R. E. TILLES.

FOOT MEASURING DEVICE.

APPLICATION FILED FEB. 1, 1909.

967,464. Patented Aug. 16, 1910.

Fig. 1.

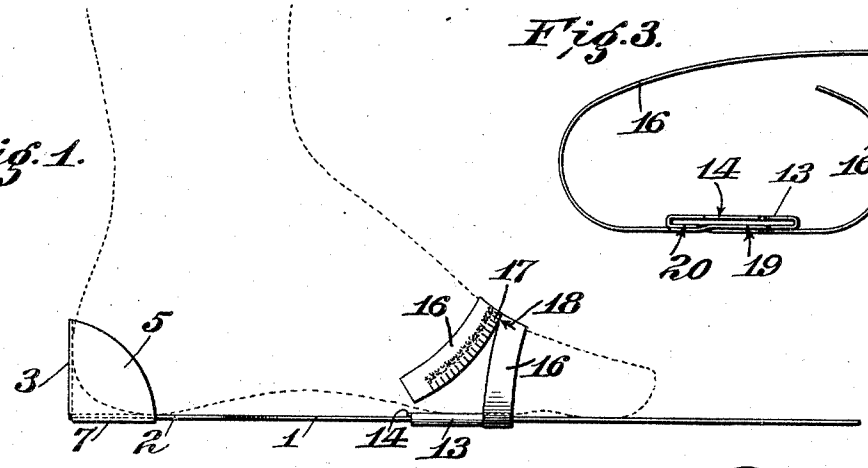


Fig. 3.

Fig. 2.

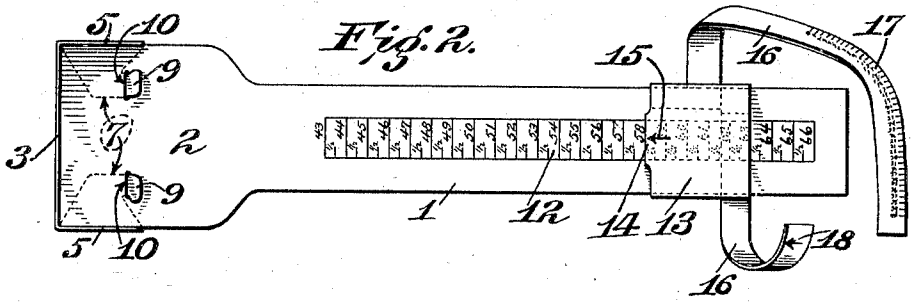


Fig. 4.

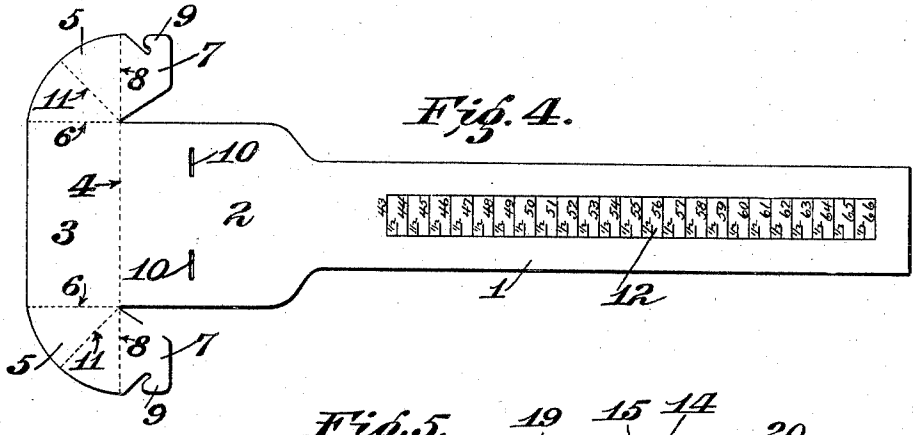
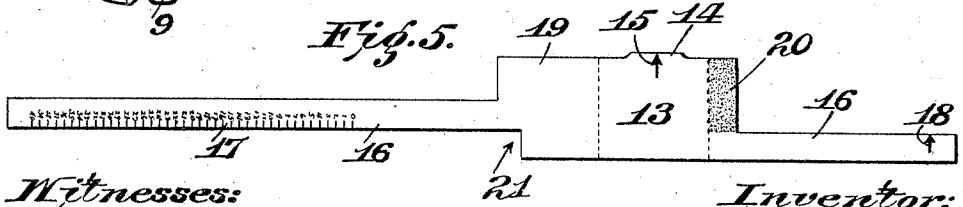


Fig. 5.



