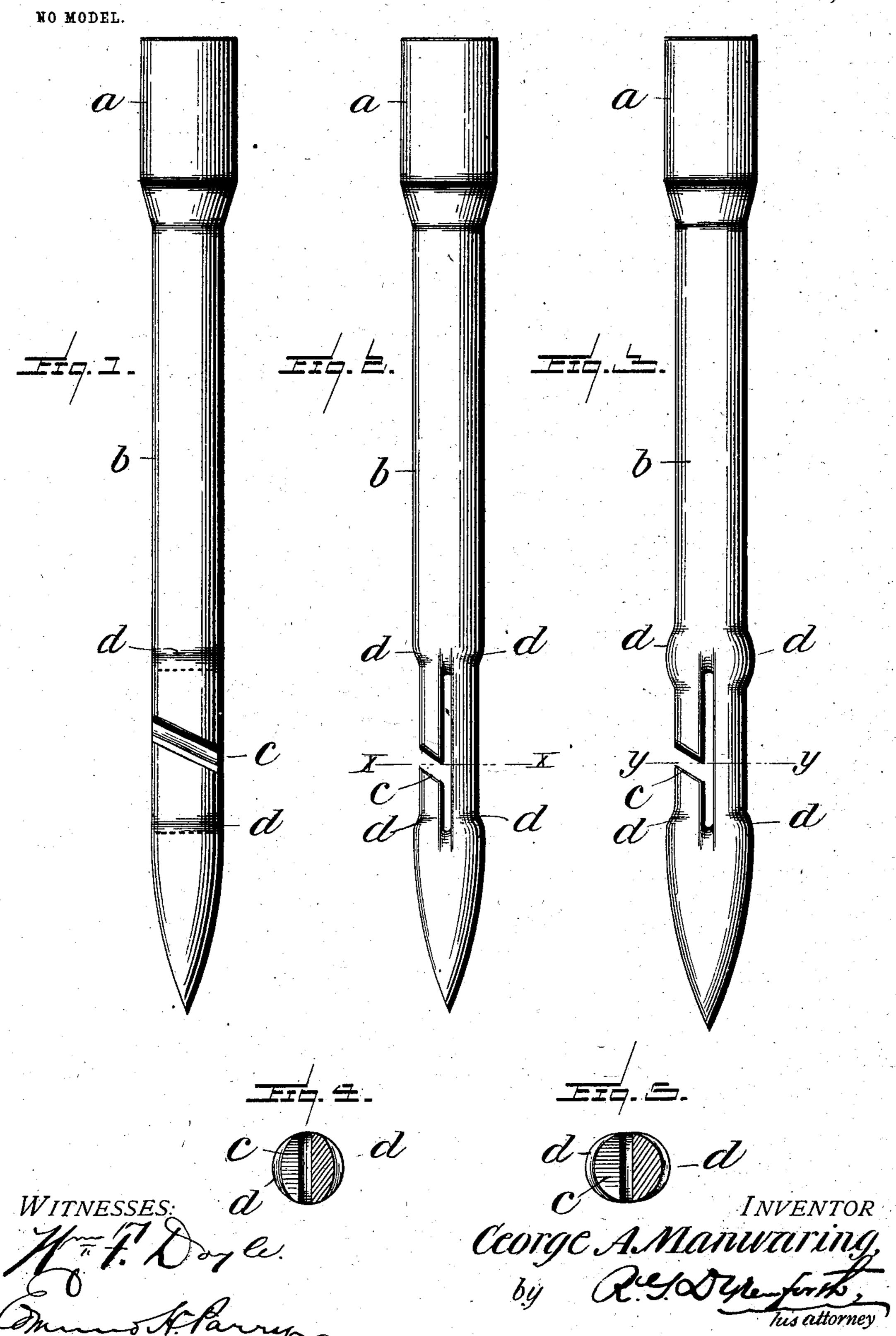
## G. A. MANWARING.

