

P. BAUER.

Button-Hole Cutter.

No. 129,309.

Patented July 16, 1872.

Fig. 1.

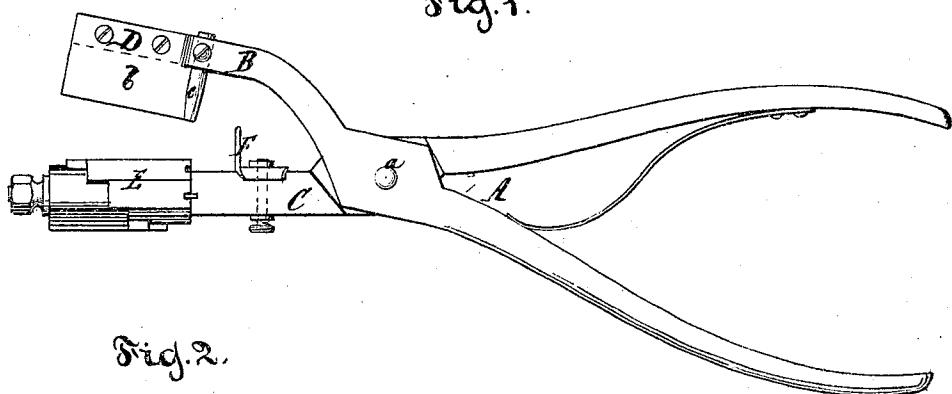


Fig. 2.

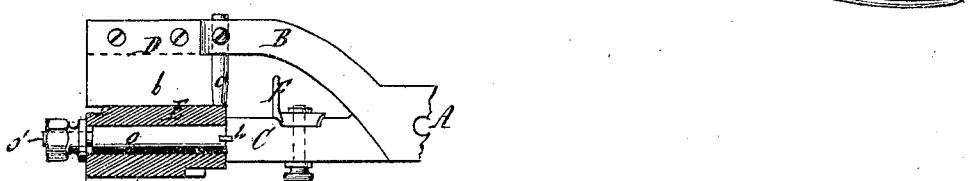


Fig. 3.

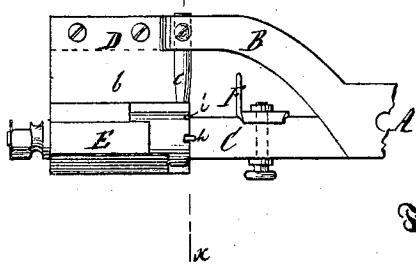


Fig. 4.

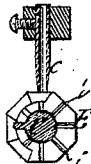
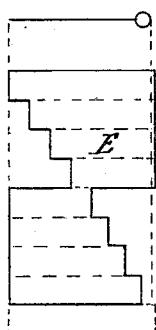


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

PETER BAUER, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN BUTTON-HOLE CUTTERS.

Specification forming part of Letters Patent No. 129,309, dated July 16, 1872.

To all whom it may concern:

Be it known that I, PETER BAUER, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Button-Hole Cutters; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a side view of my invention when the cutter is open. Fig. 2 is a sectional side view of the same when the cutter is closed and set for cutting a button-hole with an eye. Fig. 3 is a side view of the same when closed and set for cutting a button-hole without an eye. Fig. 4 is a transverse section of the same in the plane xx , Fig. 3. Fig. 5 is a diagram of the anvil when unrolled and projected in a plane.

Similar letters indicate corresponding parts.

My present invention consists of a hollow anvil or barrel provided with a series of faces of unequal length, said anvil or barrel being loosely arranged upon the journal formed on the front end of the lower jaw, so as to revolve upon said journal and present faces of different lengths to a single cutter composed of a straight blade and a punch, so that by adjusting the anvil or barrel, as hereinafter described, button-holes of different lengths, with or without an eye, can be cut with facility.

In the drawing, the letter A designates the body of my tool, which consists of two jaws, B C, connected to each other by a pivot, a , and operated by means of handles. On the jaw B is secured the cutter D, which is composed of a straight blade or knife, b , and a punch, c , said punch being secured by a setscrew, d , so that it can be removed and replaced by one of different size, which features alone are not new. The jaw C is formed with a journal arm or axle, o , upon which the hollow graduated polygonal barrel or anvil E is fitted so that the same can freely revolve thereon, the said barrel or anvil being retained upon the journal or axle o by means a screw-nut, o' , fitting upon the screw-“nib” of the axle o and extending through and be-

yond the front faces of the barrel. The shoulder of the jaw C, where the axle commences, is provided with a stop, h , which engages with the recesses $i i$ formed directly upon the end of the barrel, so that when said stop engages with either of the recesses the barrel will be held in a firm position. The faces of the anvil are of different length, as shown in Fig. 5, and by turning the same round to the position shown in Fig. 2 a long button-hole can be cut with an eye corresponding to the punch c , and by adjusting the anvil or barrel on the journal o , which is done by slightly unscrewing the nut on the axle-nib and moving forward the anvil or barrel so as to disengage the stop h from the recess i , and turning said barrel until another bed is presented to the action of the knife, or knife and punch. By this means the length of the button-hole can be diminished, as will be readily understood by referring to Fig. 1, where the faces of the anvil are shown decreasing in front. If desired, however, the anvil can be turned to the position shown in Fig. 3, and in this case the punch does not come into action and the button-hole produced is without an eye. The faces on the anvil, shown in Fig. 3, increase in length in the rear, and they allow of cutting plain button-holes of different lengths.

For cutting the button-holes with eyes it is absolutely necessary that the faces of the anvil shall be flat, so as to enable the punch c to act. A gauge, F, is applied on the jaw C to determine the distance of the button-hole from the edge of the material.

I am aware that a solid metallic cylinder has been formed with a deep spiral groove extending throughout its length, and has been arranged within a box-shaped cavity arranged upon the front jaw of a button-hole cutter so as to rotate and permit a knife and punch to operate upon surfaces of different lengths so as to cut button-holes of different lengths. Such I do not claim; for in such, where the cylinder is formed with journals, several parts are of necessity required to be used so as to connect together the bearings for the revolving cylinder. By my arrangement I dispense with the parts connecting the outer journal-bearing with the jaw, and I am en-

abled to produce a cheap and reliable instrument, since the parts composing it are few and cannot get out of order.

I disclaim in this application everything shown and described in my Patent No. 49,364; but

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

1. The hollow polygonal graduated anvil E, having its outer surface formed as herein shown, and its inner edges with a series of recesses, *i i i*, for engaging with the projections on the jaw C, as herein shown.

2. The barrel or anvil E, formed hollow,

with the recesses *i i* and outer graduated surface, as set forth, in combination with the journal and lugs of the jaw C and the screw-nut, as herein shown and specified.

3. The arrangement of the jaws B C, cutter D, punch e, gauge F, hollow anvil E, recesses *i i*, lugs *h h*, and the screw-nut, the said anvil E being provided with graduated surface for cutting button-holes both with and without eyes, as herein set forth.

PETER BAUER.

Witnesses:

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