Witnesses:

G. A. Pennington

Edgar T. Farmer.

Inventor:

Roy E. Tilles,

By Cameron & Cameron,

attys.

UNITED STATES PATENT OFFICE.

ROY E. TILLES, OF ST. LOUIS, MISSOURI.

FOOT-MEASURING DEVICE.

967,464. Specification of Letters Patent. **Patented Aug. 16, 1910.**

Application filed February 1, 1909. Serial No. 475,340.

To all whom it may concern:

Be it known that I, ROY E. TILLES, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Improvement in Foot-Measuring Devices, of which the following is a specification.

This invention relates to foot measuring devices.

It has for its principal objects to produce a simple and inexpensive, light weight, foldable or collapsible device which may be adjusted to measure feet of different sizes, and to adapt the device for self measurement in ordering shoes or other foot wear by mail.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawing, which forms part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a side elevation of a foot measuring device embodying my invention showing a foot in dotted lines and the width measuring slide being in position to measure the ball of the foot; Fig. 2 is a top plan view of the device with the foot removed therefrom but showing the position of the slide to indicate the length measure of the foot shown in Fig. 1; Fig. 3 is an end view of the slide detached from the device; Fig. 4 is a plan view of the body blank knocked down or unfolded; and, Fig. 5 is a plan view of the slide blank unfolded.

The device comprises an elongated body portion or strip 1, preferably of paper or other suitable flexible material of light weight which is more or less resilient. Preferably, the heel portion 2 of the strip is widened substantially as shown. At the end of the heel portion 2 is a flap 3 which may be folded along the dotted line marked 4 in Fig. 4 of the drawing, which line may be indicated by scoring the strip or otherwise providing for readily folding the flap. At the opposite ends of the flap 3 are corner flaps or folds 5 which are adapted to be folded along the lines 6 so as to stand vertically at each side of the heel portion 2 when the end flap 3 is folded up as shown in Figs. 1 and 2. To hold the folds or flaps 3 and 5 in set up position the folds 5 may be provided with folds or flaps 7 which may be folded along the lines 8 and secured to the heel portion 2 of the strip, preferably, to the under side thereof. This may be accomplished by gumming the upper faces of the flaps 7 or by providing said flaps with tongue portions 9 which are preferably hooked so as to engage in slots 10 or other suitable slitted portions provided therefor in the strip 1. By this latter arrangement the folded portions may be readily knocked down or collapsed when the device is not in use. The gummed set up structure may also be readily collapsed by creasing the corner folds 5 from the corners of the heel portion diagonally outward as indicated by the line 11 in Fig. 4, so that said corner flaps 5 may be folded inwardly as with a bellows fold under the end flap 3 which may be folded down upon the strip 1. It is noted, however, that the bellows folding of the corner flaps is not necessary in case the tongue and slot connection is made between the flaps 7 and the strip, although such a fold may be used if desired to obviate the necessity of unfastening the flaps 7 to collapse the set up flaps 3 and 5.

On the upper face of the strip 1 may be marked a graduated measuring scale 12 which extends lengthwise thereof. This scale may be marked with numbers or characters according to any desired system of size markings, so as to coöperate with a slide or adjustable member 13 which is arranged to be moved lengthwise of the strip 1. Preferably, the slide 13 is formed in a single blank of stout paper or other suitable material and folded into a flattened band or sleeve to slidably fit the strip 1. The slide 13 may be suitably marked or shaped to readily distinguish its indicating edge. For example, its indicating edge may be offset or projected outwardly as at 14, and, if so desired, may be marked with an arrow 15 or other suitable indicating character. The slide 13 is provided with ribbons or tapes 16 one of which is preferably longer and marked with a graduated measuring scale 17. Preferably these tapes extend from opposite sides of the slide and they are offset with respect

to each other so that they may be brought around the foot from opposite sides and made to coöperate edgewise. By this arrangement, the graduated scale may be placed along the marginal portion of the meeting side of the tape so that the end portion of the opposite tape may be brought edgewise into coöperative relation to said graduated scale, and the tapes may be manipulated more conveniently than if the tapes were made to overlap flatwise. The scale 17 may be arranged so that the measurement may be taken from the inner corner of the opposite tape, or, if desired, a marginal mark thereon, as indicated at 18.

