

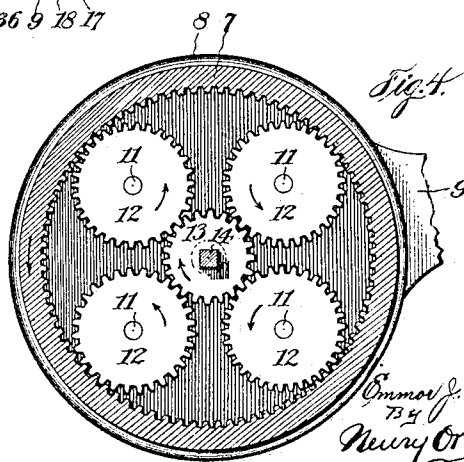
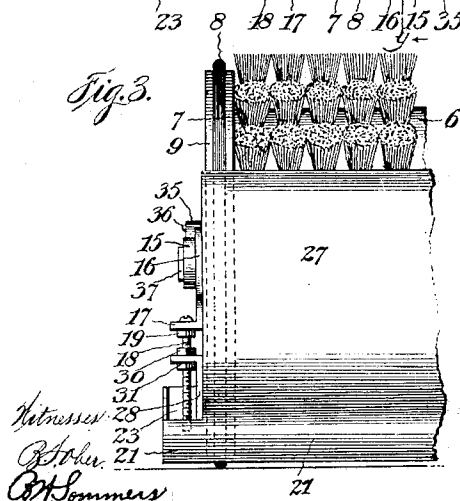
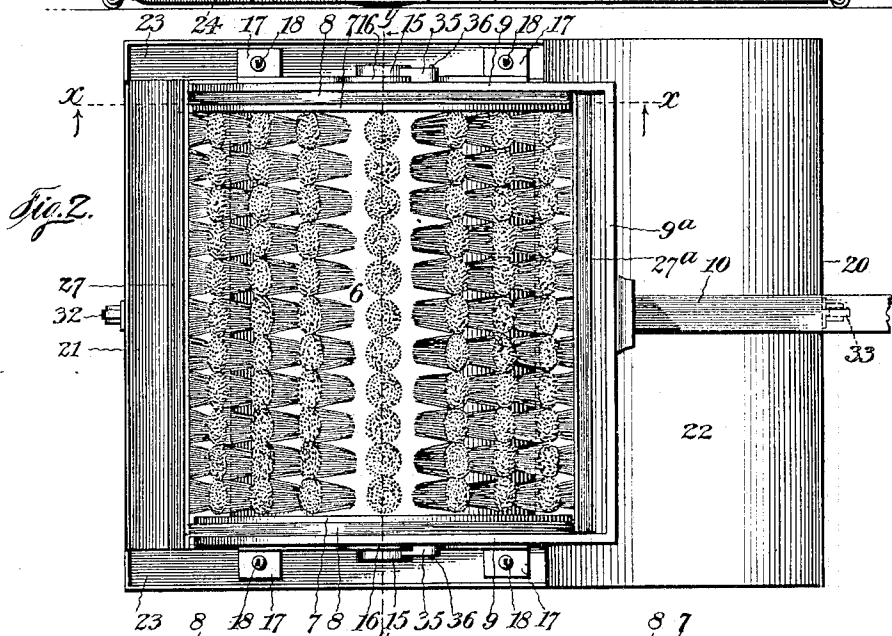
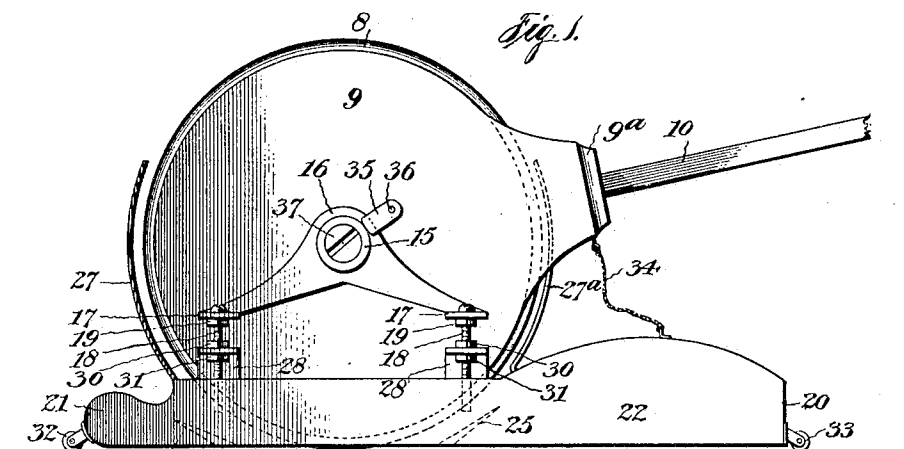
No. 758,714.

