Dec. 7, 1943. E. J. CLOUTIER 2,336,073

HAND CONDITIONING DEVICE

Filed Dec. 20, 1941

Fig. 1.

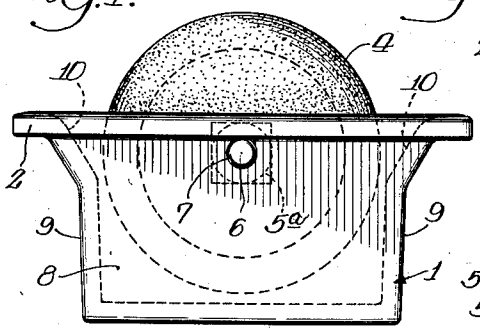


Fig. 2.

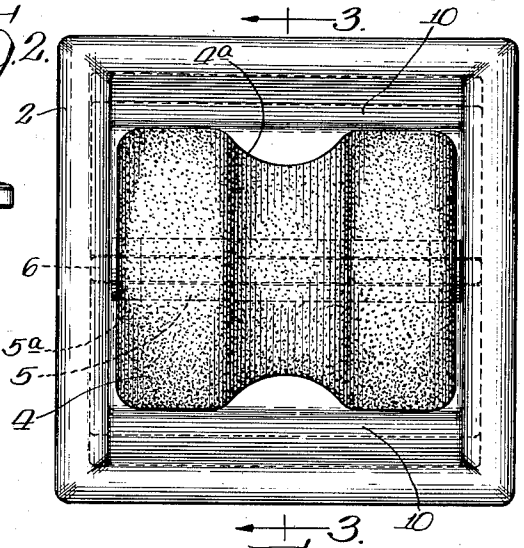


Fig. 3.

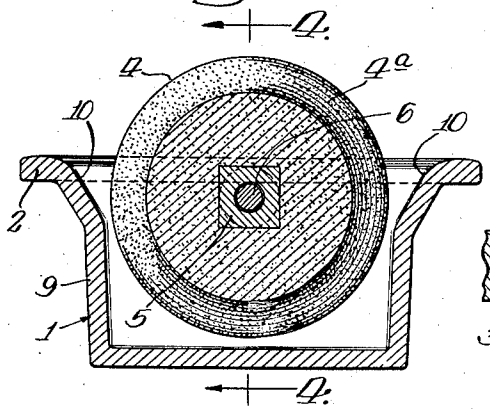


Fig. 4.

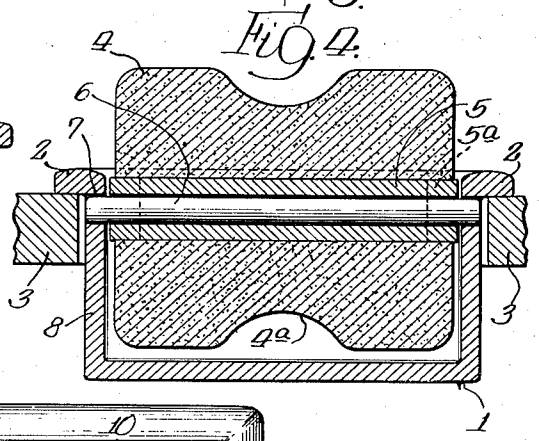
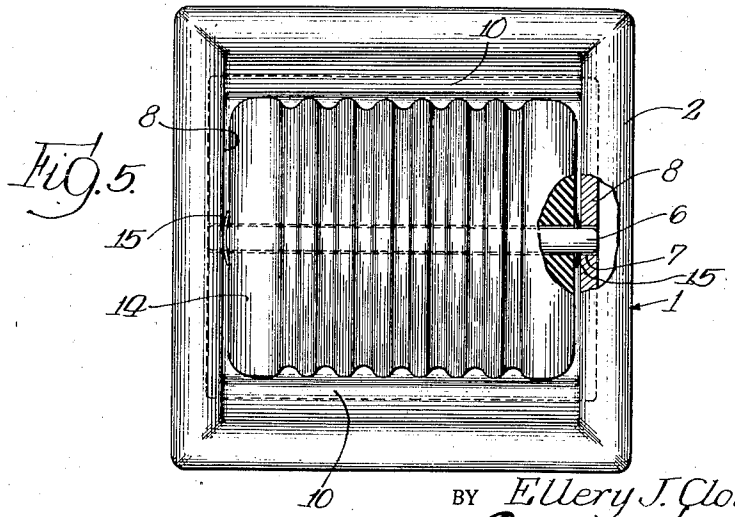


