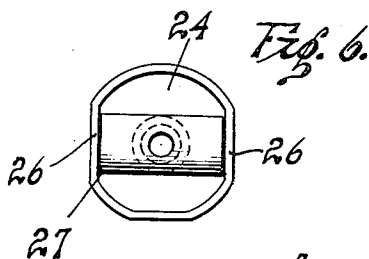
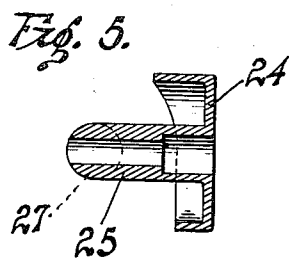
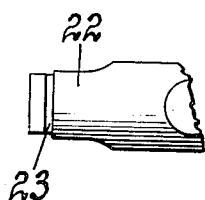
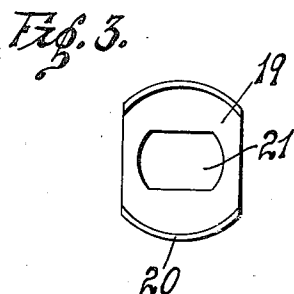
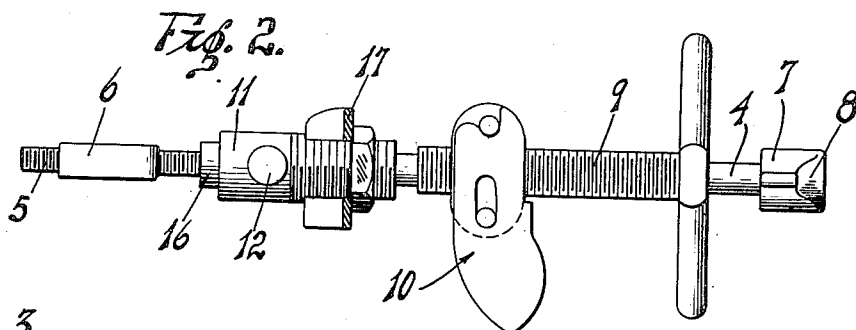
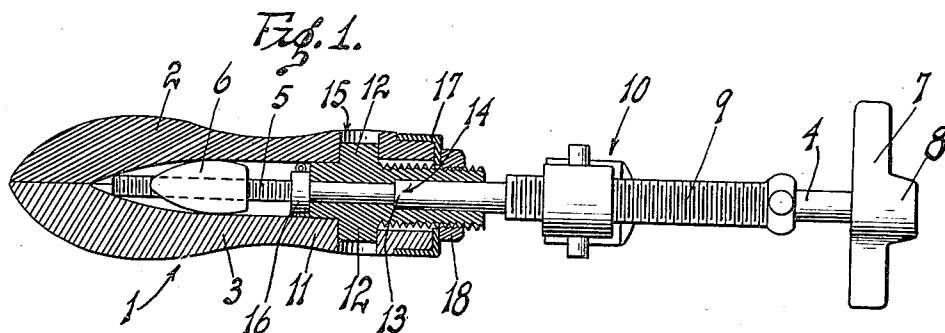


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SHOE STRETCHER

2,104,839

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2,104,839

SHOE STRETCHER

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6 Claims. (Cl. 12—128.3)

This invention relates to a shoe stretcher and an object of my invention is to enable the operator to interchange the blocks of the stretcher to conform with the type or size of shoe to be stretched.

Another object is to provide a novel shoe stretcher construction in which the stretcher can be hammered into position by striking the end of the control shaft.

Still another object is to provide a novel means of holding the blocks in position, said means being releasable to permit removal of the blocks.

Other objects, advantages and features of invention may appear from the accompanying drawing, the subjoined detailed description and the appended claims.

In the drawing

Figure 1 is a longitudinal sectional view of my shoe stretcher.

Figure 2 is a side elevation of the same with the blocks removed and with the block engaging ferrule in section.

Figure 3 is an end view of a modified form of ferrule.

Figure 4 is a fragmentary side elevation of the sleeve upon which the ferrule shown in Figure 3 is mounted.

Figure 5 is a longitudinal sectional view of a further modified form of ferrule integral with the sleeve.

Figure 6 is an end view of the form shown in Figure 5.

