J. E. FULLER.

POCKET KNIFE PUNCH.

APPLICATION FILED JUNE 12, 1915.

1,171,422.

Patented Feb. 15, 1916.

Fig. 1.

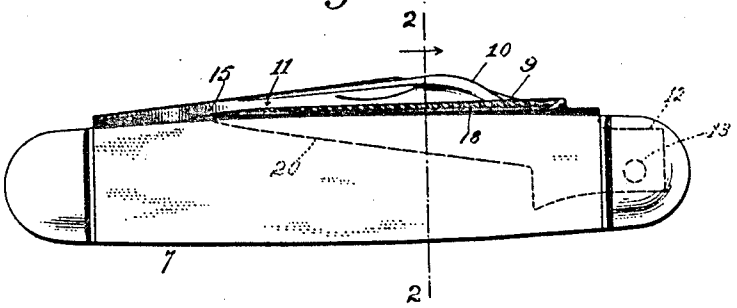



Fig. 2.

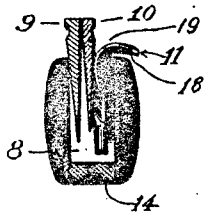



Fig. 3.

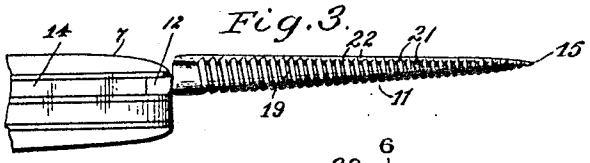



Fig. 6.

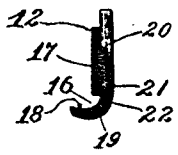



Fig. 4.

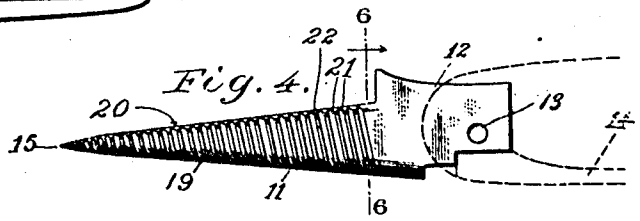
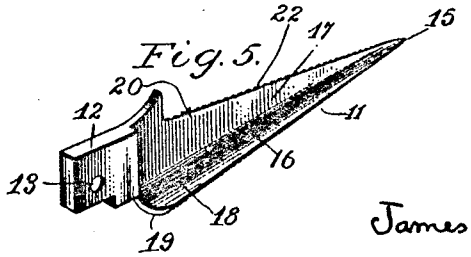



Fig. 5.




Inventor:

James E. Fuller,

By his Attorneys

Rogers, Kennedy & Campbell.

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

JAMES E. FULLER, OF NEW YORK, N. Y., ASSIGNOR TO NEW YORK KNIFE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## POCKET-KNIFE PUNCH.

1,171,422. Specification of Letters Patent. Patented Feb. 15, 1916.

Application filed June 12, 1915. Serial No. 33,648.

*To all whom it may concern:*

Be it known that I, JAMES E. FULLER, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Pocket-Knife Punches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to pocket knife punches, and more particularly to an improved construction of pocket knife having a blade adapted for punching leather, rubber, or other material; for example, for punching holes in leather straps, to accommodate buckle tongues.

The principal object of the present improvement is to increase the efficiency and facility of use of pocket knife punches of this nature.

Other objects hereof will appear in the hereinafter following description of one form in which the invention may be embodied.

To the attainment of the objects and advantages referred to the present invention consists in the novel constructions, combinations and other features illustrated or disclosed in the accompanying drawings and specification.

In the drawings Figure 1 represents a side view of a pocket knife provided with a punch blade embodying the present improvement, the same shown folded into closed position. Fig. 2 is a cross section taken on the plane 2—2 of Fig. 1. Fig. 3 is a rear view with the punch blade open. Fig. 4 is a side view with the blade open. Fig. 5 is a perspective view of the punch blade detached, showing more particularly the interior conformation. Fig. 6 is a cross section taken on the plane 6—6 of Fig. 4.

