

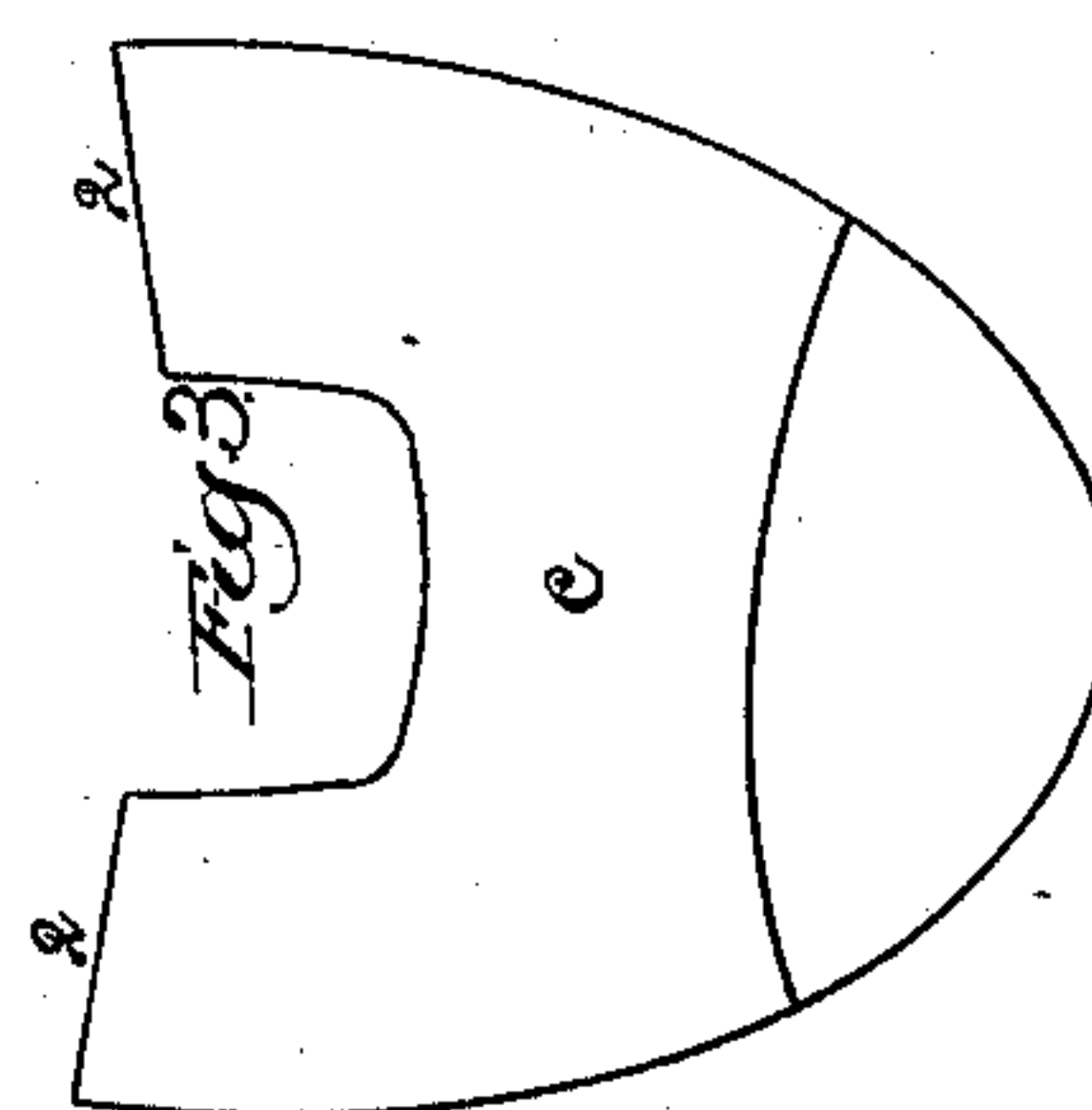
