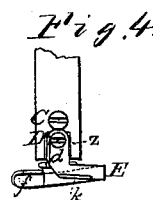
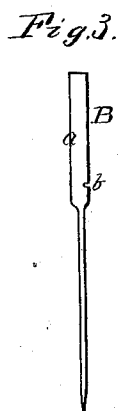
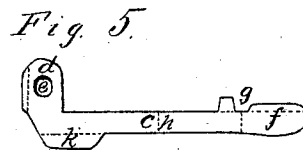
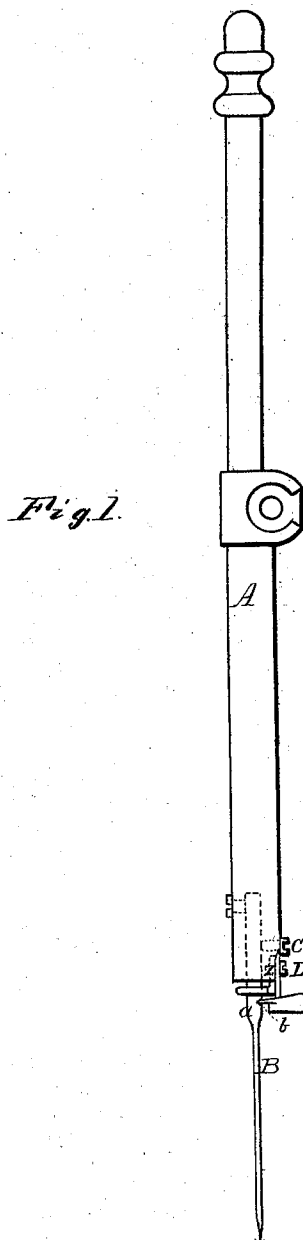


H. H. V. LILLEY.

Needle-Setters for Sewing-Machines.

No. 149,764.

Patented April 14, 1874.



Witnesses.
E. H. Bates.
George E. Upham.

Inventor.
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Attys.

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN NEEDLE-SETTERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **149,764**, dated April 14, 1874; application filed October 18, 1873.

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 the drawings is a representation of a front view of my needle-setter. Figs. 2, 3, 4, and 5 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 the spring-setter, as hereinafter more fully set forth.

In the accompanying drawings, the letter A designates a needle-bar of the Howe machine, to which my invention is represented as applied, although it may readily be attached to other machines in common use. B indicates the needle, the upper part *a* of whose shank is enlarged to secure strength and steadiness in the socket or holder of the needle-bar. For engagement with the spring-setter, this enlarged portion of the needle-shank is notched transversely at *b*, a little below the part which enters the socket of the needle-bar. C represents the set-screw, which serves to secure the needle in place when it is properly adjusted. D indicates the screw by means of which the spring-setter is secured to the needle-bar. This is usually arranged on the face of the needle-bar, below the set-screw C. E represents the spring gage or catch. This is formed of thin spring-steel, the blank being first stamped or cut in the shape indicated in Fig. 5 of the drawings, when a long arm, *e*, is connected at right angles with a short arm, *d*, which is provided with a perforation, *e*, for the passage of the clamp-screw D. For the purpose of accurate adjustment of the setter, this perforation is made somewhat elongated vertically. The long or horizontal arm *e* of the setter is provided with an extension, *f*,

which, before the device is tempered, is designed to be bent outward, to serve as a handle. It is also provided with two lugs or projections, one of which, lettered *g*, is located near the handle *f*, and extends from the upper edge of the arm *e*, which is doubled or reversely bent at *h*, between the arm *d* and the needle, inward or toward said needle. The other projection, lettered *k*, is bent outward from the lower edge of the arm *e*, near its angular connection with the short vertical arm *d*. The object of the latter projection is to enable the operator to adjust the setter in place, besides serving to give it strength and rigidity in this portion. The object of the projection *g* is to engage with the notch *b* of the needle when the latter is pushed into the socket of the needle-bar the required distance, thereby locating the needle, and at the same time holding it up in the socket until the set-screw C is tightened.

When the needle is to be taken from the needle-bar the set-screw C is loosened, and the arm *e*, carrying the catch *g*, is retracted by means of the handle *f*, allowing the needle to drop, or to be easily withdrawn out of the socket.

If necessary, the setter may be rotated to either side out of the way, the clamp-screw D being first loosened.

If the needle-bar is rounded, a flat seat, *z*, should be provided for the perforated vertical arm *d* of the setter.

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

The spring-setter described, having the short arm *d* and the long horizontal arm *e* reversely bent at *h*, and provided with the lugs *g* *k*, bent, respectively, to the front and rear, and the handle-extension *f*, substantially as and for the purpose specified.

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

HUGH HENRY VINCENT LILLEY.

Witnesses:

FRANK W. ADAMS,
GEO. G. PARKER.