

C. L. ROGERS.
 BUTTONHOLE CUTTER.
 APPLICATION FILED MAR. 2, 1909.

976,300.

Patented Nov. 22, 1910.

Fig. 1.

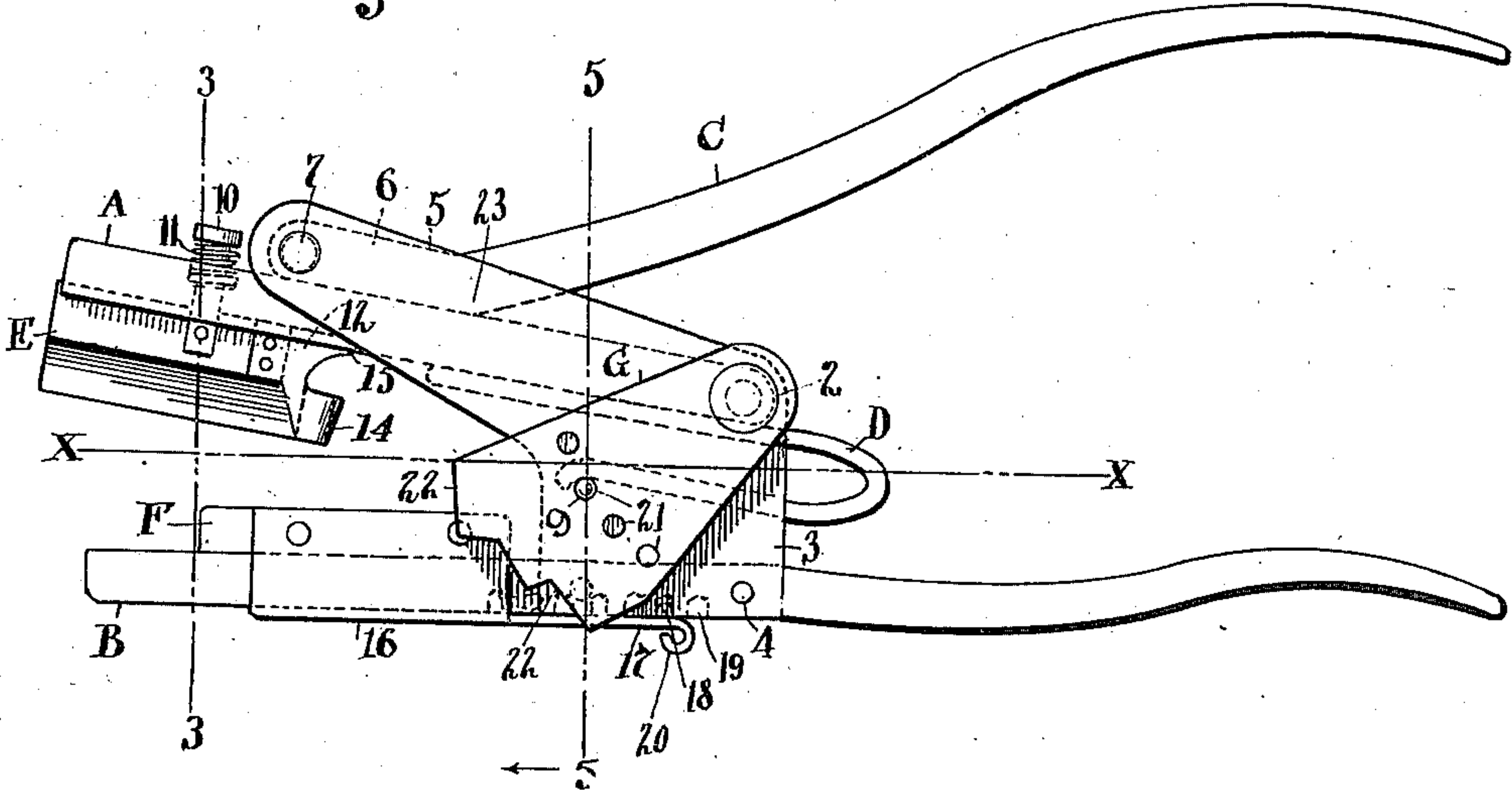


Fig. 2.

