W. E. Stoddard,

Scrubbing Machine.

No. 84,146. Patented Nov. 17, 1868.

Fig: 1.

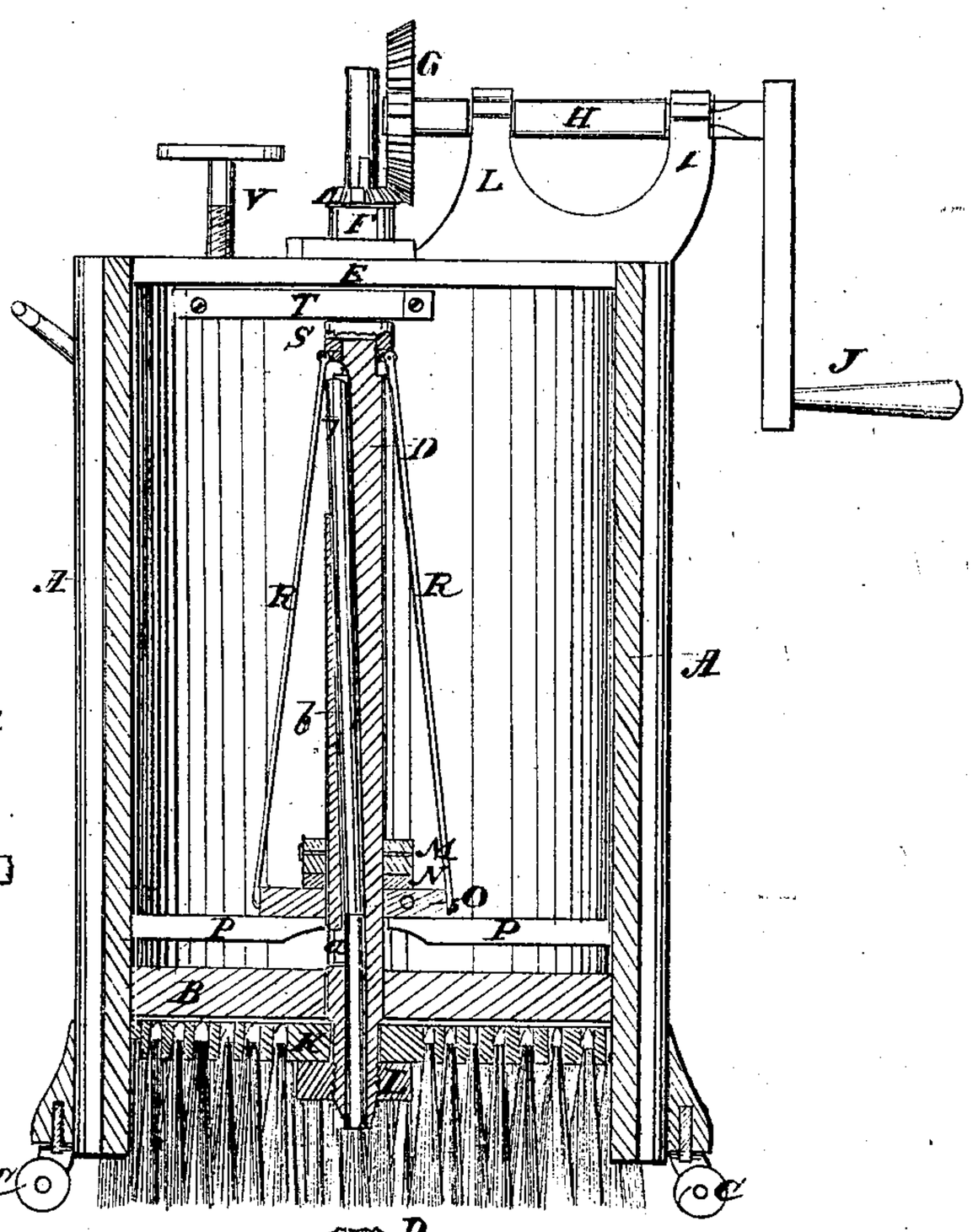
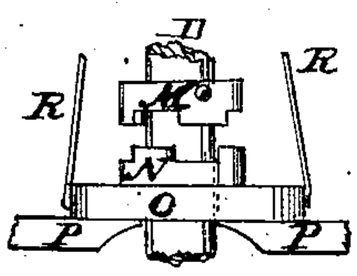


Fig: 2.



