

Feb. 6, 1951

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2,540,687

GOLF BALL WASHER

Filed Feb. 2, 1946

2 Sheets-Sheet 1

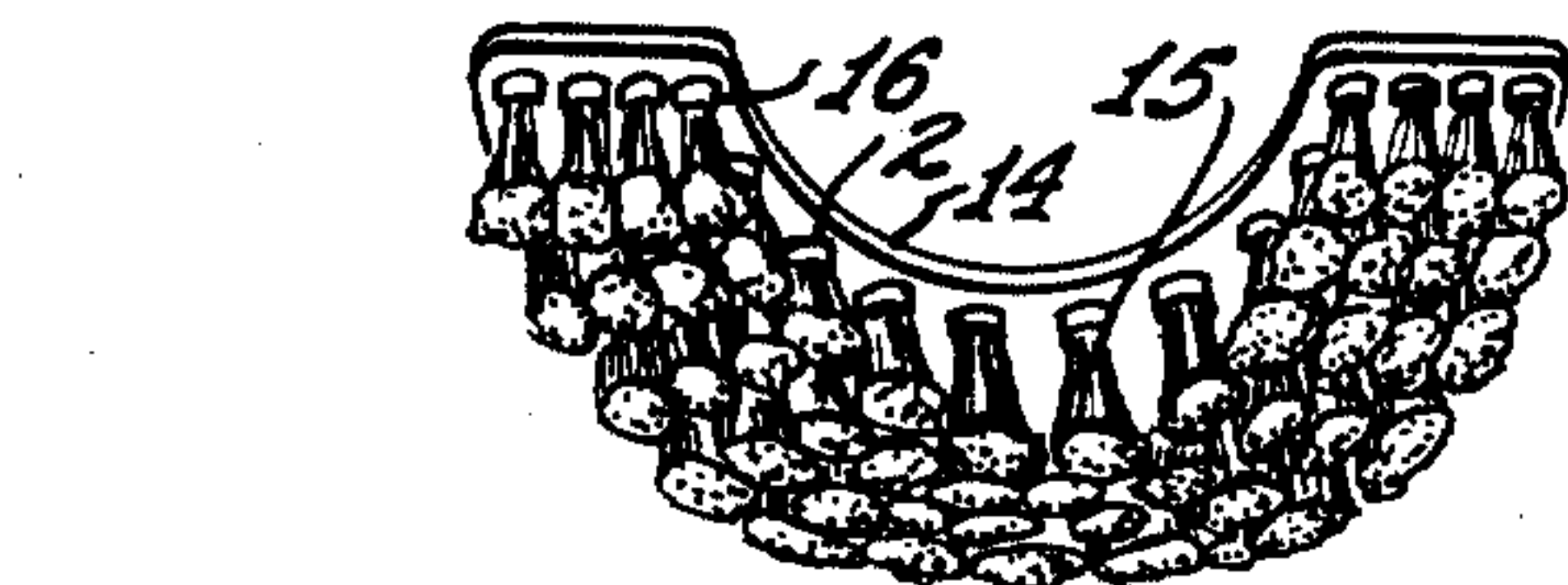


FIG. 3.

