A. J. PARKER.

Improvement in Edge Planes for Boots and Shoes.

No. 121,465. Patented Dec. 5, 1871.

Fig. 2.

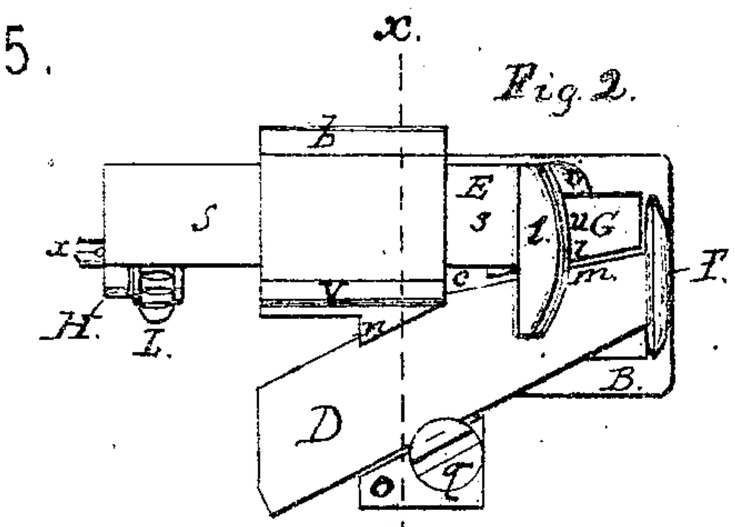


Fig. 1.

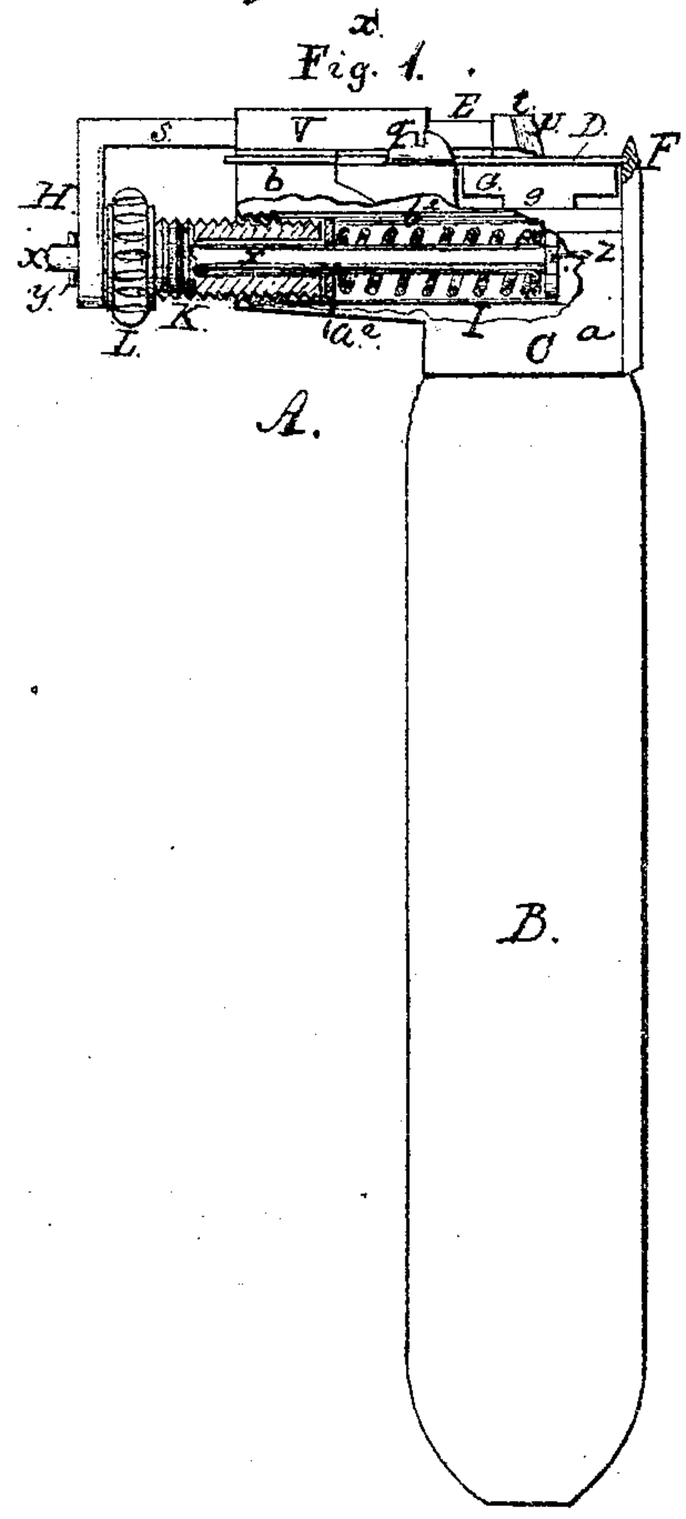
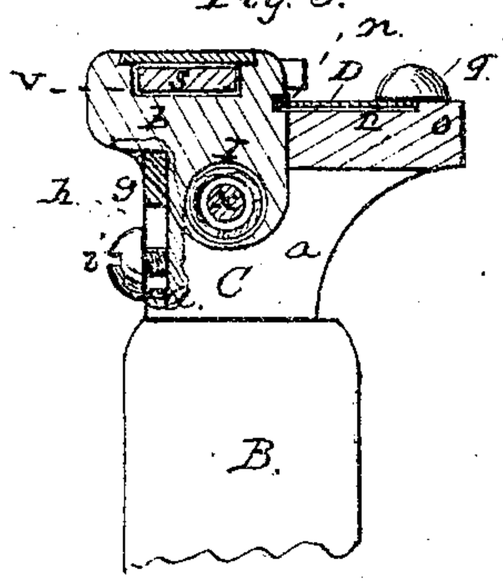


Fig. 3.



