

L. H. ALLEN.
Cutters for Sewing-Machines.

No. 139,350.

Patented May 27, 1873.

Fig. 1.

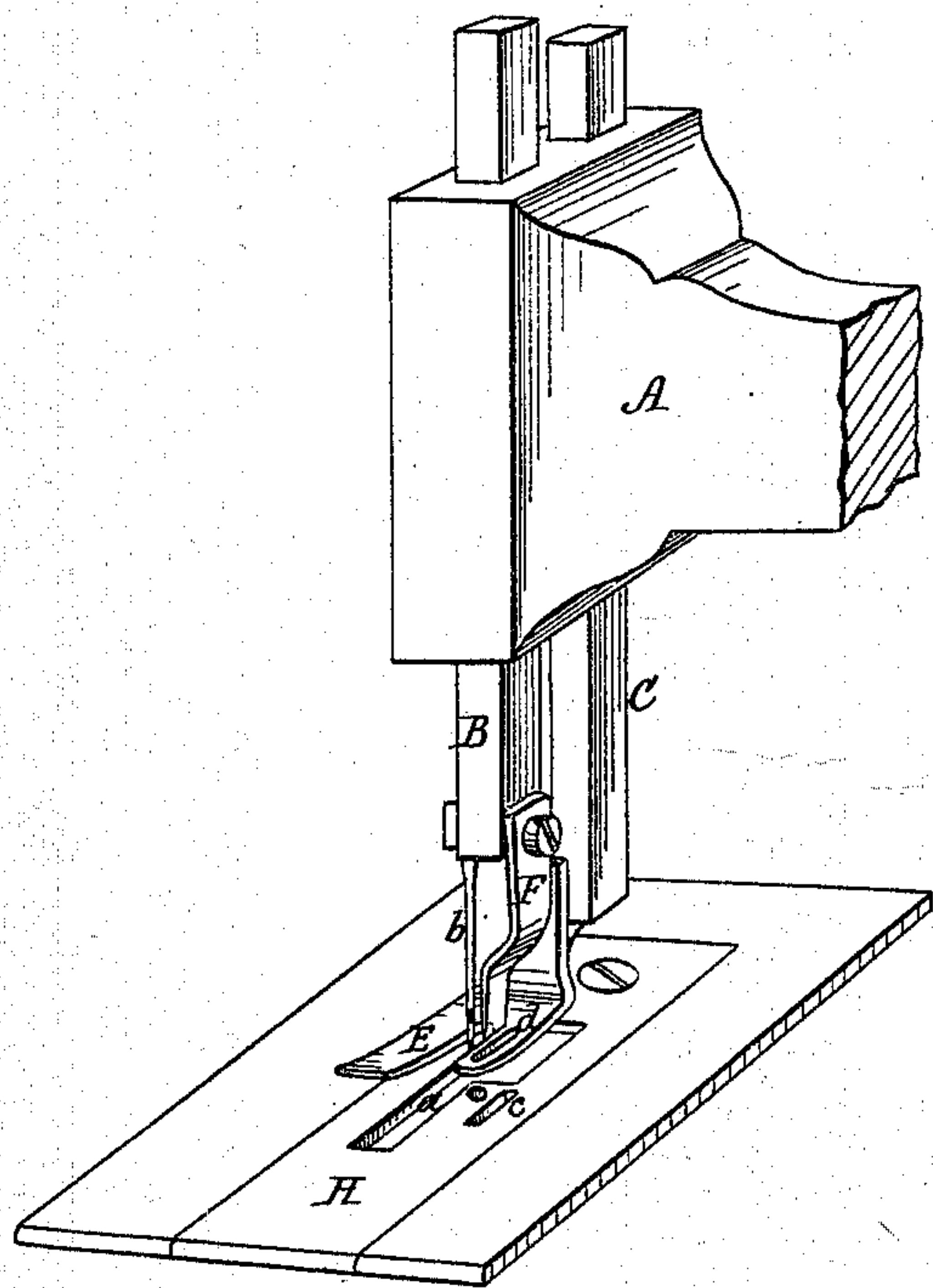


Fig. 2.