A preferable form of blank for the slide is illustrated in Fig. 5. The blank comprises the intermediate portion 13 having the flaps 19 and 20 which may be folded along the dotted lines. The narrower flap 20 may be gummed as indicated by the stippled portion, so as to be secured to the edge portion of the flap 19 which is cut away or notched at 21 so as to permit the shorter tape 16 to be brought over the outer face of said flap 19 when the blank is folded to complete the slide. If desired, the strip 1 may be folded lengthwise one or more times to make the device more compact for mailing or placing in a pocket.

In the operation of the device, the folds or flaps at the heel end of the strip are set up and secured so as to provide an abutment or stop for the heel when the foot is placed flatwise on the strip. The slide may then be moved until its indicating edge is on a line with the end of the toe or one of the scale markings nearest beyond the end of the toe (see Fig. 2 of the drawings). This will give the length for the shoe or other covering to be fitted to the foot. When the length has been determined, the slide may be moved to a position so that the ball measurement may be taken, as indicated in Fig. 1 of the drawing. Usually, according to the system of sizing ready made foot wear, the length and ball measurements only are necessary. If desired or necessary, however, it is obvious that the waist, instep, and heel measurements may be obtained by the use of the slide.

Obviously, the device admits of considerable modification without departing from my invention, and, therefore, I do not wish to be limited to the exact construction and arrangement shown.

What I claim is:

1. A foldable foot measuring device comprising a flexible strip having a length measuring scale thereon and a slide on said strip comprising a flattened sleeve having one edge portion adapted to coöperate with said scale to mark the length of the foot and said sleeve also having a tape measure thereon adapted to measure the width of the foot.

2. A foldable foot measuring device comprising a flexible strip having a length measuring scale thereon, and a slide comprising a single blank of flexible material whose intermediate portion is folded to form a flat band and having oppositely extending tape members which are offset with respect to each other so that they may be brought around the foot out of alinement with each other so as to coöperate edgewise and one of said tape members being provided with a measuring scale on its marginal portion adapted to coöperate with the adjacent marginal portion of the other tape member.

3. A foldable foot measuring device comprising a flexible strip having a collapsible heel abutment and a length measuring scale thereon, and a slide mounted on said strip and having one edge portion arranged to cooperate with said scale to indicate the length of the foot, said slide having two oppositely extending tape members thereon for determining the width of the foot.

4. A foot measuring device comprising a strip having an abutment and a length measuring scale thereon, and a slide mounted on said strip and adapted to coöperate with said scale to indicate the length of the foot, said slide having means thereon for determining the width of the foot, said means comprising two tapes extending from opposite sides of said slide and being offset with respect to each other so that they may be brought around the foot out of alinement with each other so as to coöperate edgewise, and a measuring scale on the marginal portion of one of said tapes in coöperative relation to the adjacent marginal portion of the other tape.

5. A foldable foot measuring device comprising a flexible strip having an end flap portion and corner flap portions adapted to be folded perpendicularly of said strip to constitute a heel abutment, and means for releasably securing said corner flaps to said strip, said strip having a length measuring scale thereon, and a slide mounted on said strip and adapted to coöperate with said scale to indicate the length of the foot, said slide having means thereon for determining the width of the foot.

6. A foldable foot measuring device comprising a flexible strip having an end flap portion and corner flap portions adapted to be folded perpendicularly of said strip to constitute a heel abutment, and means for releasably securing said corner flaps to said strip, said strip having a length measuring scale thereon, and a slide mounted on said strip and adapted to coöperate with said scale to indicate the length of the foot, said slide comprising a flattened sleeve portion of flexible material and having two flexible tape members extending from opposite sides of said slide, said tape members being offset with respect to each other and one of said

tapes having a measuring scale on the marginal portion thereof in coöperative relation to the adjacent marginal portion of the other tape.

7. As a measure, a strip having end portions reduced respectively at opposite edges, one end portion having a scale and the other end portion an index, said scale and index in use being adapted to register with each other.

Signed at St. Louis, Missouri, this 30th day of January, 1909.

ROY E. TILLES.

Witnesses:
G. A. PENNINGTON,
J. B. MEGOWN.