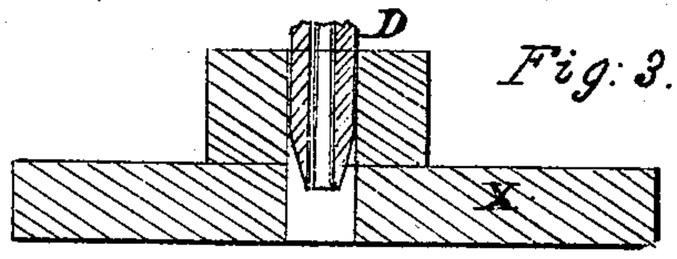


Fig: 3.

Witnesses:

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United States Patent Office.

WORDEN E. STODDARD, OF FORT EDWARD, NEW YORK.

Letters Patent No. 84,146, *dated November* 17, 1868.

IMPROVED SCRUBBING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WORDEN E. STODDARD, of Fort Edward, in the county of Washington, and in the State of New York, have invented certain new and useful Improvements in Scrubbing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in so constructing a scrubbing-machine that it can be easily changed from a scrub to a scourer or drier; also, in the manner of mixing the water and soap, and feeding the same to the brush, and in the arrangement of the different parts for operating the machine.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation in section;

Figure 2, a side view, in section, of the scourer; and

Figure 3, a side view of the joint on the centre shaft.

A represents a circular tub, of suitable dimension, the bottom, B, of which is not placed at its lower end, but a suitable distance above the same, so as to give room for the brush to be placed under said bottom.

The tub A is provided with a suitable number of casters, C C, on which it rests and moves, so as to be easily moved over the floor while the scrubbing is going on.

In the centre of the bottom, B, is a circular hole, through which a shaft, D, is passed. This shaft passes up through the tub A, and through a cross-piece, E, secured at the top of the tub, across the same.

Above the cross-bar E, the shaft D is provided with a pinion, F, which gears into a cog-wheel, G.

The cog-wheel G is mounted on a shaft, H, which is supported on suitable standards, I I, on the cross-bar E.

At the end of the shaft H is a crank, J, so that by turning the same, a rotary motion is communicated to the shaft D.

At the lower end of the shaft D, below the bottom, B, is placed the scrubbing-brush K, the said brush being provided with a hole through its centre, through which the end of the shaft D passes.

The brush K is then secured by a nut, L, which is passed on to the end of the shaft, through the centre of the bristles, which are left open for that purpose.

By this means the height of the brush can easily be regulated, so that the brush can be brought to bear on the floor by any pressure desired.

At a suitable height above the bottom, B, is secured a notched collar, M. On the shaft D, and around said shaft, below the stationary collar M, is a movable collar, N, to which is secured a circular plate, O, having a series of arms, P P. The movable collar N is notched on the upper side, to correspond with the notches on the lower side of the stationary collar M.

From the plate O two rods, R R, connect with another movable collar, S, placed around the shaft D, below the cross-bar E, and this collar is provided with an arm, T, which is operated by a screw, V, through the said cross-bar, so that, by the turning of said screw, the movable collar N can be thrown in and out of gear with the stationary collar M.

The shaft D is hollow, and just above the bottom, B, it is provided with a slot, *a*, leading into the same. Through the tube or shaft D, above the slot *a*, is a rod, *b*, which can be moved up and down, so as to open and close said slot at will. This is accomplished by means of a pin projecting from the rod *b* through a slot in the upper part of the shaft.

The operation of my machine is as follows: Water and soap are put into the tub A, the slot *a*, in the shaft D being closed. The movable collar N is moved upwards to gear into the collar M; then, by turning the crank J, the arms P P will move rapidly around and thoroughly mix the water and soap. As soon as thoroughly mixed, the arms P P are lowered, and the slot *a* opened, when the water will pass out through the centre of the brush, and a rotary motion given to the latter by turning the crank J.

For scouring decks of vessels, &c., I remove the brush K, and substitute a circular head, X, which is made of sandstone, or other suitable material.

To dry the floor after it is scrubbed, I may provide a head made of sponge, or its equivalent, and use it in the same manner as the brush, which is easily removed by unscrewing the nut L.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the hollow shaft D, pinion F, cog-wheel G, shaft H, crank J, bottom B, and cross-bar E, all substantiallv as and for the purposes herein set forth.

2. The combination of the hollow shaft D and stationary collar M, with the movable collar N, plate O, arms P P, rods R R, collar S, arm T, and screw V, all arranged and operating substantially as and for the purposes herein set forth.

3. The arrangement of the hollow shaft D, provided with a slot, *a*, and the rod *b*, substantially as and for the purposes herein set forth.

4. The combination of the hollow shaft D and tub A, with a circular brush, scourer, or drier, when arranged and operating substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 16th day of September, 1868.

WORDEN E. STODDARD.

Witnesses:

WILLIAM H. ARLIN,

ALMER K. PERRY.