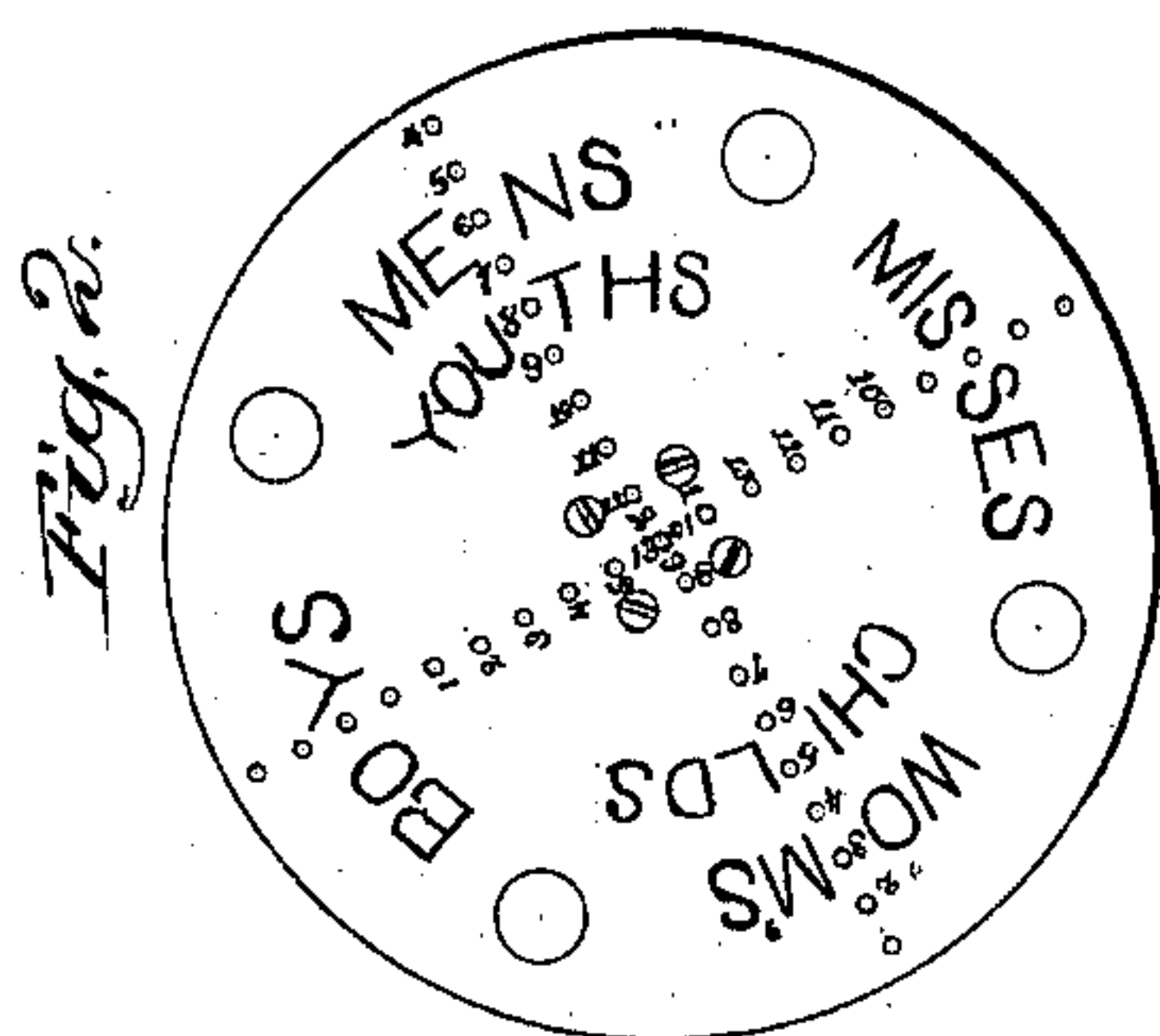
