

Sept. 25, 1923.

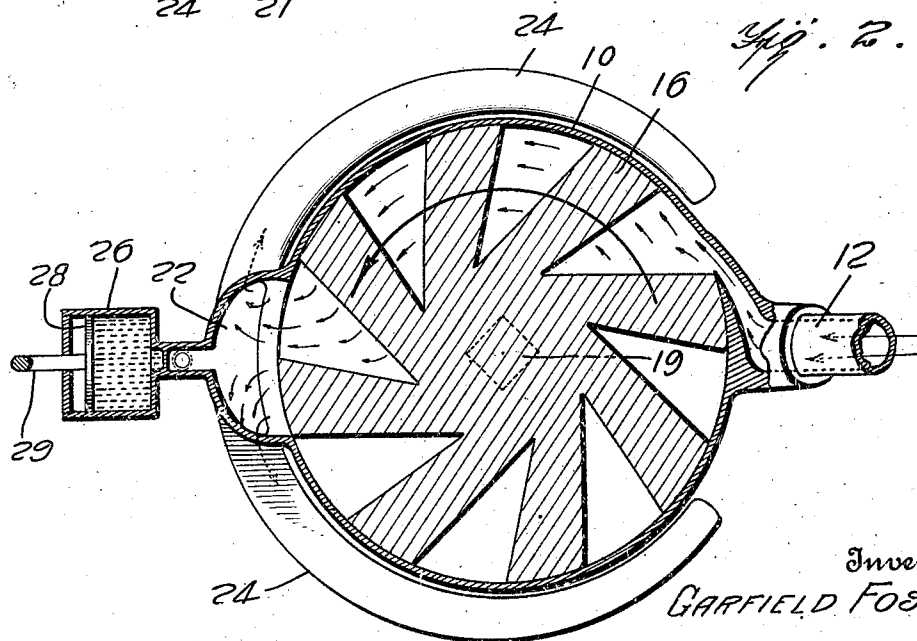
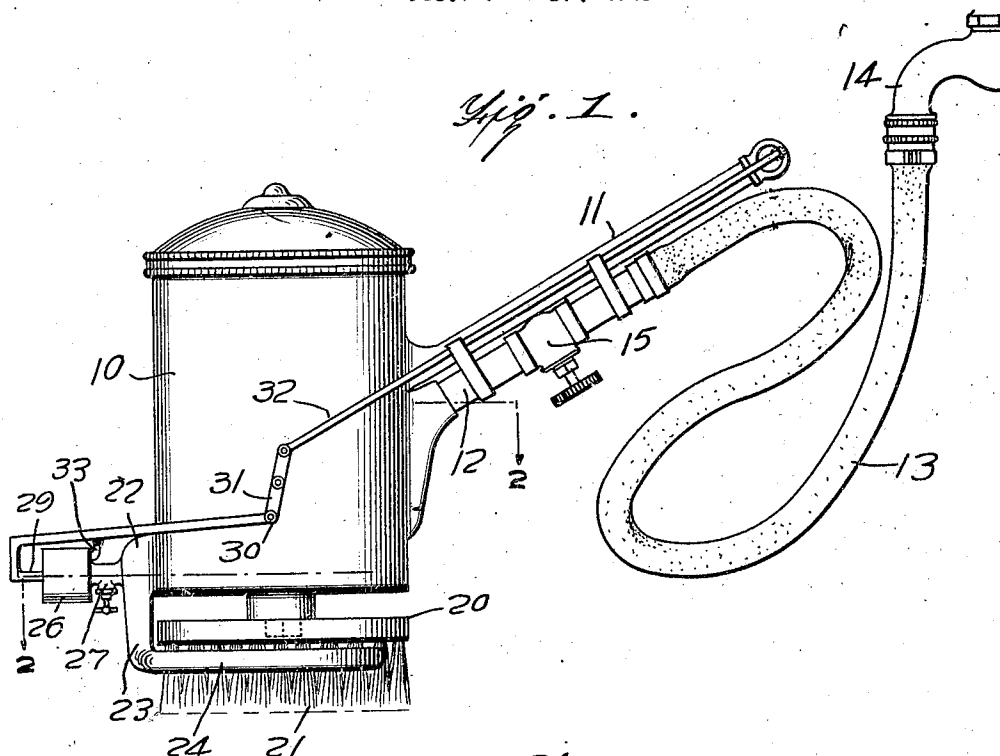
1,469,077

G. FOSTER

SCRUBBING DEVICE

Filed June 13, 1921

2 Sheets-Sheet 1



Inventor
GARFIELD FOSTER

By

Franklin H. Hough

Attorney

Sept. 25, 1923.

