E. DI LEO.

BENCH TOOL FOR SHOEMAKERS.

APPLICATION FILED NOV. 25, 1921.

1,438,366.

Patented Dec. 12, 1922.

Fig. 1

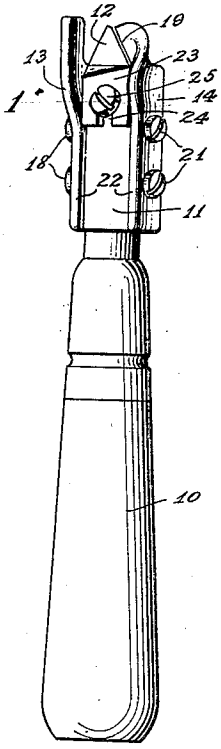


Fig. 2

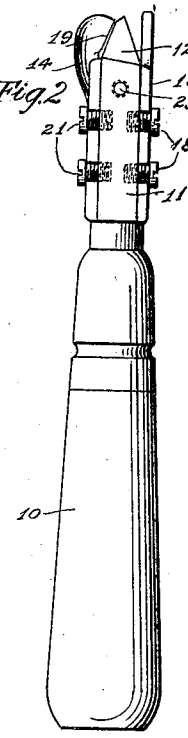


Fig. 4

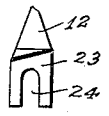


Fig. 5

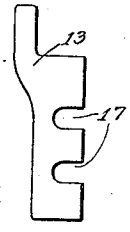


Fig. 3

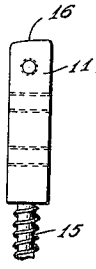


Fig. 6

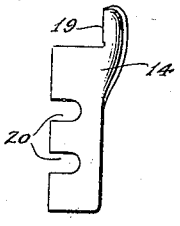


Fig. 7

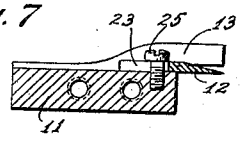


Fig. 8

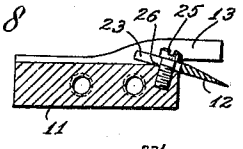
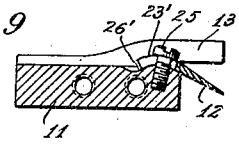


Fig. 9



INVENTOR.

Enrico Di Leo

BY

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UNITED STATES PATENT OFFICE.

ENRICO DI LEO, OF BRIDGEPORT, CONNECTICUT.

BENCH TOOL FOR SHOEMAKERS.

Application filed November 25, 1921. Serial No. 517,716.

To all whom it may concern:

Be it known that ENRICO DI LEO, a citizen of Italy, and resident of Bridgeport, in the county of Fairfield and State of Connecticut, has invented certain new and useful Improvements in Bench Tools for Shoemakers, of which the following is a specification.

This invention relates to a new and improved shoemaker's tool, and the object of the invention is to provide a simple and inexpensive tool of the present character for accurately channeling shoe soles in the process of producing the leather lips of turned shoes for receiving stitches by which uppers are attached to the soles, and to produce a device capable of effecting a saving of time and labor in the above mentioned process and constructed to attain uniformity in the production of channels.

With the above and other objects in view, the invention comprises the construction, arrangement and combination of parts as now to be fully described and as hereinafter to be specifically claimed, it being understood that the disclosure herein is merely illustrative and meant to in no way limit the spirit of the invention, slight changes in details of construction and arrangement of parts being permissible so long as within the scope of the appended claims.

In the accompanying drawing forming a part of this specification,

Fig. 1 is a perspective view of the novel tool;

Fig. 2 is an elevational view thereof looking from the rear in Fig. 1;

Fig. 3 is an elevational view of the tool head detached as it would appear when looking from the front in Fig. 1;

Figs. 4, 5 and 6 are views detailing the slitting blade, the guide arm, and the turning arm, respectively;

Fig. 7 is a longitudinal sectional view of the tool head of Fig. 1 or Fig. 2; and

Figs. 8 and 9 are views corresponding with the showing of Fig. 8, disclosing slightly different forms of heads and slitting blades.

Referring to the invention as disclosed in Figs. 1 to 7, both inclusive, 10 denotes the shank or handle, 11 the head, 12 the slitting blade, 13 the guide arm, and 14 the turning arm of the tool.

