(No Model.) 2 Sheets—Sheet 1.

W. OTT.

FLOOR AND WINDOW WASHER.

No. 302,862. Patented July 29, 1884.

Fig. 1.

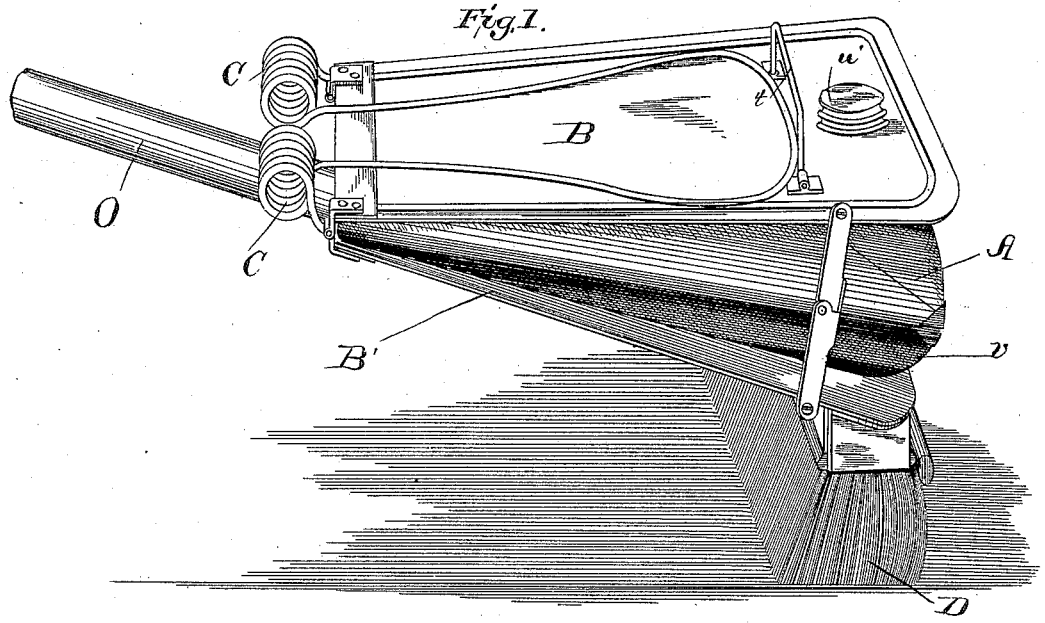
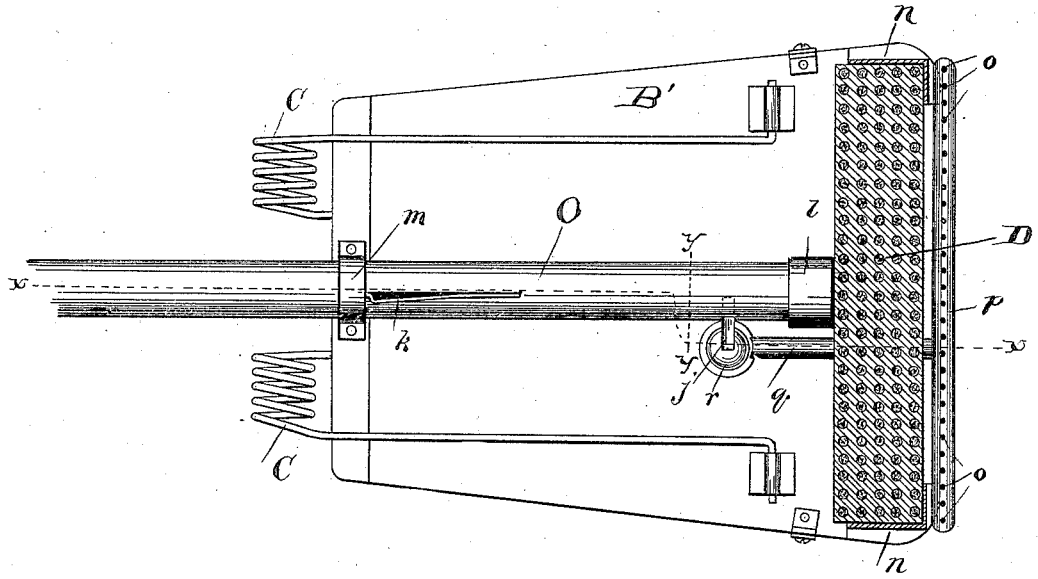


Fig. 2.



