March 10, 1936. C. E. HARRIMAN ET AL 2,033,895

METHOD OF REMODELING LASTS

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Fig. 1.

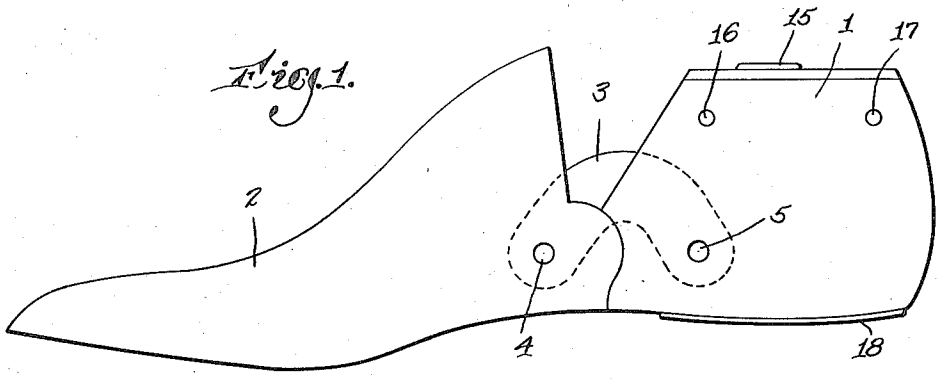
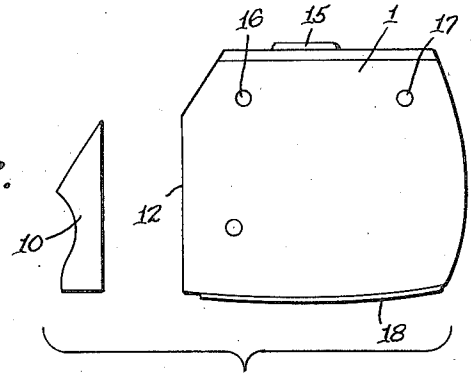


Fig. 2.



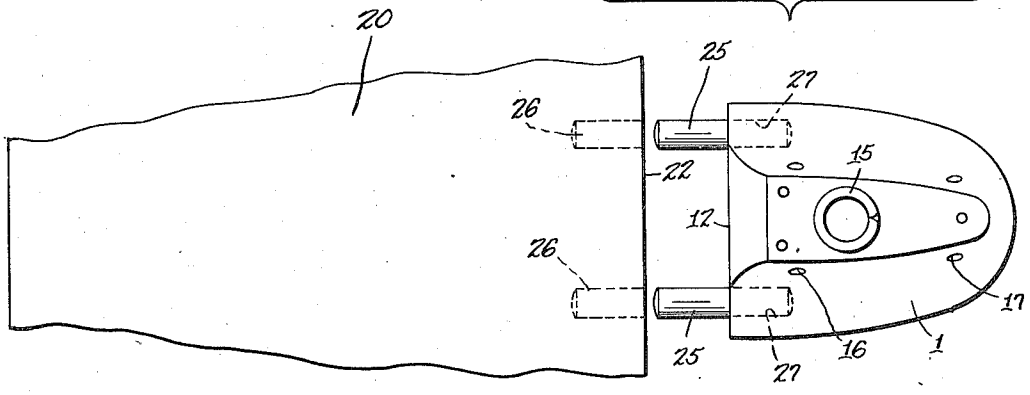


Fig. 3.

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Fig. 4.

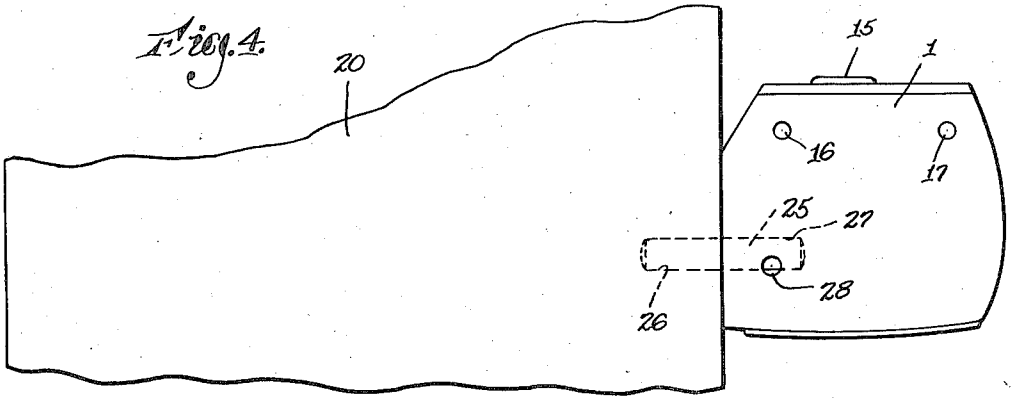


Fig. 5.

