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D. E. HERTZLER & C. F. SMITH.

DEVICE FOR MEASURING THE FOOT FOR BOOTS OR SHOES.

APPLICATION FILED FEB. 4, 1904.

NO MODEL.

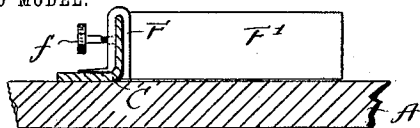


Fig. 2

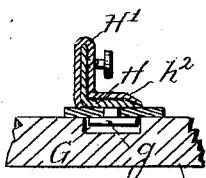


Fig. 3

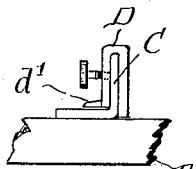


Fig. 4

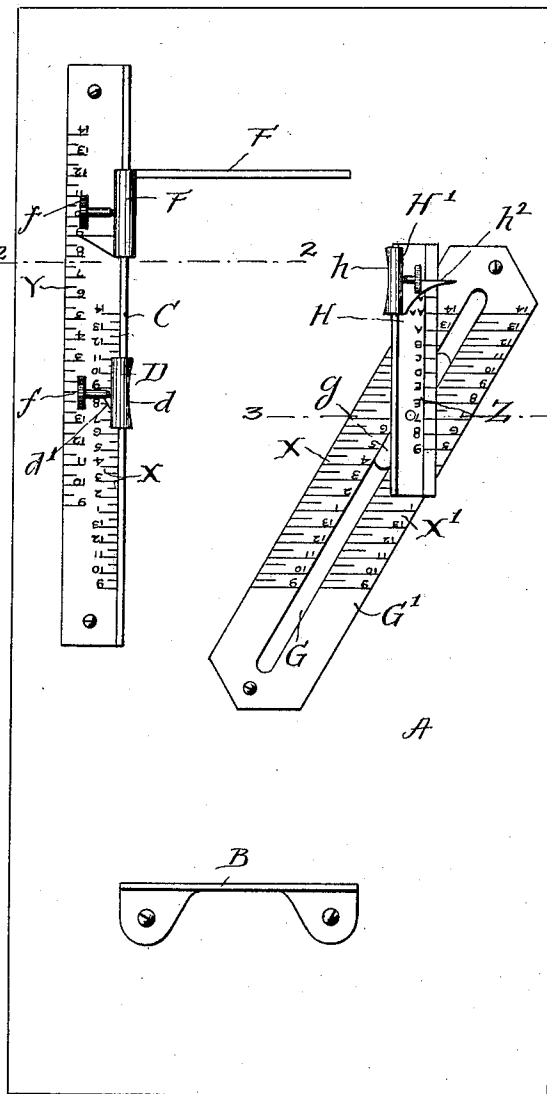


Fig. 1

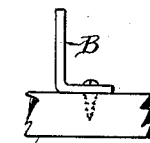


Fig. 5

Witnesses -

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UNITED STATES PATENT OFFICE.

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DEVICE FOR MEASURING THE FOOT FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 770,065, dated September 13, 1904.

Application filed February 4, 1904. Serial No. 192,015. (No model.)

To all whom it may concern:

Be it known that we, DANIEL E. HERTZLER and CHARLES F. SMITH, citizens of the United States, and residents of Burlington, in the county of Des Moines and State of Iowa, have made a certain new and useful Invention in Foot-Measuring Devices; and we declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view of the invention. Fig. 2 is a fragmentary section on the line 2 2, Fig. 1. Fig. 3 is a similar view on the line 3 3, Fig. 1. Fig. 4 is an end view of angle-bar C with slide D. Fig. 5 is a similar view of the heel-rest B.

This invention has relation to devices for measuring the foot for boots and shoes, and has for its object the provision of size-indicating devices which will expedite the fitting, providing means for readily ascertaining the correct length and width of the shoe for both right and left foot and in all cases.

With this object in view the invention consists in the novel construction and combinations of parts, all as hereinafter described, and pointed out in the appended claims.

Referring to the accompanying drawings, the letter A designates a platform or base of general rectangular form made of wood or other suitable material and having a plane upper surface of sufficient length and breadth for the purpose in view. This base has at the rear an upwardly-projecting heel-rest B. At one side of the base—preferably the left side—is a stationary longitudinal angle or L form bar C, having marked upon the inside edge of its horizontal wing, beginning at one end portion thereof, the size-scale X, running from "1" to "14," inclusive, for men's and ladies' sizes and from "9" to "13," inclusive, for children's sizes. An indicating-slide D upon the vertical wing of bar C has a concave inner surface *d*, adapted to receive the ball of the foot, and has a laterally-projecting index-finger *d'* to give the correct length or size of the shoe by shoe-numbers.

Beginning at the forward end portion of the bar C upon the outside edge of the horizontal wing thereof is marked the toe-scale Y, from "1" to "14," inclusive, for men's and ladies' sizes and from "9" to "13," inclusive, for children's sizes and correctly estimating, in connection with indicating-slide F, the length or size of the foot by shoe-numbers, which will ordinarily agree with the size given by the scale X, but in any case in feet of unusual formation will give the proper length of the shoe. This slide F has a set-screw *f* to fix its location, as has also slide D, and is provided with a laterally and inwardly extending arm F' to engage the toe of the foot.

It now remains to find the width or last of the shoe, and for this purpose the following means are employed: G is an oblique or diagonal slot or recess in the base or platform A and above which is secured the oblique plate G', also slotted and having marked upon the outside and inside edges thereof the size-scale X'. Working in the slot G is a slide-block *g*, having fixed thereto the obliquely or diagonally reciprocatory angle or L form bar H, provided with the width or last scale Z, marked upon its outside edge. Having found the size of the shoe by means of the scales X and Y upon bar D for the right foot, the width is found by pressing bar H inwardly until it contacts with the side of the foot, when the intersection of the proper size-number previously found upon plate G' with the width-scale upon bar H will give the correct width or last.

In estimating the size of the left foot the bar H and indicating-slide H' upon the vertical wing thereof are adjusted until the inner concave surface *h* of said slide fits the ball of the foot, when slide H' will, through index-finger *h'* thereof, mark upon scale X' of plate G' the correct size or length, while the intersection of the line of this number with the width-scale Z will give the width.

Having thus described our invention, what we claim as new, and desire to obtain by Letters Patent, is—

1. In a foot-measuring device, the base-plate, the heel-rest, the fixed side bar bearing the length and toe scales, the indicating-slides

thereof, the oblique length-scale, and the obliquely-reciprocatory side bar bearing the width-scale, and having an indicating-slide, substantially as specified.

- 5 2. In a foot-measuring device, the base-plate, the heel-rest, the fixed side bar of angle or L form in cross-section, and bearing upon the outside and inside edges respectively of its horizontal wing, the toe and length scales,
10 the indicating-slides working upon the vertical wing of said bar, the obliquely-recipro-

catory bar bearing the width-scale, and having an indicating-slide, and the length-scale adjacent thereto, substantially as specified.

In testimony whereof we affix our signatures 15
in presence of two witnesses.

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Witnesses:

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