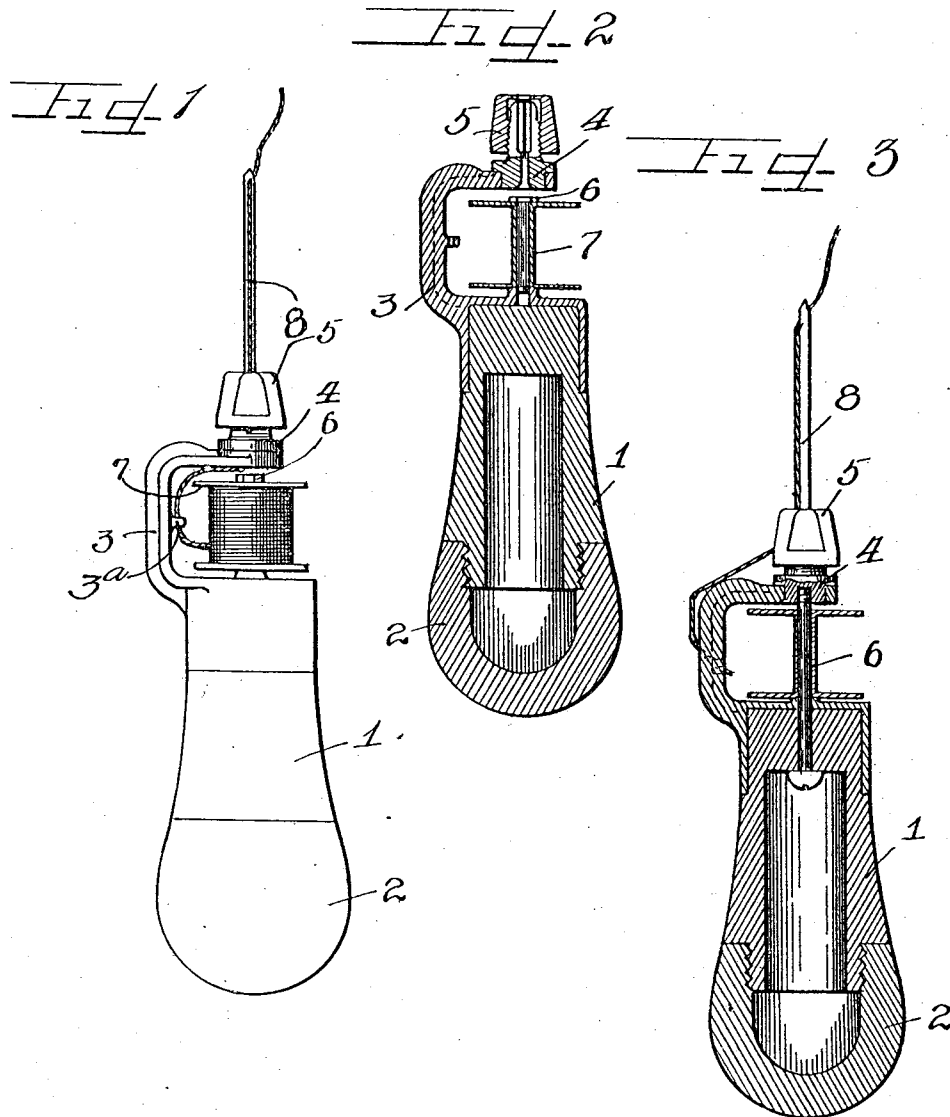


1,198,048.

Patented Sept. 12, 1916.
2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 4

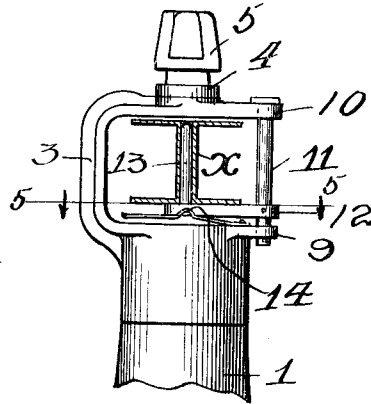


Fig. 7

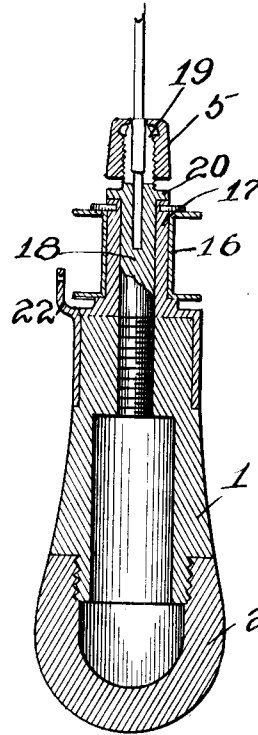


Fig. 5

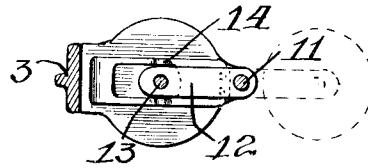


Fig. 6

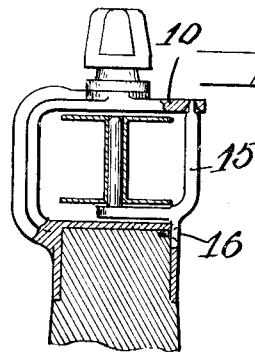
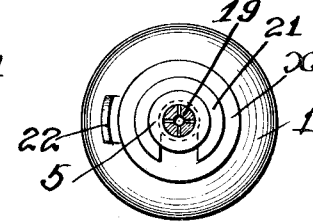


Fig. 9



Fig. 8



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1,198,048.

