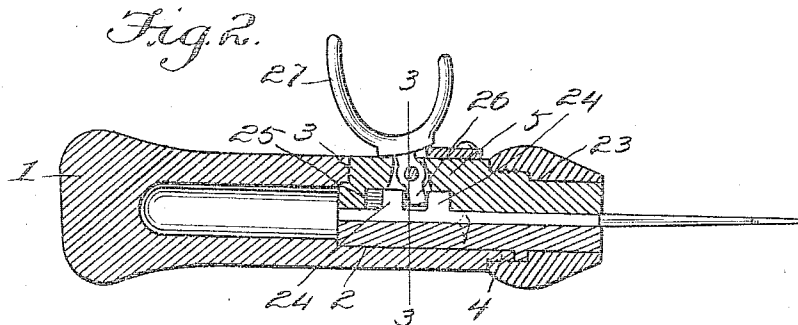
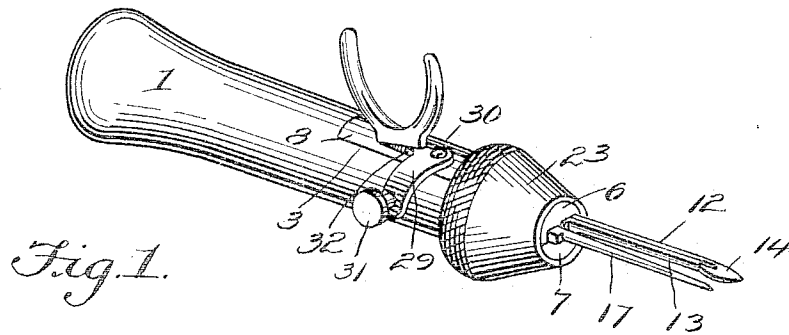


J. N. HILL.
SEWING AWL.

APPLICATION FILED JULY 24, 1909.

953,618.

Patented Mar. 29, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

JASPER N. HILL, OF WATERLOO, WEST VIRGINIA, ASSIGNOR OF ONE-THIRD TO A. W. RIFFLE AND ONE-THIRD TO H. T. STEWART, BOTH OF LEON, WEST VIRGINIA.

SEWING-AWL.

953,618.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed July 24, 1909. Serial No. 509,232.

To all whom it may concern:

Be it known that I, JASPER N. HILL, a citizen of the United States, residing at Waterloo, in the county of Mason and State of West Virginia, have invented new and useful Improvements in Sewing-Awls, of which the following is a specification.

This invention relates to improvements in sewing awls, the object of the invention being to provide an awl having a piercing member for use in conjunction with the needle for the formation of a hole in the goods in advance of the point of passage of the needle to admit of the ready insertion of the needle through the goods at such advance point, which piercing member is adapted to be disposed at a greater or less distance from the needle to regulate the length of the stitch.

A further object of the invention is to provide an awl having a hooked needle forming a member to engage and hold the thread during its passage through the goods, together with a slide operative to open and close the hook thereof, the construction being such that the awl may be employed for making a lock stitch looped on both sides of the goods or making the usual hand stitch.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a perspective view of an awl embodying my invention, showing the slide projected to close the hook of the threading needle. Fig. 2 is a longitudinal section of the same. Fig. 3 is a vertical cross section on line 3—3 of Fig. 2. Fig. 4 is a bottom plan view of the upper section of the chuck or holder, showing the arrangement of the tools therein. Fig. 5 is a top plan view of the lower section of the chuck or holder. Fig. 6 is a detail section on line 6—6 of Fig. 4.

Referring to the drawings, the numeral 1 designates the handle of the awl provided at its forward end with a receiving socket 2 formed in its upper wall with a longitudinal slot 3. The forward end of the socket terminates in a reduced threaded projection 4.

A chuck or holder 5 is provided to fit within the socket 2 and is composed of two partially circular sections 6 and 7, the upper

section 6 being formed on its convex face with a tongue or rib 8 to fit within the slot 3 and hold the chuck or holder from rotary movement in the socket.

