

(No Model.)

A. MUCKENHAUPT.  
BOOT AND SHOE INDICATOR.

Patented Mar. 27, 1883.

No. 274,639.

Fig. 1.

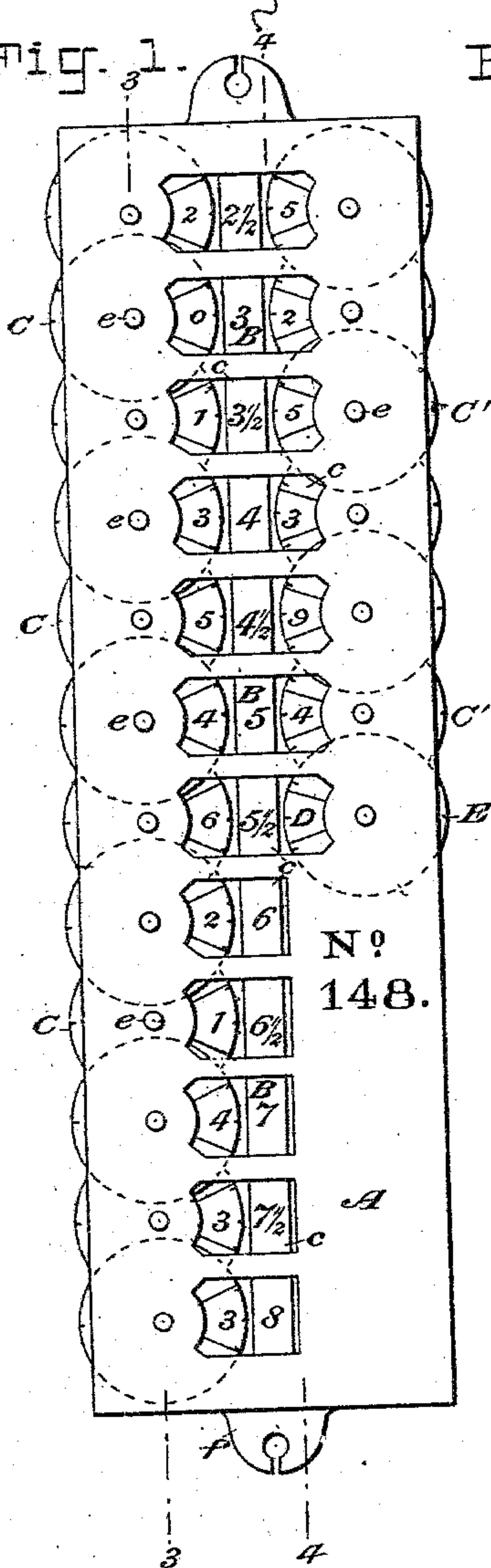


Fig. 2.

