(No Model.)

T. HUNTBATCH.

FOUNTAIN BRUSH.

No. 299,144. Patented May 27, 1884.

Fig 1.

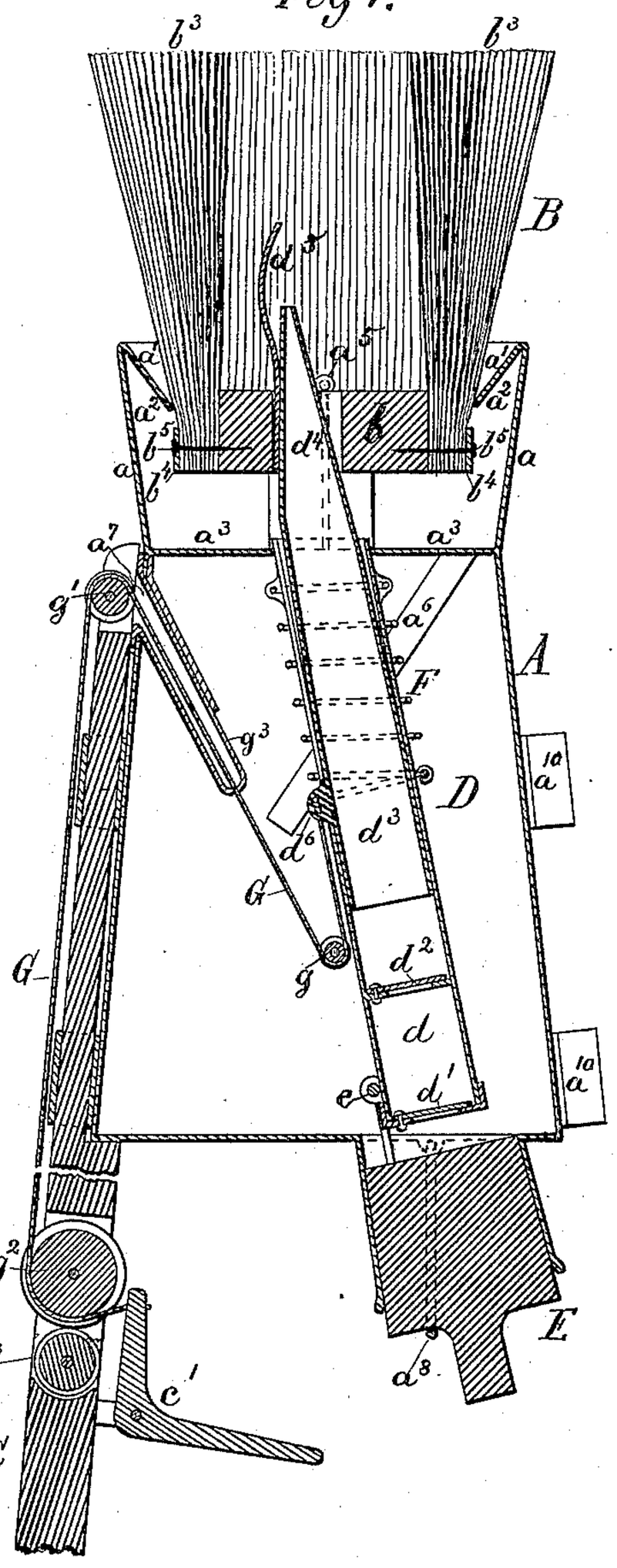
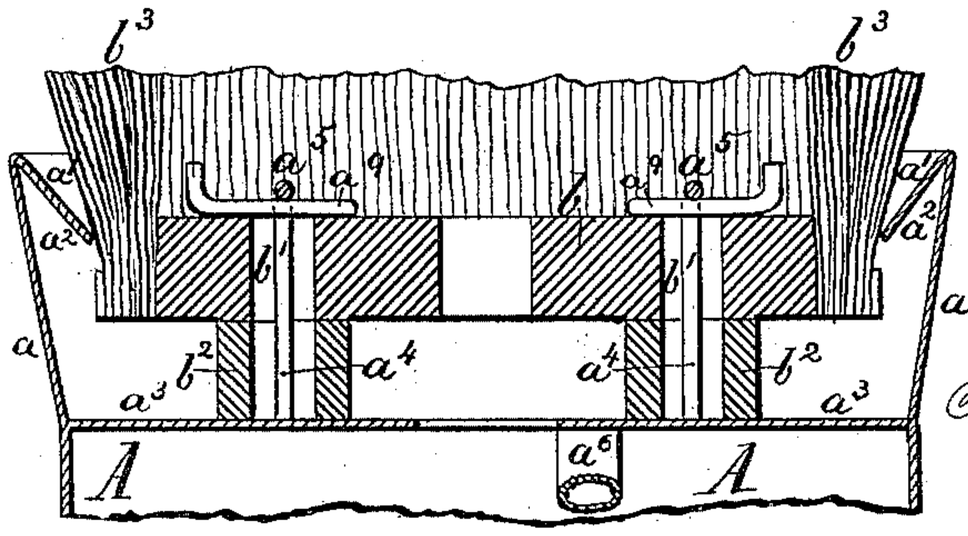


