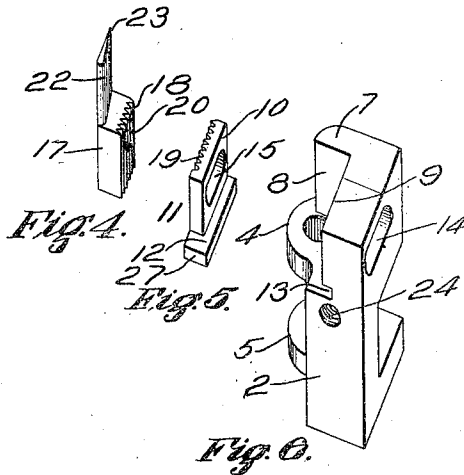
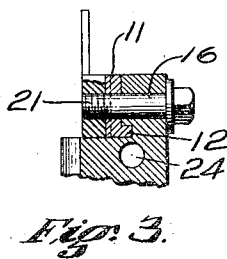
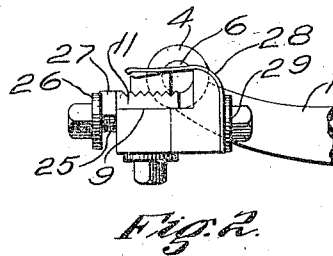
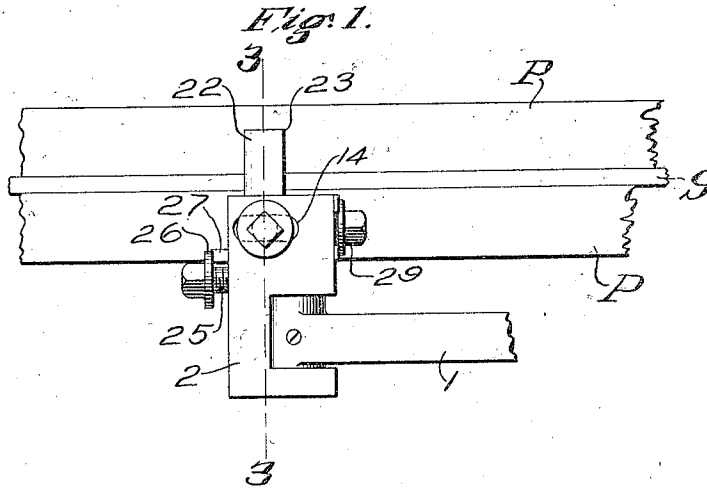


C. P. STANBON.
 KNIFE MOUNTING FOR SOLE ROUNDING MACHINES.
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944,386.

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UNITED STATES PATENT OFFICE.

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KNIFE-MOUNTING FOR SOLE-ROUNDING MACHINES.

944,386.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES P. STANBON, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented an Improvement in Knife-Mountings for Sole-Rounding Machines, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

The invention to be hereinafter described relates to sole rounding machines, and more particularly to the knife mounting in such machines, whereby the sole is trimmed or cut to the pattern, as usual in this class of machines.

It has been proposed heretofore to fixedly mount the knife or cutter upon a plate which was itself adjustable, so as to carry the cutting edge of the knife into proper relation with the axis of support of the knife carrier base. As will be readily apparent from such construction, the knife was not adjustable independent of its carrying plate toward and from the axis of the knife carrier base.

In the present invention the aims and purposes have been to provide a construction whereby the knife or cutter might be readily adjusted independently of adjacent parts, in order to bring the cutting edge into proper position, all as will hereinafter more fully appear in connection with the following description and accompanying drawings of one form of means for carrying the invention into practical effect.

In the drawings: Figure 1 is a detached detail view showing the knife mounting and the relation of the knife to the patterns or clamps which hold the sole to be trimmed; Fig. 2 is a detail plan view of the knife and mounting indicated in Fig. 1; Fig. 3 is a section on the line 3—3 of Fig. 1, the lower portion of said section being broken away; Fig. 4 is a detail perspective view of the knife; Fig. 5 is a detail perspective view of the knife washer; and Fig. 6 is a detail perspective view of the knife carrier block.

Referring more particularly to Figs. 1 and 2 of the drawings, the knife carrying arm 1 is of usual construction and has pivotally mounted thereon the knife carrier block 2, said block being provided with lugs 4, 5. Fig. 6, for receiving a pin 6, Fig. 2,

which serves as the pivotal support connecting the carrier block 2 with the arm 1, as will be readily understood, the construction being such that the block 2 may swing upon its pivotal connection with the arm 1. The upper portion of the block 2 is provided with a transversely extending shoulder 7, Fig. 6, forming above the lug 4 a recess 8 for the reception of the knife and knife washer, as will presently appear.

The knife carrier block 2 is provided with a straight bearing surface 9 against which rests the surface 10 of a washer 11, Figs. 2, 3 and 5, said washer being preferably provided near its lower portion with an offset or extending lip portion 12 adapted to engage a corresponding undercut portion 13 in the block 2, Figs. 3 and 6, the lower face of the portion 12 being adapted to slide on the opposed face portion of the carrier block, as will be readily apparent.

The carrier block 2, near its upper portion, is provided with a slot 14, and the knife washer 11 is provided with a corresponding slot 15, said slots being for the purpose of receiving a knife clamping screw 16, Fig. 3, as will hereinafter more fully appear.

