

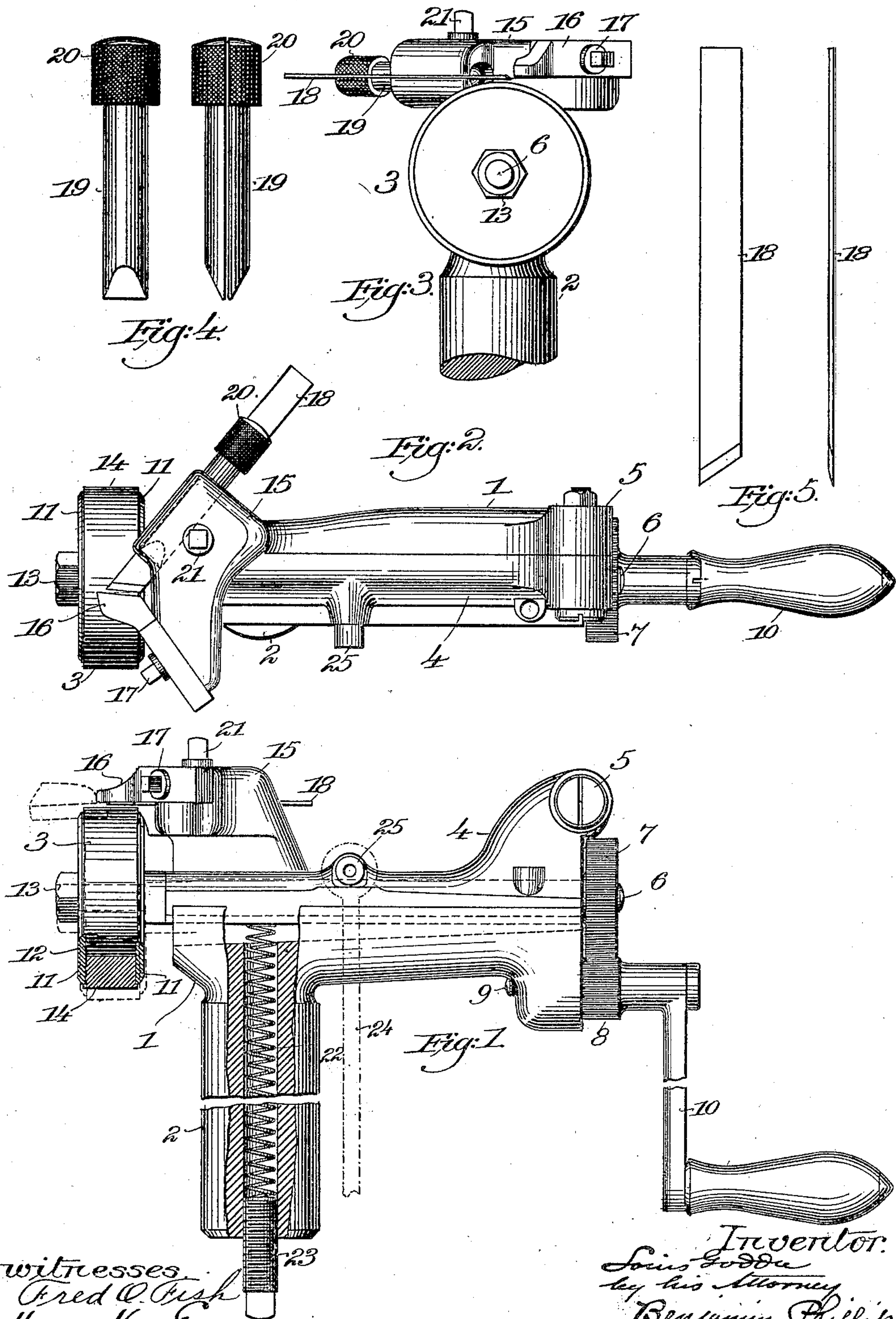
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Patented Oct. 15, 1901.

L. GODDU.  
WELT BEVELING MACHINE.

(Application filed Aug. 31, 1900.)

(No Model.)



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Fred O. Fish  
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# UNITED STATES PATENT OFFICE.

LOUIS GODDU, OF WINCHESTER, MASSACHUSETTS, ASSIGNOR TO GODDU SEWING MACHINE COMPANY, OF PORTLAND, MAINE, A CORPORATION OF MAINE.

## WELT-BEVELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 684,544, dated October 15, 1901.

Application filed August 31, 1900. Serial No. 28,629. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS GODDU, a citizen of the United States, residing at Winchester, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Welt-Beveling Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to an improvement in welt-beveling machines.

The object of the present invention is to produce a welt-beveling machine of simple construction and improved capacity for adjustment and operation.

To the above end the present invention consists in the welt-beveling machine hereinafter described, and particularly defined in the claims.

In the accompanying drawings, illustrating the preferred form of my invention, Figure 1 is a side elevation. Fig. 2 is a plan. Fig. 3 is a front elevation, and Figs. 4 and 5 illustrate details of construction hereinafter described of my improved welt-beveling machine.

The machine consists generally of a work-feeding device, a work-gage, and a welt-beveling knife. The knife and gage are fixed relatively to each other and the work-feeding device, and the knife and gage are so arranged and supported as to have motions toward and from each other to accommodate themselves to the varying thicknesses of the work.

