C. L. McBRIDE.

GLOVE STRETCHER.

APPLICATION FILED AUG. 20, 1908.

915,465.

Patented Mar. 16, 1909.

Fig. 1.

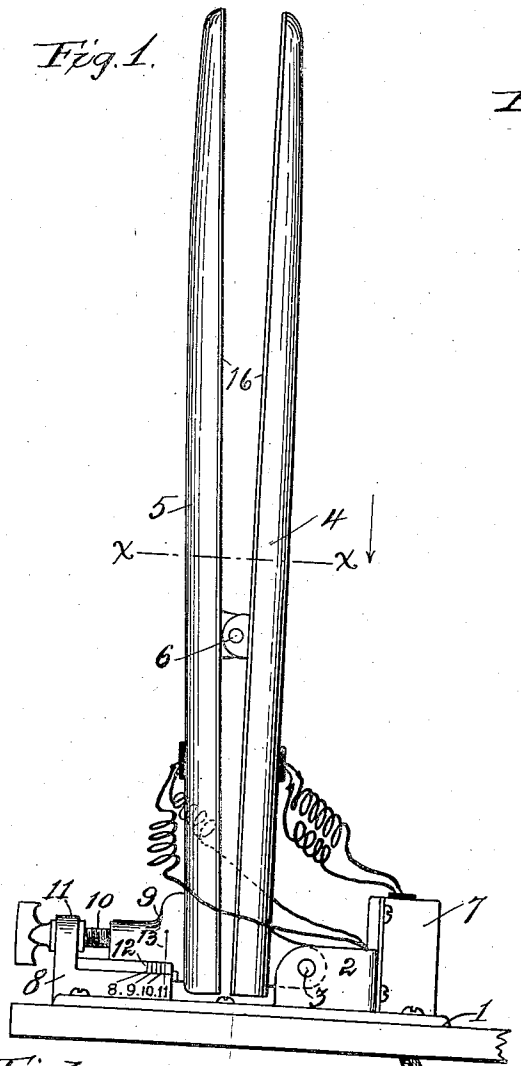


Fig. 2.

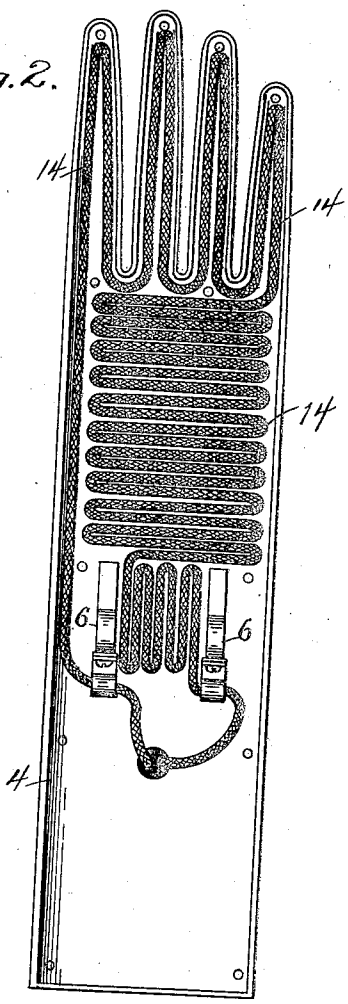
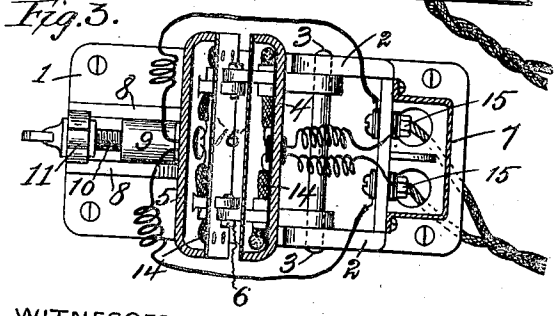


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES L. McBRIDE, OF TOLEDO, OHIO.

GLOVE-STRETCHER.

No. 915,465. Specification of Letters Patent. Patented March 16, 1909.

Application filed August 20, 1906. Serial No. 331,246.

To all whom it may concern:

Be it known that I, CHARLES L. McBRIDE, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Glove-Stretchers; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to a glove stretching device known to the trade as a "laying off board," and is intended to be used by manufacturers of gloves. After the parts of a glove are sewed together the fingers are placed over a form and are stretched. This stretching, besides smoothing the seams, contributes largely to giving the glove the exact required size or number. If the form on which the glove is stretched be sufficiently heated the work is expedited and the cloth or other material of which the glove is made is given a "set" which causes the glove to retain the size to which it has been stretched.

The object of my invention is to provide a stretching device for gloves, consisting of a pair of pivotally connected coincident half-forms over which the glove is slipped, and which forms will, by their own movement, automatically stretch the fingers of the glove as may be required, and in which the point to which the glove is to be stretched may be instantly fixed, determined, and controlled so that all gloves stretched on the device shall exactly conform to any required size to which the machine may be set or adjusted.

