No. 722,517. PATENTED MAR. 10, 1903.

J. KARLSON.

SHOE STRETCHING DEVICE.

APPLICATION FILED SEPT. 19, 1902.

NO MODEL.

Fig. 1.

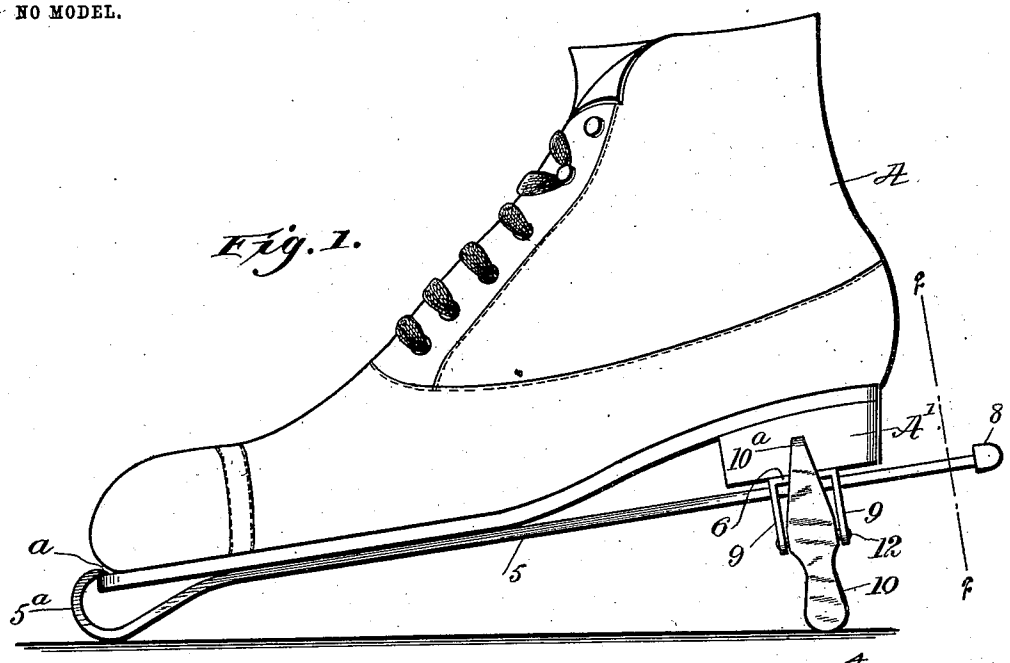


Fig. 2.

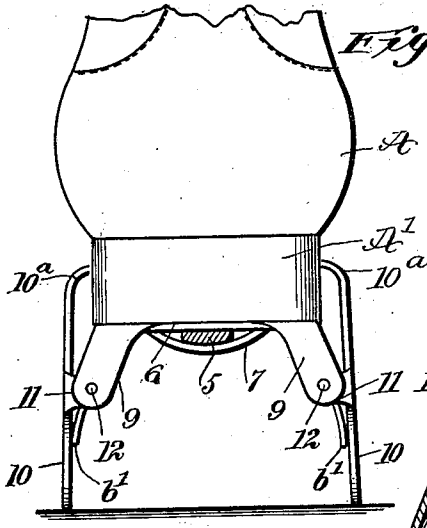
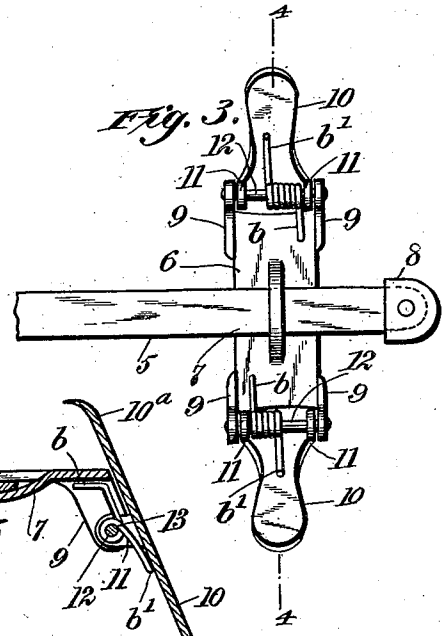


Fig. 3.



