

W. H. ALEXANDER.
 WHITEWASHING-MACHINE.

No. 172,067.

Patented Jan. 11, 1876.

Fig. 1.

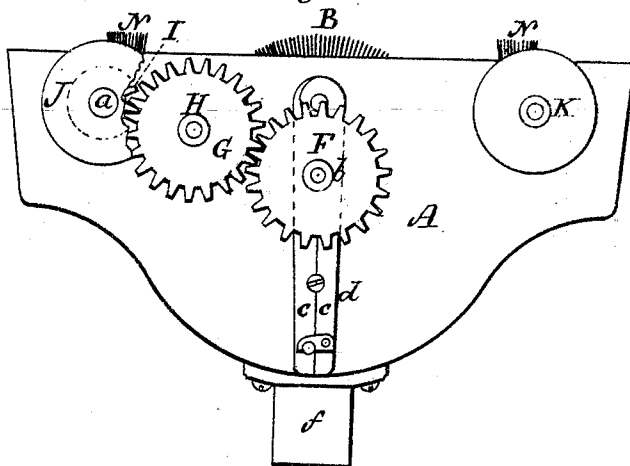


Fig. 2.

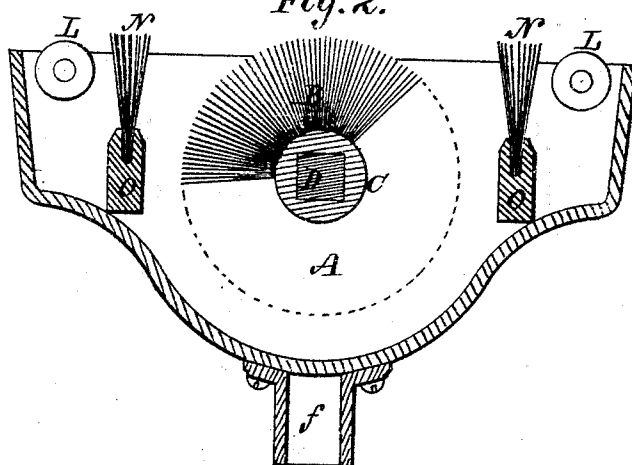
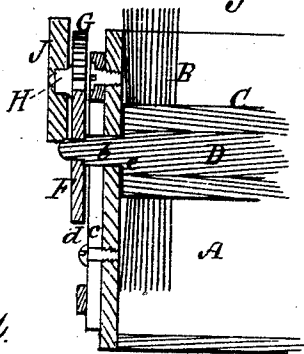


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE

WILLIAM H. ALEXANDER, OF SHARON, MASSACHUSETTS, ASSIGNOR TO
WILLIAM B. WICKES, OF SAME PLACE.

IMPROVEMENT IN WHITEWASHING-MACHINES.

Specification forming part of Letters Patent No. **172,067**, dated January 11, 1876; application filed
October 11, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. ALEXANDER, of Sharon, Norfolk county, Massachusetts, have invented certain Improvements in Machines for Whitewashing, of which the following is a specification:

This invention relates to means for laying on whitewash, or other coloring matters, on ceilings in a rapid and effective manner; and consists in the following elements: first, a box or vessel for containing the coloring fluid; second, of a rotary brush journaled within the box centrally, and wallowing in the coloring fluid, and whose purpose is to take up and deliver such coloring fluid upon the ceiling; and, thirdly, of two rigidly-disposed or stationary brushes arranged in the upper part of the vessel above the coloring fluid, and upon each side of the rotary brush, the purpose of the latter brushes being to distribute the coloring fluid or whitewash in a uniformly-even surface or coat.

The box or vessel is provided with friction-rollers, and the rotary brush with gears for rotating it, substantially as hereinafter explained.

The drawings accompanying this specification represent, in Figure 1, a side elevation, and in Fig. 2 a vertical section, of a machine embodying my improvements. Fig. 3 is a section of one of the bearings of the rotary brush and its driving-gear.

In these drawings, A represents a box or vessel, of a suitable size and shape to carry out the purpose intended—that is, of containing a quantity of whitewash or other coloring pigment or paint—being, in this instance, rectangular in horizontal section, and concave longitudinally at the bottom. Centrally and transversely of the box A I dispose within it a cylindrical brush, B, through the body C of which I pass a square shaft, D, one end of such shaft finding a bearing in one side of the box A, and the other end passing through the opposite side of the box, and having mounted upon it a spur-gear, F, which meshes into and receives motion from a second spur-gear, G, pivoted to the side of the box, as shown at H, this latter gear being an intermediate, and meshing into a driving-pinion, I, which is pivoted to a stud,

a, projecting from the side of the said box A, a trundle-wheel, J, being secured to the outer end of such pinion. K in the drawing represents a second trundle-wheel, which is a counterpart of the wheel J, and pivoted to the opposite corner of the same side of the box, while L L represent two twin trundle-wheels pivoted to opposite upper corners of the opposite side of the box. The wheels J K L L trundle along the ceiling when the machine is in use, and the former, through the agency of the pinion I and gears F and G, imparts rotary motion to the brush B, which wallows in the fluid contained within the box.

In order to permit of immediate and ready removal of the brush B, I inclose its outer journal b within the two arms C C of an expansible latch, d, which is pivoted to the side of the box above such shaft, and disposed between such box and the gear F, the two arms c c straddling the journal b, and bearing against the shoulder e of the latter.

N N in the drawings represent two upright stationary brushes, extending across the interior of the box A, and supported upon bars O O, these brushes being arranged upon opposite sides of the central rotary brush, and raised above the fluid in the box. The upper surfaces of the three brushes B N N are practically on a level, and are elevated slightly above the upper edges of the box, and slightly above the upper edges of the wheels J K L L.

A socket, f, is to be secured to the under side of the box A, in which a staff is to be inserted, and thus provided the box is to be trundled along the ceiling which is to be whitened or colored, it being presupposed that a proper quantity of fluid is first placed in such box. As the box is trundled along, the brush B rotates and takes up and delivers upon the ceiling a continuous supply of coloring fluid, while the brush N, which may at the time be in rear of it, distributes or lays the fluid thus delivered in a uniformly-even and perfect coat.

By means of my machine the whitewashing or coloring of a ceiling may be performed in a fraction of the time requisite to do the same labor by hand-brushes; but, in addition to this, a great advantage attaches to the machine, in that no fluid is spilled or spattered

upon the walls or floor of the apartment, and a very even and perfect surface of coloring or whitening is deposited.

I claim—

1. A machine for whitening or coloring ceilings, composed of the box or vessel A, brushes B N N, and wheels J K L L, the brush B being mounted within the box, and positively rotated, substantially as herein explained, and the whole being essentially as and for purposes stated.

2. The brush B, in combination with the trough A and expansible latch d, substantially as shown and set forth.

3. In a whitewashing-machine, the combina-

tion, with the trough and rotary delivering-brush, of the gears F H, pinion I, and wheel J.

4. In a whitewashing-machine, the combination of a liquid-receptacle, friction-wheels, and a delivery-brush, arranged in the said receptacle, and positively rotated by power derived from the moving friction-wheels, as herein shown and set forth.

WILLIAM H. ^{his} X ALEXANDER.
mark.

Witnesses:

WILLIAM B. WICKES,
ALBERT F. MORSE.