G. L. LAMB.

CLEANING DEVICE.

APPLICATION FILED MAY 1, 1918.

1,305,470.

Patented June 3, 1919.

Fig. 6.

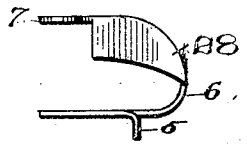


Fig. 5.

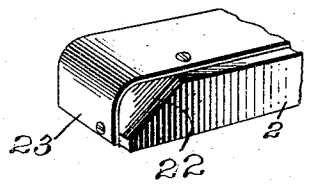


Fig. 1.

Fig. 2.

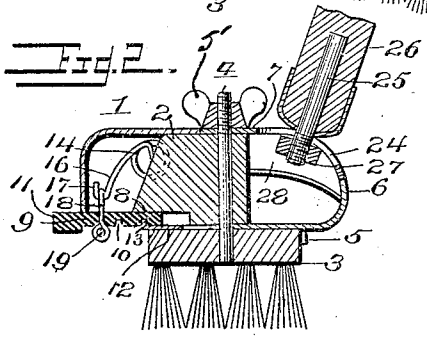


Fig. 4.

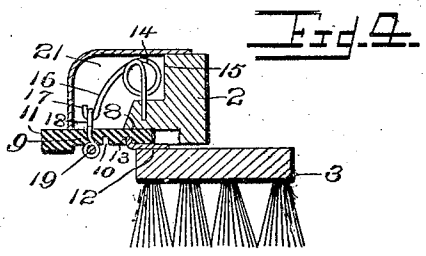
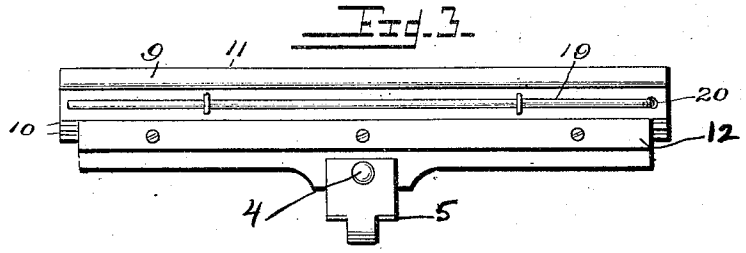


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE L. LAMB, OF NAPPANEE, INDIANA.

CLEANING DEVICE.

1,305,470. Specification of Letters Patent. Patented June 3, 1919.

Application filed May 1, 1918. Serial No. 231,785.

To all whom it may concern:

Be it known that I, GEORGE L. LAMB, a citizen of the United States, residing at Nappanee, in the county of Elkhart and State of Indiana, (whose post-office address is South Jackson street, Nappanee, Indiana,) have invented certain new and useful Improvements in Cleaning Devices, of which the following is a specification.

My invention relates to devices for cleaning floors, walls and other smooth surfaces, and comprises a device wherein means are provided for securing a brush thereto, means whereby said brush may be replaced by another; means whereby a squeegee strip may be adjustably secured thereto, a reservoir for said strip, an adjustable handle and other features, whereby I am enabled to produce a convenient, economical, useful and lasting household tool or device.

In the drawing—

Figure 1 is a perspective view of my device;

Fig. 2, a section through the center thereof;

Fig. 3, a bottom plan view, with brush removed;

Fig. 4, a section through one of the spring recesses in the frame or back of the device;

Fig. 5, a view showing one end of the device and the means provided for the discharge of water collected, and

Fig. 6 is a detail of the handle arch or holding device.

