

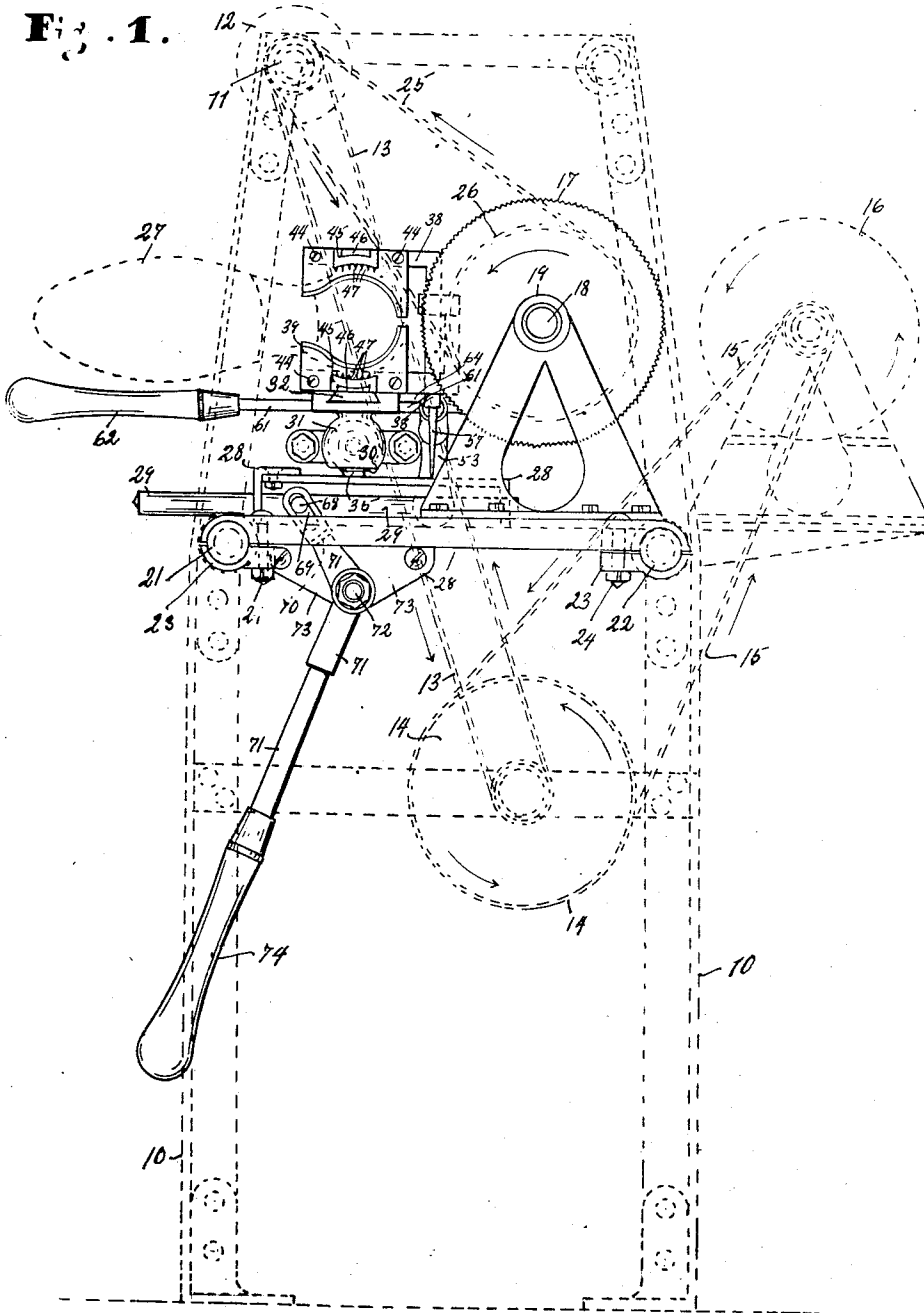
W. J. NESBITT.  
HEEL CUTTING APPARATUS.  
APPLICATION FILED JAN. 22, 1917.

1,250,488.

Patented Dec. 18, 1917.

3 SHEETS—SHEET 1.

Fig. 1.



