Nov. 20, 1951 S. A. JANKOWSKI 2,575,814

MOTOR OPERATED BOWLING BALL CLEANER HAVING A ROTARY BRUSH

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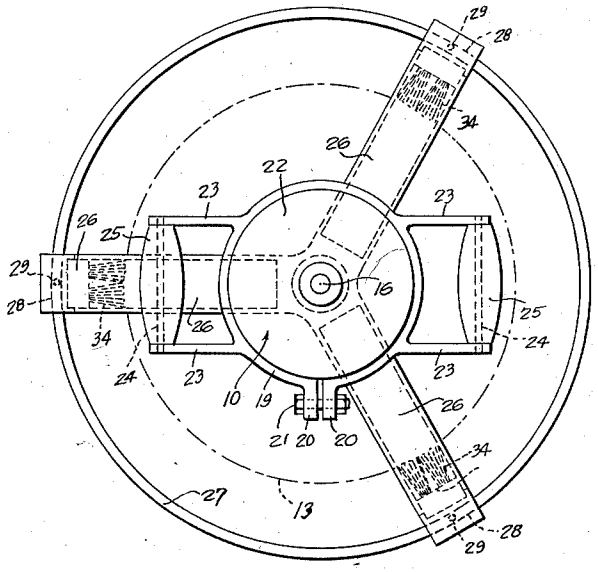


Fig. 1.

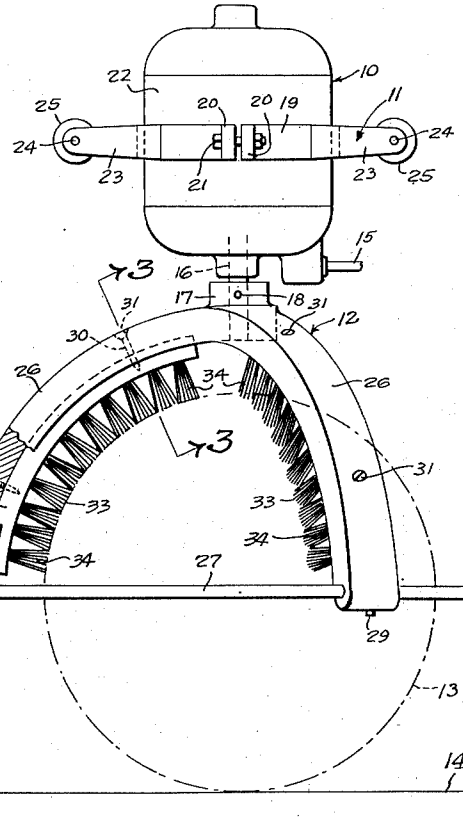


Fig. 2.

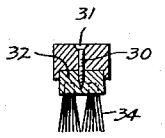


Fig. 3.

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MOTOR OPERATED BOWLING BALL CLEANER HAVING A ROTARY BRUSH

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1 Claim. (Cl. 15—22)

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This invention relates to ball cleaning devices, and in particular to devices for cleaning bowling balls.

One object of this invention is to provide a bowling ball cleaning device which is easily manipulated and which is power-operated so as to efficiently clean the ball.

Another object is to provide a bowling ball cleaning device which is light and portable yet powerful so that it can be applied to the balls one by one while they are on the ball rack.

Another object is to provide a bowling ball cleaning device having a triple armed rotary support with arcuate brushes thereon which are brought into engagement with the ball and are self-centering and self-aligning thereon, thereby facilitating the cleaning of the ball and increasing the rapidity with which it can be accomplished.

Other objects and advantages of the invention will become apparent during the course of the following description of the accompanying drawings, wherein:

Figure 1 is a top plan view of a bowling ball cleaning device according to a preferred form of the invention;

Figure 2 is a front elevation of the device shown in Figure 1; and

Figure 3 is a cross-section through one of the brush arms and brushes taken along the line 3—3 in Figure 2.

Referring to the drawings in detail, Figures 1 and 2 show a preferred form of the bowling ball cleaning device of this invention as consisting generally of a motor 10, a handle assembly 11 and a rotary brush unit 12 as applied to cleaning a ball 13 resting upon a support 14 such as a ball rack. The motor 10 is preferably an electric motor of any suitable type and receives electric current through a cable 15 connected to a source of electric current. The motor 10 has a motor shaft 16 to which is connected the hub 17 of the brush unit 12 as by the pin 18 (Figure 2).

The motor 10 is surrounded by a split ring 19 having projecting ears 20 at the opposite ends thereof. The ears 20 are forced toward one another by a bolt 21, thereby tightening the ring 19 around the casing 22 of the motor 10. Projecting outward in opposite directions from the ring 19 are spaced parallel arms 23, the outer ends of which are interconnected by rods 24 passing lengthwise through handles 25 of wood or other suitable material.

The brush unit 12 has arcuate arms 26 extending downward from the hub 17, these arms being

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preferably three in number and equally spaced around the circumference of a ring 27 interconnecting the outer end of the arms 26. The ring 27 passes through holes 28 in the outer ends of the arms 26 and is secured thereto as by the pins 29. The arms 26 are provided with radial holes 30 (Figure 3) through which pass fasteners 31, such as screws, into the arcuate backs 32 of curved brushes 33 having bristles 34 with their ends arranged in an arcuate path having approximately the same curvature as the bowling ball 13.

In the operation of the invention, the operator grasps the handles 25 of the device and carries it to the place where the bowling balls 13 to be cleaned are located. Having energized the electric cable 15 by connecting it to a source of electric current, he causes the motor shaft 16 and brush unit 12 to rotate. He then lowers the device over the bowling ball 13 and swings the device to and fro to roll the ball back and forth as the brush unit 12 is rotated by the motor shaft 16. The cleaning action is preferably carried out with the aid of a suitable soap and water or with some other type of detergent. The soap and water solution may be applied in any suitable manner such as by lowering the brush unit 12 of the device into a bucket containing the cleaning solution. When one ball has been cleaned by thus rolling it to and fro, the operator removes the cleaning device from it and brings it down upon the next ball, repeating the operation. In this manner, each of the bowling balls in the ball rack 14 is quickly and easily cleaned. While two or more arms 26 may be provided, it has been found preferably to use three because the device is thereby automatically centered upon the ball 13. In this manner all portions of the surface of the ball are reached by the brushes 34 and are thoroughly cleaned.

While I have shown and described my invention in detail, it is to be understood that the same is to be limited only by the appended claim, for many changes may be made without departing from the spirit and scope of my invention.

What I claim is:

A portable bowling ball cleaning device comprising a motor having a vertical shaft extending downwardly therefrom, a handle connected to said motor, a plurality of arms connected to said shaft below said motor and radiating outwardly therefrom in circumferentially-spaced relationship, a brush secured to each arm having a concave ball-contacting surface, said brush surface being arcuately curved outwardly and downward-

ly in a plane passing through said shaft, and an annular guard member secured to and interconnecting the outer end portions of said arms, said guard member being arranged to extend through openings in the lower ends of said arms and anchored in place therein to interbrace said arms.

STANLEY A. JANKOWSKI.

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