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INVENTOR—
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

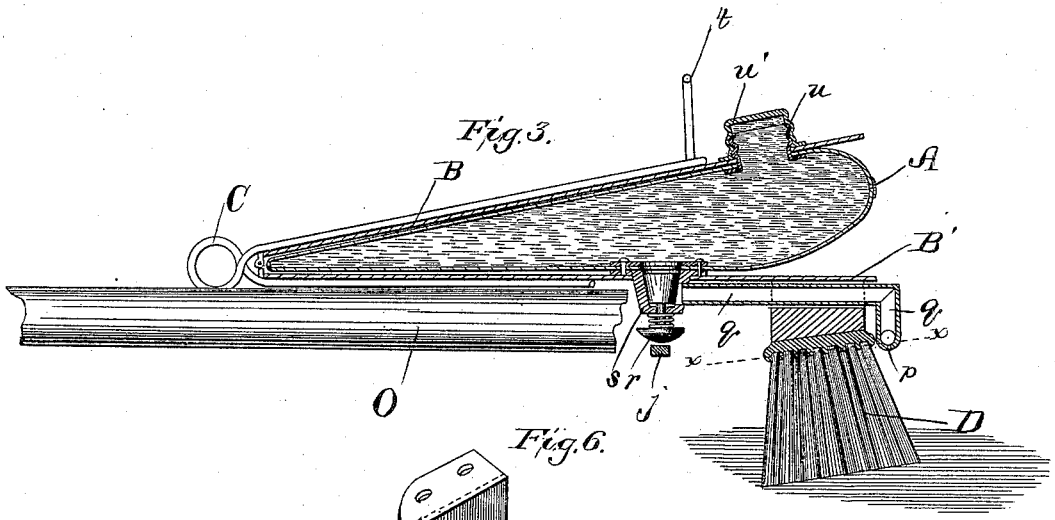


Fig. 6.

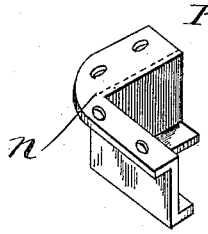


Fig. 4.

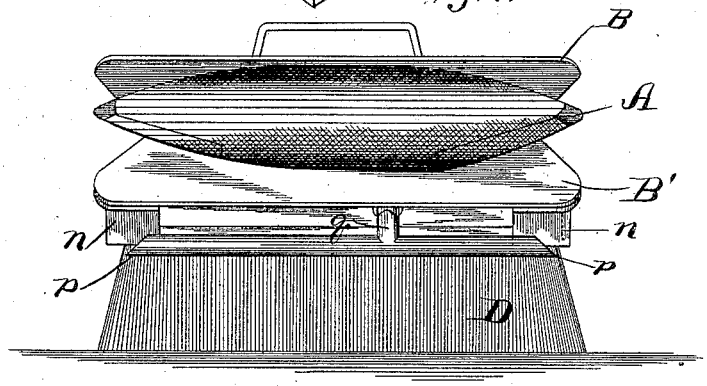
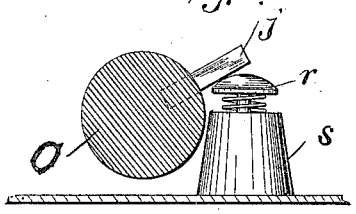


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM OTT, OF CHICAGO, ILLINOIS.

FLOOR AND WINDOW WASHER.

SPECIFICATION forming part of Letters Patent No. 302,862, dated July 29, 1884.

Application filed August 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM OTT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Floor and Window Washers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device for washing, scrubbing, or scouring surfaces, in which a brush, or other washing, scrubbing, or scouring medium is operated by means of a handle; and my object is to provide a flow of water for wetting the brush or other medium and the surface operated upon without interrupting the operation of cleaning.

A brief outline of my invention is as follows: I provide two jaws of suitable material, held closely together by means of a spring, to the lower of which jaws the brush or other washing medium is attached. Between the jaws I place a loose bag, of suitable size and material, for containing water, which is filled into the same through an opening therein, and a corresponding opening provided with a stopper in the upper jaw. On the lower jaw is provided a pipe connected with the bag, which serves as a discharge, the pipe being connected with another at the end of the device, at right angles to the first, and having perforations in its under side. The pressure of the jaws, the bag being full of water, drives the water through the pipes and out through the perforations. To regulate the flow I have provided a valve connected with the discharge-pipe, the normal condition of which is to obstruct the flow, and which is opened by pressure exerted at will by means of a projection on the handle.

My invention consists, broadly, in combining with a brush and handle a water-supply consisting of a bag and spring mechanism for exerting a strong pressure thereon, whereby water contained in the bag is forced out through one or more perforated pipes connected therewith to the point desired, said spring mechanism comprising two jaws connected together at one end, and one or more springs operating to close the jaws together; and it consists, further, in certain details of construction and combination of parts, all as hereinafter set forth.

Referring to the drawings, Figure 1 is a perspective view of my device. Fig. 2 is a plan view of the under side thereof. Fig. 3 is a sectional view taken on the irregular line *x x* of Fig. 2. Fig. 4 is an end view. Fig. 5 is an enlarged section taken on the line *y y* of Fig. 2, showing the operation of the valve. Fig. 6 is a perspective view of one of the guides, detached for retaining the brush in position.