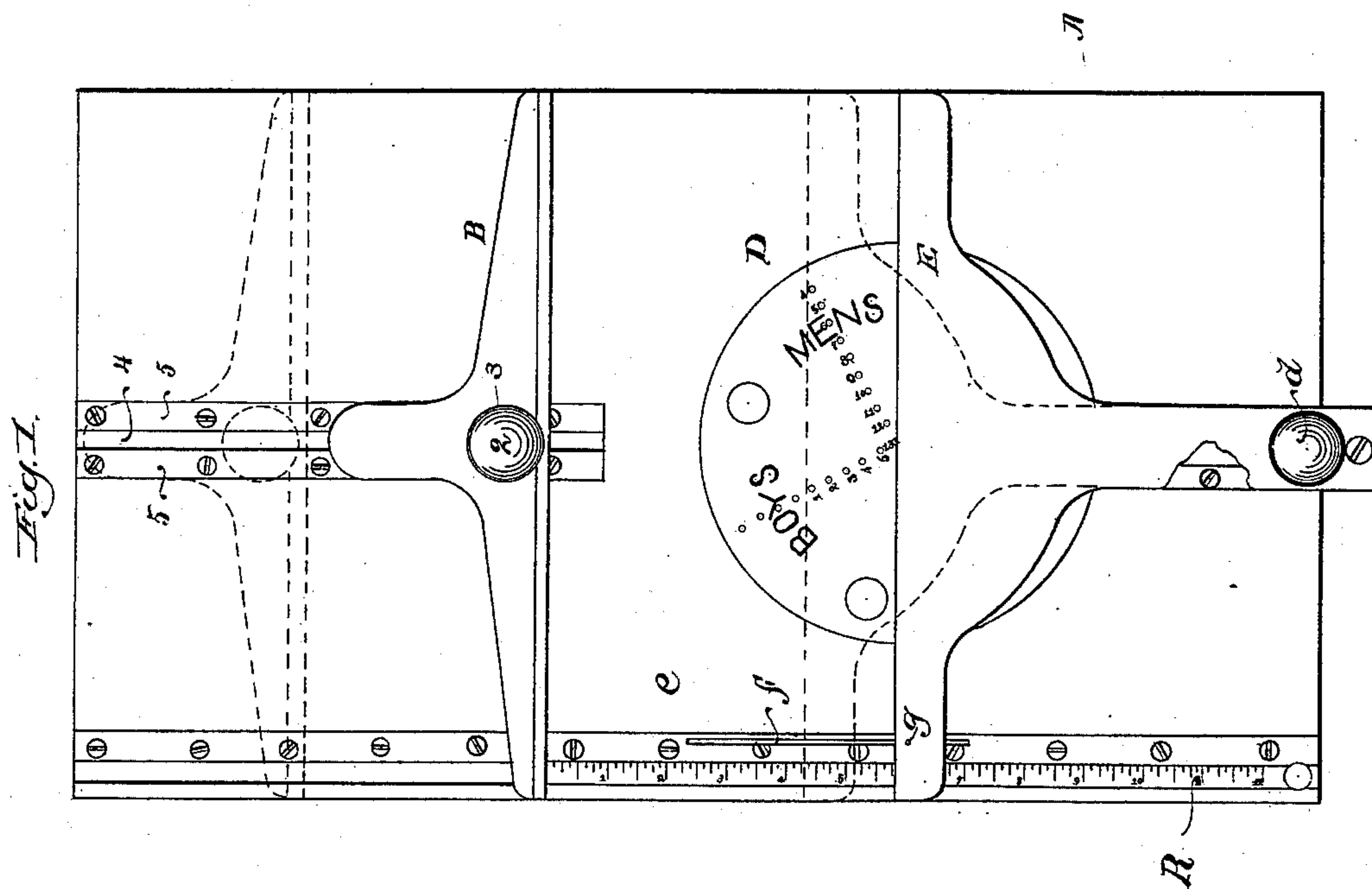
(No Model.)