Fig 2.



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UNITED STATES PATENT OFFICE.

THOMAS HUNTBATCH, OF GENEVA, IOWA.

FOUNTAIN-BRUSH.

SPECIFICATION forming part of Letters Patent No. 299,144, dated May 27, 1884.

Application filed October 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HUNTBATCH, a citizen of the United States, residing at Geneva, in the county of Franklin and State of Iowa, have invented a new and useful Fountain-Brush, of which the following is a specification.

My invention consists in an improved brush provided with a reservoir for containing calcimining, whitewashing, or other liquid, for use upon walls and other similar purposes, and said brush having a vacuum fluid-elevating attachment for forcing the liquids up to and through the bristles of the brush, a guard for catching drip material from the bristles, and for preventing splashing of said liquid out of the chamber or reservoir of the brush, and an exhaust-spout for inducting the surplus liquid from the brush into the reservoir.

The objects of my invention are to enable operators to calcimine or whitewash walls and ceilings without the necessity of frequently dipping the brush into the material; also, to perform various kinds of whitewashing or calcimining without splashing the fluid upon the floor or objects. I attain these objects by the means represented in the drawings, in which—

Figure 1 is a vertical central longitudinal section of my invention. Fig. 2 is a broken sectional view of a portion of the brush, showing its fastenings more clearly.

