F. H. FARRINGTON.

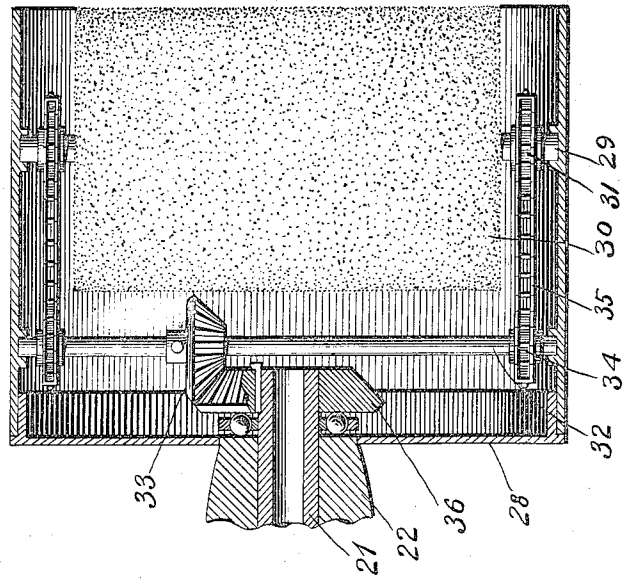
AUTOMATIC CLEANER AND POLISHER.

APPLICATION FILED OCT. 19, 1907.

949,727. Patented Feb. 15, 1910.

2 SHEETS—SHEET 1.

Fig. 2.



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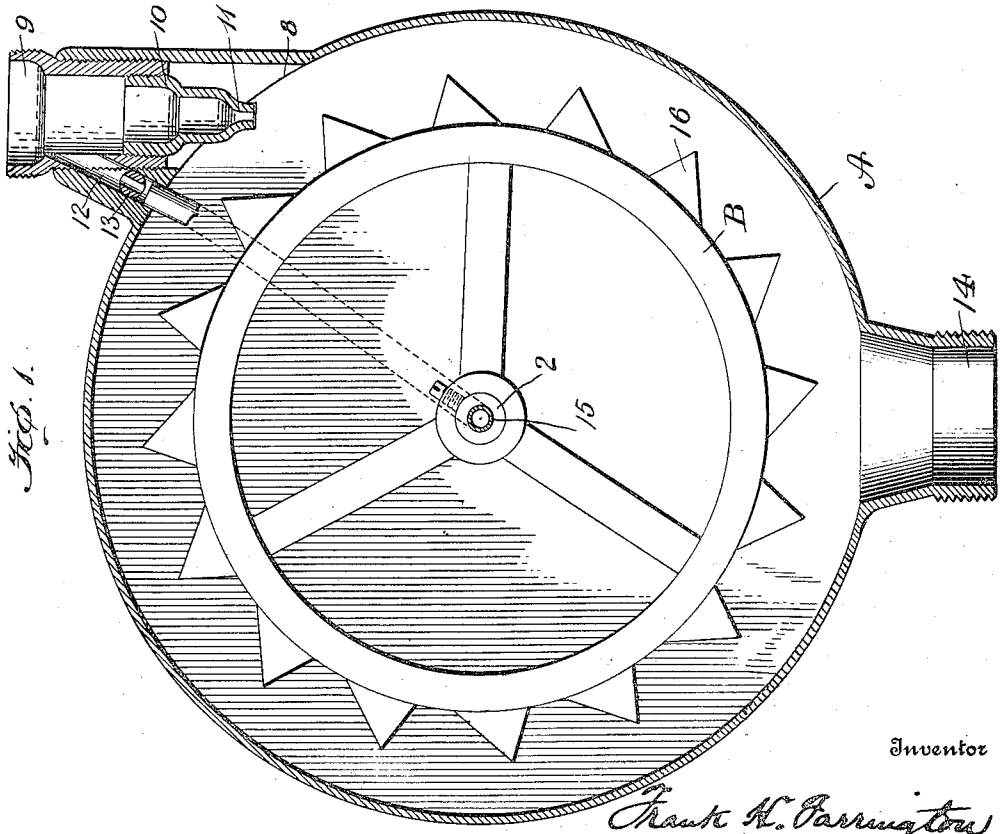

