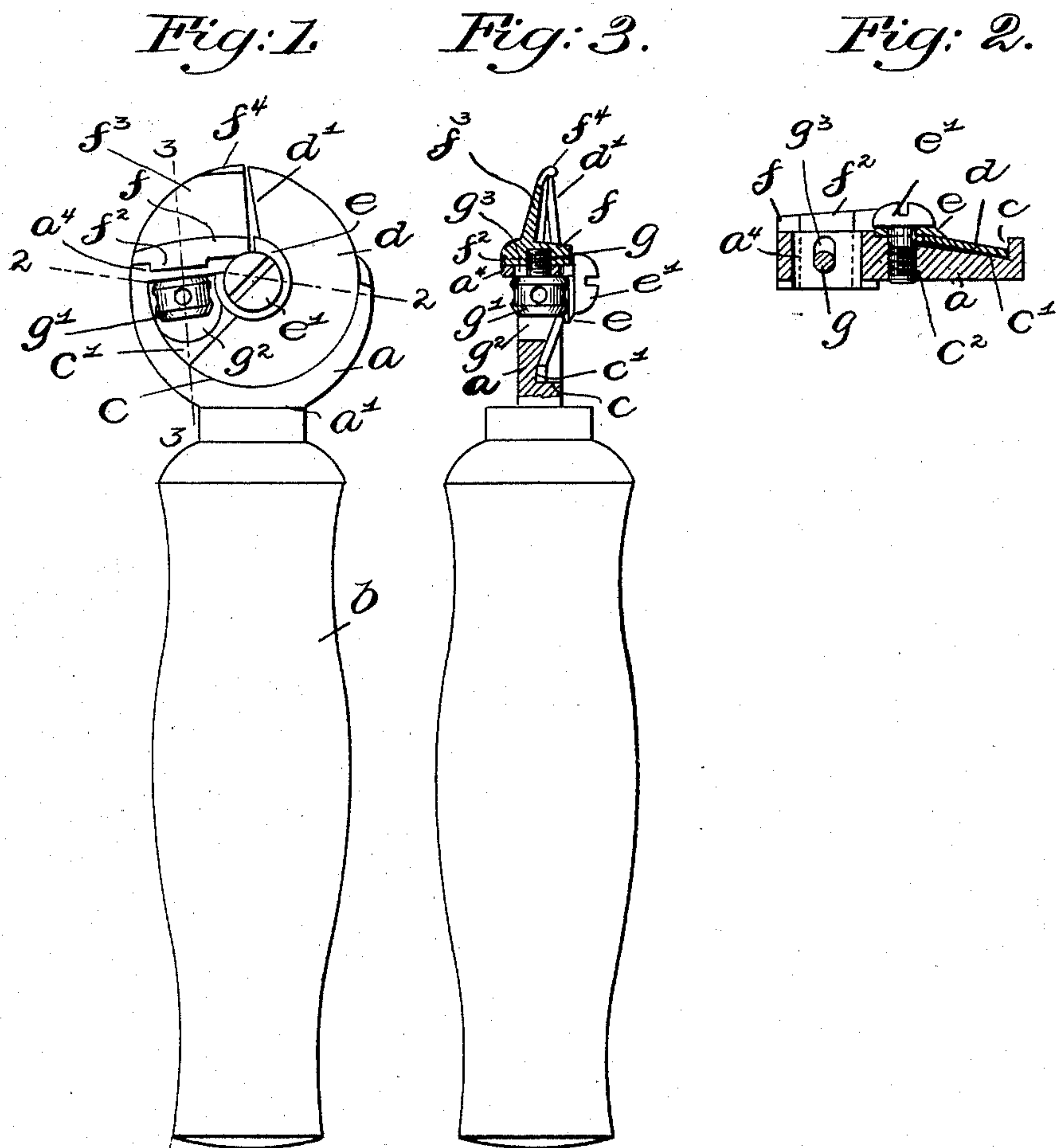


(No Model.)

F. A. DUNHAM.  
WELT TRIMMER.

No. 522,786.

Patented July 10, 1894.



Witnesses:

A. C. Harmon  
J. Davis.

Inventor:

F. A. Dunham  
by M. B. Brown Counselor  
Atty

# UNITED STATES PATENT OFFICE.

FRANK A. DUNHAM, OF BROCKTON, MASSACHUSETTS.

## WELT-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 522,786, dated July 10, 1894.

Application filed February 23, 1894. Serial No. 501,256. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK A. DUNHAM, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Welt-Trim-  
5 mers, of which the following is a specification.