An ordinary pocket knife handle 7 is shown, the same having the usual interior recess or knife groove 8 in which the knife blades may be folded; and 9, 10, represent a pair of ordinary cutting knife blades pivoted to one end of the handle, although their presence does not affect the present invention *per se*.

Pivoted to one end of the handle, preferably the end opposite to the pivots of blades 9 and 10, is the punch blade 11 more particularly forming the subject of the present invention. The blade 11 has the usual tang 12, perforated at 13 for the reception of a pivot pin by which the punch blade is pivoted to the knife handle 7. The tang 13 cooperates with a back spring 14 by which the blade is yieldingly held in its closed position of Fig. 1, its half open position, and its full open position of Figs. 3 and 4, the spring also serving as a stop or abutment to block the punch blade against swinging beyond its full open position in alinement with the knife handle.

The punch blade 11 is provided with a sharp stabbing point 15 at the extremity, and between the tang 13 and the point the blade is interiorly grooved at 16. The groove 16 may be provided between the blade's longitudinal portion or body 17 and its other longitudinal portion or flange 18, the two being integral and both converging toward the blade point 15.

The punch blade exterior has a generally rounded or conical surface 19 and at least one edge of the blade, preferably edge 20, is sharpened to a cutting condition so that a thrust accompanied by a right hand twist causes the punch blade to cut its way through the leather, forming a circular hole of a diameter which increases as the punch blade is forced farther and farther into the material.

The rounded or conical outer surface 19 of the punch blade is formed with alternate grooves or gutters 21 and ridges 22, these being formed in an inclined manner as more clearly seen in Figs. 3 and 4. As shown, the grooves and ridges 21 and 22 extend at one side substantially to the extreme cutting edge 20 of the punch blade, and from that point extend across the conical exterior surface 19, to the opposite side edge. This construction of inclined ribs on the conical punch blade exterior materially assists the entry of the blade into the leather or other material to be punched, and gives a grip upon this material; the inclined character of the grooves actually serving to effect a forward feeding of the punch blade as it is twisted, thereby greatly facilitating and conveniencing the manipulation of the instrument. At the same time these advantages are secured without detracting from neatness and accuracy of the hole cut in the leather or other material.

The contour of the various portions of the punch blade is improved and the posi-

tioning of the blade with respect to the knife handle is such as to give maximum efficiency in the thrusting and boring operation.

When the punch blade is closed, as in Fig. 1, its body portion 17 fits snugly in the handle groove 8 with the other blades of the knife in such position as to protect the user from injury from the cutting edge 20. The flange portion 18 of the punch blade overhangs the edge of the knife handle in a snug manner so as not to interfere with the ordinary uses of the pocket knife, and the overhanging flange 18 is available for the purposes of opening the punch blade.

It will be seen that there has been disclosed in combination with the grooved pocket knife handle a punch which is pivoted to swing between the usual closed and open positions, the punch in open position being in alinement with the handle, said punch having a knife-edged body portion which, when closed, enters the groove in the handle, and also a flange portion which overlies the knife handle edge when closed; said punch being constructed with a rounded or conical exterior surface tapering to a stabbing point, the exterior surface being formed with a series of cross ribs or grooves which are inclined in the manner and for the purposes already described. It is manifest that matters of size, proportion, contour, and other details may be variously modified without sacrificing the advantages of the invention, and therefore no limitation to such details is intended except in so far as specified in the appended claims.

What is claimed is:

1. A pocket knife punch adapted to be closed into and opened from a pocket knife handle, the said punch having a knife-edged body portion adapted to enter the knife handle groove when closed and a flange portion adapted to overlie the knife handle edge when closed, said punch formed with a rounded exterior surface and tapered to a stabbing point, and said exterior surface formed with a series of cross ribs inclined substantially as and for the purposes set forth.

2. A pocket knife punch blade constructed of a generally split-cone-like shape with concave interior and a rounded convex exterior surface and tapered to a stabbing point, said convex surface formed with a series of slightly inclined cross ribs, the first of which is in proximity to the blade point.

In testimony whereof, I have affixed my signature hereto.

JAMES E. FULLER.

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