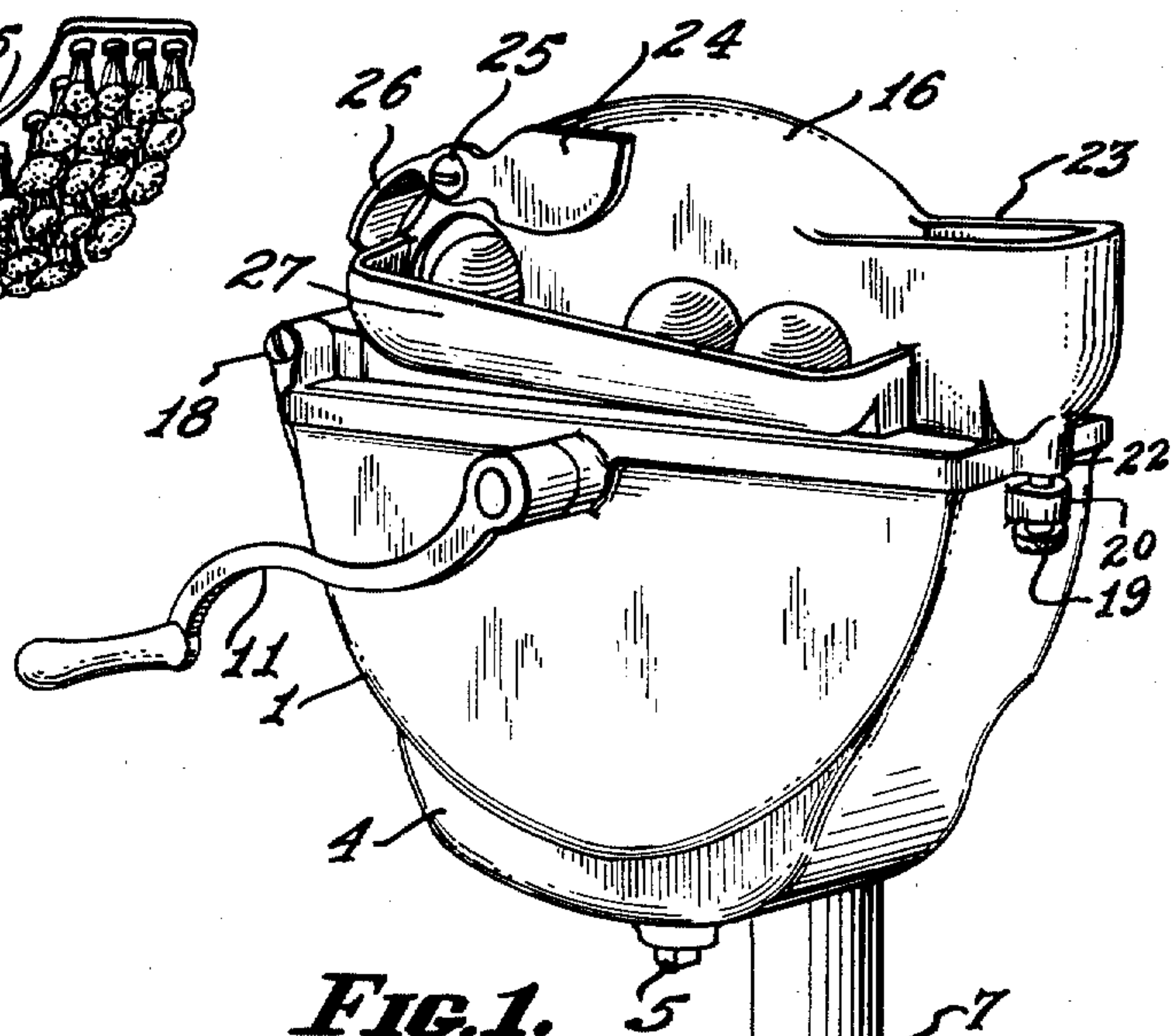


FIG. 1.

