

(No Model.)

S. W. WARDWELL, Jr.

NEEDLE GUARD FOR SEWING MACHINES.

No. 321,065.

Patented June 30, 1885.

Fig. 1.

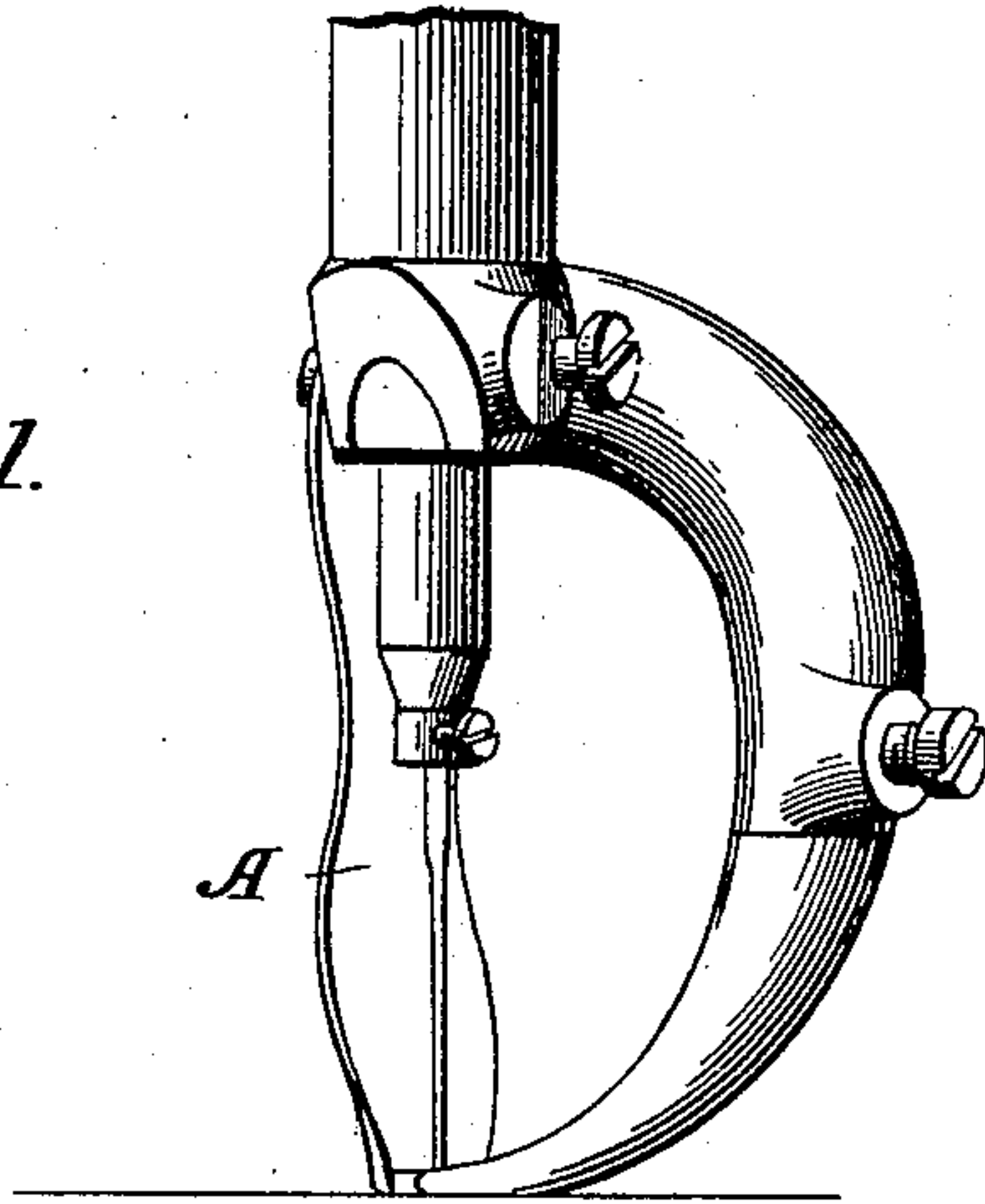


Fig. 2.