This invention relates to welt-trimmers employed in the manufacture of boots and shoes, and one object of the invention is to provide  
10 a construction whereby the knife is firmly held in place, while another object is to provide for adjustment of the guard to compensate for the wear of its bearing-lip, and improved means for setting the said guard at  
15 different adjustments.

To the above ends, the invention consists in the novel features of construction and combinations of parts hereinafter described and  
claimed.

Referring to the accompanying drawings, which illustrated an embodiment of the invention and form part of the specification,—  
20 Figure 1 shows a side elevation of the tool. Fig. 2 shows a section on line 2—2 of Fig. 1. Fig. 3 shows a section on line 3—3 of Fig. 1.

In the drawings, the letter *a* designates the body or stock of the tool, which is semi-circular in general outline and has a shank *a'*  
25 to fasten in a handle *b*. Said body is recessed in one side, as shown, the sides *c* of the recess extending in the arc of a circle, and the bottom *c'* being convex, and a screw-threaded boss *c<sup>2</sup>* being provided at the middle of the  
30 body. The knife is in the form of a partly annular concavo-convex blade *d*, and is received in the recess of the body with its concave side toward the base *c'* of said recess. The concavity of the blade causes its outer marginal  
35 portion to bear on the bottom of the recess, while its inner marginal portion stands off from said bottom. A washer *e* bears against the outer side of the inner marginal portion of the blade, and a screw *e'* is entered through  
40 said washer and into the screw-threaded boss *c<sup>2</sup>*. By driving said screw home, the washer *e* is pressed against the blade, and by the expansion thereof its outer edge is borne against the side-wall *c* of the recess, and thereby the  
45 blade is very securely held. It will be seen that a secure position of the blade is insured by its being held both at the center and outer edge. The concavo-convex form of the blade

disposes its cutting edge *d'* on the desired angle.

The body *a* has a flattened surface transversely grooved to form a slide-way *a<sup>4</sup>* for a  
55 guard whose broadened base *f* fits against said surface and is formed with a ridge *f<sup>2</sup>* to engage the groove *a<sup>4</sup>*.

The blade *f<sup>2</sup>* of the guard extends angularly, leaving an opening between it and the cutting  
60 edge *d'* for the passage of removed portion of the welt, and said blade is formed with a lateral lip *f<sup>3</sup>* designed to stand in front of the point of the knife, as usual, and to form a  
65 bearing and guiding piece in the use of the tool.

It is to be observed that the slide-way *a<sup>4</sup>* is straight, and hence the guard's movement therein is a rectilinear one, which will vary  
70 the lateral relation of the lip *f<sup>3</sup>* and the point of the knife, and may thus be employed to compensate for the wear of said lip. It is also to be observed that the base of the guard on the side which extends over the edge  
75 of the sole is of such a width as to prevent any edges or corners coming in contact with the edge of the sole and hindering the manipulation of the tool, a difficulty often experienced in the use of welt-trimmers as at present  
80 constructed.

The guard is locked at different adjustments by means of a screw *g* whose head *g'* is received in a transverse opening *g<sup>2</sup>* in the  
85 body, and which extends through a slot *g<sup>3</sup>* in the flattened portion of the body and enters a screw-threaded socket in the guard.

The screw-head *g'* is perforated as shown, to facilitate turning the screw.

It will be seen that by the construction described, protuberances around the exterior of  
90 the body are avoided.

Guards of varying form may be interchanged to suit the work.

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

1. A welt-trimmer comprising in its construction a body-portion having a partly circular recess in one side, a concavo-convex  
100 segmental blade in said recess with its marginal portion bearing against the base of the same and its inner portion normally separated therefrom, and a fastening connecting said



blade centrally with the body and pressing it toward the base of the recess, thereby expanding its edge against the walls of the recess, substantially as and for the purpose described.

5 2. A welt-trimmer comprising in its construction a recessed body-portion, a blade secured thereto, a guard laterally movable on the body-portion in a rectilinear line, and a  
10 screw extending through a slot in the body-portion and entering a screw-threaded socket in the guard.

3. A welt-trimmer comprising in its construction a recessed body-portion having a  
15 transverse opening, a blade secured to the

body-portion, a laterally-movable guard on the body-portion, and a screw extending through a slot in the body-portion and engaging a screw-threaded socket in the guard, the head of said screw occupying the transverse  
20 hole in the body-portion.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 17th day of February, A. D. 1894.

FRANK A. DUNHAM.

Witnesses:

FLORENCE H. MILLER,  
LOYED E. CHAMBERLAIN.