Witnesses.

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121,465

UNITED STATES PATENT OFFICE.

ARON JAMES PARKER, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN EDGE-PLANES FOR BOOT-AND-SHOE MAKERS.

Specification forming part of Letters Patent No. 121,465, dated December 5, 1871.

To all whom it may concern:

Be it known that I, ARON JAMES PARKER, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Edge-Planes for Boot-and-Shoe Soles; and that the following is a full and exact description of the same, reference being had to the accompanying drawing.

The present invention mainly consists in a novel construction and arrangement of the knife or cutting-blade, whereby many advantages are secured, and also in a guard or guide for the tool against the face of the sole susceptible of self-adjustment to the varying thickness of the sole as the edge-plane is run around it.

In the accompanying drawing my improvements in edge-planes for boot-and-shoe soles are illustrated, Figure 1 being a face view of the tool with a portion in section; Fig. 2, a plan view of the end of tool carrying cutting-blade; Fig. 3, a cross-section in plane of line *x x*, Fig. 2.

A in the drawing represents my improved edge-plane, of which B is the handle; C, the stock; D, the cutter or knife-blade; E, the self-adjustable guard or guide against the face of the sole; F, the guard or lip to prevent the knife D from cutting or slitting the "upper." The handle B is made of wood or other suitable material, and in any proper form for convenience in handling. The stock C is made of the general form shown in the drawing—that is, of a square block, *a*, fastened to one end of the handle B, with a side and projecting arm, *b*. To the stock C at one end is firmly fixed the guard F, projecting as shown. Between the inner face of guard F and shoulder *c* of stock C, across a portion of the outer end of stock, is arranged a bearing-plate, G, forming the cutting-plane of the tool, which plate G is adapted by its arm *g*, through slot *h* and set-screw *i*, to be adjusted for a purpose to be hereafter described. The edge *l* of the plate G is diagonal to its width, and at such edge, with the cutting-edge *m* of the knife-blade D, is the throat of the plane, said cutting-edge *m* being similar in direction to the edge *l* of plate G. The cutting-blade D from the plate G is extended diagonally across the stock C toward and back of the arm *b*, where it is arranged within a diagonal slot, *n*, of an arm, *o*, under the head of a set-screw, *q*, of said arm. The cutting-blade at its end toward the guard F is within a groove thereof, confining it from a spring or movement in any direction. By adjusting the plate G as described the throat between its edge *l* and the cutting-edge *m* of knife-blade is regulated. The guard or guide E against the boot-sole in the use of the plane is constructed of a bar, *s*, with a cross-flange or head, *t*, at one end having a curved face, *u*, and by its bar *s* it is arranged in the position shown to move through a loop, *v*, of the arm *b*, hereinbefore referred to, of stock C. *x*, a rod extending through arm H to guard-bar *s*, fastened by a pin, *y*, and from thence to and through the bore or socket I of stock C, wherein it is provided with a fixed head, *z*, a movable head, a^2, and a spiral spring, b^2, between said heads; K, a screw-rod with milled head L at one end, which screw-rod K screws into the bore I of stock C around the rod *x*, and by its head L bears against the inner face of arm H to guard-bar *s*. By turning the screw-rod K to the right or left the outer guard E, as the case may be, is moved toward or away from the inner guard-lip F of the plane, decreasing or increasing the space between its curved-faced flange and the said guard E, this arrangement being provided for adjusting the tool to about the general thickness of the boot or shoe sole on which the plane is to be used.

A tool constructed as above described, with the outer guard E properly adjusted, if taken by the handle and moved around the edge to the sole of a boot or shoe, produces by its knife a trimming of the said edge, the lip preventing the slitting of the upper by the knife, as also a feathering of the inner-sole edge, and the outer guard E the feathering of the outer-sole edge, said outer guide adjusting itself as the tool is moved around the sole-edge, through its arrangement, to the difference in thickness of the sole within the "shank" from that of the "ball" of the boot or shoe.

By the construction and arrangement of the knife described there is no impediment or difficulty in passing around the shank of the boot or shoe, and a straight knife-blade, in lieu of a curved or bent one, as heretofore, is employed. The retention of the knife-blade in place and from springing is perfectly secured, while it is susceptible of ready removal for being sharpened or for the insertion of a new one.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The stock C, constructed of a block, *a*, and guard F, in combination with the knife D secured diagonally upon said stock and interlocked with the guard F, substantially as described, for the purpose specified.

2. The outer guard E, constructed and arranged substantially as described for being adjusted and for self-adjustment to the varying thickness of boot or shoe soles, as and for the purpose specified.

The above specification of my invention signed by me this 19th day of July, A. D. 1871.

A. JAMES PARKER.

Witnesses:

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