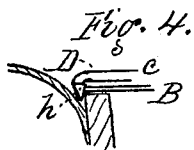
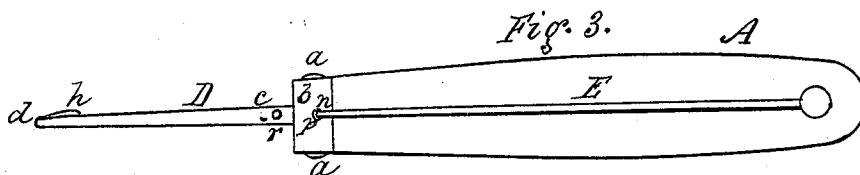
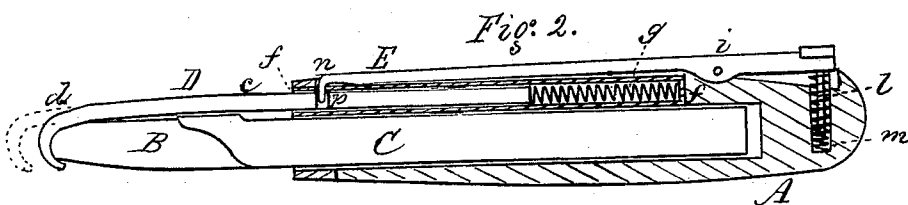
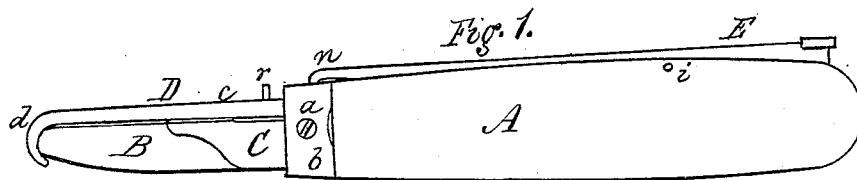


J. C. RATELLE.

Knives for Trimming Boot and Shoe Soles.

No. 142,942.

Patented September 16, 1873.



Witnesses.

William C. Baine
Chas. W. Minnick

Inventor.

Joseph C. Ratelle,
per R. H. Osgood,
att'y.

UNITED STATES PATENT OFFICE.

JOSEPH C. RATELLE, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN KNIVES FOR TRIMMING BOOT AND SHOE SOLES.

Specification forming part of Letters Patent No. **142,942**, dated September 16, 1873; application filed July 21, 1873.

To all whom it may concern:

Be it known that I, JOSEPH C. RATELLE, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Knives for Trimming Boot and Shoe Soles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My invention consists of a knife for trimming soles, constructed, arranged, and operating as hereinafter described, the object being to prevent cutting of the upper leather and to facilitate the grinding of the knife.

In the drawings, Figure 1 is a side elevation; Fig. 2, a section; Fig. 3, a plan; Fig. 4, a diagram, showing the method of trimming the sole.

A is the handle, of ordinary form. B is the blade. C C are clamps, one on each side, which hold the blade in place. The knife and the clamps are made in straight lengths separate from each other, and fit in a socket formed longitudinally in the handle, and are retained by two set-screws, *a a*, which pass in at opposite sides of the collar *b*. By this means the blade may be adjusted out as it is worn away, and the clamps may also be adjusted out, more or less, to secure the proper stiffness of the blade. The set-screws also enable the blade to be centered laterally, so as to coincide or come in line with the gage as the latter is moved out or in, as will presently be described. D is the gage, which consists of a straight shank, *e*, and a hook, *d*, whose curvature is such as to conform to and embrace the outer end of the blade. The gage is located above the blade, and its shank rests in a square tube, *f*, embedded longitudinally in the handle. A spiral spring, *g*, is located behind the gage in the tube, and so arranged as to press the gage outward when the hook rests against the end of the blade. The extreme lower end of the hook has a lateral enlargement or offset, *h*, standing at such a position relatively to the cutting-edge of the blade that in the act of trimming or paring the edge of a sole said enlargement rests in the angle or crease between the sole and the upper, as shown in Fig. 4, and serves as a guide to the trimming, and as a preventive to the cutting of the upper by any false movement or unsteadiness of the hand. E is a thumb-lever

pivoted at *i* on top of the handle or within a slot of the same. It is pivoted and so arranged that when the rear end is depressed the front end is elevated. At the rear end it has a tang, *l*, which rests in a socket of the wood, and is pressed up by a coiled spring, *m*. At the front it has a right-angled bend, *n*, which strikes into a socket, *p*, of the gage when the latter is drawn back in contact with the end of the blade. The gage is provided with a pin, *r*, which serves as a thumb-hold in drawing back the gage.

The use of the gage, as before described, is to act as a guide and prevent the cutting of the upper. At the same time it is a convenient device for covering and shielding the back and point of the blade. It also serves as a stay to the blade against the pressure which comes in action. The blade is further stiffened and stayed by means of its point striking into a groove or crease of the hook, so that it cannot spring from place.

Another important feature is the spring action of the gage and the employment of the thumb-lever E, by which it may be engaged or disengaged at pleasure.

When the lever is pressed down so as to release the gage the latter springs outward, as shown in dotted lines, Fig. 2, by which means the knife or blade may be ground or strapped without impediment.

Another advantage consists in making the blade and clamps in straight lengths, by which the blade may be adjusted out to compensate for wear, and the clamps may be adjusted to secure proper stiffness of the blade; and still another advantage consists in the use of the set-screws *a a*, by which the blade and clamps are centered to coincide with the hook of the gage.

Having thus described my invention, what I claim as new, is—

The trimming-knife herein described, consisting of the blade B, clamps C C, gage D, and thumb-lever E, when combined and arranged with the handle A, to operate in the manner and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

Witnesses:

J. C. RATELLE.

R. F. OSGOOD,

HENRY M. THOMAS.