L. S. NEWCOMB.

Needle-Setter for Sewing-Machines.

No. 196,247. Patented Oct. 16, 1877.

Fig. 1.

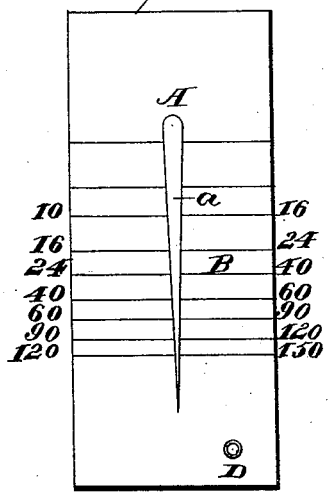


Fig. 2.

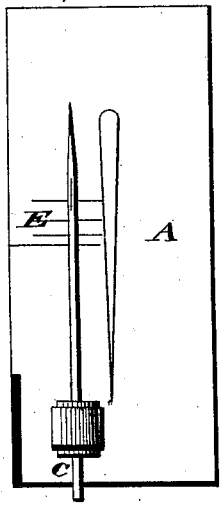


Fig. 3.

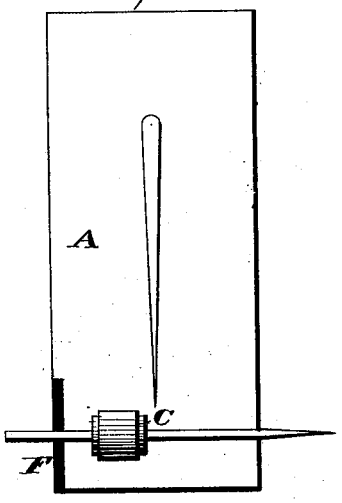
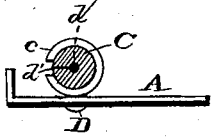


Fig. 4.



WITNESSES

Ed. L. Nottingham.

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UNITED STATES PATENT OFFICE.

LUCIUS S. NEWCOMB, OF UTICA, NEW YORK.

IMPROVEMENT IN NEEDLE-SETTERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **196,247**, dated October 16, 1877; application filed February 14, 1877.

To all whom it may concern:

Be it known that I, LUCIUS S. NEWCOMB, of Utica, in the county of Oneida and State of New York, have invented certain new and and useful Improvements in Needle-Setters; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to certain improvements in devices to be used in connection with sewing-machines; and consists in the combination, with a needle gage-plate, of a needle-setter constructed with a slotted rubber cylinder inclosed in a metallic sleeve, which latter is pivoted to the gage-plate, and allows the setter to have a rotary movement in a plane parallel with the same.

In the drawings, Figure 1 is a front view of the gage-plate, showing the rivet which connects the setter to it. Fig. 2 is a rear view of the gage-plate with the setter secured to the same. Fig. 3 shows the setter at right angles to the gage-plate, with the needle in a position to be attached to the needle bar or clamp of a sewing-machine. Fig. 4 is an end view of the gage-plate and the setter.

The needle gage-plate A is of sheet metal, about one and three-fourths of an inch in width. It is provided with a central longitudinal slot, *a*, wedge-shaped, and about an inch in length. Cross-lines B are drawn at right angles with the same, which are numbered 10, 16, &c., as indicated.

The needle of the machine is introduced into this slot *a* at its largest cross portion, with the broad side of the needle against the wall of the slot, and in a transverse line passing through the eye of the needle. The needle is then brought down until stopped by the tapering walls of the slot, when the number corresponding to the cross-line B, passing through the needle, will indicate the size of thread which will work properly with the needle.

The needle-setter is made as a rubber cylinder, C, inclosed in a metallic sleeve, *c*, which latter is secured loosely to the gage-plate by a pivotal rivet, D, which permits the setter to have a rotary movement in a plane parallel with that of the gage-plate.

A slot, *d*, is formed in the central length of the rubber cylinder, which latter is about one-fourth of an inch in both its longitudinal and cross measurement, and is provided with a side opening, *d'*.

The needle-point is inserted into this central slot, and the needle pushed through it until the eye is in a cross-line with the lines E made on the gage-plate, and which indicate the different machines in which the needle may be used.

When the needle in its setter is turned at right angles to the gage-plate, the portion extending beyond the flange F is the part to be clamped by the needle bar or clamp of the sewing-machine, and is to be inserted as far as the flange will permit.

When the needle is fastened, the setter, together with the gage-plate, is drawn from the needle at right angles to the latter, the needle passing out of the central slot *d* through its side opening *d'*.

A slight bevel may be formed on the end of the metallic sleeve *c*, which serves to retain the rubber cylinder C in place, especially while the needle is being introduced through the central slot *d*.

The dimensions of the gage-plate and the setter may be varied from those above stated, to correspond with the necessities of any special instance; while the advantages of this device consist in that the needle-setter holds any-sized needle in any desired position without inserting anything into its eye, as is necessary in other setters, and can be used for all styles or makes of sewing-machines.

The needle gage-plate and the setter are also conveniently combined with one another, and in such a manner as not to interfere with their respective workings.

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

The combination, with a needle gage-plate, of a needle-setter constructed with the slotted rubber cylinder and metallic sleeve, the same being pivoted to and adapted to have a rotary motion upon the needle gage-plate, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 12th day of February, 1877.

LUCIUS STEPHEN NEWCOMB. [L.S.]

Witnesses:

ORVILLE P. ALLEN,

JAMES COUPE.