## SEWING MACHINE NEEDLE.

APPLICATION FILED NOV. 30, 1901.



COMPANIE PETERS CO , PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

GEORGE A. MANWARING, OF BAYONNE, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO NATIONAL AUTOMATIC NEEDLE COM-PANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## SEWING-MACHINE NEEDLE.

SPECIFICATION forming part of Letters Patent No. 721,588, dated February 24, 1903. Application filed November 30, 1901. Serial No. 84,289. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. MANWARING, a citizen of the United States, residing at Bayonne, county of Hudson, State of New 5 Jersey, have invented certain new and useful Improvements in Needles, More Particularly Adaptable to Needles Used with Sewing-Machines, of which the following is a specification.

The object of this invention is to provide a sewing-machine needle with means by which it may most readily be threaded and without tendency therefrom of the thread to slip out or of the work to be caught in operation.

The invention consists in a sewing-machine needle having a threading-slot inclined in two directions into its eye and having offsets above and below the slot.

The invention consists, furthermore, in a 20 slotted needle or stem having a guard to keep the goods operated upon (generally denominated the "work") from contact with the slot.

In the accompanying drawings, showing some forms of embodiment of the invention, 25 Figure 1 is a view in elevation of a sewingmachine needle, exhibiting the slot into the eye thereof slanting across the side. Fig. 2 is a view in front elevation thereof, exhibiting the slot into the eye slanting inward as well

30 as across the side and a construction of the needle for keeping the work from contact with the slot. Fig. 3 is a like view exhibiting another construction for keeping the work from contact with the slot. Fig. 4 is a view 35 in cross-section taken on the line x x of Fig. 2, and Fig. 5 is a like view taken on the line

y y of Fig. 3.

An eye-pointed sewing-machine needle having, as usual, shank and stem (the shank here 40 marked a and the stem b) has on one side of the stem at the eye a slot c, which is at once inclined across this side and inclined inward into the eye—that is to say, inclined to or laterally aslant the longitudinal axis of the nee-45 dle and also oblique thereto or inclined inward, preferably downward, in the direction of the slot's depth. By this slot the needle is readily threaded by holding the thread taut across the slot side of the needle, moving it 50 then in the direction of its thickness straight

forward until the nearer end of the slot is reached, and then stopping with the hand at the nearer end of the slot and continuing movement with the other hand until the other end is reached, whereupon the thread will im- 55 mediately slip through into the eye. The operation is greatly facilitated by the directions of the slot, while the lateral slant of the slot practically prevents escape of the thread in

operation.

To keep the goods being sewed from catching the edges of the slot, a guard is supplied by providing the stem on its slot side above and below adjacent to the slot and preferably, also, on the side opposite the slot with 65 offsets d d, formed by inset or incut of the stem at and extending somewhat above and below the slot, leaving shoulders as the offsets, as shown in Fig. 2, or by projections on the stem, as shown in Fig. 3. The offsets 70 causing a hole to be made in the work of diameter greater than that of the stem at the slot, the slot under the usual motion of the needle will pass through before there is time for the hole to contract. This guard is effi- 75 cient with any slotted needle or similar device.

Having thus fully described my invention, what I claim is—

1. A sewing-machine needle having a 80 threading-slot leading into its eye, the plane of direction of said slot being inclined to the longitudinal axis of the needle, and the plane of direction of the depth of the slot being oblique to this axis and having offsets above and 85 below the slot, substantially as set forth.

2. A sewing-machine needle having a threading-slot leading into its eye, provided with offsets above and below the slot, adjacent to the same, constituting a guard there- 90 to, substantially as and for the purpose described.

In testimony whereof I, George A. Man-WARING, have signed my name to this specification, in the presence of two subscribing 95 witnesses, this 23d day of November, 1901.

GEORGE A. MANWARING.

Witnesses:

ROLLEO WOOSTER, Jos. A. Oakes.