H. D. SMITH.

# TOE TIP INDICATING APPARATUS FOR BOOTS AND SHOES.

No. 296,885.

Patented Apr. 15, 1884.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

HENRY D. SMITH, OF ROCKLAND, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO ZENAS M. LANE, OF SAME PLACE.

## TOE-TIP-INDICATING APPARATUS FOR BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 296,885, dated April 15, 1884.

Application filed February 11, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY D. SMITH, of Rockland, county of Plymouth, State of Massachusetts, have invented an Improvement in  
5 Toe-Tip-Indicating Apparatus for Boots and Shoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

- 10 A very large class of boots and shoes are provided with what are known as "toe-tips," and in the manufacture of such boots and shoes it is customary to take the upper of smallest size in the case to be made, draw it over the  
15 toe of a last, and apply to it the toe-tip to be used, changing the position of the latter until it is in the proper place, especially as regards appearance, and the same course is pursued with relation to the upper of the largest size.  
20 The two uppers having had the positions of their toe-tips determined, the uppers of the intermediate sizes must, for symmetry, have their toe-tips applied at points thereon which shall be in due proportion to the smaller and  
25 larger sizes, or, in other words, the space between the seam of the upper and the top of the toe-tip for the different sizes must be divided proportionally, or substantially so.

- The object of my invention is to provide an  
30 apparatus whereby, the distances between the seams of the uppers and the tops of the tips of the largest and smallest sizes having been determined, the intermediate sizes may be quickly and easily determined. In practice, the distance for the largest and smallest sizes of any  
35 pattern or cut of shoe having been once determined, the same may be set down in a book kept for the purpose, which may ever thereafter be used from which to take measurements when like shoes are again to be made.  
40

- The herein-described apparatus embodies in its construction a gage for the seam end of the upper, a gage for the top of the toe-tip, a movable dial containing figures indicating sizes,  
45 and preferably a rule.

- The particular features in which this invention consists are specifically set forth and described in the claims at the end of this specification.  
50

- Figure 1 is a top or plan view of an appa-

ratus embodying my invention. Fig. 2 represents the dial removed, and Fig. 3 represents part of an upper with a toe-tip attached.

The board or base A is provided with a gage, B, for the seam end 2 of the upper c, 55 and preferably the said gage will be made adjustable by the screw and nut 2 3, the head of the screw being placed in a slot or groove, 4, having at each side of it plates 5. At and near its opposite end the board has adjustably attached to it, in like or suitable manner, by a  
60 suitable clamp-screw, d, a toe-tip gage, E.

The board, near its center and under the path of movement of the toe-tip gage, is provided with a dial, D, herein shown as a centrally-pivoted disk provided with radial rows of numbers and dots or marks designating sizes and half-sizes, and preferably from 1 to 13, not only for men's wear, but for women's and children's wear. At its side this board  
70 will preferably be provided with a sliding rule, R, and the metal strip e, which acts as part of the guideway for the said rule, is provided with a groove, f, to receive the steady-pin g of the toe-tip gage. The toe-tip gage  
75 will preferably be of sheet metal sufficiently thin to permit the upper to be laid upon it, if desired, or under it, when the same is to be marked for the top line or the tip is to be  
80 applied.

The parts as represented in Fig. 1 in full lines are in normal position to receive the largest vamp of a Congress gaiter of that cut or pattern which is to be united with a quarter. The row of figures on the dial which will  
85 be used for such class of shoe is designated by the word "Men's," and for the purposes of illustrating this invention it will be considered that the case of shoes to be made will contain sizes from 5 to 13.  
90

The person to use the apparatus will first consult his book, and in it will find that when the edge of the toe-tip gage is in line with the center of the dial the gage B should be six and three-fourths inches distant from the  
95 tip-gage, and he will accordingly by the rule place the gage B in proper place and secure it. Next, the person using the apparatus will again consult his book, and will find, say, that the distance therein set down for a 5 is five  
100



and one-half inches, and then he will loosen the tip-gage and move the same until its edge is just five and one-half inches from the edge of gage B, and then he will move the dial until the number 5 of the row of figures being used comes in line with the edge of the tip-gage. All the parts having been thus set in proper position, the upper for the smallest size may be applied to the apparatus and be marked along the edge of the toe-tip gage to indicate the line for the top edge of the tip; or the tip may be applied to the upper in usual manner preparatory to being stitched, and as each larger size is to be marked, the toe-tip gage may be drawn toward and so as to come in line with the size or half-size marks, when it will be held as long as may be needed.

If shoes for children or women are to be marked, the radial row of figures, appropriately spaced to accommodate the customary variations in length and sizes of that class of work, will be used in connection with the toe-tip gage, there being several rows of figures on the said dial, according to the class of work and the sizes to be made.

Instead of the gage B, it would be possible to use a line or mark on the board, and I consider that such a line would constitute a gage for the seam end of the upper; but it would not be adjustable, and would not be as convenient as the movable gage B.

By the word "tip" I mean to include cap—as, for instance, toe-caps.

I claim—

1. In a toe-tip indicator, the base A and a gage to position the seam end of the upper, combined with a dial provided with numbers or marks to indicate sizes of boots and shoes to be provided with toe-tips, substantially as described.

2. The base A, a gage for the seam end of the upper, and a movable dial provided with numbers or marks to indicate sizes, combined with an adjustable toe-tip gage, to operate substantially as described.

3. The base A and toe-tip gage, and dial provided with numbers or marks to indicate sizes, combined with a rule, substantially as and for the purpose set forth.

4. The base A, the adjustable gage B, for the seam end of the upper, the adjustable toe-tip gage, and the movable dial provided with one or more radially-arranged rows of numbers or marks to designate the sizes of boots or shoes to be provided with toe tips or caps, to operate substantially as and for the purpose set forth.

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

HENRY D. SMITH.

Witnesses:

CHARLES G. JOYCE,  
LOUIS M. DILL.