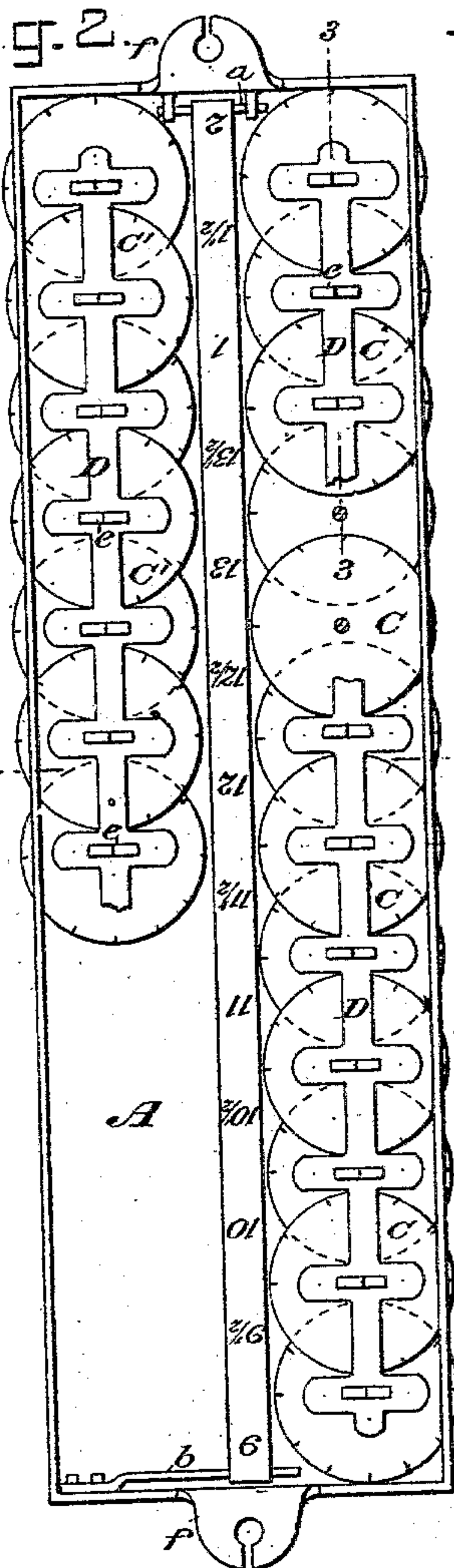


Fig. 3.

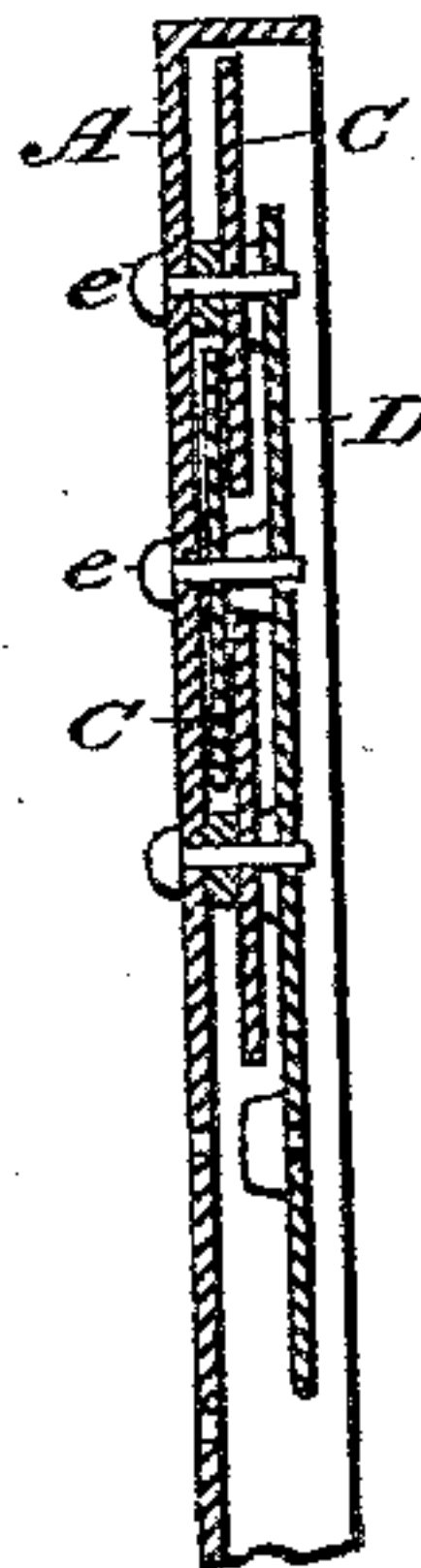


Fig. 5.