Witness:  
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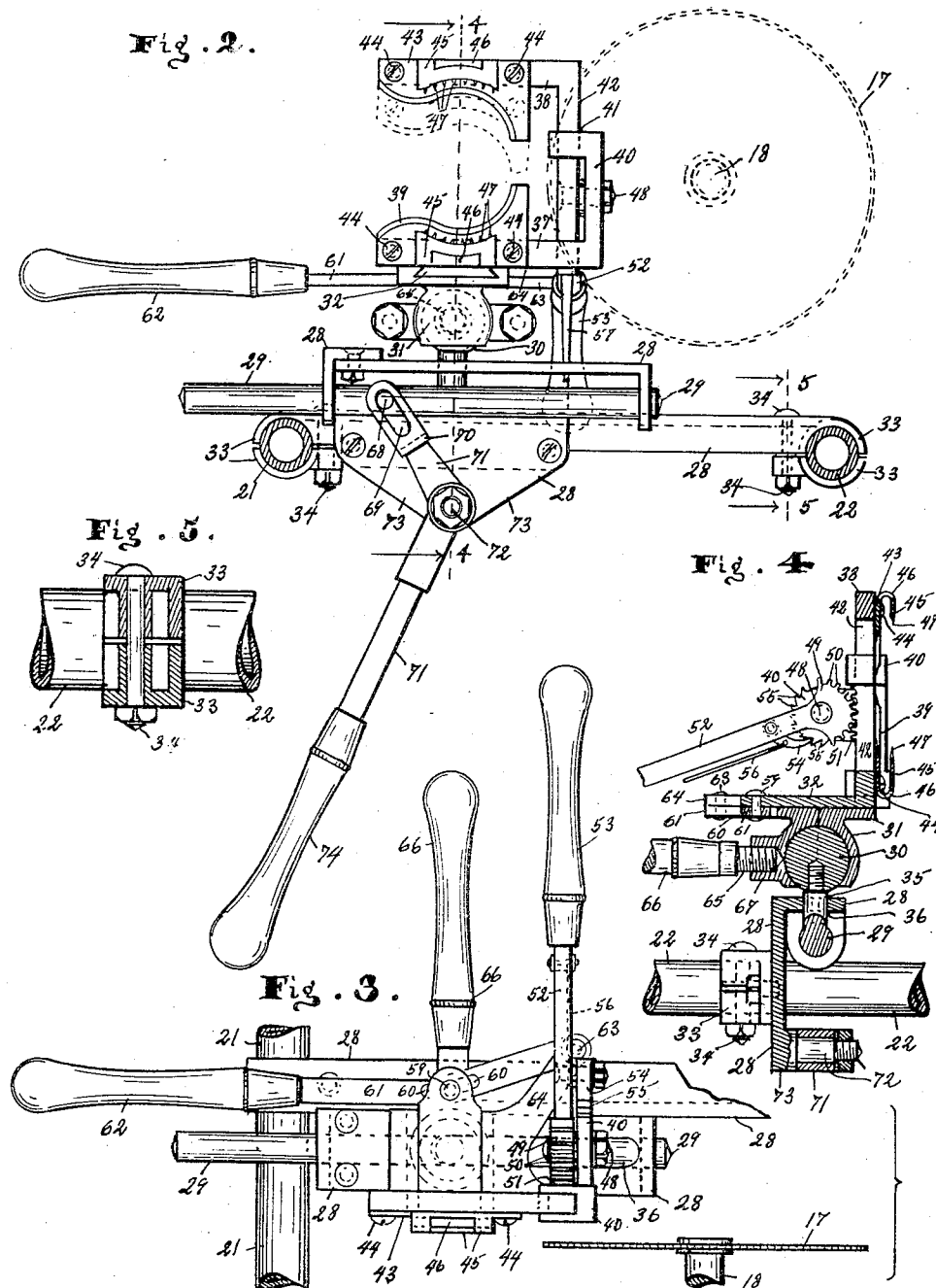
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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

Fig. 6.