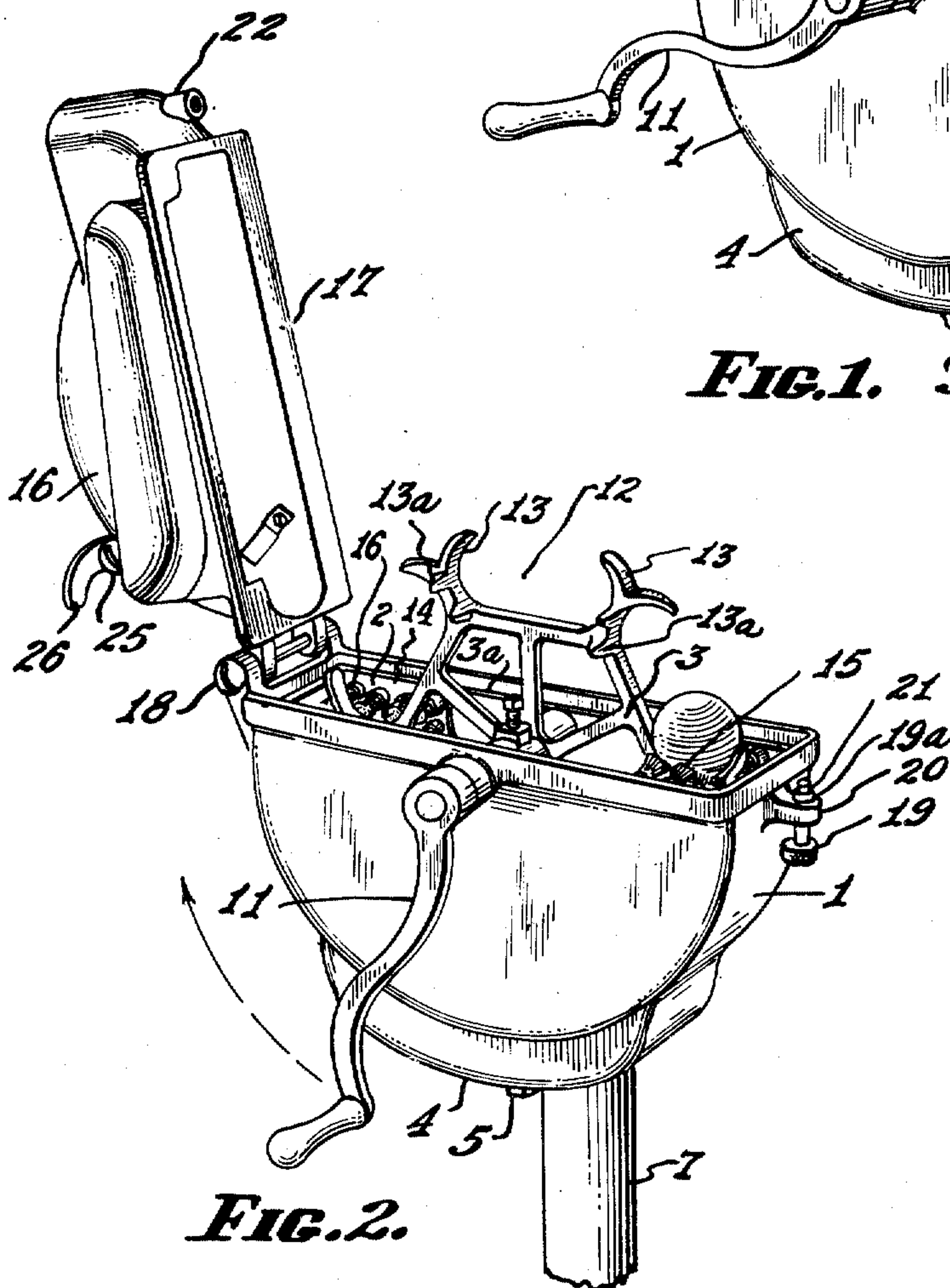


FIG. 2.

