June 30, 1925. 1,543,743

C. A. BALLARD

LOCK AND HANDLE FOR BOWLING BALLS OR THE LIKE

Filed Feb. 21, 1925

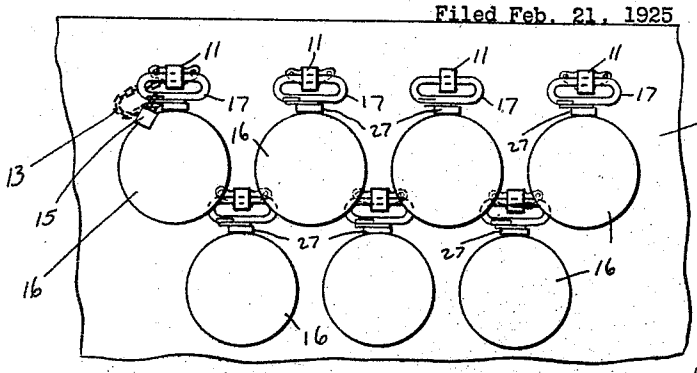


FIG. 1

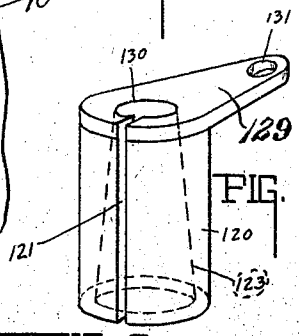


FIG. 5

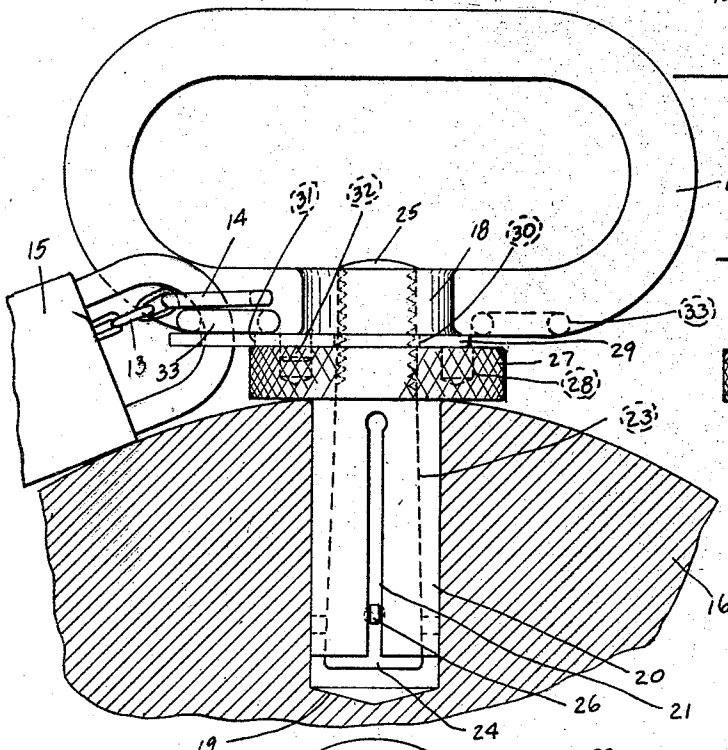


FIG. 2

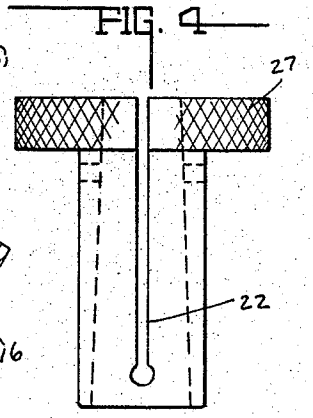


FIG. 4

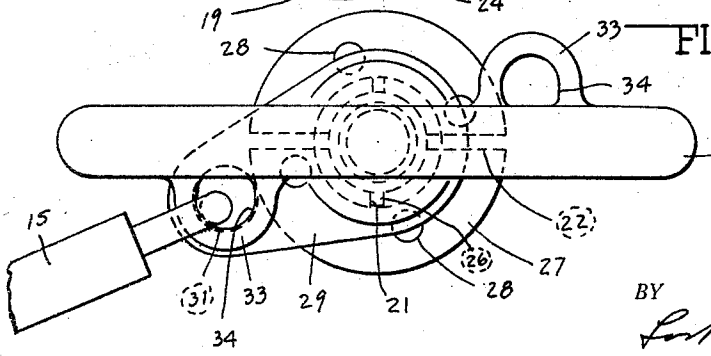


FIG. 3

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UNITED STATES PATENT OFFICE.