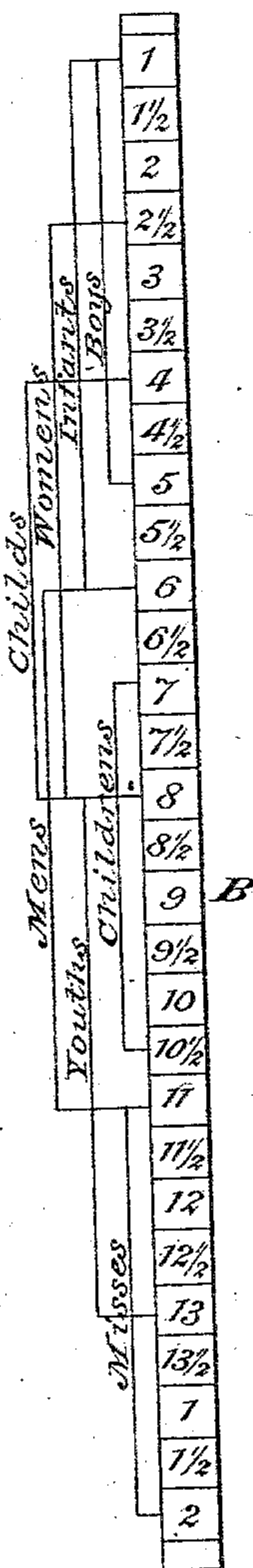


Fig. 4.

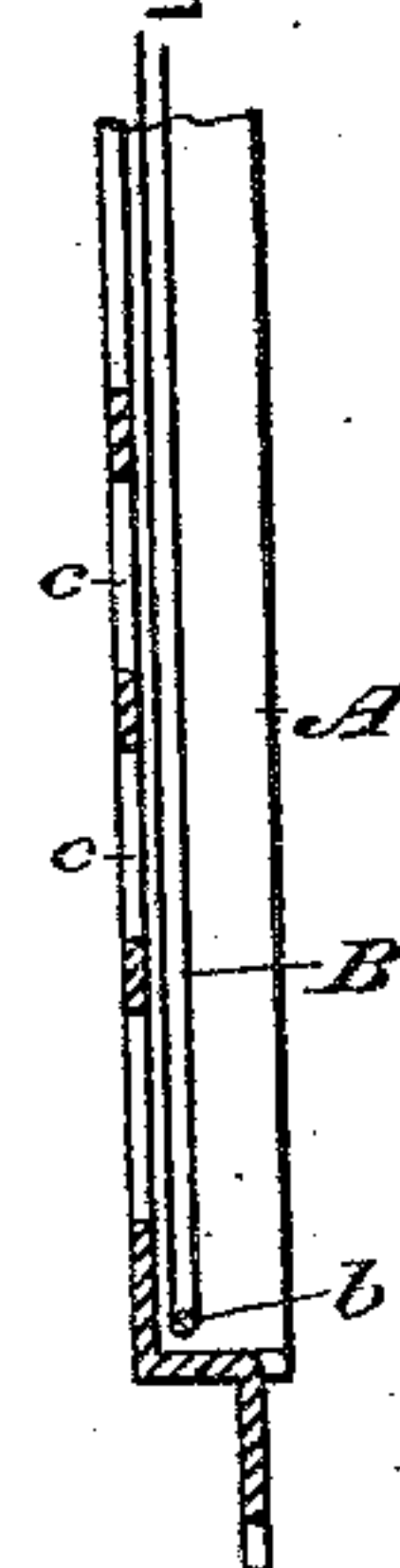


Fig. 7.