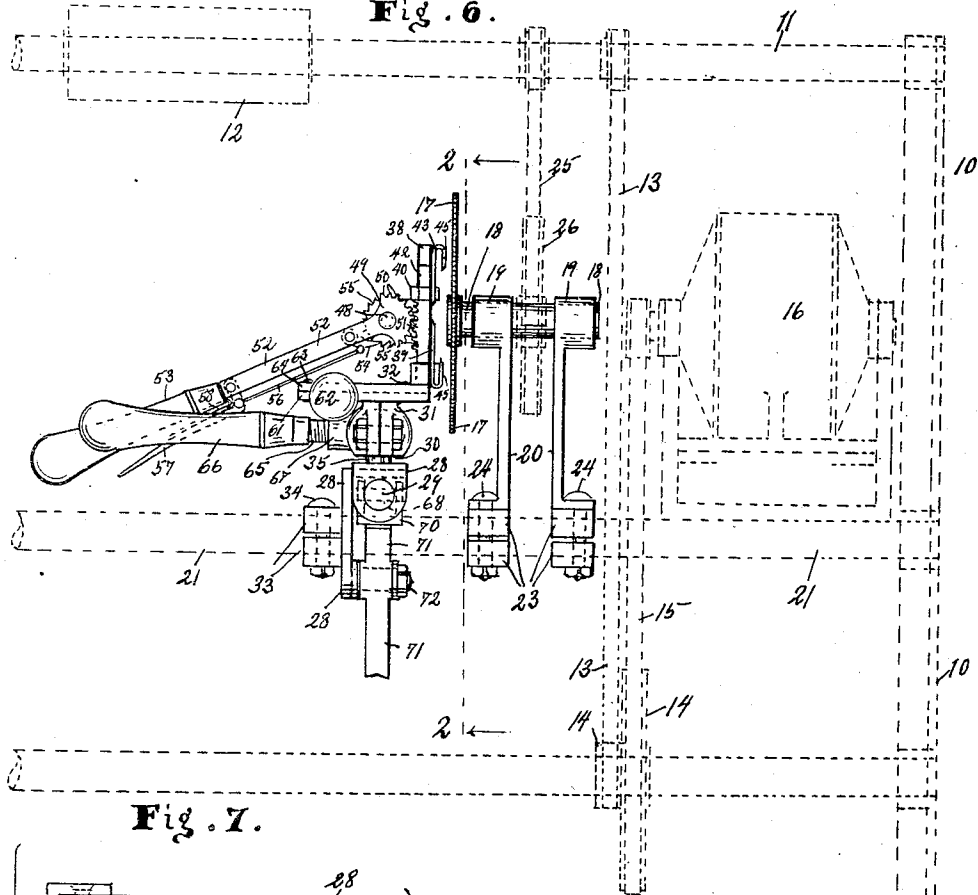


Fig. 7.

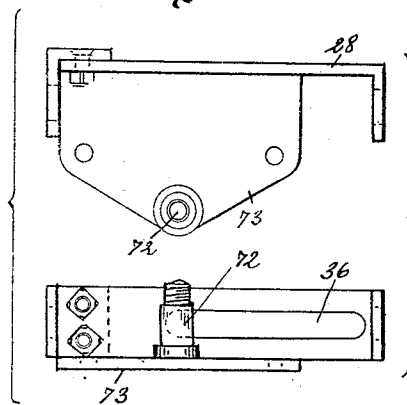
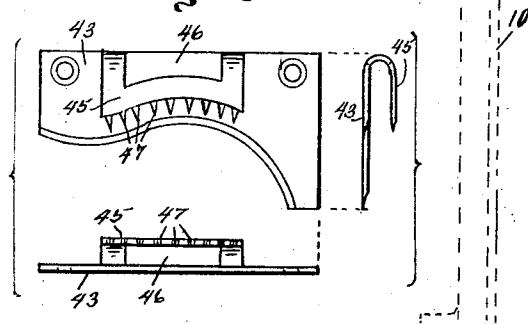


Fig. 8.



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# UNITED STATES PATENT OFFICE.

WILLIAM J. NESBITT, OF LOS ANGELES, CALIFORNIA.

## HEEL-CUTTING APPARATUS.

1,250,488.

Specification of Letters Patent.

Patented Dec. 18, 1917.

Application filed January 22, 1917. Serial No. 143,848.

