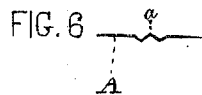
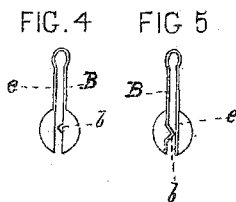
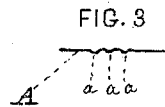
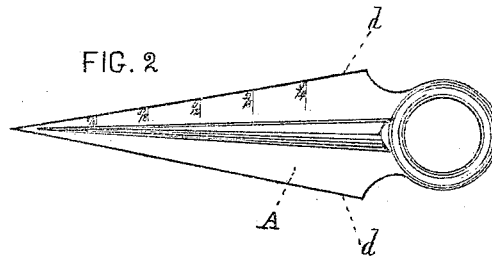
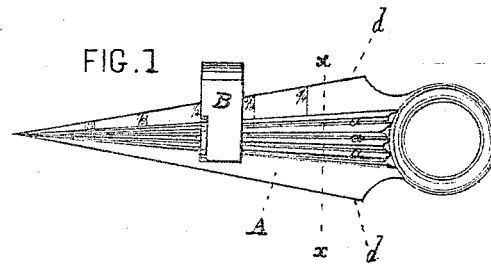


JOHN G. POWELL.

Improvement in Button-Hole Cutters.

No. 114,598.

Patented May 9, 1871.



WITNESSES

Thomas J. Dewey.
Charles T. Stickney.

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Letters Patent No. 114,598, dated May 9, 1871.

IMPROVEMENT IN BUTTON-HOLE CUTTERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN G. POWELL, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Button-Hole Cutters, of which the following is a specification.

The nature of my invention relates to a cutter-blade corrugated for the purpose of increasing its strength and to give practicability to hardening very thin blades, which, when made flat, are very liable to warp.

The invention also consists in the combination of a sliding gauge with the said blade, so constructed and arranged in relation thereto as to make one or more of the corrugations serve to guide the former in its adjustment, as hereinafter described.

To enable others skilled in the art to which my invention appertains to make and use my improved cutter, I will now give a full description thereof.

In the accompanying drawing, which makes a part of this specification—

Figure 1 is a face view of the improved cutter, having corrugations *a*.

Figure 2 is a like view of the blade A, with a single corrugation, *a*.

Figure 3 is a cross-section at the line *x x* of fig. 1.

Figures 4 and 5 are edge views of the sliding gauge B.

Figure 6 is a cross-section of the blade A, when the turns are of angular form.

Like letters in all the figures indicate the same parts.

A is a pointed blade, which I construct with one or more corrugations, *a*, as seen in figs. 1, 2, and 3, to increase its strength, so that thinner sheet metal may be used in its construction than is required when the blade is altogether flat.

In fig. 2 the blade is constructed on the same plan as in figs. 1 and 3, with the exception of its having but a single corrugation or curve, *a*.

In the cross-section, fig. 6, a modification is shown, the turns *a* being of angular shape instead of curved, as shown in figs. 1, 2, and 3.

The blade *a* is provided with a scale of figures, as shown in figs. 1 and 2, which show the distance across at various points, to determine how far it has to be pushed through the cloth to cut any required width of button-holes. The scale may be placed at one edge of the blade, as shown in the drawing, or at any other convenient part of it.

B is a sliding gauge, shown in detail in figs. 4 and 5. It is adjusted by the operator with its forward edge to the figure of the scale which indicates the required width of the button-hole to be cut.

The gauge is provided with a projection, *b*, which slides in the middle groove of the corrugations, the spring part *c* of the gauge keeping it in place as the gauge is moved longitudinally over the blade in its adjustment.

The edges *d d* of the blade A may be brought to a cutting-edge, or one left square. In the latter case the point of the blade should be inserted in the cloth at the point where determined upon for one edge of the button-hole, the square edge to follow through at said point, while the cutting-edge advances in the cloth to give the requisite width to the hole.

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

The corrugated blade A, constructed substantially as described, and in combination therewith the sliding gauge B, so constructed and arranged in relation to the corrugations that one or more of the latter shall guide and hold it in relation to its adjustment, as above set forth.

In testimony that the above is my invention I have hereunto set my hand and affixed my seal this 25th day of February, 1871.

JOHN G. POWELL. [L. s.]

Witnesses:

THOMAS J. BEWLEY,
STEPHEN USTICK.