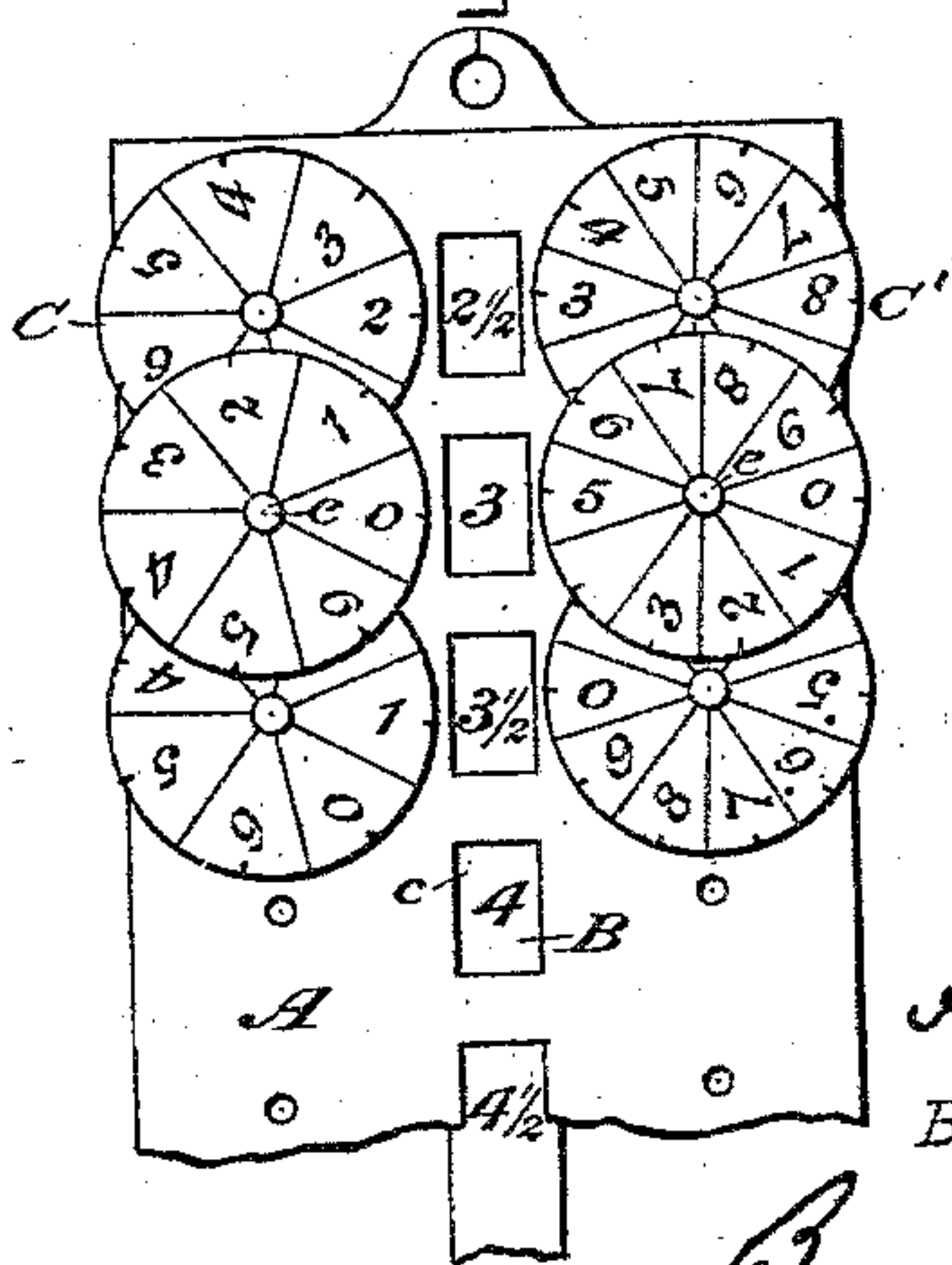
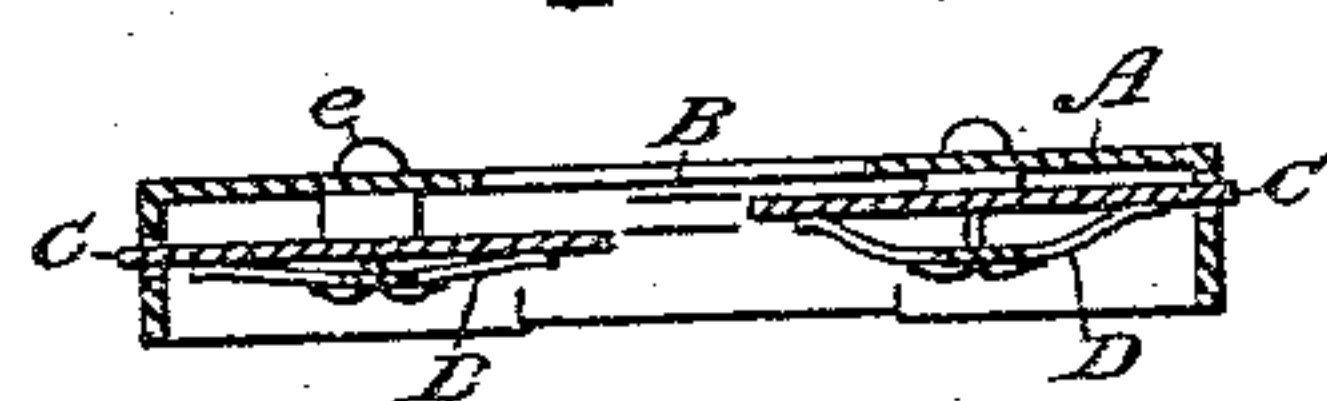


