July 27, 1937. C. O. COLLIER 2,088,290

GRIP MEASURING DEVICE FOR BOWLING BALLS

Filed Oct. 10, 1935

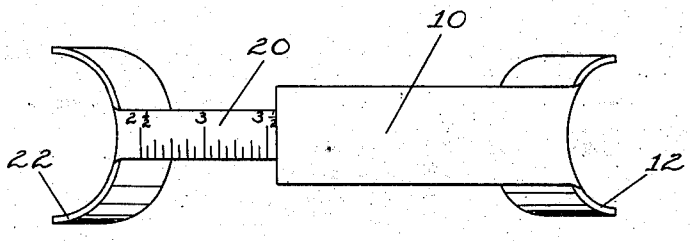

FIG. 1

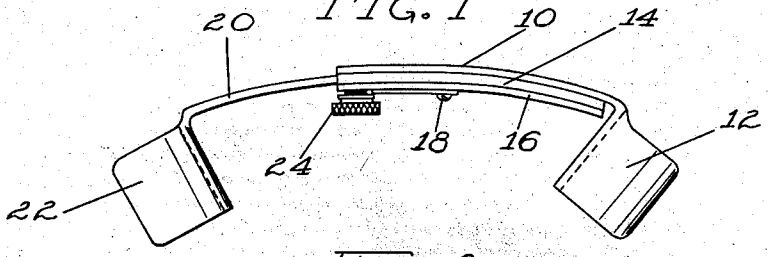

FIG. 2

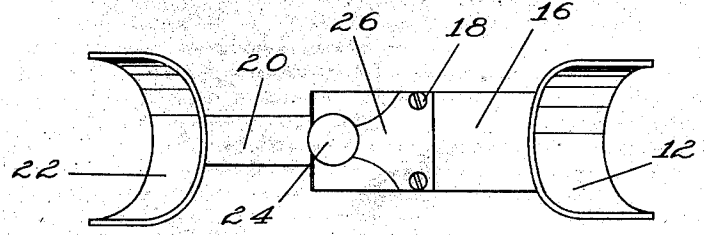

FIG. 3

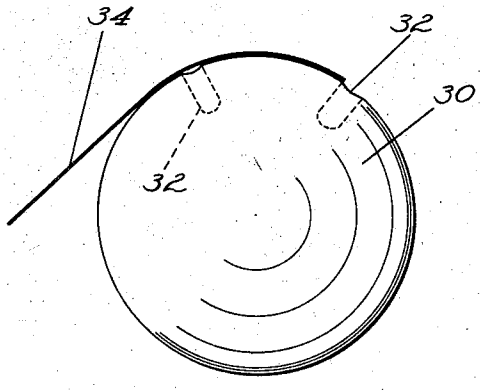

FIG. 4

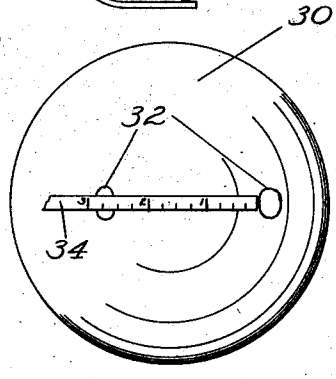

FIG. 5

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Patented July 27, 1937

2,088,290

UNITED STATES PATENT OFFICE

2,088,290

GRIP MEASURING DEVICE FOR BOWLING BALLS

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Application October 10, 1935, Serial No. 44,348

1 Claim. (Cl. 33—143)

This invention relates to an improved grip measuring device for bowling balls and has for one of its principal objects the provision of means whereby a purchaser of a bowling ball can be accurately measured so far as his grip, or the distance between his thumb and finger, is concerned, so that the seller of the ball can readily determine the spacing of the finger grips, for individual fitting of the ball to the owner and player.

An important object of the invention is to provide a device which in its contour and general relationship to the thumb and finger shall closely approximate the position of the corresponding thumb and finger of the user of a bowling ball so that the distance between the corresponding openings to be drilled in the ball can be accurately determined.

Another important object of the invention is the provision of a measuring device for bowling ball grips or the like which shall be adjustable throughout a considerable range so as to be applicable to any size of hand, so far as the user of the ball is concerned.

A still further important object of the invention is the provision of means in a measuring device for bowling balls whereby the application of a thumb and finger thereto in a bowling ball gripping relationship will automatically produce the desired relationship and corresponding measurement.

A further object of the invention is to provide in a measuring device of the class described an indicator which will immediately record the useful distance between the thumb and finger of the ball owner or player so that this measurement can be thereupon employed to indicate to the driller the necessary dimensions or distance between the openings to be drilled.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawing and following specification.

The invention, in a preferred form, is illustrated in the drawing and hereinafter more fully described.

In the drawing:—

Figure 1 is a top plan view of the improved grip measuring device of this invention;

Figure 2 is a side elevation of the same;

Figure 3 is a bottom view showing the adjusting screw;

Figure 4 is an elevation of a bowling ball showing the holes as drilled after the user's hand has been measured with the device of this invention; and

Figure 5 is a top plan view of the elements shown in Figure 4.

As shown in the drawing:—

The reference numeral 10 indicates generally one portion of the improved grip measuring device of this invention, the same comprising a plate, which may be of metal or the like, and which has an integral downwardly-extending curved portion 12 which is adapted to receive the thumb or opposed finger of the person whose bowling ball grip is being measured.

Plate 10 has positioned thereunder a pair of spacer grids 14 and beneath these is a supporting plate 16, the same being held together by means of screws or the like 18. It will be evident that this provides an inner space below the curved plate 10, into which a corresponding curved element 20 is adapted to fit. This element 20 has integral therewith or attached thereto a finger or thumb piece 22 similar to the corresponding part 12, and on the top of the inner plate 20 are a series of markings graduated in inches or other lineal dimensions, as the case might be, and so arranged that the actual operating distance between the inner edge of the thumb piece 12 and the finger piece 22 will be immediately indicated to the observer, as best shown in Figure 1.

A thumb screw 24 is screw-threadedly mounted into the base plate 16 so that the device may be fastened at a desired point for reading and thereby eliminate any chances of slipping or inaccuracies. A spring plate 26 is provided co-operating with the thumb screw 24.

The actual operation of the device is shown in Figures 4 and 5 wherein a bowling ball 30 is represented, having openings 32 drilled therein, the desired space between these openings having been preliminarily determined by means of the measuring device of this invention and then laid out on the ball by means of a correspondingly graduated tape 34.

It will be evident that herein is presented a device for measuring grips of bowlers which will positively eliminate any inaccuracies in measurement and assure to the player a drilling of the ball which will quite properly correspond to the dimensions of the user's hand and to the gripping distance between the thumb and finger. In this way a more satisfactory and individual measurement is accomplished and the player is assured of a better game.

I am aware that many changes may be made and numerous details of construction varied

throughout a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted thereon otherwise than as necessitated by the prior art.

I claim as my invention:

A measuring device for positioning bowling ball grips, including a thumb-piece comprising a guard curved to fit the thumb, an arcuate extension integral with the guard, said extension having a radius approximately equal to the radius of the bowling ball to be measured, a finger-piece comprising a guard curved to fit a finger and an arcuate extension integral with the finger-piece, the thumb-piece extension being slotted to permit the sliding reception of the finger-piece extension, a plurality of linear indicia on the finger-piece extension, means for reading the indicia, said means comprising an end of the thumb-piece extension and a spring pressed set screw mounted on the thumb-piece extension and adapted to contact the under-face of the finger-piece extension for locking the parts into predetermined space relationship.

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