

No. 668,333.

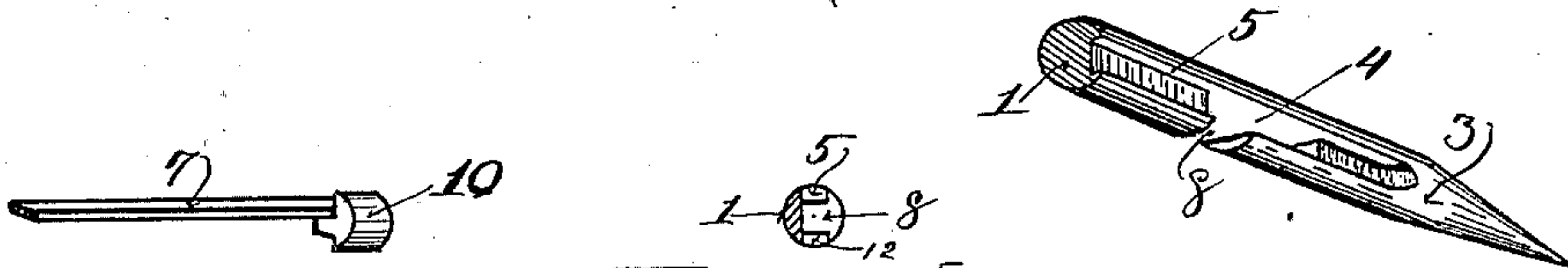
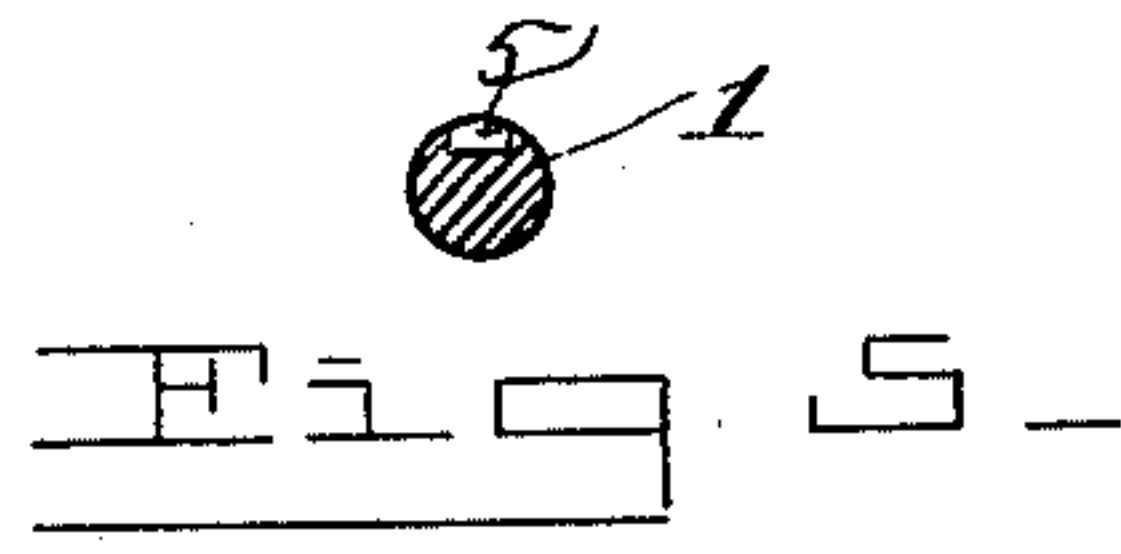