*To all whom it may concern:*

Be it known that I, WILLIAM J. NESBITT, a citizen of the United States of America, residing at Los Angeles, county of Los Angeles, State of California, have invented a certain new and useful Heel-Cutting Apparatus; 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.

This invention relates to heel cutting apparatus, and it may be said to consist in the provision of the novel and improved construction, arrangement, and combination of parts and devices as will be apparent from the description and claims which follow hereinafter.

One object of the invention is to provide a novel and improved construction which makes the heel cutting apparatus easily and quickly attachable for use on the frame which carries other devices used for repair work on boots and shoes.

Another object of the invention is to provide a form of heel cutting apparatus comprising a novel and improved construction and arrangement of parts and devices, and a novel and improved construction of some of the parts and devices.

Further objects of the invention is to provide a novel and improved heel cutting apparatus which is simple and compact, light in weight, economical to manufacture and install, easy and convenient to operate, adapted to do quick and neat work in use, and which is generally effective for its purpose.

Other objects and the advantages of the invention will be apparent to those skilled in the art from a careful consideration of the following description of the preferred construction embodying the invention, taken in connection with the accompanying drawings in which—

Figure 1 is a side elevational view of the heel cutting apparatus attached to the frame; Fig. 2 is a sectional view taken on the line 2—2 of Fig. 6 and showing a por-

tion of the apparatus in side elevation; Fig. 3 is a broken plan view of a portion of the apparatus; Fig. 4 is a broken sectional view taken on the line 4—4 of Fig. 2; Fig. 5 is an enlarged broken sectional view taken on the line 5—5 of Fig. 2; Fig. 6 is an enlarged broken front elevational view of the apparatus; Fig. 7 shows an elevational view of the support, and a plan view of the underside of the support; and Fig. 8 shows elevational views of one of the heel clamping jaws, and also a plan view of the underside of the jaw.

The frame 10 may be of the usual or any approved construction, and, as shown in this instance, it has suitably mounted thereon the shaft 11 on which is mounted the burnishing device, indicated at 12, and any other devices used in the work of repairing shoes. The shaft 11 may be driven by means of the belt or sprocket chain 13 which is suitably connected between the shaft 11 and the pulley or sprocket wheel 14 which latter is suitably mounted on the frame 10 and is suitably connected by the belt or sprocket chain 15 to the electric or other motor 16 which may be suitably mounted on the frame 10.

The cutter 17 preferably consists of a circular saw which is mounted fast on the shaft 18 which latter is mounted in suitable spaced bearings 19 which are carried by the supports 20. The latter are easily and quickly detachably mounted on the bars 21 and 22 of the frame 10 by means of the split sleeves 23 and the bolts 24 which connect the half parts of the sleeves so that the latter are clamped in position on the frame 10. The cutter 17 may be driven by means of the belt or sprocket chain 25 which is suitably connected to the shaft 11 and to the pulley or sprocket wheel 26 on the shaft 18.

At the side of the cutter 17 is arranged the adjustably and movably mounted device for clamping the heel of the shoe 27. The mounting for the heel clamping device consists of the support 28 on which is slidably mounted the bar 29 which carries the ball 30 which is adjustably fitted in the split socket 31 which latter has thereon the ad-

justable guide 32 which carries the heel clamping device. The support 28 is easily and quickly detachably mounted on the bars 21 and 22 by means of the split sleeves 33 the half parts of which are connected by the bolts 34 whereby said sleeves can be clamped on the bars 21 and 22. The ball 30 is preferably connected to the bar 29 by the stem 35 which is fitted in the guideway 36 with which the support 28 is provided.

