Jan. 16, 1923.

1,442,376.

P. H. WILLIAMS.

BLADDER NECK INSERTER.

FILED MAR. 11, 1922.

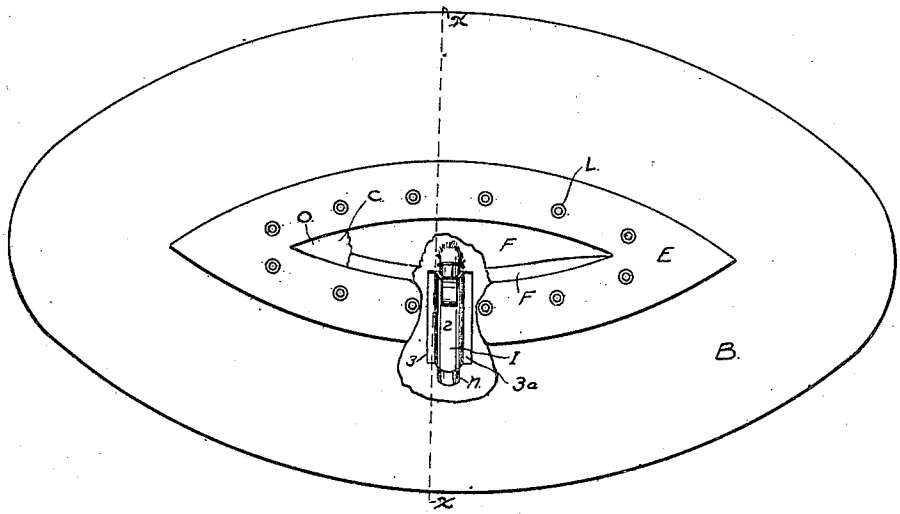


Fig. 1

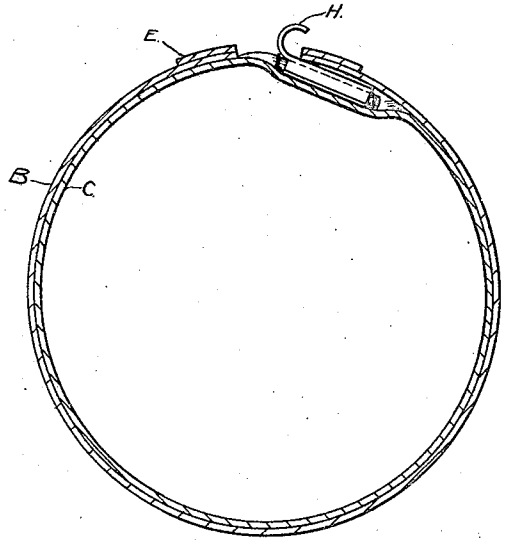


Fig. 2.

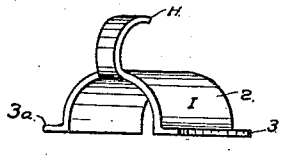


Fig. 3.

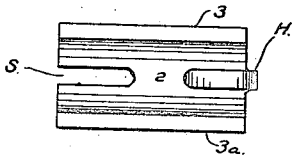


Fig. 4.

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BY

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Patented Jan. 16, 1923.

1,442,376

UNITED STATES PATENT OFFICE.

PHILLIP H. WILLIAMS, OF FRESNO, CALIFORNIA.

BLADDER-NECK INSERTER.

Application filed March 11, 1922. Serial No. 543,131.

To all whom it may concern:

Be it known that I, PHILLIP H. WILLIAMS, a citizen of the United States, and resident of Fresno, in the county of Fresno and the State of California, have invented a new and useful Improvement in Bladder-Neck Inserters, of which the following is a specification.

My invention relates to a bladder neck inserter. It is commonly known that foot balls, basket balls and similar balls contain an air tight bladder within a form made of leather or its equivalent, commonly called the ball, that in assembling the bladder with the form it is usual to insert the bladder within the ball, then inflate the bladder, tie the bladder neck, and then force it between the inflated bladder and the inside wall of the ball form. The object of my invention is the formation of a channel between the inflated bladder and the inside wall of the ball into which the neck of the bladder can be inserted with ease, and after the neck is thus inserted the device can readily be withdrawn and the opening in the ball laced.

I accomplish the object set forth by means of the device hereinafter described and illustrated on the accompanying drawing in which Figure 1 shows a foot ball with the inserter in use therein. Figure 2 is a sectional view of Figure 1 along the line *x—x* in Figure 1. Figure 3 is a perspective view of the device. Figure 4 is a modified form of the inserter.

In said drawing B represents the outside form of the ball having an opening O which is covered with a flap F. The bladder within the ball is designated as C, and the neck of the bladder as N. The device I have invented is lettered I and consists of a main portion 2 curved in transverse section having outward lateral flanges 3 and 3^a along the opposite sides, the purpose of the flanges being to prevent cutting the bladder when removing the inserter. H is a hook on one end of the inserter which is useful in removing the inserter from between the ball form and the bladder. In Figure 4 I have shown a modified form of the inserter, having a slotted portion S cut away for the purpose of economy in its manufacture. In manufacturing the device it can be pressed out of sheet metal, the portion pressed out of slot S forming a portion of the hook H on another inserter. The binding around hole O is indicated on the drawing as E and the holes for lacing the openings as L. The channel member I described can be other shapes than curved in transverse section if desired.

In using this device the bladder C is inserted in the ball form B with the bladder neck emerging from the opening in the ball form and the flap F. The inserter is then inserted between the inside wall of the ball form and the bladder, adjacent to the neck, and extending in the direction it is desired to lay the bladder neck. The bladder is then inflated, the neck tied and inserted through the channel formed by the inserter, and the inserter is then withdrawn.

I claim as new and ask for Letters Patent:

A device of the character described consisting of a member curved in transverse section and having outward flanges along the lateral edges, and an upwardly projecting hook at the top of the arch at one end thereof.

PHILLIP H. WILLIAMS.