PATENTED MAY 3, 1904.

E. J. STEWART.
SCRUBBING MACHINE.
APPLICATION FILED MAY 20, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 5.

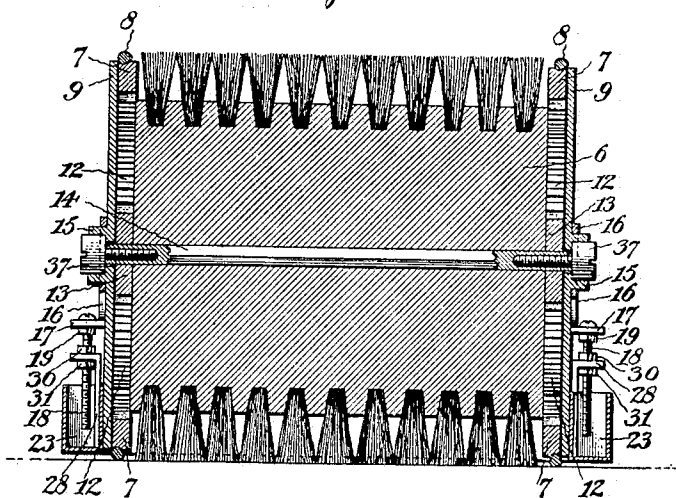
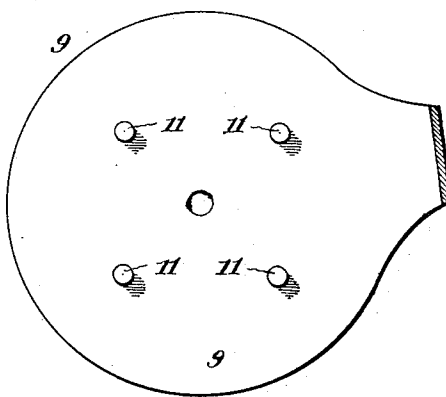


Fig. 6.



Witnesses:
 A. Ober.
 B. Lommers

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Omnor J. Stewart,
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UNITED STATES PATENT OFFICE.

EMMOR J. STEWART, OF NEW YORK, N. Y.

SCRUBBING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 758,714, dated May 3, 1904.

Application filed May 20, 1903. Serial No. 158,017. (No model.)

To all whom it may concern:

Be it known that I, EMMOR J. STEWART, a citizen of the United States, residing at New York, State of New York, have invented certain new and useful Improvements in Scrubbing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My invention relates to scrubbing-machines, sweepers, and analogous articles in which there is a rotating brush and a detachable receiver and to details of construction that will be hereinafter fully described and claimed.

Referring to the drawings, in which like part are similarly designated, Figure 1 is a side view of the device. Fig. 2 is a top plan view. Fig. 3 is a partial end view. Fig. 4 is a view of the driving mechanism of the brush, taken on line *x x* of Fig. 2. Fig. 5 is a longitudinal vertical section taken on line *y y*, Fig. 2; and Fig. 6 is a detail view of the inside of one of the covering-plates.