The heel clamping device preferably consists of the lower jaw 37 which is integral with or may be attached to the guide 32, and the upper jaw 38 which is slidably mounted on the lower jaw 37. As shown, the lower jaw 37 has thereon the plate 39 and has an upward extension 40 provided with a guideway 41 in which is fitted the downward extension 42 of the upper jaw 38 which latter has thereon the plate 43. The plates 39 and 43 may be secured in position on the jaws by means of the screws 44, and they are arranged in substantially the same vertical plane and adapted to fit in the crease between the heel seat and the heel of the shoe 27. The plates 39 and 43 are preferably stamped out of metal and one or both of them is formed with the integral extension 45 which is provided with the opening 46 and with the teeth 47. As shown the extension 45 is bent over so that the teeth 47 are adapted to grip the heel of the shoe 27 when the plate 39 is positioned in the crease between the heel seat and the heel of the shoe 27, and the opening 46 permits the operator to have a clear view in placing the plate 39 in the crease. The extension 40 has thereon the pivot 48 on which is mounted the sector 49 provided with teeth 50 in mesh with teeth 51 on one side of the extension 42. An arm 52 provided with the handle 53 is connected to the toothed sector 49 and said arm 52 has thereon the pivoted dog 54 adapted to engage the teeth 55 on the extension 40 and connected by the rod 56 to the lever 57 which is pivotally mounted on the arm 52 adjacent to the handle 53. When the heel is placed in position on the lower jaw 37 the lever 57 may be pressed to effect disengagement of the dog 54 with the teeth 55, and then the arm 52 may be moved to move downwardly the jaw 38 into engagement with the heel, whereupon the lever 57 may be released so that the spring 58 which is arranged between the lever 57 and the handle 53 acts on the lever 57 so that the dog 54 is moved into engagement with the teeth 55 and the jaw 38 is thus locked in engagement with the heel.

The guide 32 is preferably slidably fitted in a corresponding guideway on the upper part of the socket 31, and said guide 32 has thereon a pin 59 which is fitted in the slot 60 in the lever 61 which latter is provided

with the handle 62 at one end and has its other end connected to the pivot 63 on the extension 64 of the upper part of the socket 31. By moving the lever 61 the guide 32 and consequently the heel clamping device can be moved at right angles to the plane of the cutter 17 so that the heel can be adjusted relatively to the cutter 17 according to the amount that it is desired to cut off of the heel.

A screw 65 is mounted on the socket 31 and it is provided with a handle 66 and with a pointed end 67 which is adapted to engage the ball 30. The screw 65 can be turned to have the pointed end 67 disengaged from the ball 30, whereupon the handle 66 can be moved to move the socket and the parts mounted thereon so the heel can be disposed to make an angular cut longitudinally of the heel or an angular cut transversely of the heel, and then the screw 65 can be turned to have the pointed end 67 engage the ball 30 and thus lock the parts in adjusted position.

The bar 29 has thereon the pins 68 fitted in slots 69 provided in the yoke 70 at the upper end of the angular lever 71 which is mounted on the pivot 72 on the downward extension 73 of the support 28 and is provided with the handle 74. When the heel is adjusted as desired relatively to the cutter 17 the lever 71 can be moved to effect movement of the bar 29 and the parts carried thereby to move the heel past the cutter 17 and thus cut the heel.

The construction which has been particularly illustrated and described admits of changes and modifications—wherefore the right is reserved to all such changes and modifications as do not depart from the spirit and scope which is defined in the appended claims.

I claim:

1. Heel cutting apparatus comprising the combination of a frame, a support detachably mounted on the frame, a ball movably mounted on said support, a socket fitted on said ball, a heel clamping device mounted on said socket, a circular saw, and means to support said saw detachably connected to said frame.

2. Heel cutting apparatus comprising the combination of a support, a ball movably mounted on said support, a socket fitted on said ball, a heel clamping jaw carried by the socket and having an extension provided with a guideway, and a heel clamping jaw provided with an extension slidably fitted in said guideway.

3. Heel cutting apparatus comprising a cutter, a ball, means to move said ball parallel to the plane of the cutter, a socket fitted adjustably on said ball, a guide carried by said socket and movable at a right angle to

the plane of the cutter, and a heel clamping device carried by said guide.

4. Heel cutting apparatus comprising a support provided with a guideway, a bar  
5 slidably mounted on said support, a ball having a stem fitted in said guideway and connected to said bar, a socket adjustably fitted on said ball, an adjustable guide car-

ried by said socket, and a heel clamping device carried by said guide.

10 In testimony whereof I have signed my name to this specification at Los Angeles, county of Los Angeles, State of California, this 13th day of January A. D. 1917.

WILLIAM J. NESBITT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."