Fig. 6.



Fig. 3<sup>a</sup>.



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# UNITED STATES PATENT OFFICE.

ANTHONY MUCKENHAUPT, OF POUGHKEEPSIE, NEW YORK.

## BOOT AND SHOE INDICATOR.

SPECIFICATION forming part of Letters Patent No. 274,639, dated March 27, 1883.

Application filed June 30, 1882. (No model.)

*To all whom it may concern :*

Be it known that I, ANTHONY MUCKENHAUPT, a citizen of the United States, residing at Poughkeepsie, Dutchess county, New York, have invented certain Improvements in Indicators for Boot and Shoe Receptacles, of which the following is a specification.

This invention relates to a device to be placed on receptacles for boots and shoes, to designate the numbers of pairs of shoes of a particular size and width in the receptacle, the cost per pair, and the selling price per pair. The indicator is adapted to be set to indicate any class of shoes, as "men's," "boys'," "women's," &c.

The device comprises a base-plate, upon which are rotatively mounted a series of disks having numerals marked on their faces to designate the numbers of pairs, the width, and the cost and selling price, and an endless band or strip, on which are the numerals, arranged to indicate all of the sizes for all of the classes of shoes. This strip is mounted so as to be adjusted to the proper position to bring the desired series of numerals opposite apertures in the base-plate, with which apertures the numerals in the disks may be brought to register or coincide.

In the drawings which serve to illustrate my invention, Figure 1 is a front view of the indicator, and Fig. 2 is a back view of the same. Fig. 3 is a fragmentary section on line 3 3 in Fig. 1. Fig. 3<sup>a</sup> is a cross-section on line 3<sup>a</sup> in Fig. 2. Fig. 4 is a section on line 4 4 in Fig. 1. Fig. 5 is a view of the size-strip stretched out and adapted to illustrate the arrangement of the numerals for designating the classes of sizes. Fig. 6 illustrates the preferred form of attaching-screw. Fig. 7 is a modification of the indicator, which will be referred to hereinafter.

