J. BOREL & F. GRANGE.

FITTING DEVICE FOR BOOTS AND SHOES.

APPLICATION FILED MAR. 16, 1912.

1,074,406. Patented Sept. 30, 1913.

Fig. 1.

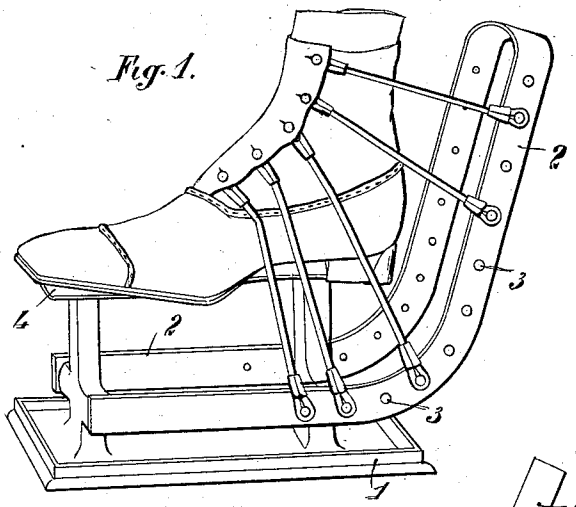


Fig. 2.

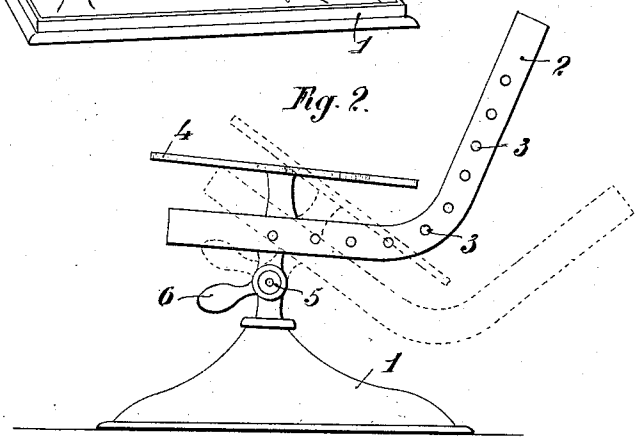


Fig. 3.

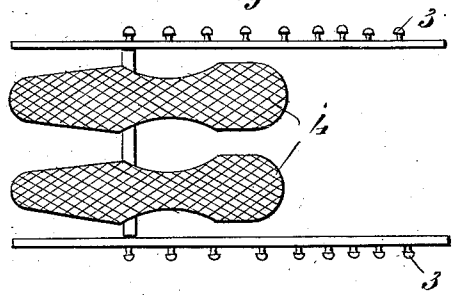
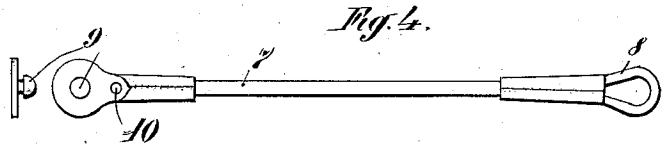


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH BOREL AND FRANÇOIS GRANGE, OF ANNECY, FRANCE.

FITTING DEVICE FOR BOOTS AND SHOES.

1,074,406. Specification of Letters Patent. Patented Sept. 30, 1913.

Application filed March 16, 1912. Serial No. 684,216.

To all whom it may concern:

Be it known that we, JOSEPH BOREL and FRANÇOIS GRANGE, citizens of the French Republic, both residing at Annecy, Haute Savoie, France, have invented certain new and useful Improvements in Fitting Devices for Boots and Shoes, of which the following is a specification.

The apparatus according to this invention is intended to be used for the purpose of indicating exactly the position to be occupied by buttons on a boot, in order to insure perfect fitting of the latter, whatever be the shape and the size of the foot.

This apparatus can be used either for press buttons, for ordinary buttons or for buttons with hooks and the like.

