

H. H. V. LILLEY.
Needle-Setters.

No. 150,167.

Patented April 28, 1874.

Fig. 1. Fig. 2. Fig. 3. Fig. 4.

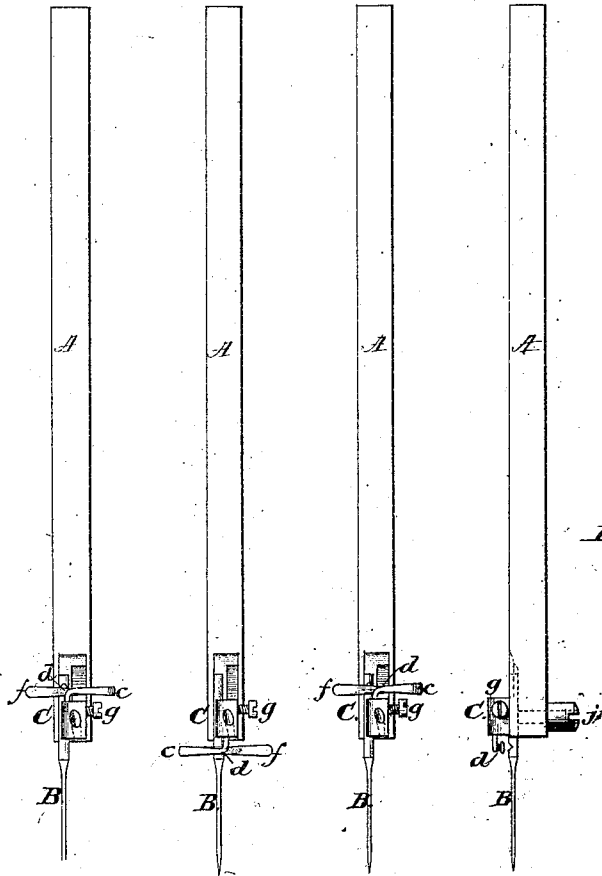


Fig. 5.

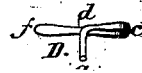


Fig. 6.

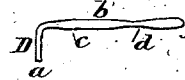
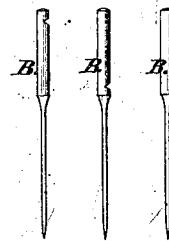


Fig. 7. 8. 9.



Witnesses:
Lewis Foles.
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UNITED STATES PATENT OFFICE.

HUGH H. V. LILLEY, OF MILFORD, MASSACHUSETTS.

IMPROVEMENT IN NEEDLE-SETTERS.

Specification forming part of Letters Patent No. **150,162**, dated April 23, 1874; application filed January 23, 1874.

To all whom it may concern:

Be it known that I, HUGH H. V. LILLEY, of Milford, in the county of Worcester and State of Massachusetts, have invented a new and valuable Improvement in Sewing-Machine-Needle Setters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of said drawings represents a front view of my improved needle-setter so arranged as to act in combination with a transverse notch in the needle near the end of the shank. Fig. 2 is a front view, showing the setter reversed from its position in Fig. 1, and acting in combination with a notch in or near the taper of the needle. Fig. 3 is another front view, showing said setter so arranged as to act as an adjustable stop for the end of the needle to abut against, as hereinafter described. Fig. 4 is a side view of the setter. Figs. 5, 6, 7, 8, and 9 are detail views of the same.

This invention has relation to means for setting the needles of sewing-machines; and it consists in the construction and novel arrangement of an adjustable spring setter or stop, as hereinafter more fully set forth.

In the accompanying drawings, the letter A designates the needle-bar of a class of machines differing from that of the Howe machine, to which my application and drawings filed October 18, 1873, were represented to apply, as will be seen on further explanation. B indicates the needle, one view of which is shown with a transverse notch cut across said needle near the end of the shank, Fig. 7. Another view, Fig. 8, shows the notch in the tapering part of the needle between the shank and the blade. Fig. 9 shows the needle without notch. C represents the head of the bolt or clamp that secures the needle after it is properly set and adjusted by the setter. D shows the spring gage or stop. This is made of steel wire, of proper size for the shank *a* of the setter. The arm *b* is formed into proper shape by being placed between dies in a drop-press, and then bent at right angles with the

shank, as shown in Fig. 6; afterward reversely bent at *c*, then properly tempered. The arm *b* is provided with a lug or projection, *d*, which serves, when used in combination with a notch in the needle, as an adjustable setter, as shown in Figs. 1, 2, and 4; also, as an adjustable stop, when used with a needle having no notch, as in Fig. 3. The arm *b* is also provided with an extension, *f*, which serves as a handle. The shank *a* of the setter fits into a socket in the needle-fastening bolt or clamp *e*, or some other part of the needle-carrier, and is secured in its proper place after it is adjusted to the machine by means of a small set-screw, *g*, or its equivalent, the side of said shank being flattened next to the set-screw.

The setter is very easily adjusted to its proper place by loosening the set-screw *g*, the shank moving up and down in the socket, as required; and being always parallel with the needle, the lug or stop is constantly kept in position to act in combination with a notch in the needle, or on the end of a needle without a notch. (See Fig. 3.) This setter is also easily reversed, as shown in Fig. 2, thus bringing the lug *d* in combination with a notch near the taper of the needle, as will be necessary in the case of some machines to which it is applicable, as herein specified.

When a notched needle is to be taken from the bar, the nut on the fastening bolt or clamp C is loosened, and the arm *b*, carrying the lug *d*, is retracted by means of the handle *f*, allowing the needle to drop or to be easily withdrawn. When the needle has no notch, loosen the nut *j*, as usual.

What I claim as new, and desire to secure by Letters Patent, is—

The spring needle-setter, constructed as described, fitted to the needle-fastening bolt or clamp, or other projecting portion of the needle-bar, and adjustable parallel with the needle, so that the stop *d* may engage the notch in, or act as a stop for, the end of the needle.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HUGH HENRY VINCENT LILLEY.

Witnesses:

LEWIS FALES,
W. A. RANKINS.