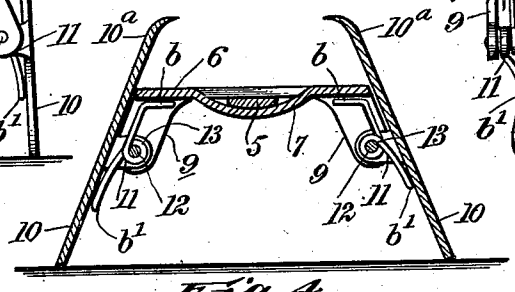


Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN KARLSON, OF NEW YORK, N. Y.

SHOE-STRETCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 722,517, dated March 10, 1903.

Application filed September 19, 1902. Serial No. 124,013. (No model.)

To all whom it may concern:

Be it known that I, JOHN KARLSON, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Shoe-Stretching Device, of which the following is a full, clear, and exact description.

The object of this invention is to provide a novel, simple, and convenient appliance for shoes or boots to hold the soles straight on their lower surfaces and stretch the uppers thereof, so as to prevent the formation of transverse wrinkles or scores in the shoe-leather that render the foot-gear unsightly and also injure the same by causing breaks in the material.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of the improvement applied upon a shoe to straighten the sole and stretch wrinkles out of the upper-leather. Fig. 2 is a rear end view of the appliance secured on a shoe, partly in section, on the line 2 2 in Fig. 1. Fig. 3 is a reverse plan view of the rear portion of the device, and Fig. 4 is a transverse sectional view substantially on the line 4 4 in Fig. 3.

It is to be understood that the single appliance shown in the drawings is employed in pairs for preserving the shape of foot-gear, the duplicate devices being applicable to footwear for males or females and can be readily secured in place upon shoes or boots that may vary considerably in size.

Each stretcher device comprises the following details:

5 represents a preferably flat metal bar having a length sufficient to permit its use on shoes or the like of the largest size worn by men. Upon one end of the stretcher-bar 5 a hook member 5^a is bent and at its free extremity is tapered to give it a thin lip *a*, which may be readily engaged with the toe portion of a shoe A (see Fig. 1) by insertion of the lip at the point where the shoe-sole joins the upper-leather.

Upon the bar 5 a heel-clamp is loosely mounted, consisting of a base-plate 6, preferably of flat metal, having sufficient area and an oblong shape and slidably mounted upon the stretcher-bar 5, this loose engagement being effected by providing a keeper loop or projection 7 on the lower side of the base-plate 6 at its center of width and length. The keeper-loop 7 may be attached to the base-plate; but, as shown, it is integrally formed therewith by cutting the side edges of the loop loose from the plate-metal material and then bending the loop down, as is clearly shown in Figs. 2 and 4, thus affording a depending keeper-band.

Upon the rear end of the stretcher-bar 5 an abutment 8 is removably secured, and this abutment is detached from the bar when the base-plate 7 is to be mounted thereon. It will be seen that when the base-plate is slid upon the stretcher-bar and the abutment 8 is secured to the end of the bar the base-plate will be prevented from removal, but may be moved along the stretcher-bar as occasion may require.

At and near each end of the base-plate 6 two ears 9 are formed or secured thereon, these ears projecting downward from the side edges of the base-plate sufficiently to receive and permit the free action of other parts.