A further object of my invention is to provide a cheap, simple, and highly efficient and easily controlled means for heating the forms employed in my device.

By obvious modifications my invention may also be used in stretching mittens.

I attain these objects by means of the devices and arrangement of parts hereinafter described and shown, and illustrated in the accompanying drawings in which—

Figure 1 is an edge-elevation of my glove stretcher; Fig. 2, an inner side-elevation of one of the finger-plates hereinafter referred to, with the lining removed, and Fig. 3, a top-plan view of my device, partly in section taken on line x—x Fig. 1.

Like numerals of reference indicate like parts throughout the drawings.

In the drawings, 1 is a base-plate adapted to be secured to a table. Projecting upwardly from the top of the plate near each side-margin is a lug 2 between which lugs is pivotally mounted, as at 3, a finger-plate 4, formed at its upper end to conform to one-half of the interior of an unstretched glove, minus the thumb, the stretching of the thumb portion being performed by a separate operation.

5 is a corresponding finger-plate opposed to the plate 4 and formed so that when the two plates, near their upper ends or tips are brought together, they exactly conform to and fill the fingers of the glove to be stretched. The plate 5 is pivotally secured to the plate 4, as at 6, about midway between the upper and lower ends of the plates. This pivotal connection is so arranged and adjusted that the plate 5 may be tilted upon the pivot 6 in such manner that the tips of the finger portion of the plate may be brought together or separated as far as may be desired, within certain limits.

Projecting upwardly from the top of the plate near its rear margin, or toward the side farthest from the operator, is a rest 7 the top of which forms a stop for the plate 4 when it is tilted backwardly on its pivot 3 or away from the operator, at an angle of about forty-five degrees. Secured to or formed integral with the top of the base, at the side opposite the rest 7, is a housing or guide 8 in which slides horizontally a stop-block 9. This is engaged by an adjusting screw 10 mounted and rotatable in a bracket 11 projecting upwardly from the housing 8. By means of the adjusting screw 10 the stop-block 9 is moved to and held at exactly the required distance from the swinging finger-plates. The inner face of the block 9 lies in the path of the lower end of the plate 5 when the latter plate is swung with its mate upon the pivot 3. Upon the housing 8 is a graduated numbered scale 12 and upon the block is an index-line 13. By turning the adjusting screw 10 the index-line 13 may be caused to register with either of the marks on the graduated scale so that the stop-block will contact with the lower end of the finger-plate 5 and tilt the upper or tip end thereof, thus separating the

tip-ends of the plates exactly to the extent indicated by the scale and index.

The plates 4 and 5 are formed preferably of stamped sheet metal and are concaved transversely with the concave faces facing each other. Within the hollow of each of the finger-plates is disposed an electric heating coil 14, (or equivalent conductor having suitable resistance,) the windings of which extend into the fingers of the forms, as shown, the terminals of each coil passing to the binding posts 15 and thence to a suitable source of electricity. In practice, the outleading and inleading wires are connected with the usual plug adapted to be screwed into an incandescent lamp-socket. The hollow of each of the finger-plates is closed with a lining 16 which protects the coils and secures them in place. The coils are of such resistance that the ordinary incandescent lamp circuit generates sufficient heat in the coils and the plates for the purpose designated.

The operation of my device is as follows: The plate 1 being properly secured to its table so that the stop-block 9 is nearest to the operator; the stop-block 9 with its index-line having, by means of the screw 10, been brought into coincidence with the proper mark on the graduated scale, and the plates 4 and 5 having been, by the electric coil, brought to the proper temperature, the two plates 4 and 5 are tilted forwardly by the operator into inclined position so that they rest upon the part 7. The glove to be stretched is slipped over the upper end of the plates 4—5, the finger portions of which are now in contact and in closed relation and which are readily slipped into the fingers of the glove. The operator now swings the stretcher upon the pivot 3 into upright position. As the plates 4—5 swing forwardly the lower end of the plate comes in contact with the block 9 pressing the lower ends of the two plates together and swinging the upper ends of the two plates asunder upon the pivot 6, thus automatically separating the finger-tips and stretching the fingers of the glove exactly to the extent indicated by the index-line 13 and the graduated scale 12. The plates are next thrown against the rest 7 so that by their own weight the tips of the plates come together, thus permitting the glove to be readily withdrawn. It will be seen that the slight flexible insulated wires leading to and from the heaters readily yield to the movements of the two plates.

Having described my invention, what I claim and desire to secure by Letters Patent is,—

1. In a device of the described character, a finger-plate, a pivotally supported opposed finger-plate, a stop which limits the swing of the latter plate upon its pivot, a graduated scale, and means for adjusting the position of the stop in relation to said scale.

2. In a device of the described character, a pair of pivotally supported plates conforming in outline to a glove, each of said plates having a hollow hand-portion and hollow finger-portions, independent electric conductors disposed in the cavities of said hand-portions and finger-portions of each pivotally supported plate and of suitable resistance for heating the plates, and means for placing said conductors in circuit with a source of electricity.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES L. McBRIDE.

Witnesses:
CLEM V. WAGNER,
ADA LAW.