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2 Sheets-Sheet 2

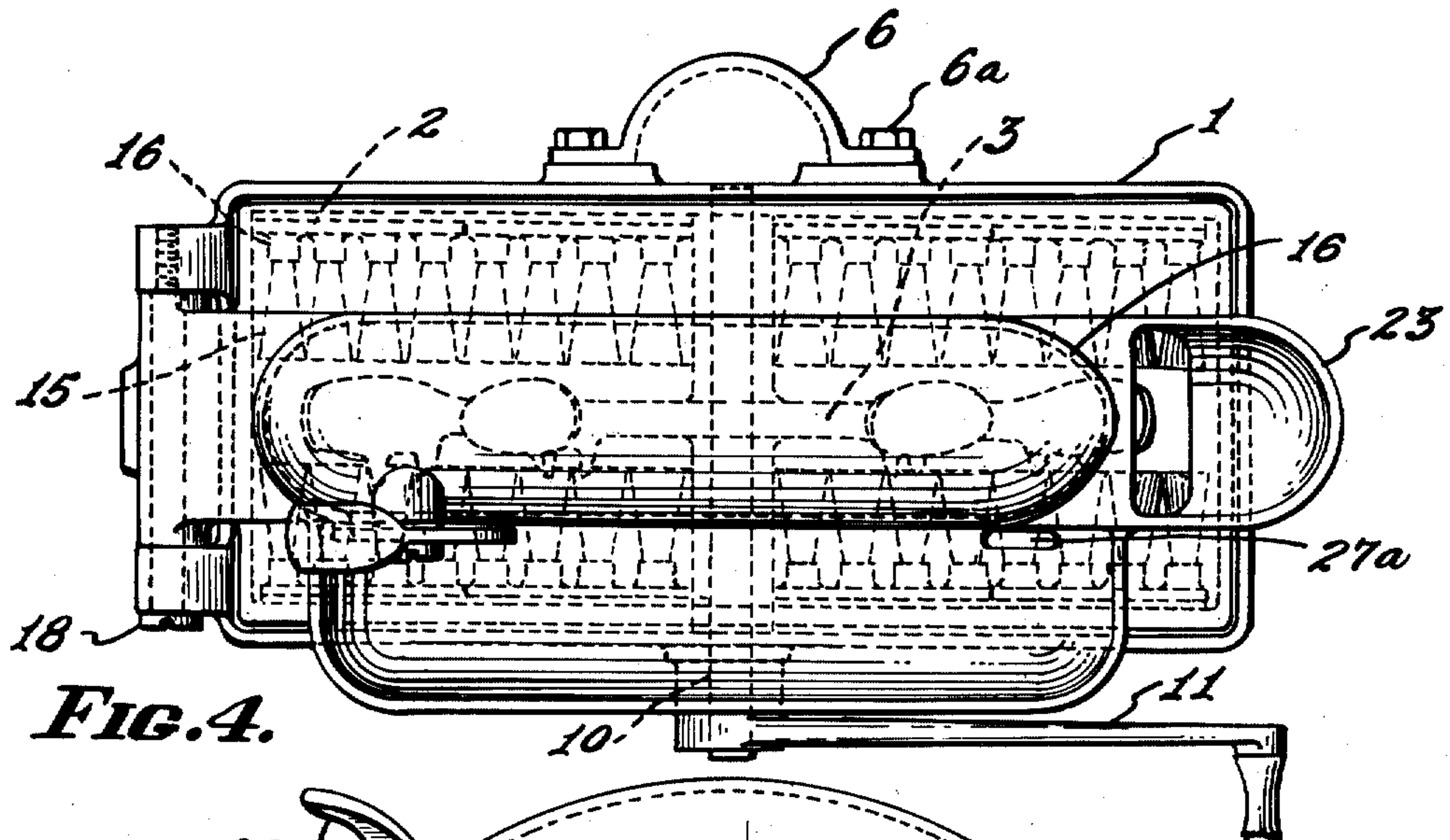


FIG. 4.