The frame 1 is provided with a socket 2, which is adapted to be supported by a suitable standard. (Not shown.) The work-feeding device consists of a wheel 3, which is mounted in bearings in a lever 4, pivoted to the frame of the machine at 5. Upon the rear end of the shaft 6 is mounted the gear 7, which is adapted to be driven by the pinion 8, mounted on the short shaft 9 in the lower rear part of the frame of the machine. Suitable provision is made for rotating the pinion 8, as by means of the crank 10. The relative position of the gear 7 and the pivotal support for the lever 4 is such that the movement of the lever about the pivot necessary to com-

pensate for varying thicknesses of work will not materially alter the relative positions of the gear 7 and the pinion 8.

The work-feeding wheel 3 consists of two flanges 11, supported upon the shaft 6, having interposed therebetween a barrel 12. These parts are held on the shaft by means of the bolt 13, screwed onto the end of the shaft. Between the two flanges 11 and mounted upon the barrel 12 I place the work-engaging material 14, which I prefer to make of rubber.

Projected upwardly from the frame 1 is the knife and gage support 15. The gage 16 is provided with a rectangular shank which is received in a recess cut in the top of support 15 and secured therein by means of the screw-bolt 17. The gage extends over the feeding-wheel 3 and is adapted to enter the crease between the upper and the welt, the end of the gage contacting with the upper to position the work with relation to the trimming-knife and the work being clamped between the surface of the feeding-wheel 3 and the under side of the gage.

18 designates the trimming-knife, consisting of a thin flat blade, and 19 a holder therefor, consisting of a slotted cylindrical rod provided with a knurled head 20 at one end. The slot extends from end to end of the rod and is open at one side, whereby the sides of the rod at each side of the slot can be compressed to clamp the knife.

The holder 19 is adjustably held on the support 15 by means of a clamp formed by suitably boring and slotting a projecting portion of the support, a screw-bolt 21 being provided for tightening the clamp. The knife-holder is arranged so that its longitudinal axis extends at an angle to the line of feed, and the cutting edge of the knife extends transversely to this axis. By loosening the bolt 21 the holder 19 may be rotated to change the inclination of the edge of the knife with relation to the work, and the holder may also be moved longitudinally to bring the knife-edge into proper position to give the desired depth of cut. The knife can be moved longitudinally in the holder to bring the knife-edge into position or to cause the knife to project a suitable distance from the holder as the edge is worn away in sharpening.



For forcing the roll 3 toward the gage 15 to clamp the work I provide a coiled spring 22, seated in a hole bored in the socket 2 and pressing upwardly against the under side of the lever 4. A set-screw 23, on which the lower end of the spring 22 rests, serves as a means of adjusting the pressure exerted by the spring. A link 24, (shown in dotted lines, Fig. 1,) pivoted on the pin 25, projecting from the lever 4 and connecting with a treadle, serves as a means for depressing the roller 3.

In operation the roller 3 is depressed by the mechanism just described and the edge of a shoe-sole inserted beneath the gage 16. The roller 3 is now allowed to rise, and the edge of the sole is clamped between the roll and the under surface of the gage. The feeding-roller acts on the bottom of the sole and the gage on the upper surface of the welt, as clearly shown in dotted lines in Fig. 1. As the shaft 6 is revolved the work is fed against the trimming-knife by the roll 3 and properly guided by the end of the gage 16 engaging the shoe-upper.

The thickness of the shaving cut from the welt and the inclination of the bevel edge produced will be determined by the position of the knife. To change the inclination of the bevel, the knife-holder is rotated in its holding-clamp, thereby adjusting the knife about an axis extending longitudinally thereof, and to vary the thickness of the shaving the knife or its holder is moved longitudinally of its axis, the parts being securely clamped in position after adjustment by means of the bolt 21.

It will be seen that by my invention I provide a simple and efficient machine capable of a wide range of adjustment and capacitated for operation upon many different styles of work.

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

1. A welt-beveling machine, having, in combination, work feeding and guiding devices, a welt-beveling knife, the longitudinal axis of which extends at an angle to the line of feed and the cutting edge of which extends transversely to said axis, and means for holding the

knife constructed and arranged to allow the knife to be adjusted angularly about said axis to change the angle and longitudinally thereof to change the depth of the cut on the welt, substantially as described.

2. A welt-beveling machine, having, in combination, work feeding and guiding devices, a knife-holder the longitudinal axis of which extends at an angle to the line of feed, a knife-blade held therein provided with a cutting edge which extends transversely to said axis, and means for clamping the knife-holder constructed and arranged to allow the knife-holder to be adjusted angularly about said axis to change the angle and longitudinally thereof to change the depth of the cut on the welt, substantially as described.

3. A welt-beveling machine, having, in combination, work feeding and guiding devices, a knife-holder comprising a cylindrical bar the longitudinal axis of which extends at an angle to the line of feed, a knife-blade held therein provided with a cutting edge which extends transversely to said axis, and a clamp for the knife-holder constructed and arranged to allow the knife-holder to be adjusted angularly about said axis to change the angle and longitudinally thereof to change the depth of the cut on the welt, substantially as described.

4. A welt-beveling machine, having, in combination, a feeding-roller for engaging the bottom of a shoe-sole, a gage for entering the crease between the upper and the welt, a knife-holder comprising a slotted cylindrical bar, the longitudinal axis of which extends at an angle to the line of feed, and a clamp for the knife-holder constructed and arranged to allow the knife-holder to be adjusted angularly about said axis to change the angle and longitudinally thereof to change the depth of the cut on the welt, substantially as described.

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

LOUIS GODDU.

Witnesses:

HORACE VAN EVEREN,  
ALFRED H. HILDRETH.