Two clamping-legs 10 of similar form are provided, each leg having two ears 11 formed oppositely on its side edges between the ends thereof. The ears 11 on each clamping-leg 10 are designed to form leaves of a hinge-joint and to this end coact with a pair of the ears 9, between which the pair of ears 11 are introduced. The pair of ears 11 on each clamping-leg 10 and the mating pair of ears 9 on an end of the base-plate 6 are transversely perforated in alinement for the loose reception of a pintle 12, which when inserted and secured at the ends affords a hinge-joint between one end of the base-plate 6 and one of the clamping-legs 10. Upon each pintle 12 a coiled spring 13 is mounted, one extended end *b* of the spring having enforced engagement with the base-plate 6 and the other extended end *b'* of the spring having a like

contact with a depending portion of the clamping-leg. The upper ends 10^a of the two clamping-legs 10 are curved slightly toward each other and given wedge form to sharpen them, and it will be noticed in Fig. 4 that the tension of the springs 13 is exerted to spread the lower ends of the clamping-legs apart and force their upper ends toward each other.

In the application of the duplicate stretching devices upon a pair of shoes each bar 5 is placed upon the sole of the shoe A at the transverse center of the latter after engaging the hook member 5^a with the toe of the shoe by introducing its edge *a* between the sole and the upper of the shoe. As the hook member on the stretcher-bar 5 is curved downward and rearward from the end 5^a and then merges into the straight body of said bar, it will be seen that any convexity of the sole on its lower surface, which usually results from wear, will be straightened if the bar 5 is pressed forcibly upon the shoe-sole, as indicated in Fig. 1.

The heel-clamp should be so positioned on the stretcher-bar 5 as to permit the base-plate 6 to receive the heel A′ of the shoe about at the center of length of said heel, the legs 10 being compressed toward each other at their lower ends to permit the introduction of the shoe-heel between the upper members of the clamping-legs. Obviously when the upper ends 10^a of the clamping-legs 10 are positioned opposite each other at the respective sides of the shoe-heel A′ a release of pressure on the lower ends of the legs 10 will allow the springs 13 to forcibly impinge the sharpened bent portions 10^a on the upper ends of the legs upon the sides of the shoe-heel, and thus hold the stretcher-bar in enforced contact upon the ball of the shoe-sole.

It will be seen that the application of a bar 5 upon each of a pair of shoes A, as explained, will pull upon the upper-leather, so as to produce strain longitudinally on the shoe-vamp and tend to remove or prevent the formation of transverse scores or wrinkles in the shoe-uppers.

It is intended that the improved shoe-stretchers be mounted upon a pair of shoes each night after day wear of the same or at any other time the shoes are temporarily disused, and it is apparent that a regular application of the improvement to footwear will keep them in shape and conduce to durability of the same by preventing cracks forming at the sides of the shoe-uppers, which result from wrinkles that usually form therein.

Having described my invention, I claim as new and desire to secure by Letters Patent—

1. A stretcher device for shoes, comprising a flat bar, a hook member bent downward, then upward and rearward on one end of the bar, and a heel-clamp held to slide on the bar, said clamp having gripping-legs adapted to clamp upon the sides of a shoe-heel.

2. A stretcher device for shoes, comprising a flat bar, a hook member bent downward, then upward and rearward, and having its end sharpened to engage the toe of a shoe, and a heel-clamp slidable on the bar, comprising a base-plate, and spring-pressed clamping-legs hinged on the base-plate, the upper ends of the clamping-legs engaging the sides of a shoe-heel that seats on the base-plate.

3. A stretcher device for shoes, comprising a flat bar, a hook member bent downward, then upward and rearward, and having its end wedge-formed to engage the toe of a shoe, and a heel-clamp slidable on the bar, comprising a flat base-plate, paired ears on each end of the base-plate, two clamping-legs, each having ears pivoted to the ears at an end of the base-plate, and a spring for each leg, adapted to press the upper ends of the legs toward each other, said ends being sharpened to grip upon the sides of a shoe-heel.

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

JOHN KARLSON.

Witnesses:
WM. P. PATTON,
JNO. M. RITTER.