A represents a reservoir of suitable shape and size; B, a brush proper, and C a handle. The reservoir A has a flaring rim, a, at its top, which is provided with an inverted conical inner rim, a', forming with the rim a the V-shaped continuous space a^2. The top a^3 of the reservoir is provided with two upright studs, a^4, terminating with loops a^5. By means of the studs and loops the brush is fastened to the top a^3 of the reservoir, the base-block b of the brush being provided with holes b', through which the studs a^4 pass, and with locking-pins a^9, which pass through the loops a^5. Washers b^2 are interposed on the studs a^4, and between the brush B and top a^3 of the reservoir, in order to give the brush the desired position in regard to the rim a', as will be hereinafter described. The bristles b^3 of the brush are fastened around the base-block b by means of a strap, b^4, and nails b^5, in such manner as to extend out to and be in contact all around with the lower edge of the rim a', and by means of washers, as b^2, of various thicknesses above and below the brush-base b the distance of the brush proper, B, from the top a^3 of the reservoir A can be adjusted at will. By this means the bristles of the brush can be made to project to a greater or less extent above the rim a', and consequently work with less or more stiffness. By means of the conical rim a' such whitewash or calcimine with which the brush may be overcharged from time to time, and which would run down along the bristles and drop upon the floor with brushes of the commonest construction, will be caught by the rim a' of my brush and be conducted down upon the top a^3 of the reservoir, from whence it is conducted down into the reservoir by a spout, a^6. If, by reason of the motion of the brush and reservoir, the whitewash should be prevented from entering the spout a^6, it will be caused to enter the space a^2, and will be held therein, the rim a' preventing it from leaving the machine. The whitewash or calcimine is forced up from the bottom of the reservoir into the brush by means of a vacuum-elevator, D. This elevator D consists of a cylindrical tube, d, having two valves, d' d^2, and a movable tube, d^3, having a pointed nozzle, d^4, and a flat curved spraying or deflecting plate, d^5, which is adjustable by bending it toward or from the nozzle, and against which the fluid issuing from the nozzle is directed. The end of the tube d^3 is nicely fitted into the tube d, so as to move freely therein. The tube d is hinged at e to a stopper, E, at the bottom of the reservoir, and extends upwardly through the top a^3 of said reservoir, while the tube d^3 extends up through the block b within range of the brush proper. The tube d^3 is provided with a lug, d^6, which moves in a suitable slot in the tube d. A spring, F, which is suitably fastened to the upper end of the tube d and to the lug d^6, keeps the tube d^3 in its normal position.

Fastened to the lug d^6 is a cord, G, which passes down over a pulley, g, on the lower portion of the tube d, and thence upward through an opening, a^7, of the reservoir, over a pulley, g', on the outside of the reservoir, and downward and over a pulley, g^2, and pulley g^3 on the handle C, where it is fastened to a lever, c', on the end of the said handle, by which means it is operated. When the free arm of the le-

ver c' is pressed down, the cord G will pull the tube d^3 down, and when the lever is left free the spring F will suddenly move the tube d^3 up again, thereby rarefying the air in it and causing a partial vacuum to be created, which, by reason of the small opening in the pointed nozzle d^4, cannot be destroyed quickly enough by the outer air, whereupon the valves d' d^2 open and admit a quantity of whitewash into the tube d. This operation is repeated until the tubes d and d^3 are filled, and the next downstroke of the tube d^3 causes the whitewash to be forced out of the nozzle d^4 and against the spraying-plate d^5, whereby it is spread and directed against the brush, thus charging the brush for the operation of whitewashing or calcimining. A flexible tube, g^3, is suitably fastened to the reservoir in the opening a^7, while its other end is closed around the cord G, thus forming a movable packing for said cord. A bail, a^8, is provided on the reservoir A, in order to be turned over and upon the stopper E, to keep it in place during the operation of whitewashing.

An extra pair of loops or staples, a^{10}, may be provided on the reservoir A, for the purpose of receiving another handle in case of necessity.

In constructing the brush proper the bristles b^3 are double, or nearly so, in quantity or thickness on the straight side of the base-block than what are on the curved sides or ends.

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

1. In a whitewash-brush, the combination of a brush, B, a reservoir, A, and an elevator, D, substantially as described.

2. In a whitewashing or calcimining brush, the combination of a fluid-reservoir, a rigid tube, d, having valves d' d^2, a reciprocating tube, d^3, having nozzle d^4, and suitable mechanism for operating the tube d^3, substantially as and for the purpose described.

3. In a whitewashing or calcimining brush, the combination of the reservoir A, having looped studs a^4, with locking-pins a^9, and adjusting-washers b^2, and the brush B, substantially as and for the purpose described.

4. The combination of the brush B, the rims a a', the chamber or reservoir A, tube a^6, stopper E, and elevator D, substantially as and for the purpose described.

5. The combination of the spraying-deflector d^5 with the brush B and the liquid-elevator D, substantially as and for the purpose described.

6. The combination of the reservoir A, having top rims, a a', forming space a^2, spout a^6, and the brush B, substantially as and for the purpose described.

THOMAS HUNTBATCH.

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