A is a base-plate, which may be of sheet-metal, formed up hollow, as indicated in Figs. 3 and 4. In the hollow of the plate is mounted an endless strip, B, which may be of any suitable flexible material, as woven tape or stout paper. This strip has marked or imprinted upon it the size-numerals, or numerals indicating the length of shoes of the different classes, as best illustrated in Fig. 5, which will

be referred to more particularly hereinafter. As a means of mounting the strip B, I provide a short rod or roller, *a*, mounted in bearings in the base-plate, and over which the strip passes at one end. At the other end the strip passes over a spring wire or rod, *b*, free at one end, so that the endless strip may be passed over it, and elastic, in order that it may serve to keep the strip strained. The numerals on the strip are so spaced as to appear at apertures *c c*, Fig. 1, in the plate A. If the strip B be made of elastic material, as rubber, the rod *b* need not be elastic. Mounted in the hollow of the plate A are disks C C, one opposite each aperture *c* in the plate, and each bearing a series of numerals (from 0 to 6 in the present case) stamped or imprinted on their faces. These disks project slightly beyond the margin of the plate, and are or may be milled, nicked, or roughened on their edges, in order that they may be turned readily with the finger. The disks are arranged alternately in different planes in order that they may overlap each other, and space be thus economized; and thick and thin washers are employed, as shown in Fig. 3, to set them at the proper distances from the face of the plate. To mount the disks rotatively, and to prevent their rotating too easily, I employ the following-described devices. Dis what I call a "comb-spring"—that is to say, a bar with elastic lateral branches, the ends of which rest and elastically press upon the reverse faces of the disks C. The disks turn on split and headed axial fasteners *e*, in the nature of paper-fasteners, the tips of which pass through and are clinched on the comb-spring D. This construction permits the disks to turn, but not too freely; otherwise they would be disarranged by handling or dusting the boxes.

So far as described the operation is as follows: By attaching the spring-like fingers to a continuous bar the springs and the fasteners are prevented from turning with the disks. The disks simply rotate on the fasteners. This construction also fixes the fasteners in a rigidly perpendicular position with respect to the disk and plate, and provides a firm bearing for the former, which cannot readily be obtained where the disks are independently mounted by rea-



son of the thinness of the metal necessarily employed. It is also difficult to mount the disks independently when they overlap, as herein shown. The strip B may be set to indicate any set of "sizes" by moving it along until the proper numeral with which the particular set or series begins, as for women's sizes, (shown in Fig. 1.) The first or lowest numeral is "2½," and they run to "8." The shifting of the strip may be done by inserting a pin in it and moving it up or down as desired. Suppose that the drawer or box bearing the indicator contains at starting six pairs of shoes of each size. In this case the disks C will be turned until the numerals "6" on the disks appear at the apertures *c* opposite the size numerals on the strip B. When a pair of shoes of any size is sold from the box the disk opposite that size—as "4½," for example—is turned until the numeral "5" on the disk appears, thus showing that but five pairs of that size remain. Thus the disks are shifted according to sales, the "0" appearing when all of the sizes are sold out. In Fig. 1 the indicator shows that there are two pairs of 2½, none of 3, one of 3½, &c., remaining in the receptacle.

The strip B (shown extended in Fig. 5) bears all the numerals for all the sizes of shoes arranged consecutively, the lines at the left showing how they are divided into groups, sets, or classes, as understood by dealers and adapted by custom. Thus boys' shoes run from 1 to 5; infants', 1 to 6; women's or ladies', 2½ to 8, &c. These do not always indicate by comparison the measured length—as infants' shoes, for example, are not the same length as boys' size for size, yet the same strip serves for all, as shown.

In order to finish out the group "misses'" on the strip shown in Fig. 5, I have repeated the numerals 1, 1½, 2; but these are not required, as will be seen, when the two ends of the strip are brought together.

The disks C, which designate the numbers of pairs of shoes in the receptacle, are shown at the left in Fig. 1. At the right I have shown another set of seven disks, made and mounted in the same way. These, however, are for another purpose. The lower or seventh disk, E, bears on its face the usual letters to indicate the particular width of shoe in the receptacle. These usually are "A," "B," "C," "C½," &c., to E. In the drawings this disk shows that the particular shoe in this receptacle has the width D. The six disks C' on the right, above the disk E, each bear the ten digits from "1" to "0," and the first three disks are designed to exhibit the numerals designating the selling price, and lower three those designating the cost price, of the shoes in the receptacle; or the upper disks may indicate the cost price, if preferred. In this case the indicator shows that the shoes in the receptacle cost \$3.94 a pair, and the selling price is \$5.25.