Witnesses

J. P. Campbell

Inventor

Frank H. Farrington

By Louis Bagger & Co

his Attorneys

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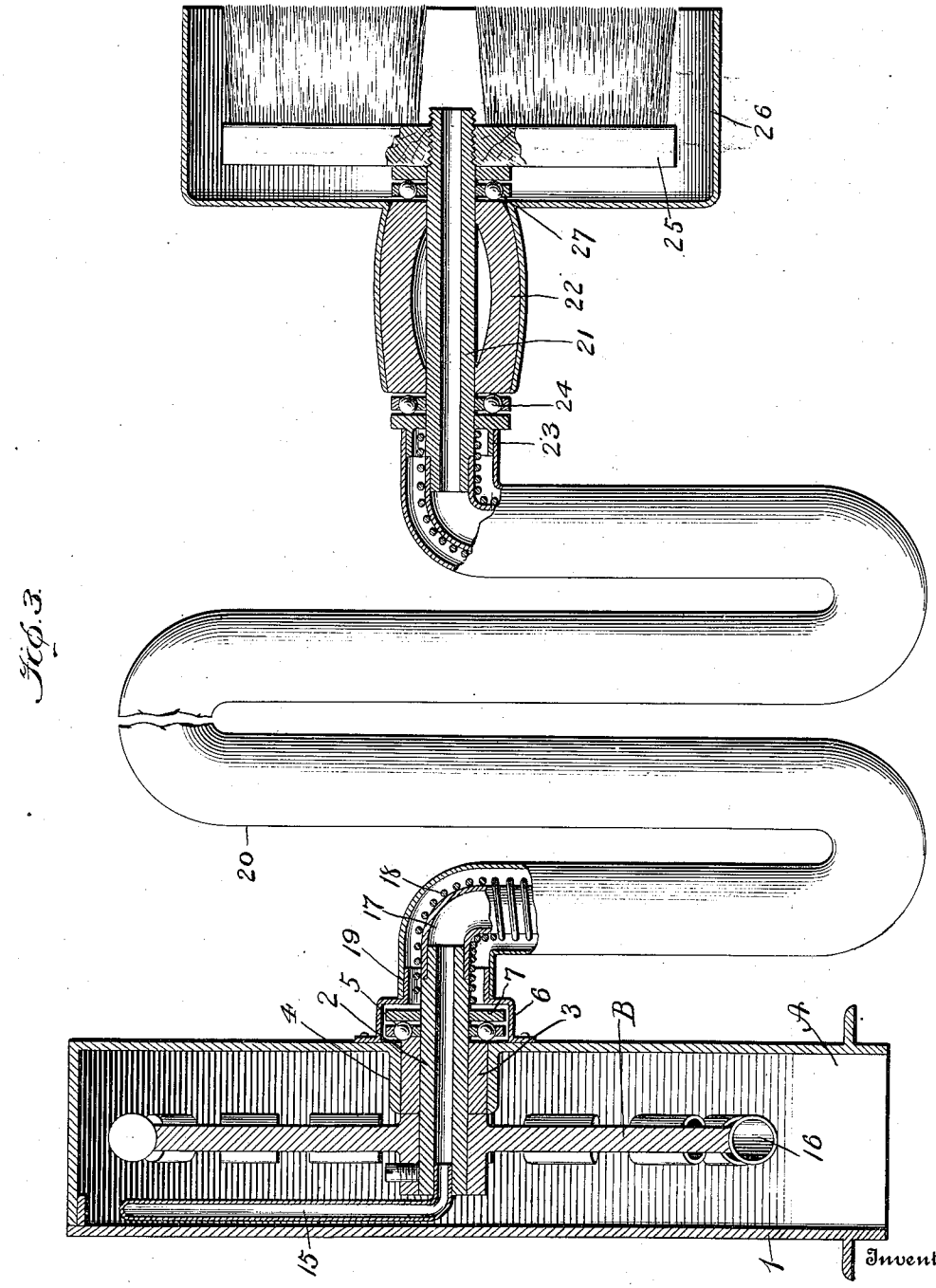

Fig. 3.

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UNITED STATES PATENT OFFICE

FRANK H. FARRINGTON, OF LOUISVILLE, KENTUCKY.

AUTOMATIC CLEANER AND POLISHER.

949,727. Specification of Letters Patent. Patented Feb. 15, 1910.

Application filed October 19, 1907. Serial No. 398,261.

To all whom it may concern:

Be it known that I, FRANK H. FARRINGTON, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Automatic Cleaners and Polishers, of which the following is a specification..

My invention relates to an improvement in automatic cleaners and polishers and more particularly to that class of inventions in which a brush is operated by means of water power.

The object of the invention is to provide means for conveniently and expeditiously cleaning vehicles, automobiles, cars, porches, side walks and the like.

Another object is to provide a brush which rotates and at the same time has water passing through the center of it whereby the object can be cleaned by simply applying the brush to it.

By my invention the operator can place the hose over his shoulder having the motor resting on his chest and by the flexible shaft extending from the motor to the brush it can be operated on any surface and in any direction.

The invention can be used for polishing purposes as well by simply removing the rotary brush and hood, shutting off the water supply and attaching a polishing brush of any suitable kind to the spindle of the handle.

The invention relates to certain novel features of construction and combination of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings Figure 1 is a vertical sectional view through the casing in which the motor wheel is mounted, Fig. 2 is a sectional view of one form of the brush, and Fig. 3 is a view partly in section of the motor wheel and brush connected by a flexible shaft.

A represents the casing having side 1 removable. A flange 4 is formed on the casing and supported on the flange is a bushing 3. An axle 2 is mounted in the bushing and extends into the casing. Ball bearings 5 are received in a boxing 6 on the outside of the casing for giving a bearing to the axle. Between the ball-bearings 5 and the boxing is a collar 7 holding the ball-bearings in place.