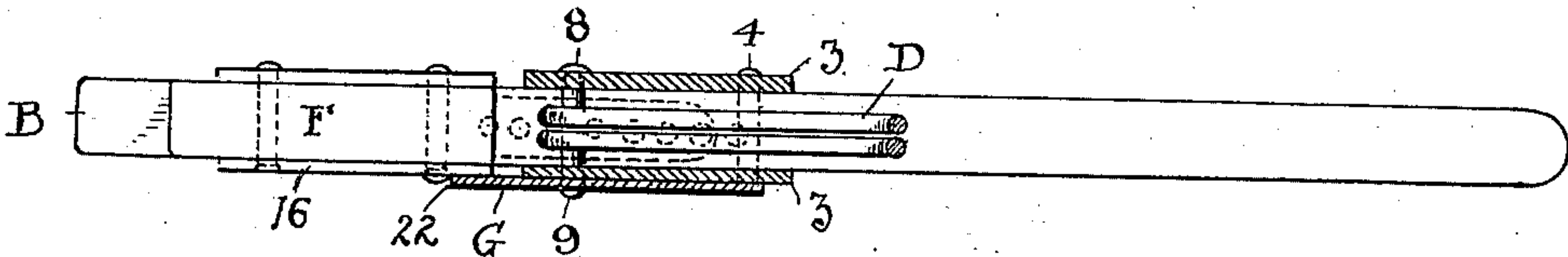


Fig. 4.

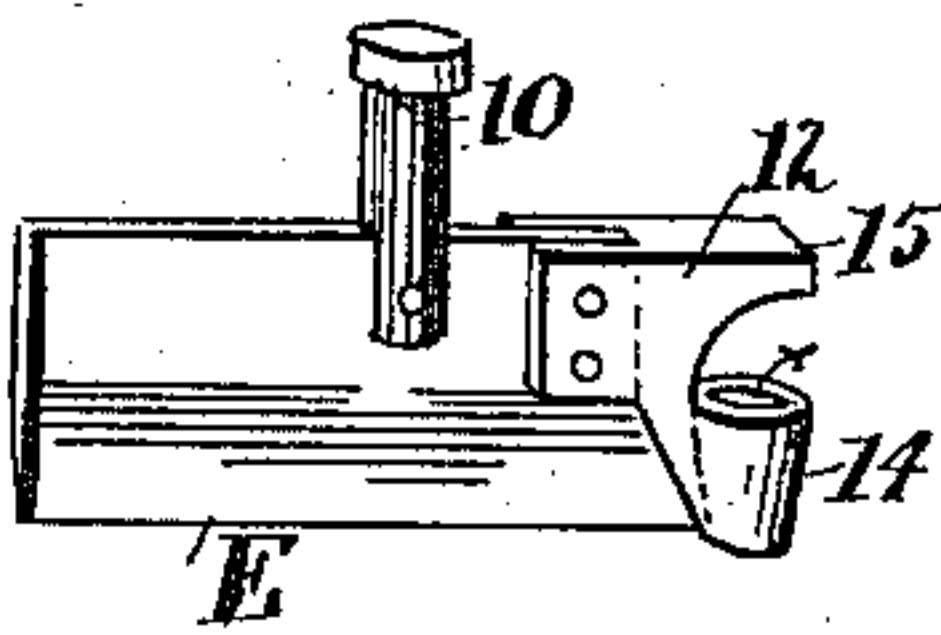


Fig. 3.