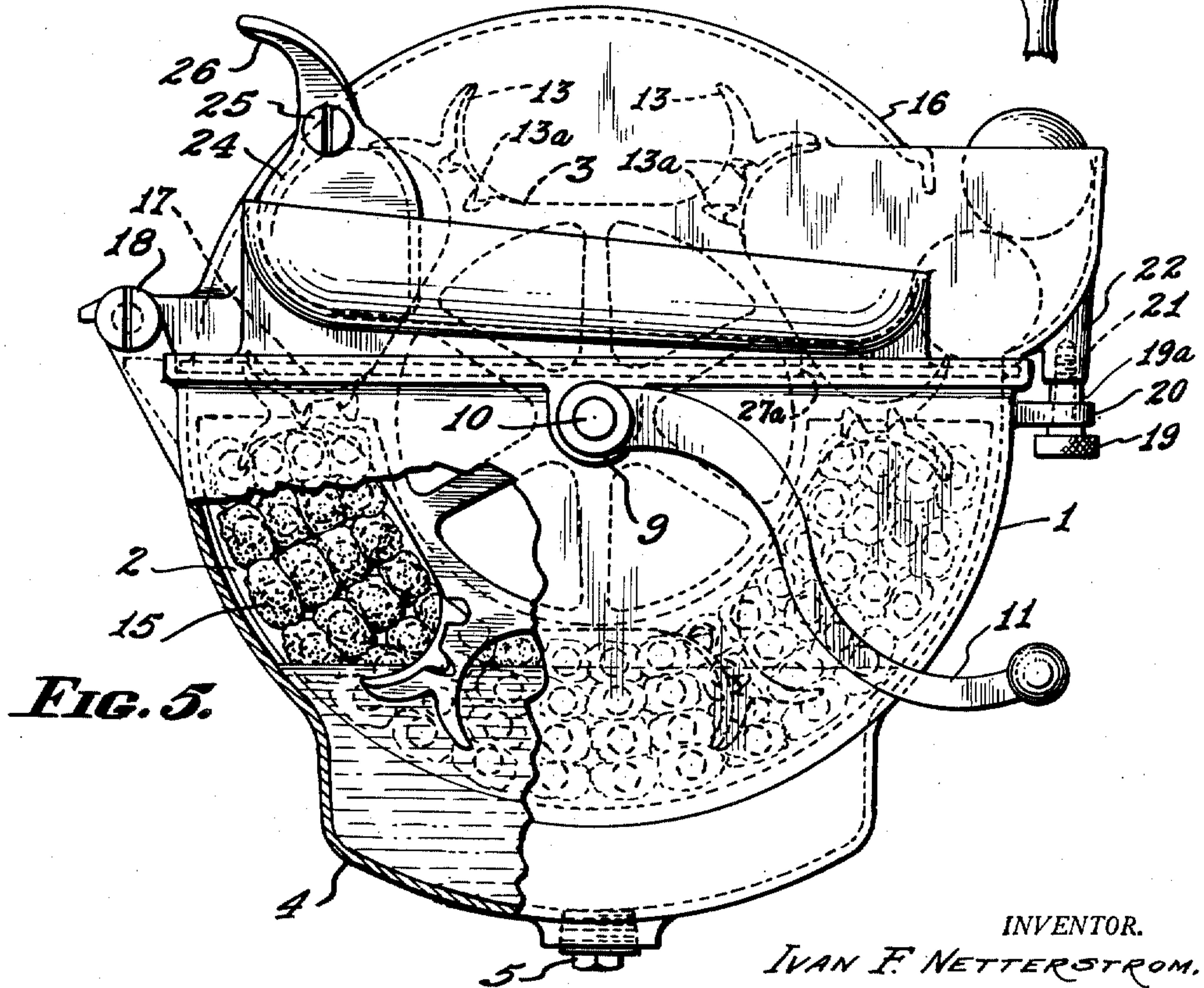


FIG. 5.

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GOLF BALL WASHER

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3 Claims. (Cl. 15-21)

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My invention relates to golf ball washers and particularly to the rotary type adapted to wash a plurality of golf balls at the same time.

It is the object of my invention to provide a golf ball washer which will wash four or more balls at the same time so that a foursome of players will not be delayed on the tee unnecessarily.

In such a washer, it is my object to provide a feeder trough from which the balls will be fed automatically into the washer and to also provide an automatic release which, when the balls have been carried around a desired number of times on the washing wheel or spider, will automatically discharge the washed balls into a readily accessible discharge trough.