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Application filed June 12, 1912. Serial No. 703,140.

To all whom it may concern:

Be it known that I, CLARENCE A. MYERS, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sewing-Awls; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numbers of reference marked thereon, which form a part of this specification.

Of the various types of sewing awls put upon the market, some of the awls are provided with exposed or exterior, rotatable thread reels, at all times under the inspection and control of the operator, and some of which are located between the handle and the needle. In some of these, the reel, being journaled transversely the axis of the handle, upon a removable pintle, is readily removable for refilling, or to permit the insertion of a reel carrying a different grade or fineness of thread. In others (and particularly those in which the reel is journaled axially of the handle, and between the handle and needle) it has been necessary to remove the needle to remove the reel. Thus, should it be desired to change reels to vary the thread to suit the work, it is practically necessary to dismantle the device. This is a very serious objection, not only as occasioning loss of time, but also for the reason that the small parts removed in that case, are sometimes dropped and lost, rendering further operation of the device impossible until the missing part is supplied from the factory.

It is an object of this invention to so construct a sewing awl as to provide a reel journaled axially of the handle, and needle, and so constructed as to permit the almost instant removal of the reel without disturbing the adjustment of the needle or any other part of the device.

It is also an object of the invention to afford a construction whereby the axially journaled reel is at all times in convenient position to be controlled by the fingers and thumb of the operator, thus enabling the desired tension to be maintained at all times during the sewing operation.

It is a further object of the invention to afford a construction of the utmost simplicity and durability, and so constructed

that the thread supply and the tension thereon is at all times under the observation and control of the operator.

It is also an object of the invention to afford a construction upon which the thread may be unwound without removing the wheel from position, should it be desired.

The invention consists in the matters hereinafter described, and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is a central, longitudinal section thereof. Fig. 3 is a view similar to Fig. 2, but with the pintle bolt threading into the needle carrying head. Fig. 4 is a fragmentary side elevation with the reel supported to swing forwardly. Fig. 5 is a section on line 5—5 of Fig. 4, with parts omitted, and indicating the outward adjustment of the reel in dotted lines. Fig. 6 is a longitudinal section, showing a detachable reel arm. Fig. 7 is a central, longitudinal section, showing the reel removable over the needle, and constructed to permit winding without removal of the reel. Fig. 8 is a front end elevation of the same. Fig. 9 is a plan view of the resilient retaining washer.

As shown in the drawings: 1, indicates the handle, which may be constructed hollow and closed with a screw cap 2, to afford a receptacle for tools, needles, or extra thread.

Referring first to Figs. 1 to 6 inclusive, a bracket 3, is rigidly engaged on the front end of the handle, any suitable attaching means sufficing for that purpose, and comprising an arm, which extends laterally and forwardly of the handle, and thence inwardly beyond the axis thereof, and is provided at the axis with a needle chuck, comprising a jaw member 4, which is externally threaded, and on which is threaded a clamping nut 5, affording a needle chuck. The reel comprises a tubular barrel 7, provided with suitable flanges or collars at each end thereof, and extending through the barrel, and threaded into the end of the handle, as shown in Figs. 1 and 2, or extending through the inner end of the handle barrel and threaded into the needle jaw member 4, is a pintle bolt 6, the removal of which releases the reel from the device.

In the construction illustrated in Figs. 1 and 2, a sufficient space is provided between

the forward end of the reel and the needle chuck member 4, to engage the angular head of the pintle bolt 6, with a suitable wrench.

In the construction illustrated in Fig. 3, the pintle bolt 6, may be engaged through the hollow handle by means of a screw driver or the like, in a familiar manner. As shown, a suitable eye 3^a, is provided at the inner side of the arm 3, to receive the thread therethrough from the reel to insure the thread drawing true from the reel at all times. The end of the thread is thence carried downwardly and may be carried through the chuck, as indicated in Figs. 1 and 2, or the thread may pass through said arm and thence be carried through the clamping nut 5, into the groove in the needle 8.