Fig. 5.



INVENTOR.

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UNITED STATES PATENT OFFICE

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HAND CONDITIONING DEVICE

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Application December 20, 1941, Serial No. 423,783

5 Claims. (Cl. 273—54)

This invention relates to a hand conditioning device adapted for use in connection with such games as bowling of the regulation variety, and duck pin bowling.

One object of the invention is to provide a fixture adapted to be employed either as a hand moistener for the use of players in duck-pin bowling, or as a chalk holder for use in regulation bowling.

Another object of the invention is to provide a receptacle to serve as a mounting for a rotably carried cylinder member with its upper portion exposed above the edge of the receptacle, for contact with the fingers.

A further object of the invention is to provide a receptacle adapted to rotatably support a cylinder of chalk and with the upper marginal portions of the receptacle flared away from the cylindrical surface, to afford more convenient access thereto in applying the fingers to the chalk cylinder for conditioning them for bowling.

More specifically it is an object of the invention to provide an upwardly open receptacle with a cylindrical member rotatably mounted therein, the mounting means being disengageable from a pair of opposite walls of the receptacle adjacent the ends of the cylinder, and the walls adjacent the curved surfaces being flared away from said surfaces to afford more convenient access to the cylinder.

Other objects and advantages will appear from the following description taken in connection with the drawing, in which:

Figure 1 is an end elevation of a hand conditioning device embodying this invention, showing a cylinder of chalk mounted therein;

Figure 2 is a top plan view of the same;

Figure 3 is a vertical sectional view taken substantially as indicated at line 3—3 on Figure 2;

Figure 4 is a vertical axial sectional view taken as indicated at line 4—4 on Figure 3;

Figure 5 is a top plan view showing a moistening roller substituted in the receptacle for the chalk cylinder.

While the invention is susceptible of various modificactions and alternative constructions, the embodiments shown in the drawing and described hereinafter are by way of preferred illustration only, and it is not intended that the invention be limited thereto or thereby, but it is the intention to cover all modifications and alternative constructions falling within the scope of the appended claims.

In connection with the regulation game of bowling it is common practice for the bowler to apply his fingers to a block of chalk preparatory to handling and delivering the ball. In connection with the modified bowling game, commonly known as "duck pins," a player usually moistens his fingers and for this purpose a special moistening device is desirable. The present invention provides certain means which can be used interchangeably for both games.

Figure 1 shows a receptacle 1, which may be formed of any convenient material, such as glass, metal, or plastic composition, and which is preferably of rectangular outline in plan view, as seen in Figure 2. The receptacle is formed with a marginal flange 2 by which it may be supported in a suitable opening such as the top wall of a newel post or other fixed furnishing of a bowling alley. A fragmentary representation of such supporting wall is included at 3 in Figure 4. Quite commonly the chalk employed for conditioning the bowlers' hands is supplied in the form of a truncated cone but in the present instance it is shown as a cylinder or roller 4, which is molded onto a wooden core 5 having an axial bore so that it may be mounted upon a rod or spindle 6 and preferably with sufficient clearance for rotation on the rod. The rod itself is supported in openings 7, 7 in the end walls 8, 8 of the receptacle 1 with sufficient clearance so that the rod may be easily slipped through these openings in assembling the roller 4 in the receptacle, or in removing it therefrom. The rod 7 is of substantially the same length as the body of the receptacle 1 so that its ends stand flush with the outer surfaces of the end walls 8, 8, and the adjacent vertical surfaces of the opening in the supporting structure 3 thus serve to retain the rod 6 in its proper position in the receptacle 1 when the receptacle is supported by its flange 2 in the opening in the structure 3, as already described.

