

(No Model.)

S. WOODWARD.
KNITTING MACHINE NEEDLE.

No. 567,931.

Patented Sept. 15, 1896.

Fig. 1.

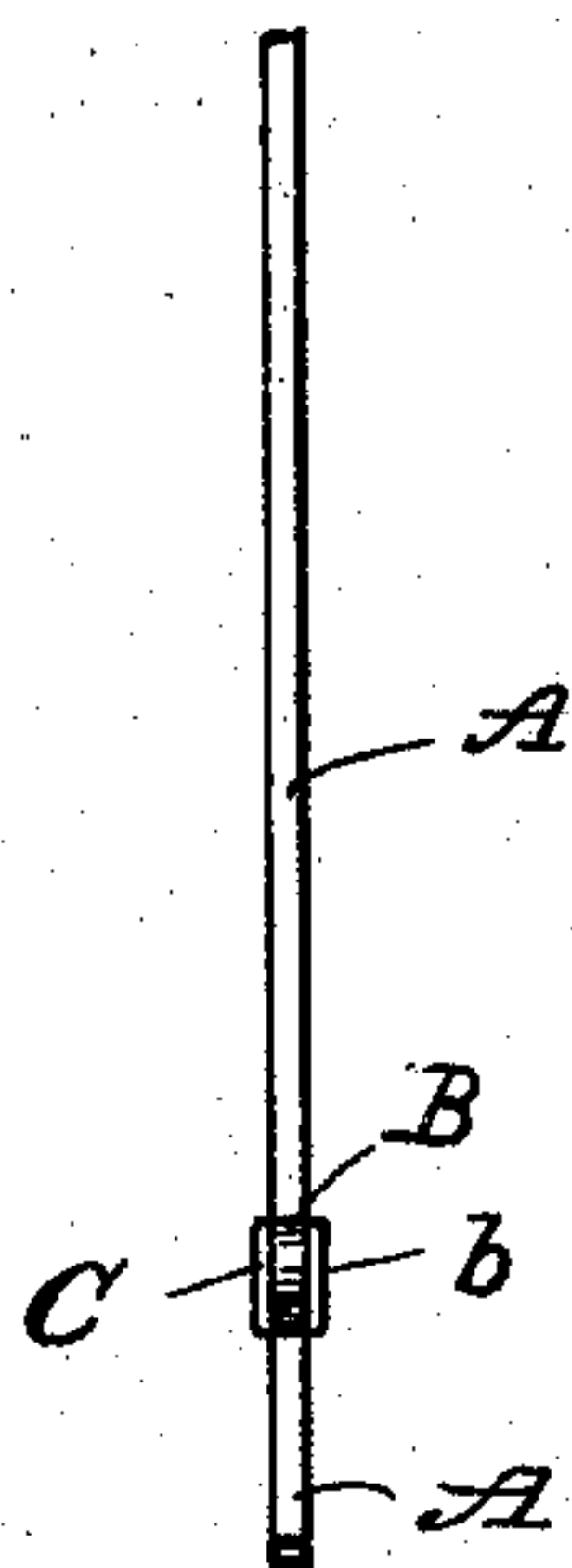


Fig. 2.