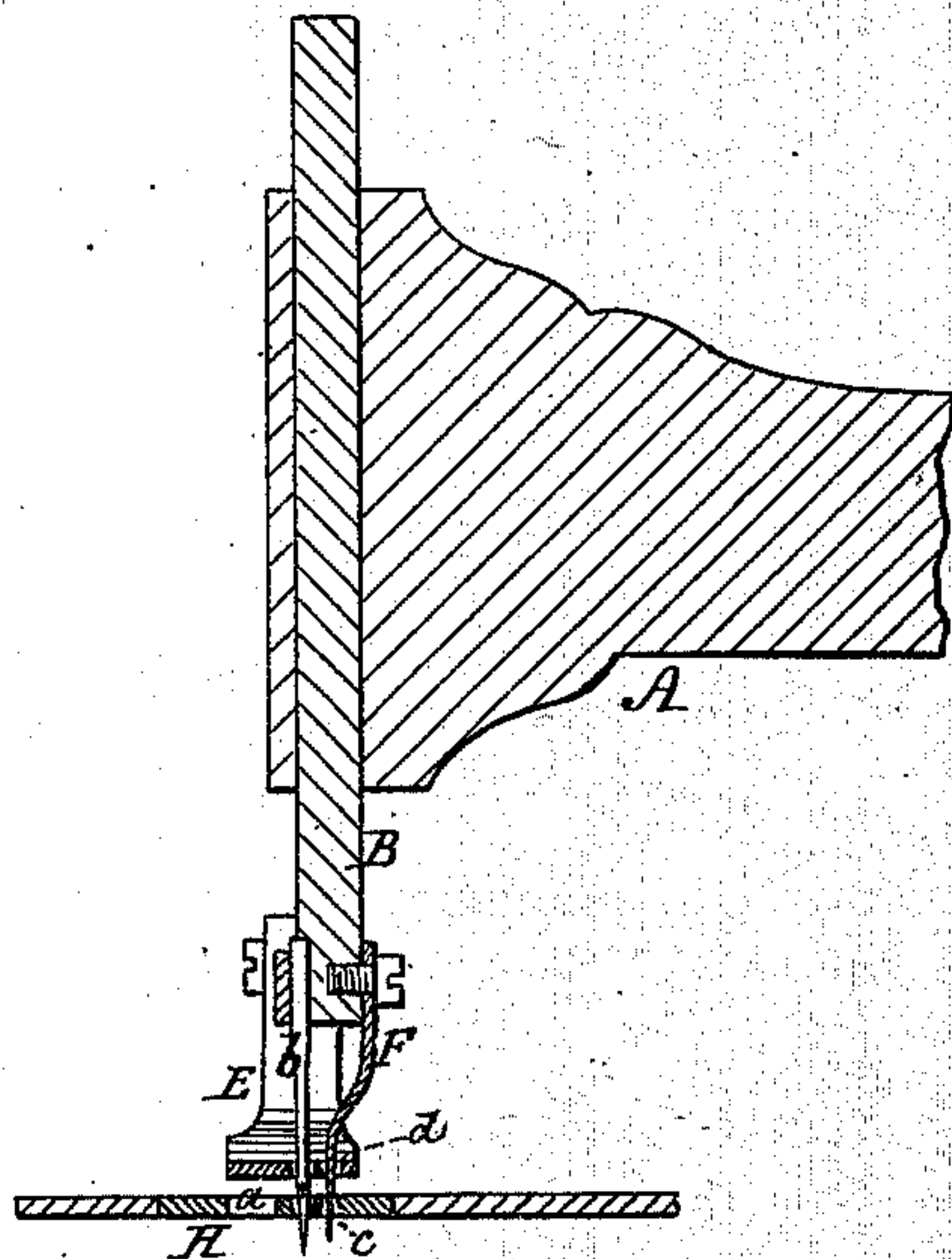
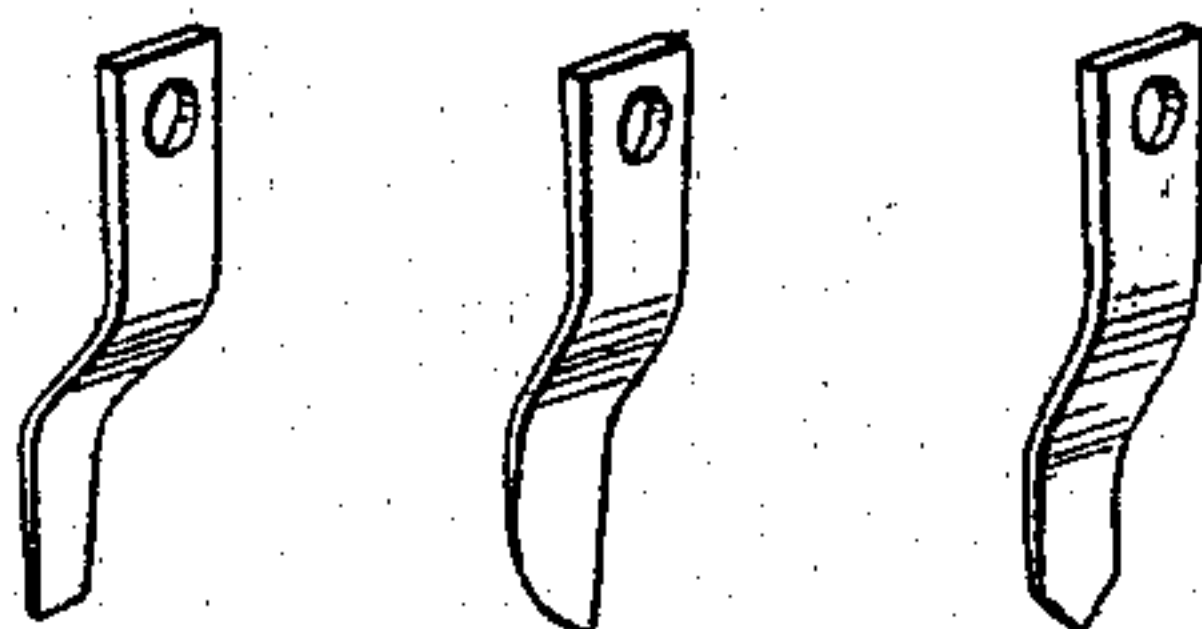