A further object is to provide a washer in which the balls cannot become lost (or fail to come out) and where rotation of the washing wheel either clockwise or counterclockwise will bring the balls around to the automatic discharge trough.

A still further object is to provide novel types of brushes with a mounting arrangement which keeps the brushes in position or permit their removal with a simple adjustment so that the brushes may be replaced or repaired.

Another object is to provide a golf ball washer in which the balls may be exposed to new unworn bristles by the simple expedient of reversing the position of each brush or changing the position of the brush on the right and putting it on the left and vice versa.

Another object is to provide an assembly which can be mounted on a piece of two inch pipe supported in a concrete block so that the washers can be readily removed in the winter season and supported, when in use, in such a steady manner that rough handling will not injure them or cause them to get out of order.

The foregoing objects and many other objects of functional desirability and constructive simplicity and to which reference will be made in the following description I accomplish by that certain combination and arrangement of parts of which I have shown a preferred embodiment.

In the drawings:

Figure 1 is a perspective view of the washer with the cover in place.

Figure 2 is a perspective view of the washer with the cover thrown back.

Figure 3 is a perspective view of one of the brushes.

Figure 4 is a plan view of the assembly.

Figure 5 is a side elevation, part of the bowl being taken away to reveal the internal construction.

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The bowl 1 of the washer is semicircular in shape and thick enough to accommodate two scrubbing brushes 2 also of semicircular shape and with the bristles extending out horizontally, those of one brush toward those of the other, with enough space between the bristles to accommodate the spider or sprocket 3, carrying the balls to be washed.

A sludge basin 4 is formed out from the base of the bowl having a drain plug 5 which, when removed, will permit the sediment and dirty water to drain out. The balls are kept from dropping into the sump by frictional contact with the bristles of the brushes.

Bolted to a side wall of the bowl there is a coupling 6 which permits the washer to be securely mounted on a pipe length 7 which may be permanently secured in a concrete block in the ground as at 8 or supported on a flat base. The coupling is preferably a split coupling with bolts 6a which permit tightening the coupling on the end of the pipe length.

The bowl is provided with bearing bosses 9 through which a shaft 10 extends. On the shaft there is secured a conventional shaped turning handle 11. Turning of the handle causes rotation of the shaft 10 which carries the spider wheel 3.

The particular wheel illustrated has six ball receiving pockets 12, each pocket being formed by curved retaining lugs 13. The pockets are in length about twice the diameter of a golf ball which permits the balls to move back and forth during washing so as to expose the entire surface to the scrubbing action of the brushes. The tips of the lugs 13 are so spaced as to be slightly less distance apart than twice the diameter of a golf ball.

The brushes illustrated have semicircular shaped backs 14, each brush being composed of a series of bristles 15 bound together and secured in a series of spaced holes 16. When such brushes, through long usage, become worn out it is an inexpensive job to have certain of the bristles replaced thereby renewing the brush to one of uniform bristle length.

The brushes slide with an endwise rotary movement into position in the bowl and by having the cover 16 provided with bottom flanges 17 the brushes are held in position at their ends when the washer is in use. The construction of the brushes is such that unusual washing efficiency is accomplished as the balls, being carried around in the pockets, are actually in contact with the brushes during one half a complete revolution of the wheel. The bowl has ledges 3a against which the flanges 17 abut.

Each brush may be removed and replaced in reversed end position or the brushes may be interchanged from side to side thereby exposing new bristles to the balls being washed. The brushes may be held in position by springs, if desired. During the normal travel of a ball it is exposed to bristles throughout half of the complete orbit.

The cover is hingedly mounted as indicated at 18. A bolt 19 having a portion of its shaft swedged outwardly to form a flange so that it cannot be removed from the apertured boss 20, in which it is mounted, holds the cover down by having its threaded end 21 engaged in a tapped and threaded boss 22 in the cover.