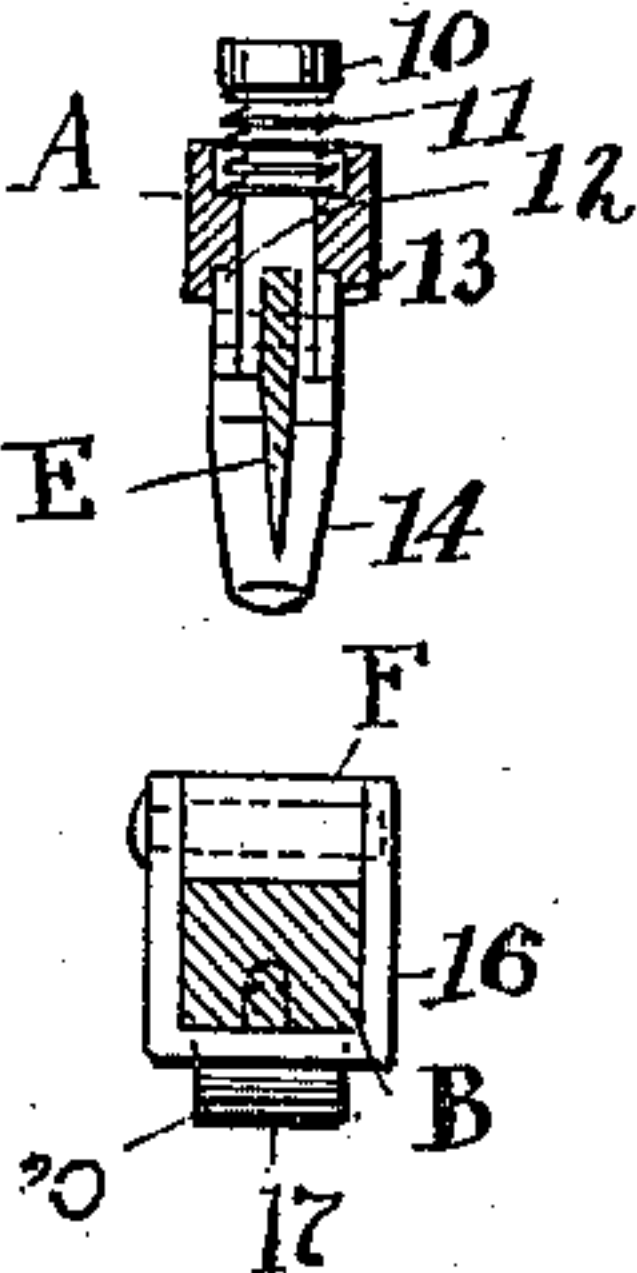
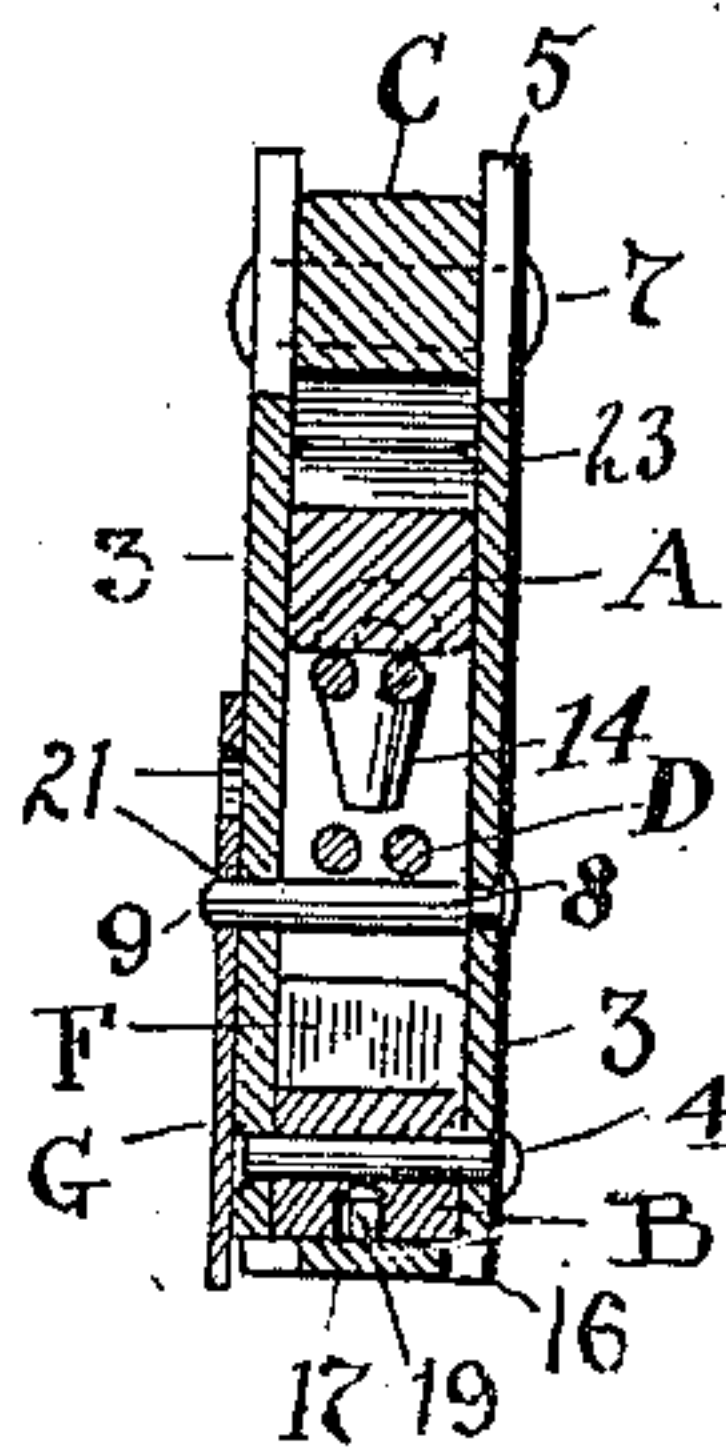