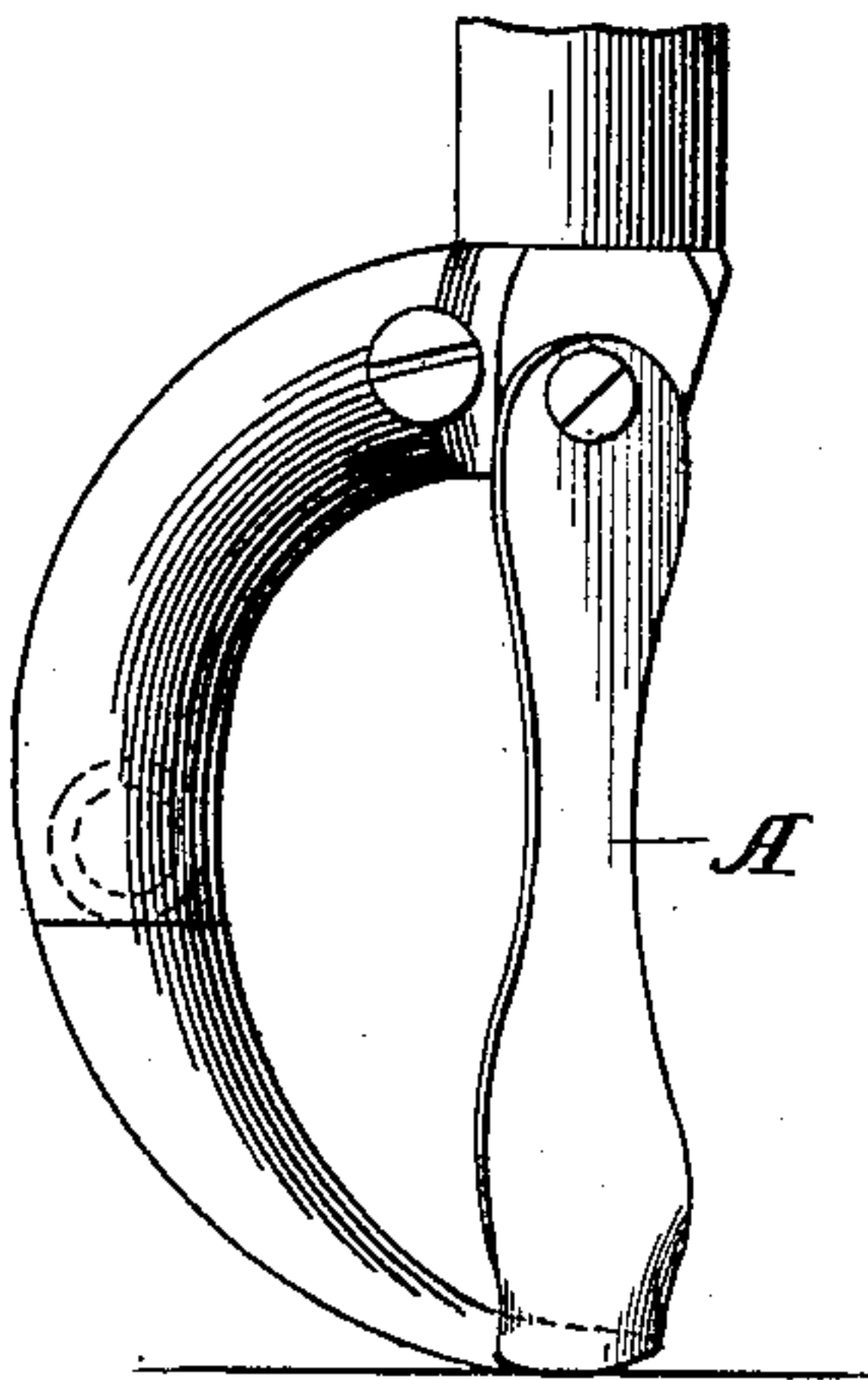


Fig. 3.