The knife is preferably formed as indicated in Fig. 4 and comprises a base portion 17 having corrugations or like projections and recesses 18 in one face thereof, said corrugations 18 being adapted to engage like corrugations 19 in the face of the knife washer 11, as indicated in Figs. 2, 4 and 5. The knife base 17 is also provided with a screw-threaded aperture or recess 20, adapted to receive the correspondingly screw-threaded end 21 of the screw 16 for holding the knife individually in its adjusted position. Projecting upward from the knife base 17 is the knife blade or cutter 22, the cutting edge 23 of which is adapted to act upon the sole 3 held between the clamps or patterns P, Fig. 1.

From the construction thus far described it will be apparent that, upon loosening the screw 16, the knife may be readily unclamped and readjusted with relation to the knife washer 11 to bring into engagement other corrugated portions of the co-acting surfaces of the knife base and knife washer, and that, upon setting up the screw 16 and bearing the knife firmly against the knife washer, the parts may be held in their re-

adjusted position. It will be noted that the knife washer 11 is not a carrier for the knife but rather an interposed washer having corresponding corrugated or projecting portions on its face which engage like corrugations or projecting portions on the adjacent face of the knife base, the purpose being to maintain the knife in proper adjusted and vertical position. By reason of the extended bearing portion 12 of the knife washer, all strain which is placed upon the knife or cutter 22 during the cutting operations is transmitted to the knife carrier block and the knife and washer are thus maintained in their proper vertically disposed position with relation to the knife carrier block.

The knife carrier block is provided with an interiorly screw-threaded recess 24 which is engaged by an adjusting screw 25, Figs. 20 1 and 2, the flanged head portion 26 of which is adapted to engage the rearwardly projecting end 27 of the knife washer 11, the construction being such that the flanged head portion of the screw 25 serves to hold the washer in position, in addition to the clamping action of the knife clamping screw 16.

By making the knife washer 11 independent of the knife, and the latter adjustable to carry the knife edge into proper position with respect to the axis of support of the knife carrier block independently of any movement of the knife washer, it will be obvious that the knife may be readily removed for the purpose of grinding and be adjusted, irrespective of any adjustment of the knife washer. Likewise, by having these parts independent of each other and the knife washer interposed between the knife base and the carrier block, different characters of knife washers, both as to size and disposition of the corrugations in the surface thereof, may be readily substituted the one for the other in order to enable the knife edge to be properly positioned with respect to the axis of the knife carrier block. For instance if it be desirable to adjust the cutting edge 23 of the knife outward from the carrier block, or to the left Fig. 3, it is only necessary to substitute for the knife washer another of somewhat greater thickness, and if it be desired to give greater nicety of adjustment of the knife edge 23 toward or from the axis of the carrier block, it is only necessary to provide a knife washer and knife base with the character of corrugations or projections and depressions suitable to this end, as will be readily understood by those skilled in the art.

In order that the knife carrier block, which as usual is spring pressed toward the work supports or patterns P, P, may have a proper bearing surface against one of these work supports or patterns, a bearing spring 28 is provided, Fig. 2, said spring

being clamped in place by a proper clamping screw 29 and the end portion of said spring being carried around, as indicated in Fig. 2, in front of the knife base 17.

What is claimed is:

1. A knife holder for sole rounding machines, comprising in its construction a pivotally mounted knife carrier block, a knife having a knife base provided with corrugations in one face, a knife washer having a corrugated face and interposed between the knife base and the knife carrier block, and a screw engaging the knife base for drawing the knife base into holding relation with the knife washer and knife carrier block.

2. A knife holder for sole rounding machines, comprising in its construction a pivotally mounted knife carrier block, a knife having a knife base, a knife washer interposed between the knife base and knife carrier block, and means engaging said knife base to permit adjustment of the knife independent of the washer and for clamping the knife and washer in holding relation to the knife carrier block.

3. A knife holder for sole rounding machines, comprising in its construction a pivotally mounted knife carrier block having an elongated slot, a knife having a screw-threaded portion, a knife washer having an elongated slot, and a screw bolt engaging the threaded portion of the knife and passing through the slotted portions of the knife washer and knife carrier block.

4. A knife holder for sole rounding machines, comprising in its construction a pivotally mounted knife carrier block, a knife having a knife base, a knife washer interposed between the knife base and knife carrier block and provided with a projecting foot portion to engage the carrier block, and means engaging said knife base to permit adjustment of the knife independent of the washer and for clamping the knife and washer in holding relation to the knife carrier block.

5. A knife holder for sole rounding machines, comprising in its construction a pivotally mounted knife carrier block having a recessed portion, a knife having a knife base to support the knife, a knife washer having a projecting foot portion to engage the recessed portion of the knife carrier block, and means for clamping the knife base, the knife washer and knife carrier block in holding relation and permitting adjustment of the knife independent of the knife washer.

6. A knife holder for sole rounding machines, comprising in its construction a pivotally mounted knife carrier block having an elongated slot, a knife having a screw-threaded portion, a knife washer having an elongated slot, a screw bolt engaging the threaded portion of the knife and passing through the slotted portions of the knife

washer and knife carrier block, and a screw having a bearing head to hold the knife washer in position.

7. A knife holder for sole rounding machines, comprising in its construction a pivotally mounted knife carrier block, a knife having a knife base, a knife washer interposed between the knife base and knife carrier block, means engaging said knife base to permit adjustment of the knife independent of the washer and for clamping the

knife and washer in holding relation to the knife carrier block, and a bearing spring secured to the knife carrier block and extending about the knife base.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

CHARLES P. STANBON.

Witnesses:

ROSWELL F. HATCH,
REDFIELD H. ALLEN.

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