Fig. 5.



ATTEST
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UNITED STATES PATENT OFFICE.

CHRISTOPHER L. ROGERS, OF CLEVELAND, OHIO.

BUTTONHOLE-CUTTER.

976,300.

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed March 2, 1909. Serial No. 480,920.

To all whom it may concern:

Be it known that I, CHRISTOPHER L. ROGERS, citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Buttonhole-Cutters, of which the following is a specification.

My invention relates to button hole cutters, and the invention is an improvement in the tool patented by me April 5, 1904, No. 756,803, and the improvement is embodied in various details of construction and arrangement of parts all as hereinafter described and more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved buttonhole cutter, and Fig. 2 is a sectional view on line $x-x$, of Fig. 1. Fig. 3 is a cross section on line 3-3, Fig. 1, but with the parts in the background omitted. Fig. 4 is a perspective view of the cutting blade alone, and Fig. 5 is a cross section of the tool on line 5-5, Fig. 1.

My improved tool consists of a pair of jaw members A and B pivotally connected by a bolt or rivet 2 which passes through two side plates 3 rigidly secured to part B by rivets 4. Plates 3 have forwardly projecting extensions 5, and a handle C having an end 6 bent at an angle to the main stem is pivoted upon cross rivet 7 secured within the ends of extensions 5. Handle C and part A are thus seen to be separately supported on their own pivots and extend in opposite directions but in contacting relation as provided for by bow spring D formed of spring wire or other suitable spring metal. One portion of spring D engages the lower face of part A and the other portion rests upon a cross rod 8 between plates 3. Rod 8 has a rounded end 9 projecting through one of said plates for purposes hereinafter described.