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LOCK AND HANDLE FOR BOWLING BALLS OR THE LIKE.

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To all whom it may concern:

Be it known that I, CHESTER A. BALLARD, a citizen of the United States, and a resident of Terre Haute, county of Vigo, and State of Indiana, have invented a certain new and useful Lock and Handle for Bowling Balls or the like; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

This invention relates to a combination support and lock for bowling balls and the like.

The chief object of the invention is to provide a lock and support for a bowling ball which will insure to the owner thereof that the ball will not be used without the owner's permission and which will not require locker accommodations to insure such privacy or personal use.

Another object of the invention is to construct a lock and support of the character described in such a manner that one form of the support is adapted to serve as a handle for transporting the ball. The aforesaid support is also adaptable for suspending the ball in a locker whenever desired.

The chief feature of the invention consists in the combination of the several parts whereby a combination lock and handle is provided for a bowling ball.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims:

In the drawings Fig. 1 is an elevational view of a rack or support showing a plurality of bowling balls each secured thereto and supported thereby. Fig. 2 is an enlarged central sectional view of a portion of a bowling ball and a portion of the combination lock and handle, the remainder being shown in elevation. Fig. 3 is a top plan view of the combination lock and handle. Fig. 4 is a view taken at right angles to Fig. 2 and of a portion of the invention shown therein. Fig. 5 is a perspective view of a modified form of the invention.

In the drawings 10 indicates a support, wall, rack or the like upon which is substantially secured a plurality of brackets 11, having hook supporting portions and to which there is secured a chain 13 terminating in an eyelet 14. A lock 15 is associated with said eyelet and is adapted to lock the combination lock and handle to the bracket 11 and thus secure the bowling ball 16 against unauthorized use or removal. The bracket 11 having a hook is so formed that it is adapted to engage the loop shaped handle 17 and suspend the same by which in turn the ball is suspended by a connection hereinafter to be described.

From the foregoing, therefore, it will be apparent that individual bowling balls may be permanently locked and detachably secured to a rack of the character described and in suspended relation therewith. The arrangement is such that the ball cannot be removed from the rack, thus preventing unauthorized use of the ball. The arrangement likewise is such that the ball is suspended and is not supported by engagement with any of the playing surface. This feature of the invention will be more apparent from the following description. It will also be apparent that the loop shaped handle will permit the ball to be manually transported with a minimum of inconvenience. Furthermore, the loop shaped handle is readily adapted for suspension in a locker whenever the same is utilized or available.

Reference will now be had to Figs. 2 to 4 inclusive, wherein the lock is illustrated in detail. Herein the U-shaped handle 17 is shown provided with a central threaded hub 18. The ball 16 is provided with the usual finger receiving opening 19. A sleeve 20 is split at 21 upon opposite sides and this split portion 21 extends from near the top of the sleeve to the bottom end thereof, a split 22 is found upon opposite sides of said sleeve and extends from near the bottom of said sleeve to the top thereof. The sleeve upon its interior is shown provided with a tapered surface 23. A tapered plug 24 is positioned within said tapered opening of the sleeve and projects beyond the same as shown at 25 and terminates in a threaded end. This threaded end is receivable by the threaded hub 18. A key or pin 26 is carried by the plug 24 and is longitudinally slidable in one of the slots formed in the sleeve and herein one of the slots 21. This pin prevents relative rotative movement of the sleeve and plug and insures that threading movement of the hub will draw the plug upwardly into the taper and cause a camming or wedging action and spread the portions of the sleeve into side wall engagement. Herein the sleeve 20 is shown including a flange 27 and

the flange is herein illustrated as provided with a plurality of spaced openings 28. Herein four are illustrated and these are arranged in spaced relation with respect to each other about the periphery. A locking plate 29 includes a central opening 30 and an aligned opening 31, said locking plate also carries a pin 32. When the central opening is aligned with stud or plug 24, then the pin 32 may be positioned in any one of the several openings 28, and thus when the handle 17 is threaded down upon the plug the entire construction is secured together in rigid relationship and to the ball.

