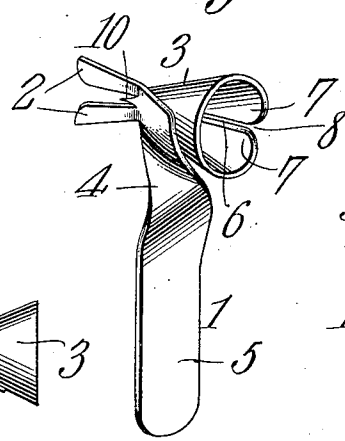
No. 886,375. PATENTED MAY 5, 1908.

A. P. KOON.

NEEDLE THREADER.

APPLICATION FILED JULY 29, 1907.

Fig. 1.



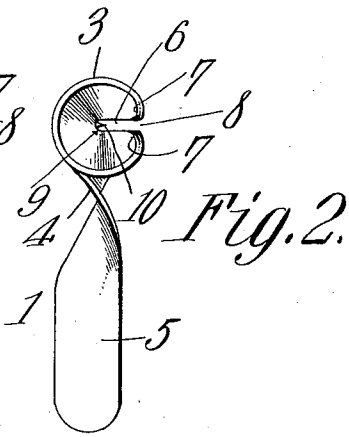
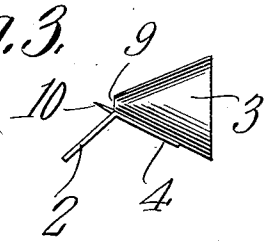


Fig. 2.

Fig. 3.



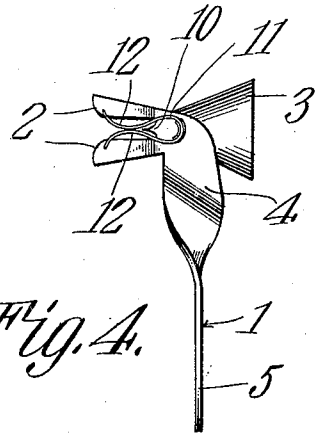


Fig. 4.

Witnesses

E. F. Stewart

R. M. Elliott

Inventor

Andrew P. Koon,

By C. A. Snow & Co.

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ANDREW P. KOON, OF SHERIDAN, ARKANSAS.

NEEDLE-THREADER.

No. 886,375. Specification of Letters Patent. Patented May 5, 1908.

Application filed July 29, 1907. Serial No. 386,039.

To all whom it may concern:

Be it known that I, ANDREW P. KOON, a citizen of the United States, residing at Sheridan, in the county of Grant and State of Arkansas, have invented a new and useful Needle-Threader, of which the following is a specification.

This invention relates to needle threaders.

The object of the invention is to provide an article of this character which shall be simple of construction, efficient and durable in use and cheap of manufacture, which shall be adapted for employment in connection with either a hand or a sewing machine needle, and in the application of which no difficulty will be encountered in threading any character of needle.

With the above and other objects in view as will appear as the nature of the invention is better understood, the same consists in the various novel details of construction and combination of parts of a needle threader as will be hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective of a needle threader constructed in accordance with the present invention. Fig. 2 is a view in end elevation. Fig. 3 is a top plan view. Fig. 4 is a view in side elevation of a slightly modified form of the invention.

The threader, as shown in Figs. 1, 2, 3 and 4 comprises a handle 1 provided with forked needle guides 2, and a thread guide designated, generally, 3. For convenience in manipulating the implement, the handle has the end portion 4 arranged at right angles to the end portion 5, such disposition of the terminals being secured in this instance by twisting the handle a quarter turn, as shown; but it is to be understood that the invention is not to be limited to this arrangement as a straight handle may be employed in lieu of that shown. Of course it will be recognized that in articles of this class it is essential that they be constructed in the simplest possible manner in order that the cost of their production may be reduced to a minimum, and to secure this result the handle 1 will be made of suitable sheet metal, and the needle guides 2 will be integral therewith.

The thread guide 3 is approximately cone-shaped and is provided with a thread-releasing slot 6 that extends throughout its length. The walls of the slot are inturned or incurled to form thread guards 7, the function of which is to prevent the thread from entering the slot when a needle is to be threaded, it being apparent that if the end of the thread contacts with either of the guards it will be deflected inward towards the center of the guide and thus away from the slot. The corners of the slot defining the walls are rounded to provide a throat 8 which will operate to guide the thread into the slot when the implement is to be freed from the thread at the conclusion of the threading operation.

The apex of the guide 3 is truncated to provide a constricted guide opening 9, and disposed obliquely to the long diameter of the thread guide partly bridging it is a finger 10 that constitutes a needle eye finder. The finder in this instance is flat and is formed integral with the handle, is disposed between the needle guides 2 and is preferably cusp shaped in order to adapt it to enter the eyes of needles from the finest to the coarsest used. As clearly shown in Fig. 3, the needle guides are obliquely disposed relatively to the long diameter of the thread guide 3 but at opposite angles to the eye finder in order that there will be no interference between the needle guides and the thread end when the latter passes through the needle eye.

The thread guide and handle may be assembled in any preferred manner, preferably by soldering, and the parts may be finished in any way to produce a neat and finished effect.

To use the above described device, which is intended for threading sewing machine needles, the handle is held between the thumb and fore finger of the right hand and the needle guides are caused to straddle the needle at any point above its eye. The implement is now pressed gently against the needle and passed downward and as soon as the finder 10 reaches the eye it will enter it and check further movement. Retaining the threader in this position the operator inserts the end of the thread, which has previously been twisted to a fine point, into the thread guide, and by causing the thread end to travel along the lower or unslotted wall thereof, it will be guided to the needle eye and be free to pass therethrough, the finder securing this result as it holds the needle eye in exact alinement with the guide opening 9. As soon as the thread projects beyond the needle, the operator reaches around with his left hand and grasps the projecting end and

draws the thread outward, thereby completing the threading operation. To free the implement from the thread, it will only be necessary to withdraw the finder from the eye and give the handle a turn away from the needle, whereupon the thread will enter the throat 8 and pass down and out of the releasing slot 6.

The modified form of invention shown in Fig. 4 is adapted for threading hand needles and this is secured by the provision of an attachment for holding the finder in the needle eye while the thread is passed therethrough. This needle-holding attachment consists of a weak spring formed with a loop 11, the crest of which is soldered or otherwise secured to the portion 4 of the handle, and with two outwardly diverging arms 12 that bear loosely upon the rear sides of the needle guides, the intermediate portions of the arms being normally in contact and constituting clamps for grasping the needle and holding it properly positioned relatively to the finder. With this exception the threader is in all parts the same as that shown in Figs. 1 to 4.

In threading the needle with the last described device, the needle is passed between the clamps 12 and drawn in the proper direction to cause the finder to enter the eye where it will be held. The thread is then passed through the needle eye, and the implement is then detached from the thread in the manner above set forth. Of course it is to be understood that the clamps 12 will be bent to lie flat upon the needle guides in order that the needle head may be engaged by the clamps.

What is claimed is:—

1. A needle threader comprising a thread guide having a thread-releasing slot, the walls of which are inturned to provide thread guards, and a needle eye finder and needle guides disposed at one end of the guide.

2. A needle threader comprising a thread guide, having a thread-releasing slot, the walls of which are inturned to provide thread guards and rounded to form a throat, and a needle eye finder and needle guides disposed at one end of the guide.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ANDREW P. KOON.

Witnesses:
J. W. HAMILTON,
C. E. CROWSON.