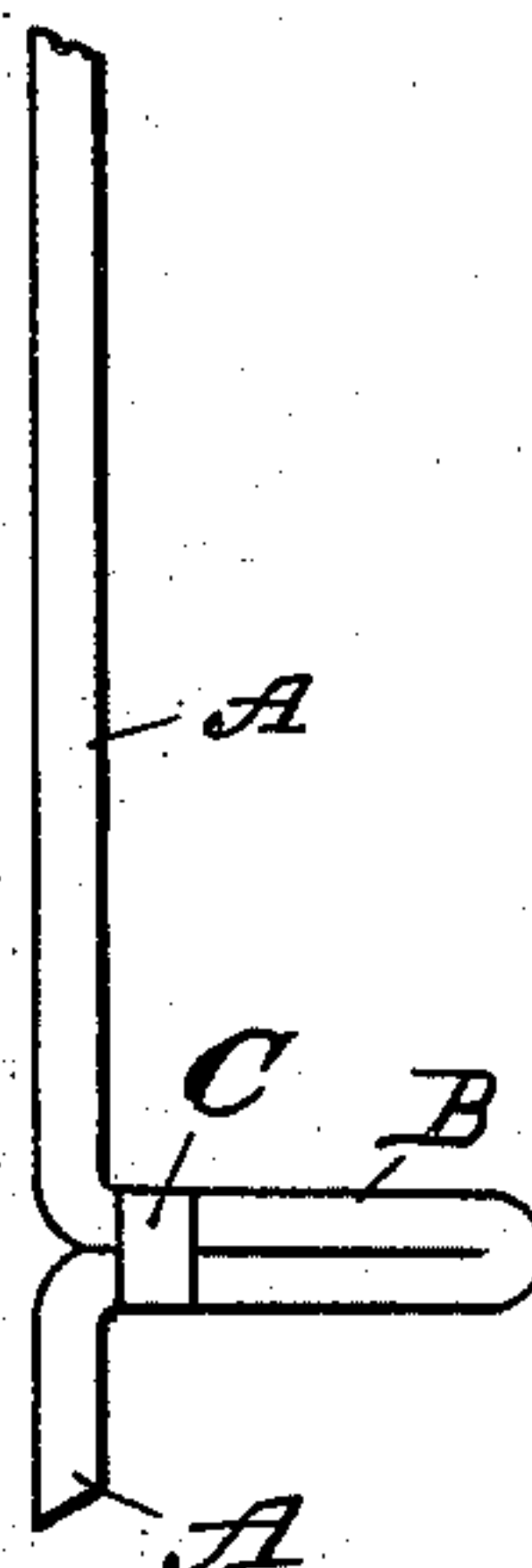


Fig. 3.

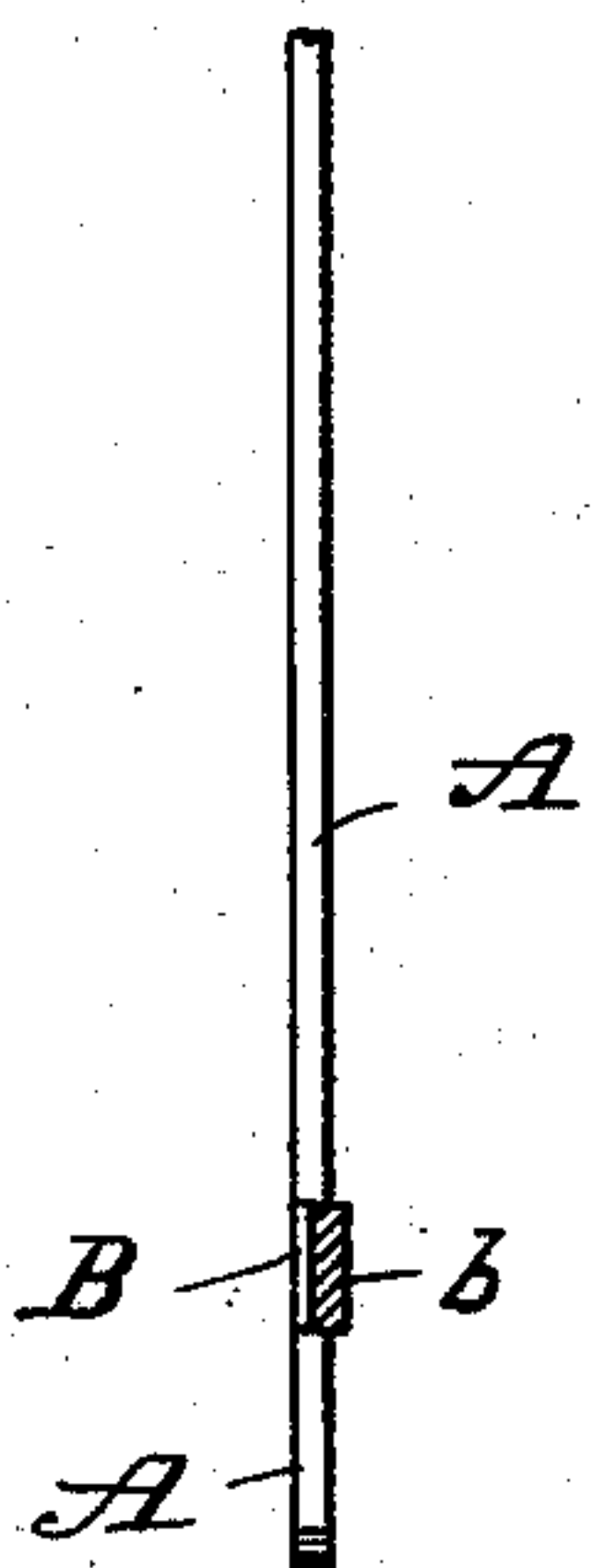


Fig. 4.