The handle 17 is provided with a pair of oppositely disposed eyelets 33 having an opening 34 therein. In the previously described threading operation it is intended that one of the eyelets 33 with its opening 34 shall register with the plate opening 31. If this is not possible and at the same time secure the necessary anchorage to the side wall of the bowling ball, then the handle is unscrewed from the plug and the plate 29 repositioned so that an additional quarter turn is possible. If the amount of movement is greater than the quarter turn, then repositioning may not be necessary because the opposite eyelet 33 would then register. The allowance is such, however, that a one-quarter turn will be practically sufficient for locking purposes and permit registration of one of the outer openings 34 with the plate opening 31 when the plate is positioned with the pin 32 in one of the openings 28.

When thus positioned the ring 14 is positioned adjacent the eyelet and the lock 15 is associated therewith to lock the ring 14 of chain 13, the eyelet 33 and the plate 29 together. If it is not desired to lock the handle to the support or rack, then the chain 13 and ring 14 will be omitted and the lock will be applied to the eyelets 33 and the plate 29 and thus secure the same together in ball anchoring position. When this arrangement of the several parts is utilized the ball may be suspended or transported by means of the handle 17. Likewise the ball cannot be utilized for playing purposes so long as the handle is locked thereto.

In Fig. 5 there is disclosed a modified form of locking plate and locking sleeve, the same being shown in perspective. In this form of the invention the sleeve portion 120 includes a tapered opening 123 and said tapered sleeve includes a slot 121 that extends substantially the full length thereof. Thus the sleeve may be expanded and contracted by longitudinal reciprocation of the bolt 24 utilized therewith. In this form of the invention, however, the locking plate 129 is shown integral with the sleeve 120 and includes at its outer end an aperture 131, and an aperture 130 registering with the tapered opening 123 of the sleeve. In this form of the invention, therefore, there is no adjustability of the locking plate with respect to the sleeve.

The invention claimed is:

1. The combination with a support, a bowling ball, a bracket secured to the support, a combination anchor and handle detachably associated with the ball for securing the handle to the ball, said handle being supportable by said bracket, and means for simultaneously locking the handle to the ball and to the bracket.

2. A combination bowling ball handle and anchor comprising a tapered sleeve receivable by one of the ball openings, an expanding wedge associated with said sleeve, a handle for moving said wedge for expansion purposes, and means associating said handle and said sleeve for securing the same together in the handle anchored position.

3. In a handle lock for bowling balls and the like the combination of a sleeve, a plate having a pair of openings, one of said openings registering with the sleeve and the other being eccentric thereof, a handle having an opening registering with said plate eccentric opening for locking the plate to the handle, a locking connection between the handle and the sleeve, and a pin and socket connection between the sleeve and plate.

4. In a device of the character described, the combination of a sleeve having an internal tapered opening, said sleeve including a slot therein, a tapered plug receivable by said tapered sleeve opening, a rotation preventative connection between said sleeve and said plug, a handle having a threaded connection with said plug for drawing the same into wedging engagement with the sleeve for expanding the latter into locking engagement, a locking plate associated therewith and including a locking pin, a flange on said sleeve including a plurality of recesses each adapted to receive said locking pin for anchoring the plate to the sleeve.

5. In a device of the character described, the combination of a handle having a pair of symmetrically positioned eccentrically arranged openings, a locking plate positionable adjacent thereto and including a locking opening eccentrically positioned and adapted to register with one of said plurality of spaced handle openings, a pin carried by said plate, a locking sleeve including a plurality of openings arranged in spaced relation and eccentrically thereof, said pin being receivable by any one of said openings, and an expanding connection between said sleeve and said handle for securing the sleeve in locking relation.

In witness whereof, I have hereunto affixed my signature.

CHESTER A. BALLARD.