The cover is provided with a receiving trough 23 having a discharge opening for balls facing the periphery of the wheel. The receiving hopper illustrated has a capacity for two balls. Of course, if the washer is in operation, as soon as a ball pocket passes the hopper opening one ball will feed tangentially into the outer opening of the pocket between the end lugs 13. Each pocket will receive only one ball as a ball in a pocket will block off another ball from entering it.

The side lugs 13a of the ball pockets on the wheel are bevelled slightly downwardly toward their outer ends so that when a set of balls have been washed, by opening the flap cover 24, which is hinged as shown at 25 and provided with a thumb trigger 26, gravity will cause the balls to roll out from the side of the pocket and into the discharge trough or hopper 27. The trough illustrated has a capacity for four balls. Since the balls coming out of the washer carry water, I have provided a passage 27a through which the water drains back into the basin 4.

It is a particularly novel feature of my washer that the balls will fall out from the pockets when the flap cover 24 is opened, whether the handle is rotated clockwise or counterclockwise. The washer works just as well backwardly as forwardly. As long as balls are placed in the receiving hopper they will feed into the receiving pockets and be discharged into the delivery hopper when the flap cover is opened.

Water and soap solution may be poured into the bowl through the discharge opening from the receiving hopper or the cover may be thrown back. The bowl is preferably filled about half full. The sediment settles out at the bottom and does not contaminate the washing fluid. This is because the sediment chamber is out of the orbit of the ball pockets carrying balls.

The simplicity of operation of the washer; its low cost of manufacture from a few simple castings of metal or plastic; its sturdiness; its fool-proof operational functions; and the readiness with which it may be mounted on the end of a pipe, all combine to make it a golf ball washer of exceptional desirability. It will be understood that changes in size or shape will readily occur to those skilled in the art without departing from the operative principle of its assembly.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A rotary golf ball washer comprising a narrow semi-circular bowl, a rotatable wheel with ball receiving pockets mounted within said bowl and having a portion projecting above the bowl, brush means provided within said bowl at either side thereof and between which said wheel rotates, and a cover for said bowl having a ball receiving hopper provided with a discharge open-

ing facing the periphery of said wheel to permit the delivery of balls to said pockets and a ball delivery trough provided with a flap valve to permit the delivery of balls from the ball receiving pockets, said pockets having lugs inclined in the direction of the delivery trough to discharge balls sideways from said pockets by gravity when the flap valve is open.

2. A rotary golf ball washer comprising a narrow semi-circular bowl, a rotatable wheel with ball receiving pockets mounted within said bowl and having a portion projecting above the bowl, a cover for said bowl having a ball receiving hopper provided with a discharge opening facing the periphery of said wheel to permit the delivery of balls to said pockets and a ball delivery trough provided with a flap valve to permit the delivery of balls from the ball receiving pockets, said pockets having lugs inclined in the direction of the delivery trough to discharge balls sideways from said pockets by gravity when the flap valve is open, and a pair of semi-circular brushes mounted within the bowl and having opposed bristles against which balls in the pockets will be carried, said cover provided with means for holding both ends of said brushes in position.

3. In combination in a golf ball washer having a rotatable wheel with single ball carrying pockets arranged circumferentially thereof, to carry balls in a circular vertical path around the axis of the wheel, a cover for said washer having a ball receiving hopper provided with a discharge opening facing the periphery of said wheel to permit the delivery of balls to said pockets, and a ball delivery trough provided with a flap valve to permit the delivery of balls from the said pockets, said pockets having lugs inclined in the direction of the said delivery trough to discharge balls sideways from said pockets by gravity when said flap valve is open, and a pair of bristle brushes provided with means for mounting same within the washer one brush on one side of the wheel and one on the other with the bristles thereof facing each other, said bristles extending into the circular path traversed by balls within the pockets of the wheel, each of said brushes being of arcuate shape lengthwise of the brush and of a peripheral length equal substantially to half the orbit of the ball carrying pockets.

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