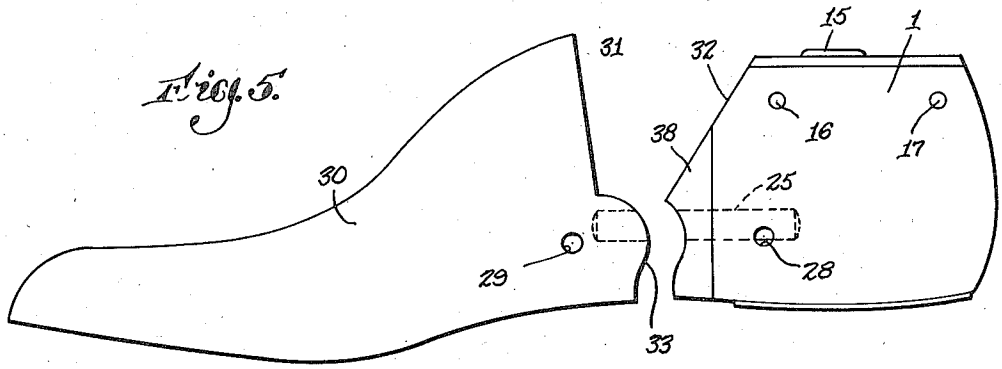
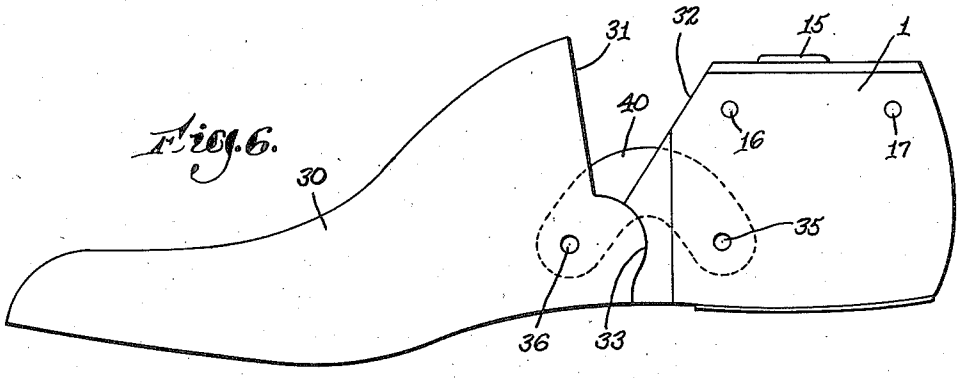


Fig. 6.



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UNITED STATES PATENT OFFICE

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METHOD OF REMODELING LASTS

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Application September 18, 1935, Serial No. 41,068

3 Claims. (Cl. 144—309)

Our present invention is a novel and improved method of last construction, and an improved last made thereby.

It is an important object of our present invention to enable the remodeling of lasts, particularly of the forepart, to be effectively, economically, and efficiently carried out, and while the invention is primarily directed to such remodeling or remaking, it is also within the scope of the invention to utilize our method for the manufacture of original last structures, particularly hinge lasts.

In the remodeling of lasts, particularly hinge lasts, it has heretofore been customary to cut off a part of the forepart, apply blocks, wedges, or additional sections, and then turn the forepart to give a different style from that of the original last. Usually the heel portion of lasts of similar sizes are substantially uniform, but the constant changes in styles and designs necessitate corresponding changes in the forepart and, therefore, the remodeling of the forepart has become an established practice.

However, great difficulty has been experienced in the remodeling of such lasts because of the many difficulties encountered, such for example as getting the same properly aligned with the forepart, centering the remodeled forepart and heel part in a lathe, and, in addition, the difficulties of making any substantial changes in the original model.

Our present invention has for its object to obviate the difficulties above briefly outlined and to provide a method of remodeling which will give a complete and entirely new forepart structure formed on as widely a different contour and design as that of any original last design.