A construction according to this invention is shown in the accompanying drawing in which—

Figure 1 is a perspective view of a fixed or stationary apparatus, Fig. 2 a side elevation of a modified form, the upper part of which has been made adjustable, Fig. 3 is a plan of a further modification with two foot plates, and Fig. 4 is a detail view of one of the stretchers intended to be used with this apparatus.

The apparatus comprises a plate 1 made of suitable material such as cast iron, wood or sheet metal, carrying an iron frame or bracket 2 preferably of the shape shown in the drawing. This frame or bracket is provided on its outer face with a series of studs 3 intended to be hooked into the loop or eye of the stretcher.

On the plate 1 are mounted one or two foot plates 4 on which the foot is placed provided with the boot on which the position of the buttons is to be determined.

When the upper part of the apparatus is movable, the bracket 2 and the foot plates 4 are mounted on the bottom plate by means of a joint 5 on which the whole can be turned by a handle 6. Any inner or outer device such as a pawl ratchet gear, etc., enabling the foot plates to be locked in a given position, can be used.

The stretcher, Fig. 4, comprises a rod of rubber or other elastic material 7, forming a loop or eye 8 at one of its ends and provided at the other end with a ball 9 for a press button riveted to a plate. The said ball is of a shape suitable for the button used; it is either a round ball, or a hook engaging with a button hole.

For the purpose of tracing, the plate of the ball carries either a hole 10, or a pointer or a small pin arranged on its lower surface, at a point suitable for the kind of button to be used. When a hole is used the end of a pencil or a pin is introduced for marking the place of the button on the boot. When a pointer is used, it is sufficient to press on the ball (provided as already stated with a pin), in order to force the pointer slightly into the leather.

When buttons are used which are fixed or secured eccentrically, the apparatus will have its indication point or hole at 10, while when centrally fixed buttons are used, an opening or hole must be arranged in the center of the fastening button.

The apparatus in question is used in the following manner:—The foot or feet provided with the boots, being placed on the foot plates 4 of the apparatus the ball 9 of a stretcher is hooked either into each pressure button or into each buttonhole of the upper portion of the boot. Each stretcher is successively hooked with its loop or eye 8 to that stud 3 of the bracket 2, which appears to be the most suitable. When all the stretchers are in position, the place that will be occupied by the button is traced as already stated. It then remains merely to arrange the buttons at the places indicated, and thus a boot fitting the shape of the foot perfectly will be obtained.

The rods of the stretchers can be of rubber or other elastic material, and can be replaced by a helical spring or the like.

What we claim as our invention and desire to secure by Letters Patent is:—

1. In a fitting device for button boots and shoes, a foot plate, a bracket supported in fixed relation to the foot plate and having a portion approximately concentric to the portion of the upper of the shoe to which the buttons are to be applied, and elastic tension devices detachably connected to the bracket and having their opposite ends adapted for detachable connection with the overlapping portion of the shoe upper, said opposite ends also having means whereby the position of the buttons on the upper may be indicated, substantially as described.

2. In a fitting device for button boots or shoes, the combination of a base plate, a bracket thereon, studs on each side of the bracket, a foot plate adjacent the bracket and connected to the base plate, and a plu-

rality of elastic members each comprising an elastic rod, a loop at one end of the rod and adapted to engage one of the said studs, and a perforated connecting member at the other end of the rod adapted to engage a button hole or recess in the boot for the purpose set forth.

3. In a fitting device for button boots or shoes, the combination of a base plate, a pivoted bracket thereon, studs on each side of the bracket, two foot plates connected to the bracket, and a plurality of elastic members each comprising an elastic rod, a loop at one end of the rod and adapted to engage one of the said studs, and a perforated connecting member at the other end of the rod adapted to engage a button hole or recess in the boot for the purpose set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOSEPH BOREL.
FRANÇOIS GRANGE.

Witnesses:
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T. W. MARTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."