I prefer to number the indicators used by one dealer consecutively, and to stamp the number on some visible part of the base-plate. In this

case the number is "148," as shown in Fig. 1. The object of this is to enable the salesman to indicate what particular box he wishes the clerk to set and put away after a sale is made. For example, if the salesman has sold a pair of shoes of size 4 from box 148, it is only necessary for him to say to the clerk "one forty-eight, four," and the clerk will understand how to adjust or set the indicator before putting that box away.

Any means may be employed for attaching the indicator to the receptacle containing the shoes—as, for example, ordinary wood-screws if the receptacle is a wooden drawer or box, or clinching-clips if it be a paper box. But in order that the indicator may have a means of conveniently fastening it already attached to it, I prefer to employ the following-described device: I provide the base-plate with apertured flanges *f* and slit said flanges into the apertures, as shown. I then provide screws, *g*, shown detached in Fig. 6, with milled heads and necks formed in their shanks to engage the apertures in the flanges *f*. These screws are inserted by bending the metal of the flange at the sides of the slit until an opening is made wide enough to insert the screw. The flange is then flattened until it assumes its normal position, when the screw will be found mounted rotatively therein, but be prevented from escaping by reason of the flanges on the shank at each side of the neck.

In Fig. 7 I have shown a modification of the indicator just described, in which the disks C C' and E are mounted on the base-plate instead of underneath the plate. This construction would serve the purpose; but it is not so easily read as the preferred form, and the disks are more exposed, and therefore more liable to accidental disarrangement.

Having thus described my invention, I claim—

1. An indicator for boot and shoe receptacles, comprising an apertured base-plate to be affixed to the receptacle, an endless flexible strip mounted on the plate and bearing the size-numerals, which are arranged to appear through the apertures in the plate, and disks bearing numerals marked on their faces, rotatively mounted on the plate with their margins adjacent to the size-strip, whereby the number of shoes in the receptacle of each particular size may be indicated, as set forth.

2. An indicator for boot and shoe receptacles, comprising an apertured base-plate to be affixed to the receptacle, an endless flexible strip mounted on the plate and bearing the size-numerals, which are arranged to appear through apertures in the plate, disks bearing numerals marked on their faces, rotatively mounted on the plate with their margins adjacent to the size-strip, and disks C', mounted rotatively on the plate and bearing on their faces the ten digits or figures, from "1" to "0," whereby the cost and selling prices of the shoes in the receptacle may be indicated, substantially as set forth.



3. In an indicator for boots and shoes, the combination, with a face-plate, of a series of disks mounted on the face-plate by split fasteners *e*, and adapted to rotate, and the continuous comb-spring *D*, provided with elastic lateral branches, arranged to rest on the several disks, substantially as set forth.

4. The combination of the base-plate *A* with apertures *c*, the endless strip *B*, bearing the size-numerals, mounted on the under side of the plate, with its numerals arranged to register with the apertures in the plate, and said strip arranged to be shifted, the disks *C*, bearing numerals on their faces and mounted rotatively on the back of the plate, as shown, the numerals being arranged to appear at the apertures *c* as the disks are rotated, and means for exerting a frictional elastic pressure on

said disks to prevent them from rotating too easily, substantially as set forth.

5. In an indicator for boot or shoe boxes, the combination of the base or foundation plate *A*, bearing the indicating devices, with attaching-screws *g g*, confined to said plate at opposite ends thereof, each mounted rotatively in an aperture therein, and provided with flanges on opposite sides of the plate, whereby its escape from the aperture is prevented, substantially in the manner set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ANTHONY MUCKENHAUPT.

Witnesses:

CHARLES MORSCHAUSER,  
EDWIN RISLEY.