In the construction illustrated in Figs. 4, 5 and 6, the reel is likewise removable without disturbing the adjustment of the needle. For this purpose, as shown, laterally directed arms 9 and 10, are provided at the forward end of the handle, and at the forward end of the arm 3, and extending therethrough is a pivot bolt 11. Rigidly engaged thereon is an arm 12, and rigidly secured thereon at a distance from the pivot bolt 11, corresponding with its distance from the axis of the handle, is a pintle stud 13, adapted to receive the barrel X, of the reel, thereon. As shown, a retaining member 14, comprising a longitudinally slotted leaf spring, is engaged on the end of the handle in alinement with the arm when swung inwardly, and is slotted to receive said arm therein, as shown in Figs. 4 and 5, so that, when the arm is swung inwardly, the reel is positively engaged in axial alinement with the handle and needle, but by depressing said spring 14, may be instantly swung outwardly on the pivot bolt 11, whereupon the reel may be wound without removing the same from its pintle bolt 13, or may be removed, as preferred. If desired, the reel may be carried upon a bracket arm 15, indicated in Fig. 6, one end of which may be engaged in the arm 10, as before described, and the other end of which may be engaged at the handle by means of a suitable screw or bolt to permit the immediate removal of the reel when desired by the operator.

In the construction illustrated in Figs. 7, 8, and 9, the reel 16, is journaled upon a suitable axial extension 17, projecting forwardly from the handle, and through which a shank 18, (the outer end of which affords the inner member 19, of the needle chuck) extends. In this construction, the extension 17, is of a diameter slightly greater than the diameter of the clamping nut 5, and, as shown, an integral collar 20, is provided on the shank 18, which bears against the forward extension 17, from said handle. A peripheral slot or groove is provided in said extension adja-

cent its extremity, and a U shaped spring washer 21, is slidably engaged in said groove, and is of a diameter sufficiently great to bear against the outer head or flange of the reel to prevent the accidental removal or displacement of the reel from said projection. As shown in this construction, a relatively short arm 22, is provided at the forward end of the handle, having an aperture therethrough, and through which the thread from the reel may be led to a suitable aperture in the chuck to insure leading true to the needle. Of course, in this construction the only necessity for the removal of the reel is to substitute one fineness or grade of thread for another, inasmuch as the reel can readily be wound in place. This also is true of the reels in the constructions indicated in Figs. 1, 2, and 4 to 6 inclusive.

The operation of the device is thought to be evident from the foregoing description. Obviously, while operating the device, the fingers and thumb of the operator may grip the thread on the reel so that the tension of the thread at all times may be controlled, and the operator, by inspection, may always determine when it is necessary to replenish the thread, thus obviating the difficulty frequently encountered with those devices in which the reel is concealed in the handle, or otherwise, in the use of which it is frequently found that the thread is exhausted before the particular work is completed, thus occasioning vexatious delay and imperfect work.

Of course, details of construction may be varied through a wide range, but I purpose claiming broadly a sewing device of the class described, having an exposed reel axially supported between the handle and the needle, and capable of removal or re-winding without disturbing the adjustment of the needle.

I claim as my invention—

1. A sewing awl embracing a handle, a needle chuck carried on the forward end thereof to hold the needle in axial alinement therewith, and a reel rotatably mounted between the forward end of the handle and the needle chuck co-axially therewith and removable therefrom without releasing the needle chuck.

2. A device of the class described embracing a handle, a member mounted thereon, a needle chuck supported on said member in advance of the handle and in axial alinement therewith, and a reel journaled on said member below the needle chuck and in axial alinement therewith and adapted for removal from the member independently of the handle and chuck and adapted also for the winding of the thread thereon without removal.

3. A device of the class described embracing a handle, a yoked member thereon, a

thread reel rotatably mounted therein in longitudinal alinement with said handle, and a needle chuck carried by the member and supported thereby in advance of, and in longitudinal alinement with the reel and handle, said thread reel being removable independently of the handle and needle chuck.

4. A device of the class described embracing a handle, a yoke arm secured thereon to afford a reel space between the handle and end thereof, a needle chuck carried on said yoke arm, a pintle removably supported between the handle and chuck and in axial alinement therewith, and a thread removably journaled on said pintle and adapted to be moved out of alinement with the handle and chuck for removal when the pintle is removed from such alinement.

5. A device of the class described embracing a yoked handle, a bracket secured to said handle and engaging the yoke thereof, a reel journaled on said bracket and in longitudinal alinement with said handle, and exposed and in position to be manipulated with the fingers of the operating hand, and a needle chuck carried on the handle in alinement with the reel and handle, said reel being removable independently of the handle and chuck.

6. A device of the class described embracing a hollow handle, a cap threaded thereon, a needle chuck supported on said handle and in advance thereof, and in axial aline-

ment therewith, means connecting said chuck with the handle and affording a laterally open space between the handle and chuck, a thread reel journaled in said laterally open space in longitudinal alinement with the handle and the chuck, and wholly exposed to view and adapted for convenient manipulation by the fingers, and a pintle bolt releasably mounted to rotatably support said reel in operating position and to permit removal thereof with the removal of the pintle bolt without removing the needle chuck.

7. A device of the class described embracing a handle, a yoke arm secured at the forward end and side thereof, and projecting forwardly, then laterally to afford a reel space between the handle and end thereof, a needle chuck carried on the end of the yoke arm, a pintle removably supported between the handle and chuck and in axial alinement therewith, and a thread reel removably journaled on said pintle and adapted to be swung out of alinement with the handle and chuck for removal when the pintle is removed from such alinement.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

CLARENCE A. MYERS.

Witnesses:

LAWRENCE REIBSTEIN,
GEORGE R. MOORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."