The two chuck sections are formed with flat meeting or abutting faces 9 and 10, the flat face of the upper section 6 being provided with a longitudinal groove or passage 11 of sufficient length to receive the shank of a threading needle 12 and a slide 13. The needle 12 is formed at its outer end with a thread engaging and carrying hook 14, providing an opening 15 for the passage of the thread. The shanks of the two tools thus described are angular in form and engage each other so as to be held from possible turning movement in the groove 11. The forward end of the slide 13 is adapted to engage the bill of the hook 14 to close the thread passage or eye 15 for the retention of the thread and ready passage of said needle through the goods without displacing the thread. The face 9 of the chuck section 6 is also formed with a short receiving groove 16 for the shank of a piercing needle 17, which needle is offset from one side of the forward end of said shank and arranged at an obtuse angle thereto. The needle 17 extends alongside the threading needle and slide with its point arranged in spaced relation to the hook 14, so that in the use of the tool the hook carrying the thread may be forced through a hole in the goods previously formed by the piercing needle, while in this operation said piercing needle will form another hole in advance for the subsequent passage of the threading needle. The offset arrangement of the piercing needle with relation to its shank adapts it by a reversal of its position through a turning movement in an arc of 180° to be spaced at a greater or less distance from the threading needle for the formation of stitches varying in length, as will be readily understood.

The under side of the shank of the threading needle is formed with a V-shaped recess 18 to engage a correspondingly shaped locking projection 19 on the face 10 of the chuck section 7, whereby the threading needle may be held from longitudinal movement. Similarly the shank of the piercing needle 17 is provided in its reverse sides or top and bottom faces with recesses 20 and 21 to engage a locking projection 22 on the chuck

section 7, whereby said piercing needle may be held against displacement in either of its operative positions. The outer ends of the chuck sections when assembled form a reduced cylindrical portion to fit within the correspondingly shaped socket of a cap 23 having a threaded flange at its inner end to engage the threaded projection 4 of the handle, whereby the chuck is secured in position.

The shank of the slide 13 is formed on its upper surface with spaced lugs or projections 24 which project into a groove 25 in the chuck section 6 and receive between them a stem or finger 26 projecting from an operating yoke or device 27, said operating device being arranged above the rib 8 of the chuck, while said stem extends downward through an opening therein and is pivotally mounted upon a pivot pin 28 carried by the chuck. The operating device 27 is forked or yoke shaped so as to receive and engage the thumb and is adapted to be rocked longitudinally of the handle to project and retract the slide to close and open the eye 15 of the threading needle. A latch 29 is pivotally mounted on the part 8, as indicated at 30 and provided at its free end with a finger piece 31. The pivoted end of the latch has a projection 32 adapted to be engaged under the base of the operating device when the latter is tilted rearwardly to lock the slide in projected position.

From the foregoing description, it will be seen that the needles and slide are mounted upon a sectional chuck which may be readily removed to permit of the application of tool members of different sizes and of the substitution of new ones for old ones when occasion requires. It will be apparent also that the slide may be projected to close the eye of the threading needle while the latter is being passed through the goods. It will be further apparent that the invention provides a piercing needle which may be used to form the succeeding thread passage in the goods simultaneously with the operation of passing the thread through the goods, and that this needle may be adjusted to regulate the length

of the stitches. By the construction described ordinary hand stitching may be closely simulated, or a lock stitch may be formed with loops on both sides of the goods, as will be readily understood.

I claim:—

1. An awl comprising a handle, a hooked threading needle mounted thereon, a slide for opening and closing the eye of the needle, a pivotally mounted member for operating said slide, and a pivotally mounted latch for engaging and locking said member in slide projecting position.

2. An awl comprising a handle, a hooked threading needle mounted thereon, a slide for opening and closing the eye of the needle, a yoke having a stem pivotally mounted on the handle and provided with a bearing shoulder, and a pivoted latch member having a projection to engage under said shoulder for locking the member in slide projecting position.

3. An awl comprising a handle, a hooked threading needle mounted thereon, a slide for opening and closing the eye of the needle, said slide having spaced lugs, an operating member having a stem pivotally mounted on the handle and engaging said lugs, and means for locking said member in slide projecting position.

4. An awl comprising a handle, a longitudinally divided chuck mounted therein, the chuck sections being formed in their meeting faces with recesses providing spaced passages, a sewing needle having a shank detachably held in one of said passages, a piercing needle having a shank fitted in the other passage, said needle being offset from its shank so that by reversing its position it may be spaced a greater or less distance from the threading needle, and means for securing said piercing needle against displacement in either of its positions.

In testimony whereof I affix my signature in presence of two witnesses.

JASPER N. HILL.

Witnesses:

A. W. RIFFLE,
H. T. STEWART.