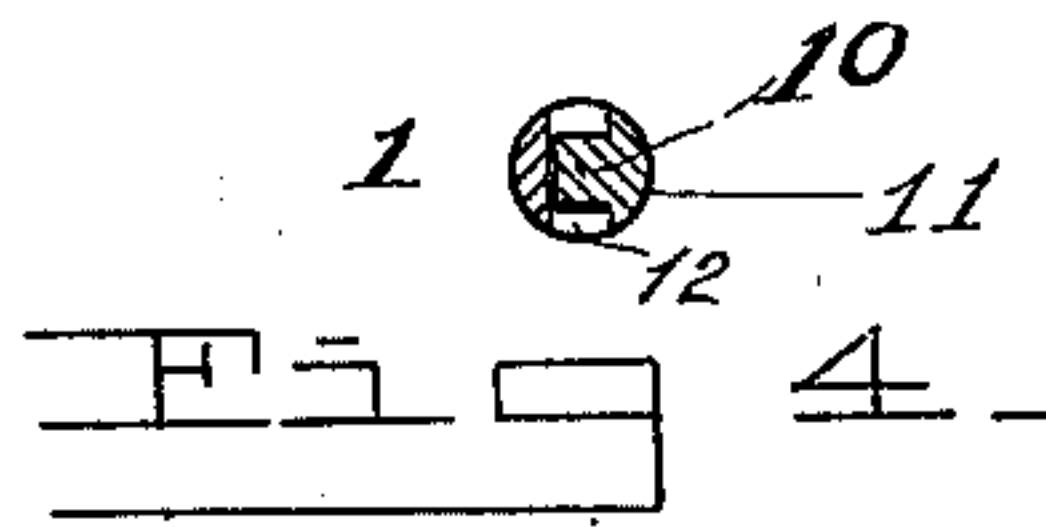
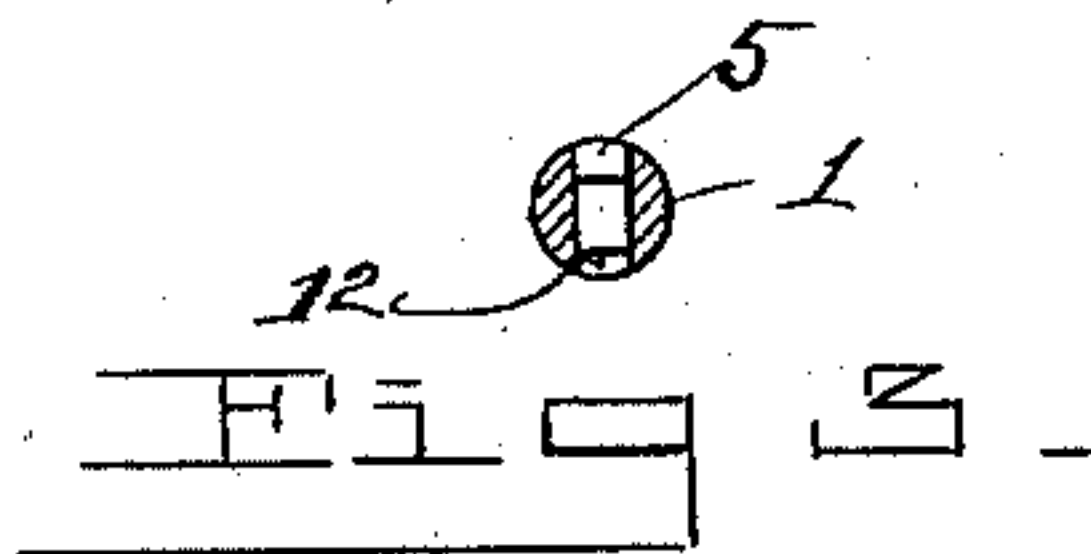