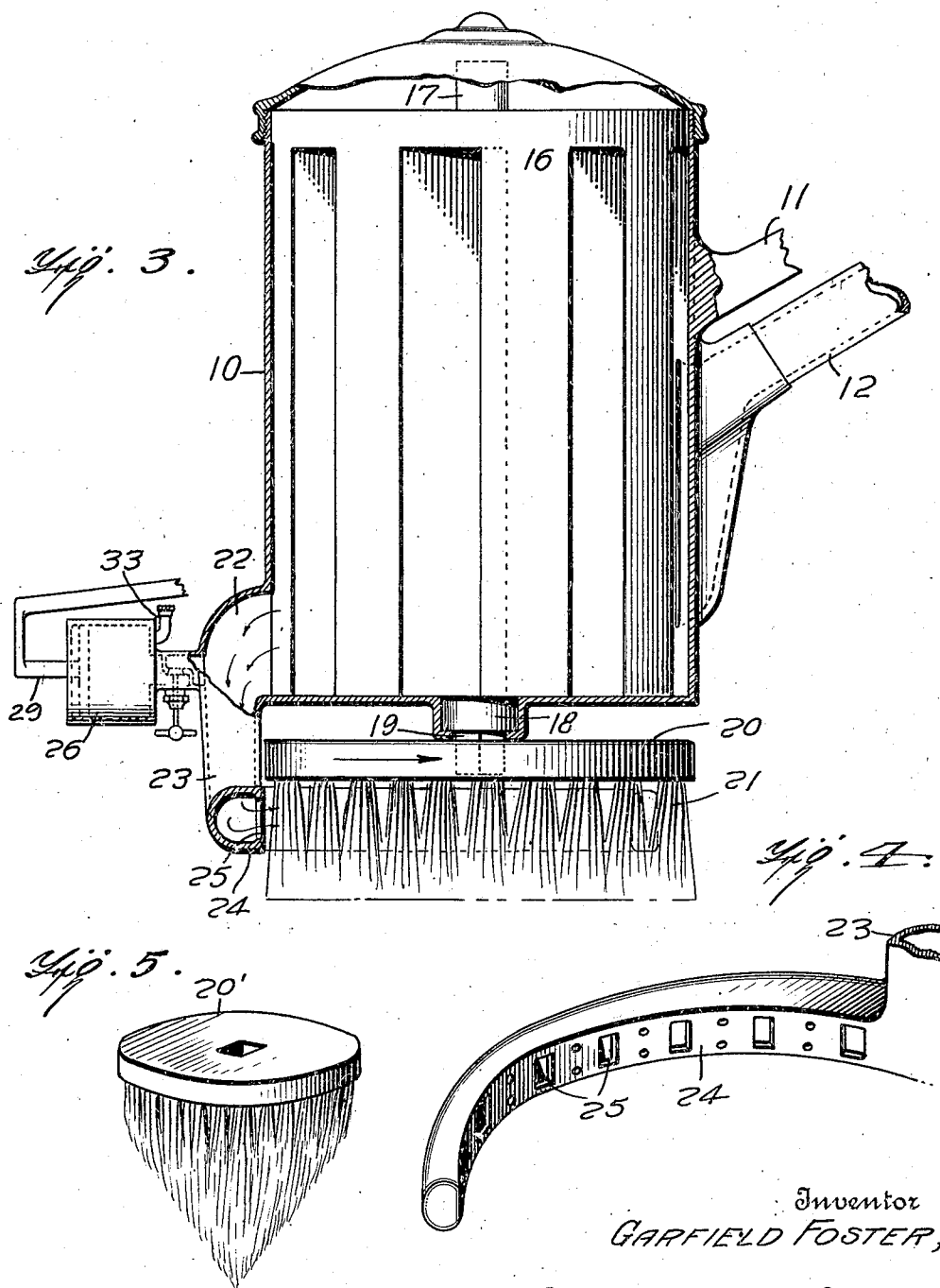
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SCRUBBING DEVICE

Filed June 13, 1921

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

GARFIELD FOSTER, OF FAIRFIELD, ALABAMA.

SCRUBBING DEVICE.

Application filed June 13, 1921. Serial No. 477,210.

To all whom it may concern:

Be it known that I, GARFIELD FOSTER, a citizen of the United States, residing at Fairfield, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Scrubbing Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to scrubbing brushes and has for an object to provide a mechanically operated brush which will simultaneously actuate the brush itself and supply water and detergent to the article being cleaned, and all under the control of the operator.

A further object of the invention is to provide a water wheel connected to a source of water under pressure with a brush carried by or rotating with the water wheel, and means for employing the water after passing through the water wheel to be discharged at the point of cleaning.