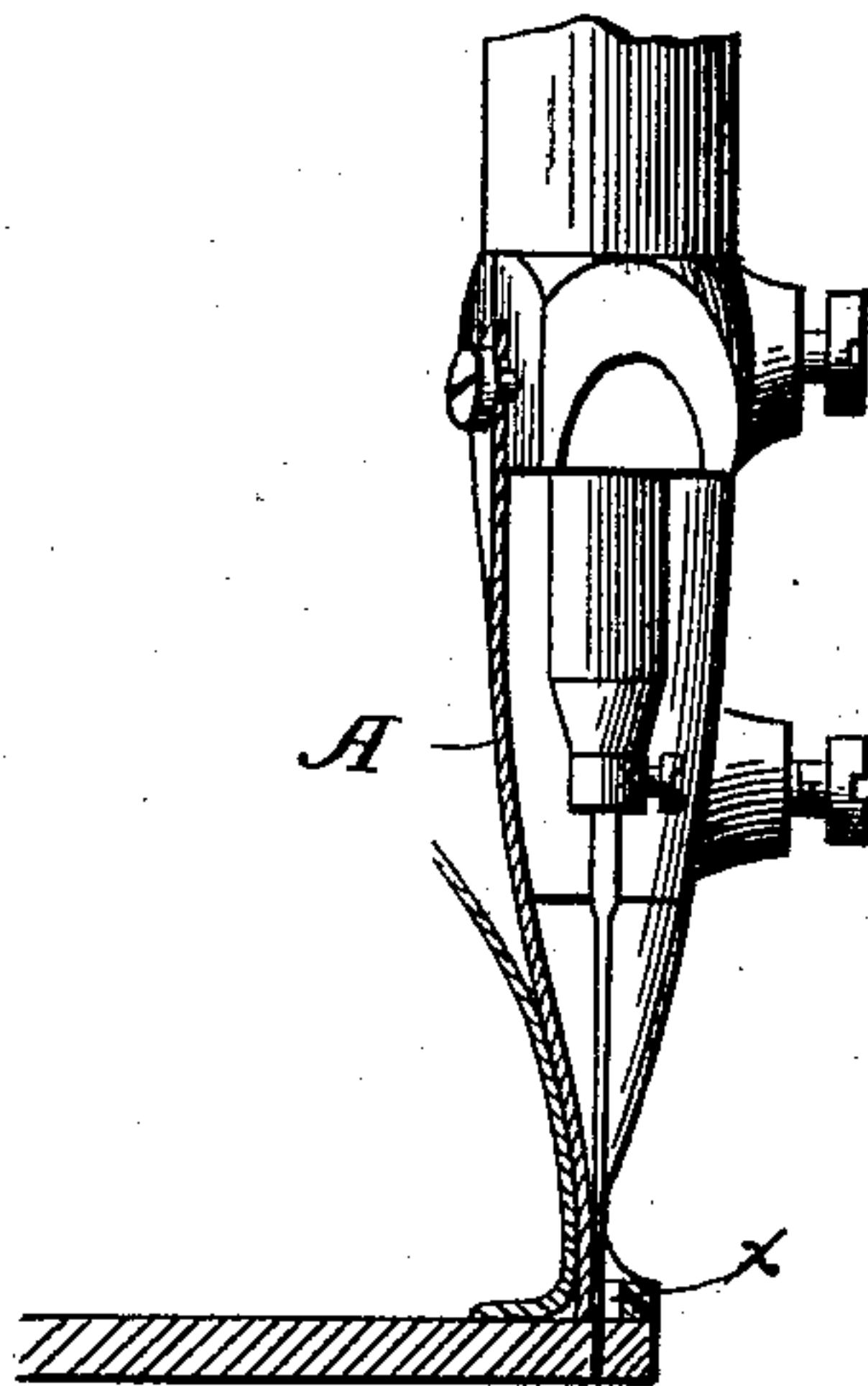
