(No Model.)

W. CRAIN.

TOOLS FOR CHANNELING SHOE SOLES.

No. 260,169. Patented June 27, 1882.

Fig. 1.

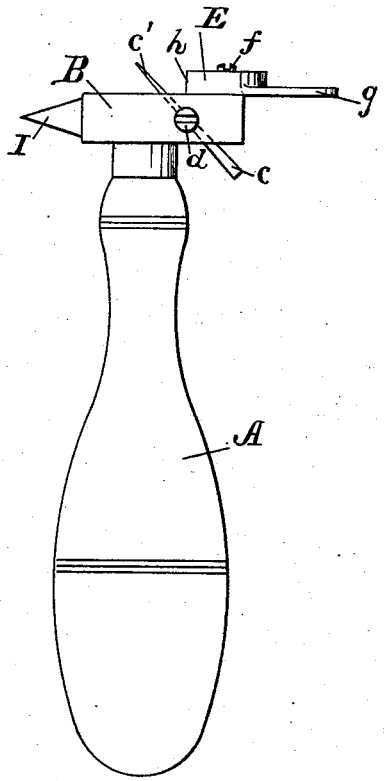


Fig. 2.

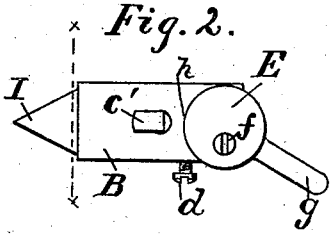
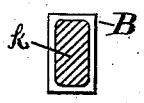


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM CRAIN, OF BALTIMORE, MARYLAND.

TOOL FOR CHANNELING SHOE-SOLES.

SPECIFICATION forming part of Letters Patent No. 260,169, dated June 27, 1882.

Application filed May 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CRAIN, a citizen of the United States of America, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Tools for Channeling Shoe-Soles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved hand-tool for channeling shoe-soles, and it will first be described, and then designated in the claims.

In the drawings hereto annexed, Figure 1 is a side view of the tool. Fig. 2 is an end view, or a view of the tool-head on the side transverse to that seen in Fig. 1. Fig. 3 is a cross-section of the tool-head point on the line *x x* in Fig. 2.

The letter A designates the handle; B, the tool-head, mounted on the end of the handle. The tool-head consists of a four-sided metal block the cross-dimension of which in the broadest direction is about double what it is the other way, and the length of said block is more than twice as great as its widest part. A hole is bored through the broad sides of the block or tool-head in a slanting direction, and a blade, *c*, is inserted from one side into and through this hole, the cutting-point *c'* of the blade projecting from the side at an angle of about forty-five degrees. A set-screw, *d*, enters the narrow side of the tool-head and retains the blade wherever set. At one end of the tool-head, and on the side from which the blade-point projects, an eccentric, E, is pivoted. This eccentric is a circular block pivoted by a screw, *f*, a little at one side of a line extending lengthwise of and through the center of the block and blade. A handle, *g*, is attached to the eccentric and serves to turn it on its pivot. The edge *h* of this eccentric acts as a guide for the blade-point. The said edge, by bearing against the edge of the shoe-sole, guides the blade as it cuts the channel.

It will be seen that by slightly turning the eccentric the part of the edge *h* which bears against the sole may be brought closer to or moved away from the blade-point, and thus the eccentric guide is capable of adjustment.

The end of the tool-head opposite that whereat the eccentric is attached is provided with a point, I, somewhat cone-shaped. This point has four tapering sides, with the corners of the tapered part rounded. It is broader in one direction than the other, as indicated by the section marked *k*. This point serves to spread the channel open after the blade has cut the channel.

It will be seen by reference to Figs. 1 and 2 that, owing to the point being narrower one way than the other, the taper on two opposite sides is more acute than on the other two, from which an advantage results, as follows: The channel having been cut, it is now desirable to spread it open ready for stitching. The operator then first draws the tapered point along the channel, with the narrow part or more acute angle of the point resting in the channel. This has the effect to spread the channel sufficiently open for some work; but if it is desired to spread it still more the tool-head is turned one-quarter way around to bring the broad part of the point in the channel. The point may then be drawn along the channel, as before stated.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a tool for channeling shoe-soles, a head-block, B, mounted on a suitable handle, a cutting-blade adjustable thereon, and provided with a circular guiding-disk, E, eccentrically pivoted upon said head-block, and having an operating-handle, *g*, for regulating the width of cut from the edge of the sole, all substantially as described, and for the purpose set forth.

2. A hand-tool for channeling shoe-soles, consisting of the handle A, head-block B, adjustable blade *c*, channel-opener I, and eccentrically-pivoted guiding-disk E, having an operating-handle, *g*, all substantially as set forth.

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

WILLIAM CRAIN.

Witnesses:

CHAS. B. MANN,

JNO. T. MADDOX.