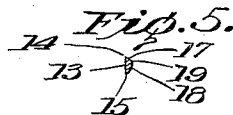
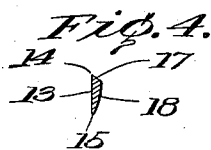
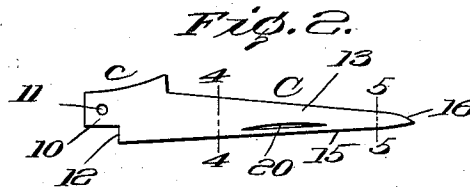
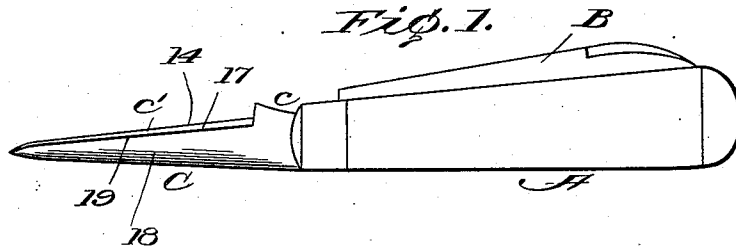


J. E. FULLER.  
LEATHER PUNCH.  
APPLICATION FILED MAY 12, 1910.

1,012,838.

Patented Dec. 26, 1911.



WITNESSES:

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ATTORNEY

# UNITED STATES PATENT OFFICE.

JAMES E. FULLER, OF NEW YORK, N. Y.

LEATHER-PUNCH.

1,012,838.

Specification of Letters Patent.

Patented Dec. 26, 1911.

Application filed May 12, 1910. Serial No. 560,775.

*To all whom it may concern:*

Be it known that I, JAMES E. FULLER, a citizen of the United States, and a resident of the city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Leather-Punches, of which the following is a specification.

This invention has reference to improvements in tools having blades intended to pierce leather or other material and to produce a round hole therein by turning the blade after its point has been inserted a suitable distance in the material. Its object is to provide a special construction of blade which may be produced at materially less cost than those hitherto proposed, and proposed, and at the same time can be most readily sharpened and will produce perfectly round holes with a minimum expenditure of manual force and without requiring any special dexterity. This object is well accomplished by the construction illustrated in the accompanying drawing, exemplifying what I regard as the best form of the invention and showing it embodied in a blade which forms one of the blades of a pocket knife, this being a most useful form of these tools.

In said drawings: Figure 1 is a side view of a pocket knife embodying my improvements, showing the novel blade of the latter in its open position, for use. Fig. 2 is a side view of the blade detached from the handle. Fig. 3 is a back edge view of the blade. Fig. 4 is a cross section on the line 4—4 of Fig. 2. Fig. 5 is a cross section on the line 5—5 of Fig. 2.

Similar characters of reference are used to denote corresponding parts in the several views.

A designates a suitable handle, the one here shown being similar in all substantial particulars to those commonly used for pocket knives and calling for no further description.

B designates what may be an ordinary blade of a pocket knife, and C designates the blade which forms the essence of the present invention. This blade C is here shown in its preferred relationship with a handle therefor, that is to say, so correlated therewith that it may be closed into the handle when its use is not desired and opened therefrom for use, in the same manner as ordinary blades of pocket knives. Its shank

c is shown as being substantially similar to the corresponding part of an ordinary knife-blade, having a projection 10 which engages the back-spring (not shown) of the handle and has an aperture 11 for the usual pivot pin and a shoulder 12 to engage the end of said spring when the blade is open, all for the usual and well known purposes.

The cutting portion c' of the blade is of peculiar construction. One side 13 is substantially flat throughout from its cutting edge 14 to its back edge 15 and from the point 16 to the shank c. The opposite side is beveled along the line of the cutting edge 14, as shown at 17, and thence is convexly curved to its intersection with the flat side of the blade, at the back edge 15, as shown at 18. The end of the blade remote from the shank c is pointed at 16 in order that it may easily penetrate the leather or other material upon which it is to operate, and the blade preferably is of gradually increasing diameter from said point to the shank, in order that it may be employed to cut holes of varying diameters. A well-defined shoulder 19 extending longitudinally of the blade is observable at the intersection of the convex portion 18 and the straight beveled portion 17, this shoulder defining the intersection of the parts referred to and the beveled portion cooperating with the flat side 13 to produce a cutting edge which can be readily sharpened, while the cooperative action of all the parts referred to is such that after the blade has been inserted in the material a distance which is determined by the diameter of the hole to be produced it will produce such hole by the mere act of turning the knife or tool axially, in the manner in which tools of this type have been hitherto operated, and will leave the hole with a smooth wall. It will be noted, however, that while the blade has this capability in common with other blades hitherto proposed, its construction is wholly free from the complications hitherto thought to be essential in blades for this purpose, and is such that it may be readily and practically produced at a cost which is but a trifle, if any, in excess of that of an ordinary knife blade of the same grade of material, and is nominal in comparison with the cost of those hitherto proposed. Again, the form is such that no reinforcement of the shank is essential in order that it may be pivotally attached to the handle, and in its appearance

when closed and its provision for being opened and closed, it need not in any wise differ from the blade of an ordinary pocket knife or call for any peculiar construction  
5 of handle. It will be noted that the flat side of the blade has a recess 20 for convenience in opening the blade, as is customary in ordinary knife blades.

From the foregoing the objects and advantages of my invention, as well as the mode of operation thereof and its construction, will be readily understood.

Having now described the invention, what I believe to be new and desire to secure by  
15 Letters Patent is:

1. A knife blade having one side flat from edge to edge, a uniformly curved side opposite thereto, and a plane face intersecting said sides and forming a straight angled  
20 cutting edge, the curved side acting as a

smoothing guide for the cut surface of the material operated on.

2. A tool of the class described, comprising a handle and a blade, said handle adapted to receive the blade, the blade having one  
25 of its sides or faces substantially flat from edge to edge, a uniformly convexly curved side opposite thereto, and a substantially flat beveled face intersecting said sides and forming a beveled cutting edge, the curved  
30 side acting as a smoothing guide for the cut surface of the material operated on.

In witness whereof I have hereunto set my hand at the city, county and State of New York, this twenty-fifth day of April, 35  
1910.

JAMES E. FULLER.

In presence of—

I. R. RICHARDS,

A. C. O'CONNELL.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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