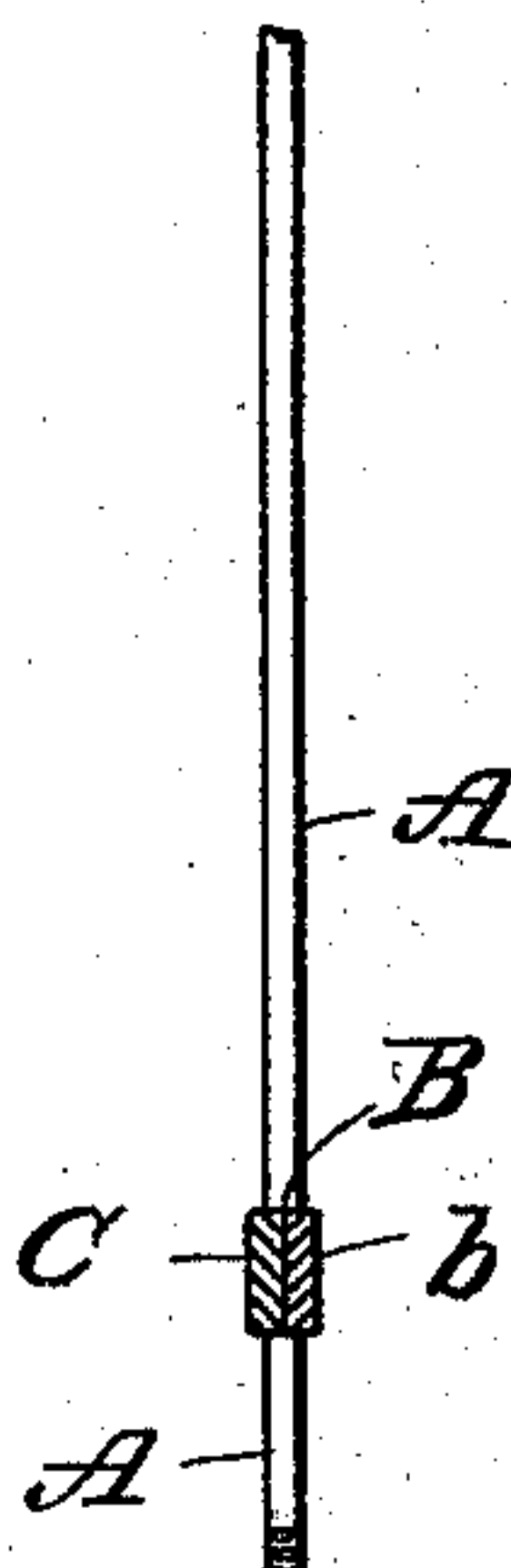
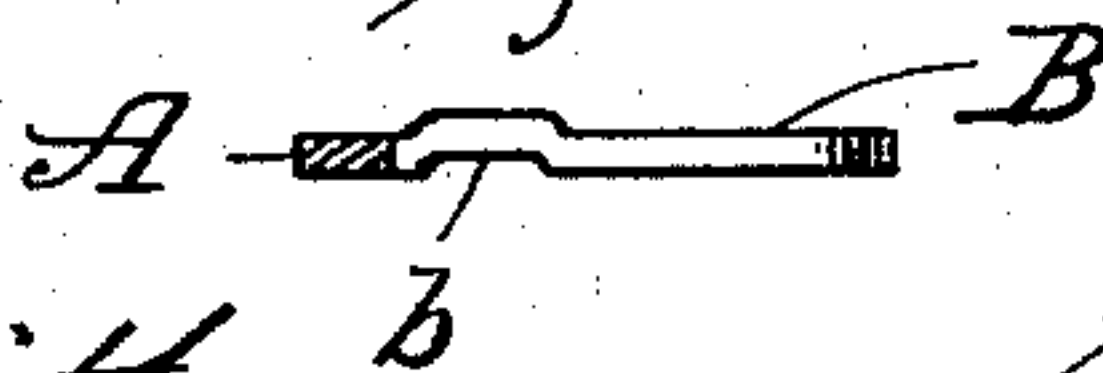


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

STEPHEN WOODWARD, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR TO
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KNITTING-MACHINE NEEDLE.

SPECIFICATION forming part of Letters Patent No. 567,931, dated September 15, 1896.

Application filed May 21, 1896. Serial No. 592,440. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN WOODWARD, a citizen of the United States, residing at Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Knitting-Machine Needles; 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.

This invention relates to the construction of the shanks of knitting-machine needles; and it consists in the peculiar and novel method of thickening said shank near the point of its union with the needle, the object being to provide means for preventing the displacement of a needle from its groove in the needle-cylinder.

The invention will be fully set forth in the following specification and claim, and clearly illustrated in the accompanying drawings, forming a part of the same, of which—

Figure 1 is a broken elevation showing a portion of a needle of my improved construction in edge view, Fig. 2 being a broken side elevation of same. Figs. 3 and 4 are sectional elevations, and Fig. 5 is a plan view.

The reference-letters used will correspond in the several views.

A is the needle, and B is the shank, in which I form an offset *b* near the point of union of said needle and shank, and if desired to keep the needle in a central position in its groove in the needle-cylinder a plate C may be fitted into the offset *b* of the shank B, said plate being of a thickness sufficient to equal the projection of the offset at the opposite side of said shank, and this plate C may be brazed in proper place in the depressed side of said offset. This construction forms a simple means of thickening the needle-shank, and it is also easily and cheaply made, and is equally as effective as is the collar which is slipped around the shank of a needle by some manufacturers for this same purpose.

Having described my invention, what I claim is—

In a knitting-machine needle, a shank provided near its union with the needle with an offset, and a plate rigidly secured within the depressed side of said offset, substantially for the purpose set forth.

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

STEPHEN WOODWARD.

Witnesses:

J. B. THURSTON,
GEO. H. WARREN.