The head is provided with a threaded end 15 adapted to be inserted in the handle, and with an oblique end or guide shoulder 16 opposite said threaded end adapted to bear against the shoe sole in a manner to become obvious when the device is in use. The guide arm, slitting blade and turning arm are all separate and distinct from each other and from the head and are adjustably attached to said head. That is to say, the guide arm is designed to rest upon the surface of the sole as the cutting operation proceeds to regulate the depth of the cut relative to the flat or plain surfaces of the sole, it having its bearing surface spaced from the plane of the head at such an interval as to insure the proper positioning of the channel relative to the thickness of the sole, and said arm is provided with slots 17 to receive screws 18 whereby the guide arm can be adjustably attached to one side of the head; the turning arm is designed to follow the slitting blade and has its edge 19 so positioned with reference to the plane of the blade as to engage the edge of the lip of the sole and turn it back or roll it upon the surface of the sole to expose the channel for access by the shoemaker to facilitate the succeeding operation of attaching the upper thereto, and said turning arm is provided with slots 20 adapted to receive screws 21 whereby the turning arm can be adjustably attached to the opposite side of the head; and both said guide arm and turning arm desirably protrude for their full lengths beyond one face of the head, that face to receive the slitting blade, to provide ways 22 between which an attaching plate 23 of the slitting blade is positioned, the plate being adjustably attached to the head by means of a slot 24 adapted to receive a set screw 25 entering the head, and the slitting blade being desirably of tapered formation and disposed at an inclination to the plane of the head so as to intersect the same and cut diagonally into the body of a sole leather to produce the channel by which the leather lip is permitted to fold back relatively to the body of the sole to permit of the necessary stitching of the upper thereto, all as will be readily understood.

By the provision of slitting blade, guide arm, and turning arm which are separate and distinct from each other and adjustably attached to the tool head, a number of conditions of use of the device are bettered and the device is thus rendered more efficient, the construction as so far described

allowing adjustment of the guide and turning arms transversely of the tool and adjustment of the slitting blade longitudinally of the head to be nearer to or farther from the obliquely disposed shoulder. By the provision of the oblique shoulder better results in the actual work performed by the tool can be accomplished, said shoulder being disposed with respect to the head so that the entire face of the shoulder will smoothly engage the leather of the sole when cutting, and not, as heretofore, so that an edge of the working end of the head will tend to dig into the sole leather and retard smooth action of the tool.

By the arrangement of the slitting blade between protruding portions of the guide arm and turning arm, a more stable blade and a simplified construction is obtained, this with the necessity of the utilization of but a single screw for holding the slitting blade to a face of the tool head.

In Figs. 1 to 7, inclusive, I have disclosed the attaching plate of the slitting blade as arranged upon the flat, smooth face of the tool head to be parallel with said head. In Fig. 8 I have disclosed a head, one face of which is provided with an obliquely disposed portion 26 against which the attaching plate of the slitting blade can be adjustably arranged so that said blade will be at an acute angle with respect to the head and shoulder, while in Fig. 9, I have shown a head the corresponding face of which is provided with a portion 26′ of that irregular conformation permitting the slitting blade to be arranged either parallel with the head and perpendicular to the plane of the shoulder, or at any angle with respect to said head and shoulder, the attaching plate 23′ of the present slitting blade being of general curved formation. By utilization of the principle of the modification illustrated in Fig. 9, a slitting blade capable of making a cut of any preferred nature or depth can be procured.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is:

1. A tool of the character described, comprising a handle, a tool head having three longitudinally disposed flat sides and an oblique shoulder upon its outer end, a guide having a flat shank adjustably secured to one of the said sides of the head, a turning arm also having a flat shank that is adjustably secured to that side of the head opposite said attached guide, a slitting blade adjustably secured to a side face of the head intermediate of the said guide arm and turning arm, said slitting plate being adjustable longitudinally of the head toward and from said oblique shoulder and at an angle with respect thereto.

2. A tool of the character described, comprising a handle, a tool head thereon having a smooth obliquely inclined end and three elongated flat sides, a guide arm including an elongated flat shank positioned against one of the flat sides of the head and provided with slots and screws for its adjustable attachment to the head, a turning arm having an elongated flat shank fitted against a side of the head opposite the guide arm, and a slitting blade upon a side of the head between said guide and turning arm, the shanks of said arms forming protruding portions against which said slitting blade is adjustably secured.

3. A tool of the character described, comprising a handle, a tool head thereon, having a smooth obliquely inclined end and three elongated flat side faces, a guide arm upon one of the faces of said tool head, a turning arm upon a face of said head and opposite said guide arm, and a slitting blade upon a face of said head and between and supported against both said guide and turning arms, said arms provided with protruding portions between and by means of which said slitting blade is located.

4. A tool of the character described, comprising a handle, a tool head thereon, having an oblique shoulder upon its end, and three flat side faces, a guide arm upon one face of the tool head adjacent the end thereof spaced from said handle, a turning arm upon said tool head opposite said guide arm, a slitting blade adjacent said shoulder and disposed at an inclination to the plane thereof, and an attaching plate for said slitting blade adjustably arranged against a face of said head and longitudinally between and against protruding portions of said arms.

5. A tool as specified in claim 4, wherein the face upon which the slitting blade is arranged is provided with an irregular portion and the attaching portion of the blade is of general curved conformation, whereby the slitting blade is angularly adjusted with respect to the plane of the oblique shoulder to make a cut of preferred nature or depth.

Signed at Bridgeport in the county of Fairfield and State of Connecticut this 22nd day of November, A. D., 1921.

ENRICO DI LEO.

Witnesses:

LILLIAN M. ALLING,

C. M. NEWMAN.