Fig. 3.



Witnesses

James S. Granger

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Attys.

UNITED STATES PATENT OFFICE.

LESTER H. ALLEN, OF FARMINGTON, NEW HAMPSHIRE.

IMPROVEMENT IN CUTTERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **139,350**, dated May 27, 1873; application filed May 17, 1873.

To all whom it may concern:

Be it known that I, **LESTER H. ALLEN**, of Farmington, State of New Hampshire, have invented an Improvement in Sewing-Machine Trimmers, of which the following is a specification:

My invention has for its object to provide a cutting trimming attachment for sewing-machines, by means of which the seam may be trimmed at the same time that it is sewed; and it consists in the use of a trimming-knife or cutter attached to the needle-bar, so as to be reciprocated with it, in combination with a slot in the cloth-plate, into which the edge or point of the knife may enter, and a presser-foot so constructed as to hold down the goods at a point where the knife is operating.

I am aware that it is not new to attach a reciprocating trimming device to the needle-bar of a sewing-machine, nor to cause the same to operate through a slot in the plate below; but my invention constitutes an improvement upon these, in the particular that I so construct my presser-foot that it shall not only hold the goods down at the point where the needle is operating, but shall clamp them to the table more firmly than would be possible with existing devices.

In carrying out my invention, I provide the presser-foot with a slot, through which the knife or chisel is to play, and which is made to register with the slot in the plate below. By this construction I am enabled to hold the goods down on both sides of the knife, which, with many kinds of goods, particularly the light, thin material frequently employed in the manufacture of ladies' shoes, becomes a necessary condition to the successful working of a trimmer made to operate by attachment to the needle-bar.

In this respect my trimming mechanism is different from and constitutes an improvement upon those devices in which the knife operates only at the side of the presser-foot, or in an open recess formed in the side of the presser-foot.

In order that the bearing-face of the presser-foot may be brought as close to the line of action of the knife as possible, I make the slot beveled, as shown in the drawings hereto attached. By this means the slot can be made of such width on the under side of the presser-foot as to approach very closely to the sides of the knife; the beveling of the sides of the slot serving as a guide to the point of the knife in case of any lateral vibration tending to divert it from its proper direction. I also bevel the under side of the slot in the cloth-plate in order that any fibers or fragments of the material that may be crowded down into it by the knife may be quickly and readily discharged, and not clog or bind the knife.

In the drawing hereto annexed, Figure 1 is a perspective view, showing the position of the trimmer in relation to those parts of the sewing-machine with which it immediately co-operates. Fig. 2 is a vertical sectional view through the knife and needle of the machine, showing more particularly the bevel in the slot in the presser-foot and in the slide of the cloth-plate. Fig. 3 shows various forms of knives that may be used, though I do not confine myself to any particular form.

A represents the end of the working-arm of a sewing-machine; B, the needle-bar; C, the presser-foot bar; E, the presser-foot, provided with the beveled slot *d*; F, the trimming-knife, secured to the needle-bar; *b*, the needle; H, the slide in the cloth-plate; *a*, a recess in said slide, through which the feed mechanism operates upon the under side of the goods; *c*, the beveled slot in said plate, through which the trimming-knife operates.

What I claim as my invention is—

A presser-foot, provided with a needle-hole and an inclosed slot for the reception of a trimming-knife, in combination with a reciprocating knife attached to the needle-bar.

LESTER H. ALLEN.

Witnesses:

WILLIAM M. FURBER,
JOHN F. CLOUTMAN.