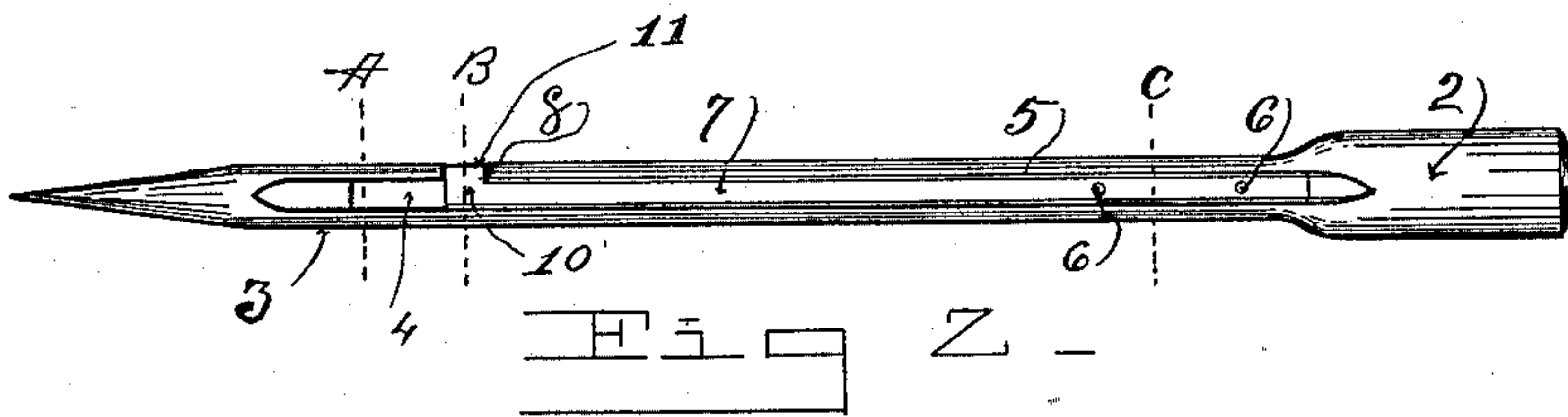
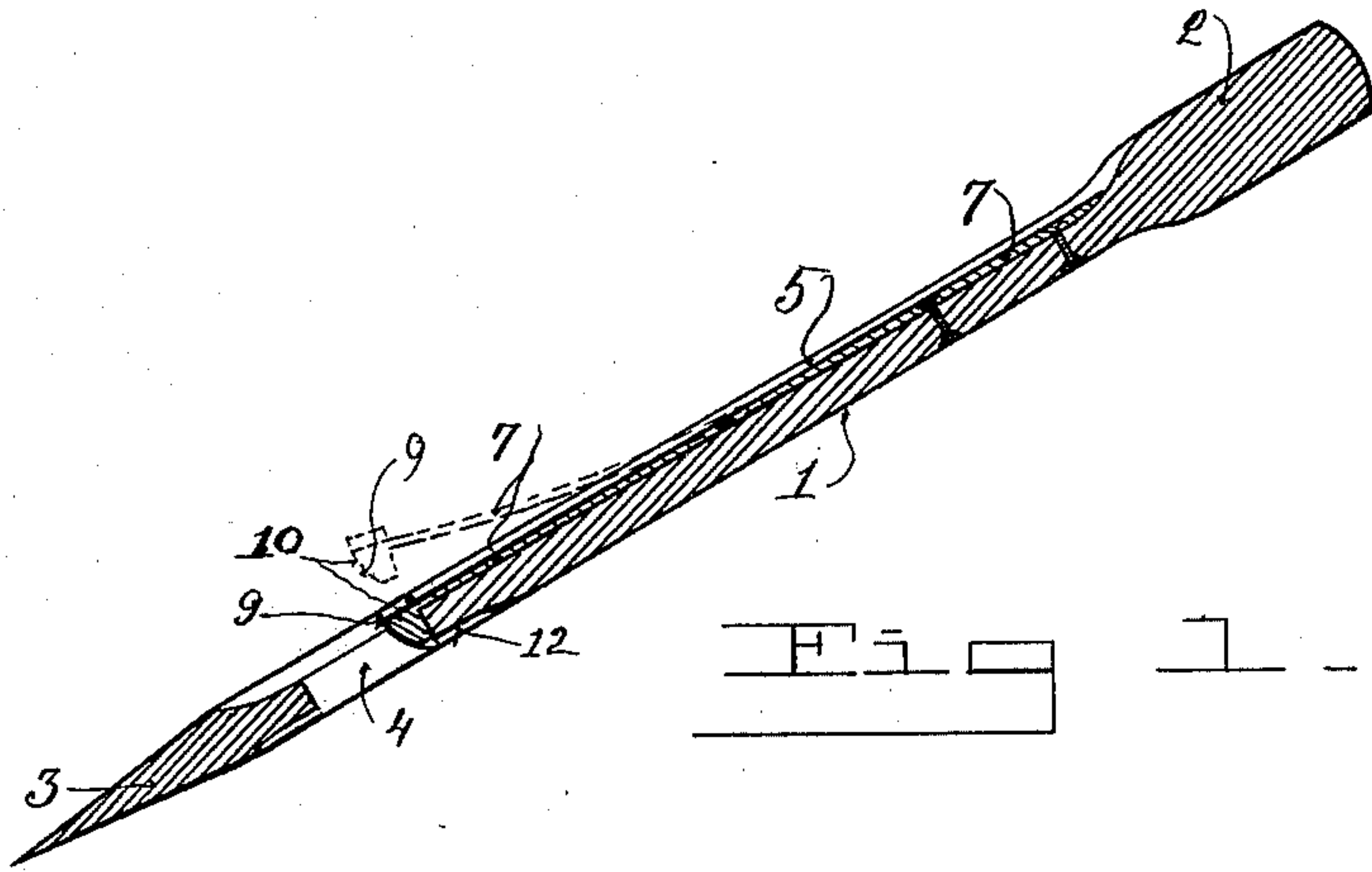
Patented Feb. 19, 1901.

