

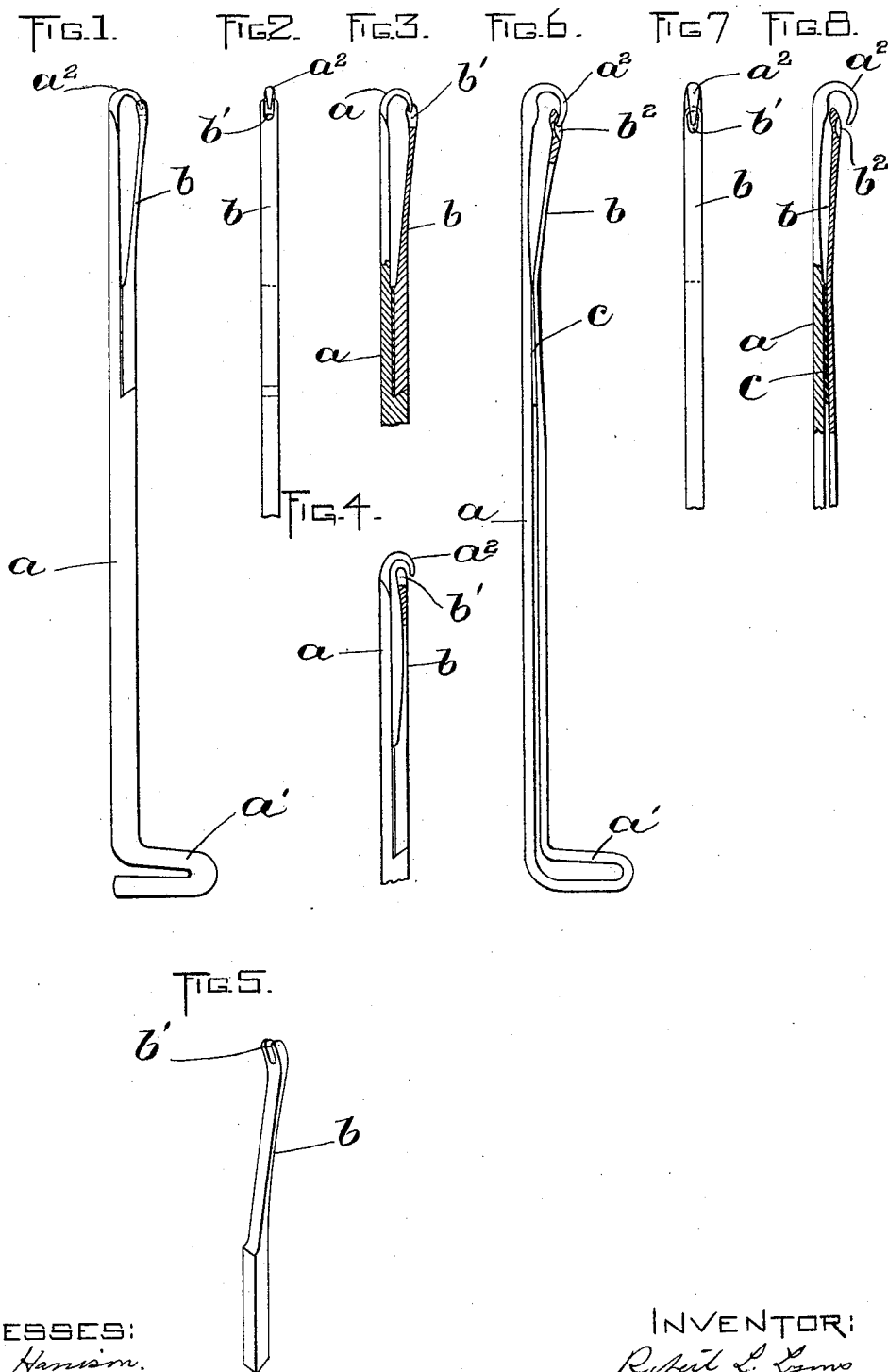
No. 607,253.

Patented July 12, 1898.

R. L. LYONS.  
KNITTING MACHINE NEEDLE.

(Application filed June 21, 1897.)

(No Model.)



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

ROBERT L. LYONS, OF WALTHAM, MASSACHUSETTS, ASSIGNOR TO THE UNION BUTTON SEWING MACHINE COMPANY, OF BOSTON, MASSACHUSETTS.

## KNITTING-MACHINE NEEDLE.

SPECIFICATION forming part of Letters Patent No. 607,253, dated July 12, 1898.

Application filed June 21, 1897. Serial No. 641,559. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT L. LYONS, of Waltham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Knitting-Machine Needles, of which the following is a specification.

This invention relates to the production of a novel needle for knitting-machines; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

Reference is to be had to the accompanying sheet of drawings, in which like characters are used to indicate like parts wherever they occur.

Figure 1 represents a side elevation of a knitting-needle constructed in accordance with my invention. Fig. 2 represents a partial front view of the same. Fig. 3 represents a partial longitudinal section. Fig. 4 represents a side elevation, partly in section, showing the latch or stitch-caster displaced from its normal position. Fig. 5 represents a perspective view of the latch. Fig. 6 represents a side elevation, partly in section, of a modified form of my invention. Fig. 7 represents a front view of the same. Fig. 8 represents a side elevation of the same, partly in section, showing the latch displaced.

Referring for the present to Figs. 1 to 5 of the drawings, in the embodiment of my invention therein shown and selected by me for the purpose of illustration, *a* designates the needle bar or shank, which is bent at its lower end in the usual manner to form the foot *a'* and at its upper end to form the hook *a''*.

Instead of the pivoted latch which is ordinarily found in knitting-needles I employ a flexible spring-metal latch *b*, attached at its lower end by solder or other suitable means to the shank *a*. The latch *b* occupies normally a stitch-casting position, (shown in Figs. 1 and 3,) its end being bifurcated at *b'*, so as to pass on both sides of the point of the hook and prevent the yarn from being hooked on the down or return stroke in forming the stitch.

For the purpose of displacing the latch, as shown in Fig. 4, to liberate the yarn-loop

which has been hooked or to form a new loop a suitable device is provided on the knitting-machine, which presses the flexible upper end of the latch inwardly at the proper moment and holds it a sufficient time for the said operations to be performed and then releases it, when the elasticity of the metal causes said latch to return to its normal stitch-casting position.

In Figs. 6 to 8 I have shown a modified form of knitting-needle in which the needle-bar and latch are formed of a single piece of metal bent around at its lower end to form the foot *a'* and continued upwardly to form the latch *b*, the two parts being fixed together at *c* by soldering or other suitable means.

I have also shown a modified construction of the upper end of the latch, wherein instead of bifurcating the latch I provide its end with a spoon-shaped depression *b''*, which receives the point of the needle-hook, as shown in Fig. 6.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim, and desire to secure by Letters Patent, is—

1. A knitting-needle comprising a hooked needle-bar and an elastic non-pivoted latch adapted by its elasticity to occupy a normal stitch-casting position.

2. A knitting-needle comprising a hooked needle-bar and an elastic non-pivoted latch affixed thereto or forming a part thereof, the said latch being adapted by its elasticity to occupy a normal stitch-casting position, and to be pressed inwardly therefrom by suitable means to uncover the hook.

3. A knitting-needle comprising a hooked needle-bar and an elastic non-pivoted latch adapted by its elasticity to occupy a normal stitch-casting position, and having a recess adapted to receive the end of the hook.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of June, A. D. 1897.

ROBERT L. LYONS.

Witnesses:

A. D. HARRISON,  
P. W. PEZZETTI.