In carrying out our invention we cut off the heel portion adjacent the hinge and thereupon attach securely to the heel an entirely new forepart block; thereupon turning the new block into the desired last design; thereafter forming any line of cut between the thus newly turned forepart and the heel portion, and thereupon fit such hinge or connecting link, or links, as may be desired.

Further advantages, important features, and novel constructions will be hereinafter more fully pointed out and claimed.

Referring to the drawings illustrating a preferred embodiment of our method and the improved last construction made thereby,

Fig. 1 is a side view of a conventional style of last which it is desired to remodel;

Fig. 2 illustrates diagrammatically the cutting of the heel part;

Fig. 3 is a plan view showing the method of attachment of the new forepart block with the heel part;

Fig. 4 is a side view of the new forepart and heel portion;

Fig. 5 illustrates the same after it has been turned and with the new line of division between the forepart and heel part cut, and

Fig. 6 illustrates the remodeled last reassembled.

As shown in the drawings, we have illustrated a typical hinge last having a heel portion 1, forepart 2, any desired connecting link or hinge 3 secured by pins 4 and 5, as shown. The first step in our process is to drive out the pins 4 and 5 and separate the last parts, the forepart being entirely discarded. Thereupon, we form a straight plane cut substantially vertical on the heel part, dividing a small section from the heel part 1, as shown at 10, Fig. 2, giving the plane, flat surface 12 of substantial area, leaving the heel part with its thimble 15, reinforcing bolts 16 and 17, and heel plate 18 intact. Thereupon, we fit a new block 20 of suitable length and proportions from which the new forepart is to be cut, severing the end of this block in a straight plane surface 22 to fit and contact with the surface 12 which has been formed on the heel part. Any suitable means may be used to unite the forepart block 20 and heel 1.

Ordinarily, glue may be sufficient during the turning and subsequent cutting and fitting, but we prefer to utilize two or more dowels 25—25 fitted in appropriate recesses 26—26 in the fore block 20, and 27—27 in the heel part 1; thereupon driving the two parts 1 and 20 together and uniting the same by glue in addition thereto, so that the prepared last as thus far made is shown in Fig. 4 and is ready for fitting in the turning lathe before turned at the new forepart 30.

Thereupon the last as thus far constructed is subjected to the turning operation and is, thereafter, cut on the usual lines of division 31, 32, and 33. If desired, the hinge recess in the heel portion may be pegged or closed and a new recess bored to receive the new hinge pin 35 to cooperate with the new hinge pivot 36 in the forepart for securing the hinge 40. The original hinge 3 may be used for this purpose, if desired, and the last parts assembled and completed as shown in Fig. 6.

Our method thus enables us to make an en-

tirely new and different style of last, with the forepart 30 radically different from that of the original forepart 2, and often of different sizes. This is accomplished without disturbing the thimble and other fittings on the heel part 1 and, furthermore, enables the completed last structure to be quickly, easily, and readily assembled, centered, turned, and lines of cut sawed therethrough, and the hinge applied all in accordance with standard and existing methods without any extra difficulty, jigs, fittings, operations, or the like.

We claim:

1. The improved method of remodeling lasts, which consists in disassembling the forepart from the heel part, preparing a smooth flat surface of substantial area on the heel part, securing thereto a last block of sufficient area to produce an entire forepart, thereupon turning the said block into the contour of the forepart desired, thereafter severing the forepart and heel by a line of cut independently of the contacting surface of the original heel and block, and applying a hinge.

2. The improved method of remodeling lasts, which consists in disassembling the forepart from the heel part, preparing a smooth flat surface of substantial area on the heel part, securing thereto a last block by means of dowels, said block being adapted to produce an entirely new forepart, thereupon turning the said block into the contour of the forepart desired, thereafter severing the forepart and heel by a line of cut independently of the contacting surface of the original heel and block, and applying a hinge.

3. The improved method of remodeling lasts, which consists in disassembling the forepart from the heel part, preparing a smooth flat surface of substantial area on the heel part by a line of cut forward of the thimble, heel plate, and fittings in said heel part, applying and securing thereto a last block of sufficient area to produce an entirely new forepart, thereupon turning the said block into the contour of the forepart desired, thereafter severing the forepart and heel by a line of cut independently of the contacting surface of the original heel and block, and applying a hinge.

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