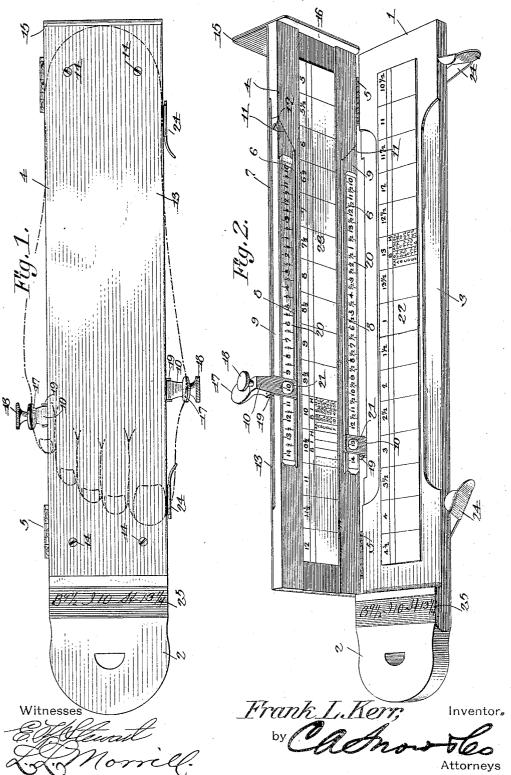
F. L. KERR.
FOOT MEASURING DEVICE.
APPLICATION FILED OCT. 27, 1905.



## UNITED STATES PATENT OFFICE.

## FRANK L. KERR, OF ALEXANDRIA, INDIANA.

## FOOT-MEASURING DEVICE.

No. 838,720.

Specification of Letters Patent.

Patented Dec. 18, 1906.

Application filed October 27, 1905. Serial No. 284,686.

To all whom it may concern:

Be it known that I, Frank L. Kerr, a citizen of the United States, residing at Alexandria, in the county of Madison and State of Indiana, have invented a new and useful Foot-Measuring Device, of which the following is a specification.

My invention relates to foot-measuring devices, and especially to those devices used for measuring feet for fitting shoes thereon.

An object of my invention is to provide a foot-measure embodying new and improved features of convenience, durability, and accu-

racy of measurement.

It is well known in the craft that a shoe fitted to a measurement taken from the ex-

fitted to a measurement taken from the extreme of the heel to the extreme of the toe does not always result in the desired fit. It is conceded that a measurement taken from 20 the ball-joint of the foot to the heel will insure a better-fitting shoe than one taken from the extremes, and it is an object of my invention to provide a device adapted for measuring a foot from the extreme of the 25 heel to the ball-joint and having a scale to indicate from such measurement the size of shoe necessary to fit the foot. It is further well known that shoemakers and shoe-salesmen are subjected to considerable annoy-30 ance by reason of the curiosity and inquisitiveness of customers, and it is an object of my invention to provide a foot-measuring device wherein the scales and indicators are hid from the view of the customer.

A further object of my invention is to provide a device for determining the length of shoe required and combine therewith a scale from which the other necessary proportions of the shoe may be determined from measurements taken as with a tape-measure.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a top plan view of my improved measuring device in closed and operative position. Fig.

2 is a perspective view of my improved foot- 55 measuring device shown open to exhibit the scales, indicators, and fastening means.

Like characters of reference designate cor-

responding parts in both the views.

In its preferred embodiment my improved 60 foot-measuring device comprises a rigid base member 1, having at one end a raised portion 2, adapted for use as a handle and being rabbeted throughout a portion of its length intermediate its ends, as indicated at 3. the base 1 is pivotally secured a guide member 4 by means of longitudinally-disposed hinges 5 and provided along its longitudinal edges and intermediate its ends with guideways 6. The guideways are preferably 70 formed by rabbeting the top of the guide member intermediate its ends, as at 7, and producing a longitudinal saw cut 8, thereby forming an elongated guide 9, angular in cross-section and upon which is mounted an 75 indicator 10. For positioning the indicator 10 upon the guide 9 an oblique saw cut 11 is produced, registering with the cut 8 and through which the guide member may pass, and the opening thus formed may be closed, 8c as by the screw 12. Upon the guide member 4 is mounted a plate 13, preferably of metal and secured thereon adjacent its ends by the screws 14 or in any other approved manner. At the end opposite the handle 2 85 the plate is provided with an upstanding heel - rest 15, substantially perpendicular thereto and having a flange 16, which normally closes over and abuts the end of the base 1.