Referring more particularly to the drawing, the numeral 1 indicates a shoe stretcher comprising a pair of blocks 2, 3 which are inserted into the shoe in the usual and well known manner. A shaft 4 extends between the blocks 2, 3 and the inner end is threaded as shown at 5. A wedge 6 is mounted on the threaded portion 5 of the shaft and on rotation of the shaft, the wedge is moved forwardly to expand the blocks 2, 3. A handle 7 is mounted on the outer end of the shaft 4 and this handle is provided with a heavy boss 8 which is adapted to be hammered upon when the shoe stretcher is forced into the shoe. A threaded sleeve 9 is fitted over the shaft 4 and this sleeve carries the heel plate 10 of the character disclosed in my Patent No. 2,069,537, or if desired, a heel plate of a different character could be employed. A sleeve 11 is fitted on the shaft 4 and this sleeve is provided with outwardly extending pins 12—12, which are preferably integral with the sleeve. A shoulder 13 is formed within the sleeve 11 and the shaft 4 is enlarged as shown at 14 so as to fit against the shoulder 13. The blocks 2, 3 are pro-

vided with a hole 15 into which one of the pins 12 extend. Thus it will be evident that by hammering upon the boss 8, the force of the blow will be transmitted into the shaft 4, thence into the sleeve 11 and then to the blocks 2, 3. By this arrangement the blocks are not damaged and there is less tendency for them to spread under the force of a blow. The collar 16 on the shaft 4 holds the sleeve 11 in position on said shaft as shown in Figure 1. A ferrule 17 fits on the sleeve 11 and this ferrule is held on the end of the blocks 2, 3 by the nut 18 which screws onto the threads formed on the sleeve. The ferrule 17 is substantially "U" shaped and the sides of the same engaging the blocks 2, 3 in the plane of the pins 12.

The blocks 2, 3 fit somewhat loosely on the pins and also a space is provided between the blocks and the sleeve 11 so that these blocks can swing outwardly to stretch the shoe. In Figure 3 and 4 I have disclosed a modified form of ferrule 19, the opposite flanges, 20 of which are arcuate. An elongated hole 21 in the ferrule fits over the outer end of the sleeve 22. By turning the ferrule through 90° the elongated hole 21 will fit into opposite grooves 23 in the sleeve. A partial rotation of the ferrule will thus release or secure the same to the sleeve, thus permitting the shoe blocks to be replaced when necessary. In the modification shown in Figures 5 and 6, the ferrule 24 is substantially circular although the opposite sides thereof are flattened as shown at 26 so as to better engage the rear end of the shoe blocks 2, 3. In this type of ferrule here under discussion, a sufficient space is provided from the pins 27 to the ferrule so that the shoe blocks 2 or 3 can be inserted endwise into the ferrule and then snapped over one of the pins 27.

Having described my invention, I claim:

1. A shoe stretcher comprising a pair of blocks, a shaft extending into the blocks, block expanding means mounted on the shaft and operable thereby, a sleeve on the shaft, pins on said sleeve, said pins extending into the blocks, a ferrule engaging outer ends of the blocks and means removably mounting the ferrule on said sleeve.

2. A shoe stretcher comprising a pair of blocks, a shaft extending into the blocks, block expanding means mounted on the shaft and operable thereby, a sleeve on the shaft, pins on said sleeve, said pins extending into the blocks, a shoulder in the sleeve, said shaft being enlarged to engage the shoulder whereby the force of a blow on the shaft is transmitted to the sleeve and thence to the blocks.

3. A shoe stretcher comprising a pair of blocks,

a shaft extending into the blocks, block expanding means mounted on the shaft and operable thereby, a sleeve on the shaft, pins on said sleeve, said pins extending into the blocks, a shoulder in the sleeve, said shaft being enlarged to engage the shoulder whereby the force of a blow on the shaft is transmitted to the sleeve and thence to the blocks, and a ferrule removably mounted on said sleeve, said ferrule engaging the outer ends of the blocks.

4. A shoe stretcher comprising a pair of blocks, a shaft extending into the blocks, block expanding means mounted on the shaft and operable thereby, a sleeve on the shaft, pins on said sleeve, said pins extending into the blocks, a shoulder in the sleeve, said shaft being enlarged to engage the shoulder whereby the force of a blow on the shaft is transmitted to the sleeve and thence to the blocks, and a ferrule removably mounted on said sleeve, said ferrule engaging the outer ends of the blocks, and a nut threaded onto the sleeve, said nut engaging a ferrule whereby the ferrule is held in engagement with the blocks.

5. A shoe stretcher comprising a pair of blocks,

a shaft extending into the blocks, block expanding means mounted on the shaft and operable thereby, a sleeve on the shaft, pins on said sleeve, said pins extending into the blocks, a shoulder in the sleeve, said shaft being enlarged to engage the shoulder whereby the force of a blow on the shaft is transmitted to the sleeve and thence to the blocks, and a ferrule on the outer end of the sleeve, said ferrule engaging the outer ends of said blocks.

6. A shoe stretcher comprising a pair of stretching blocks, a shaft arranged between said blocks, block expanding means mounted on the inner end of the shaft and operable thereby, a sleeve mounted on the shaft, a pair of pins projecting from the sleeve, each of the pins extending into a block, a shoulder in the sleeve against which the shaft bears, a substantially "U" shaped ferrule mounted on the sleeve, means releasably mounting the ferrule on said sleeve, said ferrule engaging the outer ends of the blocks in the plane of said pins.

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