F. M. LEPORE.

NEEDLE.

(Application filed Apr. 26, 1900.)

(No Model.)



WITNESSES: Claude A. Dunn, 1322 Thompson

INVENTOR Felix M. Lepore

BY H. S. Bailey, ATTORNEY.

UNITED STATES PATENT OFFICE.

FELIX MARIAN LEPORE, OF DENVER, COLORADO.

NEEDLE.

SPECIFICATION forming part of Letters Patent No. 668,333, dated February 19, 1901.

Application filed April 26, 1900. Serial No. 14,459. (No model.)

To all whom it may concern:

Be it known that I, FELIX MARIAN LEPORE, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Sewing-Needles; and I do 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 drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in sewing-needles; and one object of my invention is to provide a needle in the eye of which a thread can be placed through the side of the needle.

The second object is to provide a sewing-needle having a normally-closed gap through one side of the needle into its eye, which can be easily and quickly opened and a thread inserted into the eye through the gap.

I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of a needle embodying my invention. Fig. 2 is a plan view of a needle embodying my invention. Fig. 3 is a cross-section on line A of Fig. 2. Fig. 4 is a cross-section on line B of Fig. 2. Fig. 5 is a cross-section on line C of Fig. 2. Fig. 6 is a cross-section on line B of Fig. 2, with the head of the tongue left out in order to show the side recess. Fig. 7 is a perspective fragment of a needle, showing the side gap and the longitudinal slot in which the tongue and gap-closing head fits. Fig. 8 is a fragment of a tongue and gap-closing head. Fig. 9 is a longitudinal view of a hand-operating needle embodying my invention.

Similar figures of reference refer to similar parts throughout the several views.

Referring to the drawings, the numeral 1 designates a sewing-machine needle. My invention is, however, applicable to hand-sewing needles 1^A, as shown in Fig. 9.

2 designates a head portion formed on the sewing-machine needle which is not used on the hand-needles. The point 3 of the needle has an eye 4 adjacent to its end. Axially

along one side of the body of the needle a slot 5 is cut, which extends across the eye and the whole length of the body of the needle to its head portion. In this slot I secure by any suitable means, but preferably by rivets 6, a thin flat tongue 7, of spring metal, which is arranged to normally lie flat along the bottom of the slot. A gap 8 is cut through one side of the needle into the eye 4, as shown in Figs. 1, 6, 7, and 9, at preferably its head end. This gap is preferably curved or tapered from its farthest side 9 from the body of the tongue toward the tongue. A head portion 10 is formed on the end of the tongue, that is made wide enough to fit snugly but loosely the width of the eye, and a lateral extension 11 is formed on the head, that fits closely into the gap leading into the eye through the side of the needle and is fitted to register smoothly with the curved side of the needle. This lateral extension is curved to register with the curve of the gap. The slot 5 in the sewing-machine needle is preferably deeper than the thickness of the tongue to allow a portion of the slot to be exposed along the needle above the tongue, where it is in normal position. In the hand-sewing needle the slot is preferably full flush with the surface of the needle by the tongue when in its normal position. If desired, the lateral extension may be made substantially as shown in Fig. 8 or, if desired, V-shaped, as shown in Fig. 9. A short slot 12 is also formed in Fig. 1 opposite the slot 5 and extends from the eye a short distance. Both slots are formed for a thread to lie in. The curved end on the outer extremity of the head is preferable, as it forms a passage big enough to admit a thread by a much slighter movement of the head out of the gap than a square form would. The end of the lateral extension of the head of the tongue that fits down into the gap is flat and is arranged to fit smoothly with the side of the needle and forms a flat surface against which a finger-nail may be pressed and the head and tongue sprung out of the gap far enough to insert a thread, as shown in Fig. 9.

The operation of threading the needle is as follows: The nail of a finger of one hand is pressed against the narrow end of the head of the tongue and it is pressed back, as shown in the dotted lines in Fig. 1 and in the fragment

in Fig. 9, and as it is moved back its curved end moves away from the curved face of the gap and leaves a clear open space in the eye of the needle, into which a thread can be
5 quickly and easily inserted, when the fingernail is taken from the head portion of the tongue and the resilient tension of the tongue springs the head into the gap again.

My needle is adapted to all kinds of thread
10 and string and cord sewing needles, either for hand or machine use. It is immaterial whether the eye is in the head or in the point of a needle, as my invention contemplates a needle either with or without an enlarged
15 head portion or with an eye at either end or at any portion of its length.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a new article of manufacture the herein- 20 described needle having in the body thereof an eye and a longitudinal groove communicating therewith, said needle-body being also provided at one side with a gap leading to said eye, a resilient tongue secured and lying 25 wholly within said groove and provided at its lower end with a gap-closing head normally flush with the surface of said body, whereby the gap may be opened and a thread inserted in said eye through said gap, substantially as 30 described.

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

FELIX MARIAN LEPORE.

Witnesses:

CLAUDE A. DUNN,
BESSIE THOMPSON.