A further object of the invention is to provide improved means for commingling a detergent with the water applied to the surface to be cleaned while the brush is being rotated by the passage of the water from the source to the discharge.

With these and other objects in view the invention comprises certain novel units, parts, elements, combinations, functions and mechanical movements as disclosed in the drawings, together with mechanical equivalents thereof, as will be hereinafter more fully described and claimed.

In the drawings:

Figure 1 is a view of the improved brush in side elevation;

Figure 2 is a horizontal sectional view of the improved brush on the plane indicated by line 2—2 of Figure 1;

Figure 3 is a side view of the water wheel with the housing broken away showing the relation of the parts;

Figure 4 is a detail perspective fragmentary view of the water nozzle, and

Figure 5 is a perspective view of one type of brush to be used with the device.

Like characters of reference indicate corresponding parts throughout the several views.

The housing 10 which forms the body of the present brush is connected rigidly with a handle 11, beneath or associated with which is a pipe or an auxiliary tubular

handle 12 communicating by means of a hose or flexible tube 13 with a source of water supply under pressure, indicated by the conventional spigot 14. A valve 15 is interposed in the tubular handle 12 by which the water flowing through the tubular handle 12 is controlled.

Within the housing 10, which is preferably cylindrical, a water wheel indicated as an entirety at 16 is journaled in any approved manner, as by a trunnion 17 at the top and a bearing 18 at the bottom, shown more particularly at Figure 3. It is also provided with a squared extremity 19 to which is attached a brush 20 preferably having a circular back with a squared opening to receive the squared extremity 19 and with bristles or cleaning fibers 21, as indicated at Figures 1 and 3.

At Figure 5 the brush 20' is shown having the bristles of different formation, but it is to be understood that the particular style or type of brush does not limit the present invention.

At the side of the housing 20, approximately opposite the inlet of the tubular handle 12, an outlet 22 is provided communicating by a passage 23 with an arcuate conduit 24. It is obvious that this conduit 24 may extend entirely around the brush or may be only a part of a circle, as indicated in the drawings, but showing this as including a part of a circle is not to be considered as in any way limiting the invention to the art disclosed. The conduit 24 is provided with a plurality of outlets 25 directed toward the brush fibers 21 so that the water passing through the hose 13, handle 12 and housing 10 into the discharge member 24 will direct the flow against the sides of the rotating brush 20.

Communicating with the passage 23 is a cylinder 26, the communication being controlled by means of a valve 27. Within the cylinder 26 a follower or piston 28 is mounted, controlled by a piston rod 29 which is bent upon itself and pivoted at 30 to a lever 31 (see Figure 1) which lever is controlled by a manually operable rod 32 extending upwardly along the handle 11 into position to be actuated by the operator. This cylinder 26 is intended to receive a detergent through the inlet 33 and when the valve 27 is open, the operator, by manipulating the rod 32 may force the detergent out of the cylinder 26 into the passage 22 where it

commingles with the water and thereafter is discharged in juxtaposition to the brush 20.

By supplying the cylinder 26 with the detergent and attaching the device to a source of water under pressure, as conventionally shown at Figure 1, the admission of water to the housing 10 through the tubular handle 12 will cause the wheel 16 to rotate in the direction indicated by the arrows at Figure 2 to be discharged into and through the passage 22 where it will commingle with the detergent. The rotation of the wheel will rotate the brush 20 and the water with the detergent will be discharged adjacent to said brush, and by reason of its rapid rotation will automatically scrub the material or surface to which it is applied.

What I claim to be new is:

1. A scrubbing device comprising a housing, a water wheel journaled to rotate within the housing, a tubular member communicating with the housing and providing means for flexible attachment with a source of water under pressure, a brush carried by and rotating with the water wheel without the housing, a conduit communicating with the housing opposite the tubular inlet and discharging adjacent the periphery of the

brush, a detergent container communicating with the conduit, and manually-controlled means extending along the tubular member for controlling the flow of detergent from the container to the conduit.

2. A scrubbing device comprising a housing, a water wheel journaled to rotate within the housing, a tubular member communicating with the housing and extended by flexible means for attachment with a source of water under pressure, a brush carried by and rotating with the water wheel without the housing, a conduit opening from the housing approximately opposite the inlet to the tubular member and discharging adjacent the periphery of the brush, a detergent cylinder communicating with the conduit between the housing and the discharge, a piston mounted to move in the cylinder, and manual means extending along the tubular member for actuating the piston.

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

GARFIELD FOSTER.

Witnesses:

J. C. GUERRY.

W. M. COBB.