Preferably the extreme end portions 5a of the core 5 are cylindrical in cross-section, while the intermediate portions are of square cross-section, as seen in Figure 3, and since the circular form of each portion 5a is of such a size that it may be inscribed within the square cross-section of the main core 5, this arrangement interlocks the core 5 with the molded chalk cylinder 4 and prevents it from moving endwise therein.

In the use of the chalk for conditioning his fingers the bowler will usually want to rub his fingers over the surface of the chalk without turning the roller 4 on its spindle 6. Hence to afford a more convenient grip of the chalk cyl-

inder for this purpose the side walls 9, 9 of the receptacle 1 are flared outwardly and upwardly away from the cylindrical surface of the chalk 4, as seen at 10, 10, in Figure 3. In addition, the chalk cylinder itself is formed with a groove or channel 4a at the middle of its length, which provides extra space for the thumb of the bowler as he grasps the cylinder. Thus while the cylinder is not rotated in actual use, it will be turned around on its spindle from time to time so as to present different surfaces upwardly for contact with the fingers, thus affording substantially uniform wear of the chalk as it is consumed in this manner. When the chalk cylinder has become too small for convenient use, it is easily removed by sliding the rod 6 out of the openings 7, 7 and out of the bore in the core 5, then replacing the worn chalk with a fresh cylinder and securing the whole in place by re-insertion of the rod 6 through the openings in the receptacle walls 8, 8.

When the device is to be used in connection with duck pin bowling, the chalk cylinder 4 will be replaced by a roller 14 which may be of rubber or other suitable composition and is preferably formed with a corrugated surface as shown in Figure 5. The receptacle 1 will then contain a quantity of water which will be distributed onto the corrugated surface of the roller 14, for moistening the bowler's fingers upon contact with the roller, and in this use the roller itself may be actually rotated in contact with the fingers. Preferably convex washers 15 are inserted between the ends of the roller 14 and the end walls 8, 8 of the receptacle 1 to insure free rotation of the roller therein.

I claim as my invention:

1. In a hand conditioning device an upwardly open receptacle and a cylindrical roller of chalk supported therein for rotation on its axis, the side walls of the receptacle being flared upwardly and away from portions of the curved surface of the chalk below the horizontal plane of its axis.

2. In a hand conditioning device an upwardly open receptacle and a cylindrical roller of chalk supported therein, the side walls of the receptacle being flared upwardly and away from the curved surface of the chalk, said surface being formed with a circumferential groove of approximately finger width intermediate its ends.

3. In a hand conditioning device an upwardly open receptacle having side walls and end walls, the end walls having a pair of aligned openings, a spindle removably carried in said openings and a cylinder removably supported on said spindle with its upper portion exposed above the margins of the receptacle, said cylinder being formed of chalk and having a core of other material and of non-circular cross section molded axially within it in interlocking engagement, said core having an axial bore to fit on the spindle.

4. A hand conditioning device comprising an upwardly open receptacle having side walls and end walls, the end walls having a pair of aligned openings, a rod insertable through said openings and dimensioned to be supported therein and a cylinder carried on said rod, the receptacle having horizontally extending flanges disposed above said openings and adjacent thereto for supporting the receptacle upon the marginal area adjacent an opening in a supporting structure, with the body of the receptacle depending in such opening and with the adjacent walls of the opening serving to retain the rod in position in the receptacle.

5. In a hand conditioning device as defined in claim 3, said core having adjacent portions of different cross section forming trans-axial shoulders in endwise interlocking engagement with the chalk cylinder.

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