A cylindrical brush 6 is mounted between two internally-toothed driving-wheels 7, that are preferably provided on their periphery with rubber tires or bands 8, which insure frictional contact with the floor or surface to be scrubbed or swept. The outside of each wheel 7 has a covering 9, formed integral with a forked frame 9^a, to which latter an operating-handle 10 is attached. These covering-pieces 9 correspond in shape to the periphery of the driving-wheels and are provided on their inner side with a number (preferably four) of stub-shafts 11, on each of which is mounted a gear-wheel 12, that engages the internal teeth on the driving-wheels 7. Motion is imparted to the brush through the medium of these gears 12 engaging with a central gear 13, mounted on a square shaft 14, that forms the axis of the brush. This shaft 14 projects into a boss 15, centrally mounted in each covering-piece 9, and in each boss is inserted a screw 37, which takes into the shaft 14 and securely holds it in place. On each of these bosses is

mounted a bracket 16, having arms extending on each side of the axis of the brush and terminating in horizontal plates 17, having bolt-holes formed therein to receive bolts 18, having locking-nuts 19 for the purpose to be hereinafter explained. These brackets 16 are held on the bosses 15 by locking-lugs 35, mounted on pivots 36.

The receiver comprises a metallic vessel 20, substantially as shown, having a forward compartment 21, a rear compartment 22, and lateral compartments or troughs 23, that communicate at their ends with compartments 21 and 22, respectively. The brush rotates between the troughs 23 and the forward and rear compartments and throws the sweepings or wash-water either over a forward apron 24 or a rear apron 25 into the respective receiver. On both the forward and rear compartments there is a top apron or splash-board 27 and 27^a to prevent water being thrown out of the receiver by the brush when rotating in either direction. To the inner side of each lateral trough 23 is secured brackets 28, suitably positioned to enable the bolts 18 to pass through a hole in their horizontal portions. Lock-nuts 30 and 31 hold the brackets, and consequently the receiver, adjustably and at the proper height above the surface to be scrubbed.

Guide-rollers 32 and 33 prevent the receiver from sliding on the floor. A chain or cord 34 is connected to the top of the rear of the receiver and to the frame 9^a or to the body of the handle, if so desired. This prevents the receiver from tilting when the device is lifted from the floor.

The operation is as follows: When the device is pushed over the floor, the driving-wheels 7, Fig. 4, will rotate in the direction of the arrow and by reason of the friction on the floor give a rotation in a similar direction to the gear-wheels 12, that will rotate the pinions 13, and consequently the shaft 14 and brush 6, in a direction opposite to that in which the driving-wheels 7 rotate to throw the water that has been placed on the floor over the front apron 24 into the forward compartment. Pulling the brush over the floor will rotate it to throw water into the rear compartment.

The brush and gears fit closely between the coverings 9, so that when the shaft is inserted the end screws 37 hold the entire mechanism of the brush in operative relation.

5 Having thus described my said invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. The combination with a rotary brush, of a frame and a receiver suspended from the latter having communicating compartments surrounding the brush, substantially as described.

2. The combination with a rotary brush, of a frame, a receiver suspended from the latter having compartments surrounding the brush, and means for adjusting the receiver, substantially as described.

3. The combination with a rotary brush, of a frame, a receiver suspended from the latter and having communicating compartments surrounding the brush, a forward and a rear apron, and a splash-board on the forward and on the rear compartments, substantially as described.

4. The combination with a rotary brush, internally-toothed gears, and gearing connecting the latter with the brush, of a frame supported by the gears, a receiver suspended from the frame having compartments surrounding the brush, a forward and a rear apron, a splash-board on the forward and on the rear compartments, and means to adjust the height of the receiver, substantially as described.

5. The combination with a rotary brush, internally-toothed gears, and gearing connect-

ing the latter with the brush, of a frame supported by the gears, a receiver having a front and a rear compartment, side compartments communicating with the aforesaid compartments, a forward and a rear apron, and a splash-board on the forward and on the rear compartments, substantially as described.

6. In a scrubbing-machine, the combination with two internally-toothed gears, of a frame on the outside of said gears, a brush mounted between said gears, a longitudinal axle fast in said brush projecting through the frame, gears fast on said axle, shafts on the frame, gears on said shafts in mesh with the aforesaid gears and with the teeth of the internal gears, a receiver suspended from the frame and having rear, side and front compartments, a forward and a rear apron between which the brush rotates, a splash-board on the forward and on the rear compartments, and means to adjust the height of the receiver, substantially as described.

7. The combination with a rotary brush, of a frame, brackets having each two arms, bolts held in the ends of said arms, a receiver and means to adjustably secure the receiver to the bolts, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

EMMOR J. STEWART.

Witnesses:

CHAS. M. ARNOLD,
Mrs. E. J. STEWART.