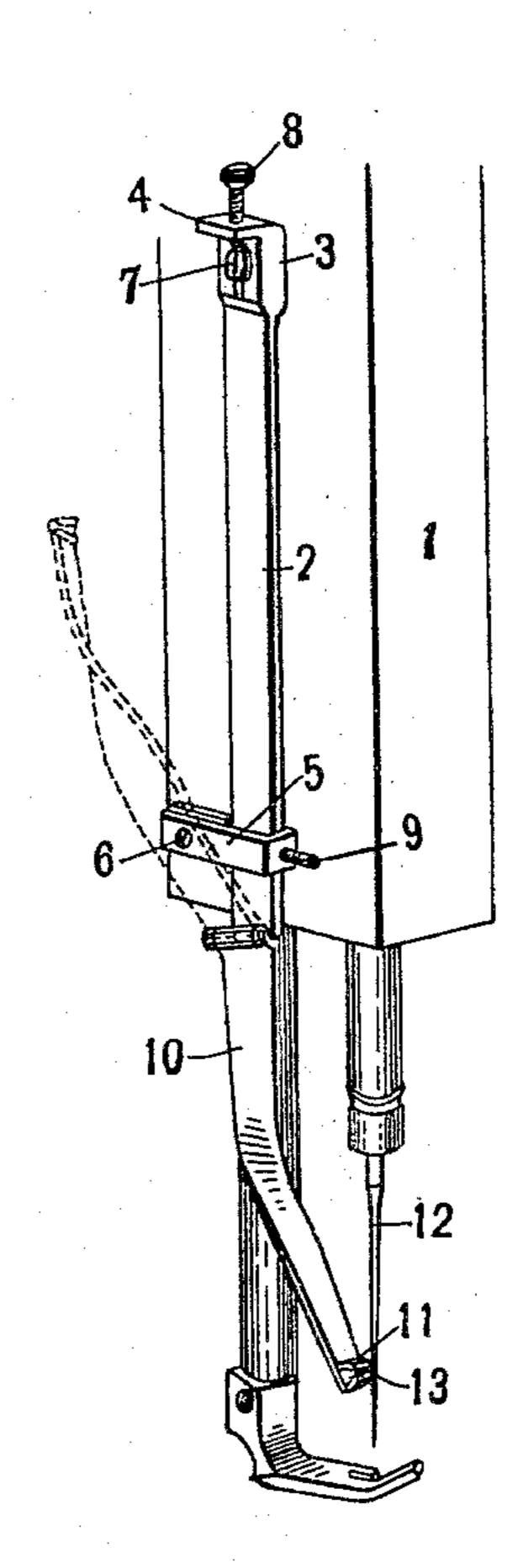
(No Model.)

W. A. NORTHUP.
NEEDLE THREADER.

No. 597,735.

Patented Jan. 25, 1898.



WITNESSES.

J. Other lers

Frank Avery

INVENTOR.

Itilland a Troubup,

By A Cosco Wheeler

Attorney.

## United States Patent Office.

WILLARD A. NORTHUP, OF HARVARD, ILLINOIS. .

## NEEDLE-THREADER.

SPECIFICATION forming part of Letters Patent No. 597,735, dated January 25, 1898.

Application filed April 30, 1897. Serial No. 634,557. (No model.)

To all whom it may concern:

Be it known that I, WILLARD A. NORTHUP, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Needle-Threaders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, forming a part of this specification.

This invention relates to new and useful imrovements in needle-threaders; and it consists in the device hereinafter more fully set forth, and pointed out particularly in the claim.

The object of the invention is to provide a device of cheap and simple construction that may be attached to the head of a sewing-machine, said device consisting of stationary and movable portions, said movable portions having a guiding-piece secured thereto in such position that it may be carried adjacent to the eye of the sewing-needle, which object is attained by the construction illustrated in the accompanying drawing, in which the figure is a general perspective view of a portion of a sewing-machine head having my improved threading device mounted thereon.

Referring to the numerals of reference, 1 designates the head of the machine.

2 represents a bar having a slotted head 3

35 and a flange 4 at its upper end.

5 designates a clip having an aperture 6 in its outer leaf and one of less diameter in its inner leaf, said apertures being in direct alinement with each other. Clip 5 is secured 40 to the machine-head by passing a screw (not shown) through aperture 6 and securing the inner leaf of clip 5 directly to the head, as will be readily understood.

Passing through the slot in head 3 of bar 2 is a supporting-screw 7. Extending through flange 4 and bearing at right angles upon the head of screw 7 is a set-screw 8, which is employed for a purpose hereinafter referred to.

The distance between the leaves of clip 5 50 is such as to snugly receive the lower portion of bar 2 and hold it therein by spring-tension.

9 designates a screw which is adapted to be passed through the head of clip 5 and to bear

against the front edge of bar 2 and limit the forward swing of said bar, as hereinafter more 55 particularly referred to.

Hinged at an angle to the lower end of bar 2 is an arm 10, said arm being bent, as clearly

shown in the drawing.

11 designates a two-part funnel-shaped 60 guide-piece which is mounted upon the outer

side of arm 10 at its lower extremity.

It will now be seen that by the minute adjustment of screws 8 and 9 the apex or smaller circular opening in guide 11 may be brought 65 in line with the eye of needle 12 by passing the end of a thread into the larger end of said guide. It will readily be directed to the smaller end and thence through the eye of said needle. After the thread has been passed through 70 the needle hinged arm 10 may be swung up out of the way against bar 2, the dotted line in the drawing showing the direction in which said arm is moved. As said arm is swung upward the main portion of the thread passes 75 outward through slot 13 in the guide-piece.

It will thus be seen that the device hereinbefore set forth, and illustrated in the drawing, is very cheap and simple in its operation, and by its use a needle of the character set 80 forth may be quickly and easily threaded.

Having thus fully set forth my invention, what I claim as new, and desire to secure by

Letters Patent, is— In a needle-threader, the combination of 85 the bar 2 terminating at its upper end with the slotted head 3 and flange 4, the supporting-screw 7, and the set-screw 8 extending through said flange and arranged to bear at right angles upon the head of said support- 90 ing-screw, the spring-clasp 5 secured to the machine-head and adapted to guide the lower end of said bar, a set-screw in said clasp adapted to engage against said bar whereby it may be adjusted, the arm 10 hung at an 95 angle from the lower end of said bar 2, and a two-part funnel-shaped guide-piece mounted upon the free lower extremity of said arm, substantially as described.

In testimony whereof I affix my signature 100 in presence of two witnesses.

WILLARD A. NORTHUP.

Witnesses:

WALTER J. LEACH, PHILIP C. LAMPERT.