The indicator 10, which is mounted upon the guide 9 and within the rabbet 7, is disposed beneath the plate 13 and carries at its end an upstanding spoon-shaped arm 17, extending upwardly above the plate 13. To secure the indicator at any desired adjustment, a set-screw 18 is provided, abutting a bushing 19, contacting with the edge of the guide 9.

Upon the guide 9 is arranged a scale 20, 100 and the indicator 10 is provided with an opening 21, through which a single number upon the scale 20 may be read.

Conveniently arranged along the inner surface of the base 1 and the guide member 4 105 are the scales 22 and 23, having columns thereon headed by numbers corresponding to the numbers upon the scale 20 and in the

columns characters to designate the width of shoe necessary to correspond with other measurements of the foot—as, for instance, the measurement about the ball-joint indi-5 cated upon the scale 23 by "B," the measurement about the instep indicated by "I," and the measurement about the heel indicated by "H." For retaining the measure in a closed position latch members 24 are 10 provided, said members being pivotally secured to the base and engaging the guide member to prevent the opening of the guide member upon the hinges 5 and to conceal the scales within and between the said members. 15 Upon the extended end 2 is mounted a plate 25, of ivory, celluloid, or other material, upon which characters may be made with a lead-

pencil and easily erased therefrom.

In operation the foot to be measured is 20 placed upon the plate 13 with the heel abutting the heel-rest 15, and after the foot is expanded by bearing the weight upon it the indicator 10 is moved until the spoon 17 fits snugly upon the ball-joint. The screw 18 is tightened, bearing the bushing 19 firmly upon the guide 9 and securing the indicator from longitudinal displacement. As shown in the drawings, two indicators with a spoon each are provided, thereby making it possi-30 ble to measure either foot, it being understood that but one indicator is used in the measurement, but that for opposite feet opposite indicators are used. With a tapemeasure or other flexible measuring device 35 the ball, instep, and heel of the foot are respectively measured and the measurements written upon the plate 25, as indicated. The measuring device is then removed and, if desired, out of sight of the customer opened to 40 the position shown in Fig. 2 and the measurements taken read from the scale 20.

Having thus described the invention, what

is claimed is-

1. In a foot-measuring device, a pair of 45 pivoted members, a scale carried by one of the members and normally housed between said members, and means coacting with the scale for indicating the length of the foot.

2. In a foot-measuring device, a pair of 50 pivoted members one of which is movable to open position, a scale interposed between said members, and an indicator coacting with the scale for indicating the length of the foot.

3. In a foot-measuring device, comprising a pair of pivoted members one of which is 55 movable to open position and constitutes a foot-plate, a scale carried by the foot-plate and normally housed between said members, and an indicator slidably mounted on said plate and coacting with the scale for deter- 60 mining the length of shoe required from the

position of the ball-joint.

4. A foot-measuring device embodying a foot-plate hinged upon a base, an indicator slidably mounted relative to the foot-plate 65 and carrying a spoon arranged for engagement with the ball-joint of the foot, a scale carried normally closed between the footplate and the base and for cooperation with the indicator, and means for securing the 70 plate and base in a closed position.

5. A foot-measuring device embodying a base, a foot-plate hinged upon the base, a scale normally closed between the base and the plate, an indicator slidably mounted 75 upon the foot-plate and provided with means for indicating markings upon the scale, a heel-rest carried rigidly by the foot-plate, means carried by the indicator for engagement with the ball-joint of the foot, and 80 means whereby from such engagement the length of shoe required is indicated by the indicator upon the scale.

6. In a foot-measuring device, a pair of pivoted members one of which is movable to 85 open position, a scale interposed between said members and hidden from view when the members are in closed position, an indicator slidably mounted on said member and coacting with the scale for determining the length 90 of shoe by the position of the ball-joint, means for clamping the indicator in set position, and means for locking the pivoted members

in closed position.

In testimony that I claim the foregoing as 95 my own I have hereto affixed my signature in the presence of two witnesses.

FRANK L. KERR

Witnesses:

W. J. NEWBURG, H. F. BRADSTREET.