A is a bag for containing water, and is shown confined between two jaws, B and B′, hinged together. C is a spring fastened to the jaws, and serving to press them toward each other. The jaws B and B′ are provided near their outer ends with toggle-joints *v*, to permit them to be held apart during the operation of filling the bag. The bag is provided at a suitable point in its upper face with a filling-orifice, *u*, passing out through the upper jaw, and provided with a stopper, *u′*. A handle, *t*, on the upper jaw serves as a convenient aid for forcing the jaws apart in opposition to the spring preparatory to filling, the toggle-joints preventing their closing. The bag is then filled through the orifice *u*, which is then closed and the toggle-joints tripped. In its under side the bag is provided with an orifice, into which is passed a tube, *s*, having an ordinary spring-valve, *r*. The end of the tube is firmly secured to the bag, and is of any desired size. The normal condition of the valve is to keep the orifice closed. The tube *s* is connected with a pipe, *q*, at right angles to it, which extends to the outer end of the device, where it is bent and again connects with the pipe *p*, lying along the outer end of the device, and provided with perforations *o*. It may be found convenient to have the tube *s* connect with two or more pipes connecting with the pipe *p*, or discharging the water directly, thus dispensing with the pipe *p* altogether. I do not confine myself, therefore, to the specific construction of the discharge-pipe shown. The brush D is removably attached to the lower jaw, B′, by means of the guides

n, and is kept firmly in place by the handle O pressing against it. The handle O is held firmly by the guide-ring *m* and a socket on the brush, (which may be in the form of a thimble, *l*, as shown, or simply a recess cut into the brush-head,) and is kept firmly against the brush by means of the spring-catch *k*. To remove the brush, it is only necessary to press down the spring-catch *k* and withdraw the handle sufficiently to permit the brush to be slipped out of the guides *n*. Thus brushes of different degrees of stiffness for different purposes may be substituted.

At a point on the handle O opposite the valve *r* the handle is provided with a pin, *j*, projecting out so as to extend over the cap of the valve *r*, as shown in Fig. 5.

The bag being filled, and the orifice *u* closed, and the toggle-joint *v* tripped, to cause a flow of water into the pipe *p* requires simply a turning of the handle in such manner as to press the pin *j* upon the cap of the valve *r*, thus opening the same and admitting the water into the tube *s*, whence it passes through the pipe *q*, and out through the perforations *o*, provided in the pipe *p*.

It is obvious that the jaws B and B′ may be variously modified in form, the object of their use being, principally, to obtain an equal pressure by the spring upon the bag A. The spring, also, may be made of other form than that shown, though I prefer the construction represented in the drawings.

It will be seen that by my device the object to be cleaned and the brush may be continuously kept sufficiently wet without necessitating a cessation of the operation of cleaning, and without unduly wasting water, since the flow may be graduated to any desired degree. The handle, of course, may be made in several lengths, or otherwise extensible, to permit the washing of windows at considerable height from the ground.

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

1. The combination, with a brush or other washing or scouring medium, of a bag for containing water, having a suitable filling-orifice, two jaws connected together at one end and inclosing the bag between them, one or more springs tending to close the jaws together, and discharge mechanism for conveying the water from the bag to the surface, substantially as described.

2. In a device for cleaning surfaces, the combination, with a brush or other washing or scouring medium, of the bag A, having a suitable filling-orifice, two jaws connected together at one end and inclosing the bag between them, one or more springs tending to close the jaws together, a discharge device for conveying water from the bag in separate streams to the surface operated upon, and a valve for regulating the flow, substantially as described.

3. In a device for cleaning surfaces, the combination, with a brush or other washing or scouring medium, of the bag A, having a filling-orifice and an orifice for discharging the water, spring mechanism for compressing the bag when distended, a discharge device for conveying water from the bag in separate streams to the surface operated upon, valve *r*, for regulating the discharge of water, handle O, turning within a guide, *m*, upon the compressing mechanism, and socket *l* at the brush-head, and having a projection, *j*, at a point opposite the valve *r*, when the handle is in position whereby the valve may be opened by pressure of the projection upon the cap thereof exerted by turning the handle, all substantially as described.

4. In a device for cleaning surfaces, the combination, with the jaws B and B′, hinged together at their inner ends, springs C, tending to press the said jaws together, mechanism for holding the said jaws apart when desired, socket *l* on the brush-head, and guide *m* on the jaw B′, a water-bag interposed between the said jaws, provided with a filling-orifice through the upper jaw and a discharge-orifice through the lower jaw, pipe *q*, and perforated branch pipe *p*, leading from the discharge-orifice to the outer end of the device, and valve *r*, for controlling the flow, of the brush D, fitting within the guides *n*, and handle O, provided with a spring-catch, *k*, and turning within the socket *l*, and provided with the projection *j*, for operating the valve *r*, substantially as described.

WILLIAM OTT.

In presence of—
DOUGLAS DYRENFORTH,
EDWARD MCCAFFREY.