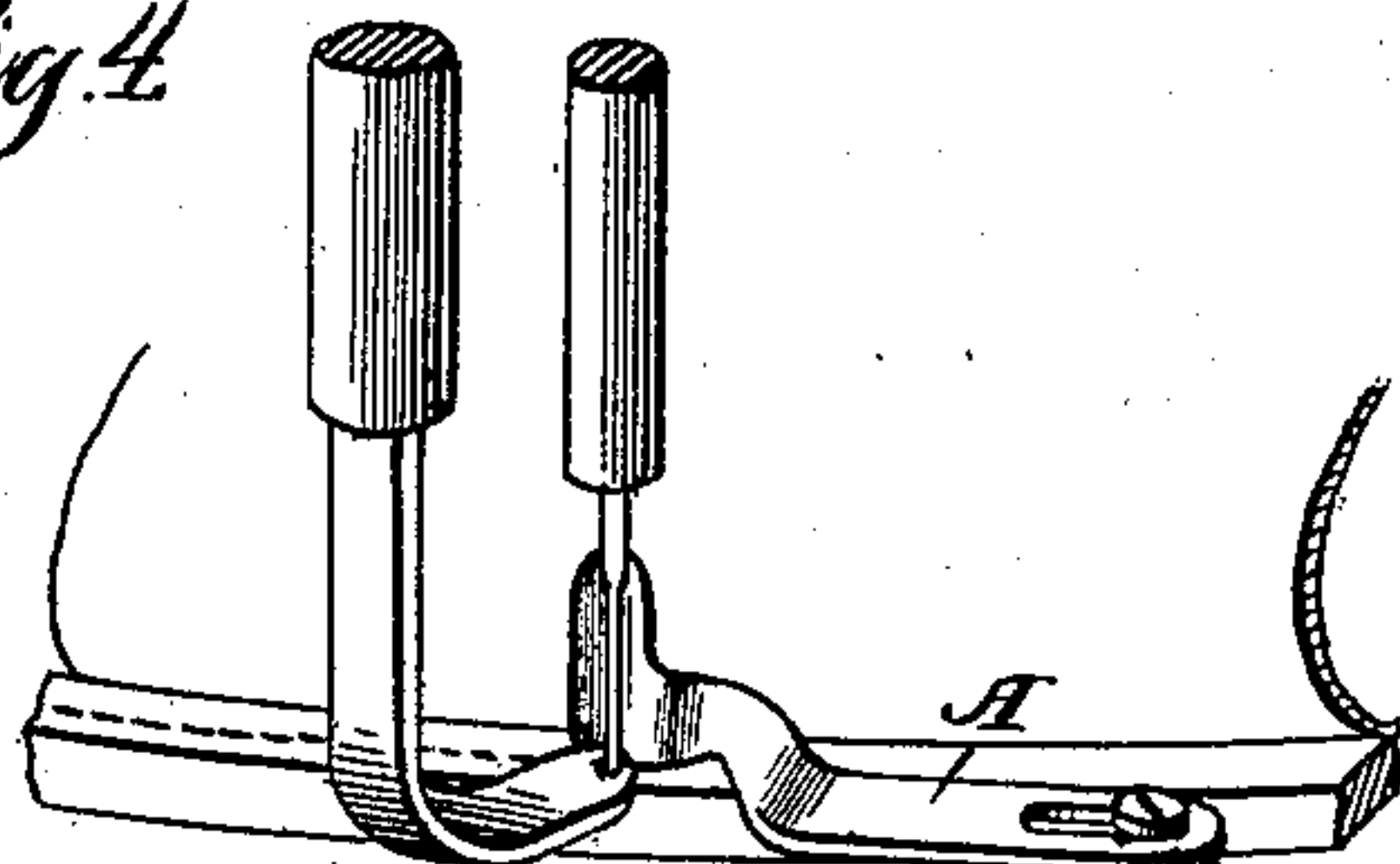