An inlet opening or tube 8 is preferably formed at the top of the casing and a coupling 9 is received therein, which coupling has a nozzle 10 therein which leads into the casing and has its discharge end reduced as at 11. Leading from the coupling 9 is a conduit 12 having a stop cock 13 therein. Connected to the conduit 12 is a pipe 15 which extends downwardly and is connected to the hollow axle 2. Mounted on the axle is a wheel B having buckets 16 thereon into which the water through the nozzle 10 is discharged which causes the wheel to rotate and thereby rotating the axle 2. The water is discharged from the casing 1 through the outlet 14.

Connected to the outer end of the axle is a flexible shaft, comprising a tube 17 which is mounted on the axle and around this tubing and on the axle is a coiled wire 18. Surrounding the tube 17 and the wire 18 and mounted on the flange 19 of the boxing 6 is a tubing 20. The opposite ends of the tube 17 and wire 18 are mounted on the hollow spindle 21 of the handle 22, and the tubing 20 is mounted on the flange 23 of a collar 38 mounted on the spindle 21. Between collar 38 and the end of the handle ball-bearings 24, 24 are placed. Mounted on the other end of the hollow spindle 21 is the brush 25 and between the brush and handle ball-bearings 27 are placed to give a bearing surface to the brush. Mounted over the handle and surrounding the brush 25 is a rubber hood 26.

In the modification shown in Fig. 2 a hood 28 is mounted on the handle 22 and carries a shaft 29 having a brush 30 thereon, and on the shaft are sprocket wheels 31, 31. The secondary shaft 32 journaled in the hood is provided with a gear 33 which is adjustable thereon, and on the shaft are sprocket wheels 34, 34 which are connected to the sprocket wheels 31, 31 on the shaft 29 by chains 35, 35. On the spindle 21 a beveled gear 36 is mounted which is adapted to engage the gear 33 on the shaft 32 whereby the brush is caused to rotate.

The operation is as follows: The water passing through inlet 9 will enter the buckets 16 on the wheel B causing it to rotate which in turn rotates the axle 2 and the axle transmitting motion to the flexible shaft which revolves the spindle 21 causing the brush to rotate. The water entering through the conduit 12 passes through the pipe 15 to the hollow axle and thence

through the flexible shaft to the brush. If it is desired only to polish some article or to merely use the brush, the stop cock 13 in the conduit is closed which prevents any water from passing to the brush. When the person desires to polish articles a polishing brush is substituted for the cleaning brush, and the hood is removed.

It is evident that many slight changes might be resorted to in the form and arrangement in the several parts described without departing from the spirit and scope of my invention and hence I do not limit myself to the exact construction herein set forth; but:—

Having fully described my invention what I desire to secure by Letters Patent is:

1. In a cleaner and polisher, the combination with a casing having an inlet and outlet opening, of a hollow axle, a wheel mounted on the axle, a brush, a hollow flexible tube connecting the brush and the axle, a pipe leading from the inlet opening to the axle for conducting water to the brush, and means within said pipe for closing the same and cutting off the supply of water to the brush.

2. In a cleaner and polisher the combination with a casing having inlet and outlet openings, of a hollow axle journaled in the casing, a wheel mounted on the axle, a brush, a hollow flexible tube connecting the brush and the axle, a coupling within the inlet opening, a nozzle within the coupling, an opening in the coupling registering with a passage in the casing, and a pipe leading from said passage to the axle for conducting water to the brush.

3. In a cleaner and polisher the combination with a casing having inlet and outlet openings, of a hollow axle journaled in the casing, a wheel mounted on the axle, a brush, a hollow flexible tube connecting the brush and the axle, a coupling within the inlet opening, a nozzle within the coupling, an opening in the coupling registering with a passage in the casing, a pipe leading from said passage to the axle for conducting water to the brush and a valve for closing the pipe and cutting off the supply of water to the brush.

4. In a cleaner and polisher, the combination with a casing having inlet and outlet openings, of a hollow axle journaled in the casing, a wheel mounted on the axle, a brush, a hollow spindle connected to the brush, a flexible tube connecting the axle and spindle, a hood provided with a handle surrounding the brush and spindle, anti-friction rollers between the hood and the brush and between the handle of the hood and the flexible tube, and means for conducting water from the hollow axle to the brush.

5. In a cleaner and polisher, the combination with a casing having inlet and outlet openings, of a hollow axle, a wheel mounted on the axle, a brush, a hollow flexible tube connecting the brush and the axle, means within the inlet opening for conducting water to the wheel whereby the same is rotated, a passage leading from the inlet opening, a pipe leading from the passage to the hollow axle for conveying water to the brush, and means within the passage for regulating the flow or supply of water to the brush.

6. In a cleaner and polisher, the combination with a casing, having inlet and outlet openings, of a hollow axle journaled in the casing, a wheel mounted on the axle, a brush, a hollow flexible tube connecting the brush and axle, a coupling in the inlet opening for conducting water to the wheel for rotating the same, a passage leading from the inlet opening, a pipe leading from the passage to the hollow axle, whereby water is conducted to the brush, and means within said passage for cutting off the supply of water to the brush.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK H. FARRINGTON.

Witnesses:

ROBERT L. BOLTON,

BAILEY H. LOVELACE.