A cutting blade E is reversibly and depressibly mounted upon the front or free end of pivoted jaw part A by means of a round stem 10 secured to the blade at its upper edge centrally between its ends, and a coil spring 11 seated in a recess in the top of jaw A holds the blade in place within a groove or recess 13 in the bottom of said jaw part. That is to say, blade E has a separate piece 12 riveted thereto at one end which has a width equal to the width of

groove 13 and when piece 12 is seated within said groove, blade E is immovably fixed upon part A and can only be rotated and reversed by first depressing stem 10 and the blade. Piece 12 is formed with a tubular portion 14 having a lower sharp cutting edge on the same plane with the cutting edge of blade E and wherewith the eye of the buttonhole is cut, and the full depth of portion 14 is preferably and substantially half the depth of blade E, so that the waste cuttings may be discharged through its upper end beneath jaw part A and not therethrough as in my former construction. An overhanging part 15 of piece 12 opposite portion 14 helps to sustain the thrust upon blade E at this point. Now, in order that holes or slits of different lengths may be cut with blade E, I provide jaw part B with a movable block F and secure it adjustably thereon in respect to blade E. Thus block F is of the same width as part B and has a U shaped piece 16 riveted thereto which snugly fits and surrounds jaw part B, and said piece 16 has an extension 17 lying flush with the bottom of part B and provided with a short nib or projection 18 adapted to enter any one of a series of openings 19 therein. Extension 17 is necessarily made of spring material, so that it may flex or bend when grasped by the hand at rounded portion 20 to remove nib 18 from an opening 19. Then block F may be moved forward or backward and set in any given relation to the cutting blade E to obtain any given length of slit or opening in the material.

The means for fixing the relative depth or distance of the holes or slits from the edge of the material is adjustably determined by a pivoted wing or plate G rotatably secured at one end to the side of the plate E by the enlarged head of bolt or rivet 2. Plate G is preferably made of spring material and rests flat and flush against the side of plate 3 but may be flexed or bent away therefrom so that release may be effected from rounded end 9 of rod 8 which is adapted to project through any one of the several openings 21 in plate G. These openings correspond in number to a series of straight edges 22 at the front of plate G which are at different distances from its pivot, whereby when the plate is rotarily shifted, the distance between the cutting tool and said plate is increased or decreased and a corresponding difference in the place

of the cut from the edge of the material is obtained.

One important advantage gained by making handle C and pivoted jaw part A as shown rests in the increased leverage and power to be obtained thereby for cutting purposes. Thus it will be noted that the engaging point 23 of handle C with part A comes intermediate of pivots 2 and 7, and that this increases the leverage obtained by hand through handle C and considerably augments the cutting power at the cutting blade E.

By substituting a different cutter or punch for the blade shown, I am enabled to use this tool for other purposes than a button-hole cutter, say for cutting or punching leather and other materials.

What I claim is:

1. In a cutting member, a handle part and a cutting member pivotally secured thereto and a second handle to operate said cutting member, a movable block mounted upon said handle part and having a U shaped piece secured thereto adapted to sleeve over said handle part, and a spring extension from said sleeve having a projection thereon and openings in said handle

part adapted to be engaged by said projection to adjustably fix the block upon said handle part.

2. In a tool for cutting buttonholes, a pair of pivoted members and means thereon to cut the material and an adjustable gage to fix the depth of the cut from the edge of the garment comprising a spring plate rotatably secured to rest flush against one of said members, and means to adjustably lock said plate in any adjusted position thereon adapted to be released therefrom by flexing said plate laterally.

3. In a tool for cutting slits and buttonholes, a cutter member comprising a blade, and a separate piece secured thereto having an eyelet former and cutter of relatively less depth than said blade and open at one end to permit the cuttings to be discharged therefrom, and an overhanging portion on said piece opposite said eyelet former adapted to sustain the thrust immediately opposite thereto.

In testimony whereof I affix my signature in presence of two witnesses.

CHRISTOPHER L. ROGERS.

Witnesses:

R. B. MOSER,

F. C. MUSSUN.