Fig. 4.



Witnesses:
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NEEDLE-GUARD FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 321,065, dated June 30, 1885.

Application filed December 7, 1883. Renewed December 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, SIMON W. WARDWELL, Jr., a citizen of the United States, and a resident of Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Needle-Guards for Sewing-Machines, of which the following is a specification.

My invention is an improvement in sewing-machine guards or attachments, fully described hereinafter, whereby to facilitate the "fairstitching" of the soles of boots and shoes without injury to the uppers.

In the drawings, Figure 1 is a perspective view showing my improved guard as applied to the presser-foot of a sewing-machine. Fig. 2 is a side view of the parts shown in Fig. 1. Fig. 3 is an edge view, in part section, showing the position of the shoe in sewing. Fig. 4 is a perspective view showing a modification.

In fairstitching boots and shoes the needle must pass through the sole between the edge and the upper, and when the latter projects laterally or bulges out over the sole it is not uncommon for the needle to make objectionable creases or marks, and sometimes to penetrate the leather of the upper, scoring and abrading it.

To avoid these objectionable effects, I employ a guard-plate, A, which may be secured to the bed or work-plate of the machine, as shown in Fig. 4; but it is preferably carried by the presser-foot or presser-foot bar, as shown in the remaining figures.

However the plate may be supported, it is constructed and arranged so that it will at some part bear against the side of the upper between the latter and the path of the needle, and extend upward as far as the movement of the point of the needle, which therefore cannot touch or injure the upper and may be carried close to the lower edge thereof, so as to penetrate the sole near its junction with the upper.

When the guard is to move with the presser-foot, it consists of a thin blade attached at the upper end to the top of the foot or to the bar, and at the lower end to the end of the foot as close as practicable to the slot x of the

latter, and thus effectually shields the upper from any action of the needle. By thus having the blade bear upon the side of the presser-foot it may serve to form one side of the needle-slot, and the presser-foot serves as a brace to prevent the shoe or boot pressing the blade or guard into the plane of reciprocation of the needle.

When the guard is attached to the bed or other stationary part of the machine, a portion projects over the edge of the boot or shoe and between the upper and the needle, to occupy the same position as the lower part of the guard carried by the presser-foot and with like effect.

I am aware that presser-feet have been made consisting of parallel blades inclined at their lower ends and crossing the plane of reciprocation of the needle and bearing upon the sole of the boot or shoe; but my invention is distinguished from these by the fact that the plate is substantially parallel with and extends vertically throughout the whole extent of movement of the needle.

Without limiting myself to the forms of parts shown, I claim—

1. The combination, with a boot and shoe sewing-machine, of a work-guide attachment consisting of a narrow vertical plate of a length greater than the throw of the needle, connected to the machine in a position adjacent the needle and at the side of the same to bear upon the sole of the boot or shoe and to extend vertically upward throughout its entire length, whereby the upper of the boot or shoe being operated upon cannot be injured in the operation of stitching, substantially as set forth.

2. The combination, with the presser-foot of a shoe or boot sewing-machine and a reciprocating needle, of a plate or blade carried by said foot and extending vertically upward throughout its entire length at the side of the path of the needle, thereby preventing the needle bearing upon the upper of the shoe when being operated upon, substantially as specified.

3. The combination of the presser-foot of a shoe or boot sewing-machine and the vertical blade A, extending upward alongside the

path of the needle from a point adjacent to the slot in the presser-foot, and connected at the upper end to the foot or bar and bearing at its lower end upon the material and forming one side of the needle-slot, substantially as described.

In testimony whereof I have signed my name

to this specification in the presence of two subscribing witnesses.

SIMON W. WARDWELL, JR.

Witnesses:

G. E. BISHOP,

EDWIN J. PEIRCE, Jr.