In the drawings, 1 represents my device in general, 2 a back or frame preferably of wood, 3 a brush herein indicated as a scrubbing brush but which may be replaced by a sweeping brush or wall brush, and 4 is a clamping bolt by which said brush is secured to the said frame, the bolt passing through a perforation of the central part of the said frame and being held in place by a thumb nut 5′ on the top. The brush rests at the rear against one or more lugs 5 which form a seat for the back of said brush and keep it from turning. These lugs are shown bent out from the metallic handle arch 6 which is secured to the rear of the frame or back, and its forward extension 7 is provided with an opening through which the bolt 4 passes. In the front lower edge of said frame or back I provide a rabbet 8 in which I mount a squeegee strip 9, the rabbet being of substantially the same thickness as the strip. This strip is provided with several grooves 10 whereby as the front edge wears at 11, the strip may be set farther forward. This strip is held in position by a metallic part or clamp 12 secured by screws or otherwise at the under side of my frame or back 2, and with an upturned projection 13 which engages, or may be made to engage, one of the grooves of the said squeegee strip.

To further secure the strip in place, I provide springs 14 which are coiled as shown in certain recesses 15 provided in the front face of my frame or back. Each of these springs has a downwardly projecting part 16, which engages a corresponding hole in the bottom of said recess, and a forwardly extending hook 17 over which is placed a link 18 extending through a slot in the squeegee strip to the front face of said strip, and I provide a bolt 19 which passes through the part of the link extending through the strip to hold the link. Usually there are several such links and springs.

The bolt may have an upturned part indicated at 20 which passes into a corresponding hole of the squeegee strip to keep the bolt from getting loose. Just above said strip I mount a reservoir 21 which extends a little forward from the wooden back and the lower face of which is even with the upper face of the squeegee strip. The strip in question thus closes the lower part of the reservoir. The reservoir includes or embraces the space between the squeegee strip, the vertical and horizontal sides of said reservoir, and the front face of the wooden back. The ends of the space thus made are inclosed by the ends of the metallic reservoir which is, of course, secured in any suitable way to the wooden back.

At the ends the said wooden back is beveled off and under the metallic reservoir member it is beveled off as at 22, and the metallic reservoir member bends more sharply at 23 so that there is a space left between the two, through which space any water collected by the squeegee strip may be poured or discharged in a manner that is obvious.

In the rear I have provided, as I have stated, the handle arch or frame 6 which also is secured, as has been stated, to the under side of the wooden frame or back, and this member is slotted, as indicated, at 24, the slot being placed in the arch or curve. Through this slot I pass a bolt 25 attached to a handle 26. The end of the bolt is screw threaded

and I provide a nut 27. This nut is kept substantially in place by the wings 28 of said arch in that it cannot readily fall out. The handle can be adjusted to any angle by simply turning it to loosen the nut a little. The handle is then adjusted to the required angle and by turning it clockwise it becomes fastened securely or clamped again, whereby the device may also instantly be made ready for use. It is obvious that this adjustment is desirable in many cases and particularly is it desirable to adjust the handle to the stature of different persons using the device, and the particular device being used. It is obvious that the scrubbing device will need greater pressure than a sweeping brush.

The manner of using my device is obvious. For instance, the scrubbing brush shown may be used to scrub, say a kitchen floor, and after the scrubbing is done the water left can be collected by this squeegee into the reservoir and discharged into the pail or other device without the labor of wiping up the floor. The device when used as a squeegee is preferably used so that the tractive effort pulls the squeegee away from the reservoir, thus leaving a crack or opening into which water flows and as fast as the reservoir fills, it is, of course, emptied.

The device may obviously be used in the cleaning of walls, windows, and other similar surfaces. If it is desired to replace a brush, all that is necessary is to unscrew the thumb-nut 5′, remove the bolt and brush already in place, and substitute another.

Also if it is desirable to use the device without the handle, that is simply by the hand, the handle may readily be removed.

I desire not to be restricted to the exact devices here shown, but to cover all substantial equivalents.

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

1. In a cleaning device, in combination, a brush holding frame having a brush engaging part thereon, said part having a recess rabbeted in its lower face and other recesses in its upper forward part, a detachable brush, means adapted to hold said brush in engagement with said brush engaging part, an adjustable squeegee strip adapted to be adjusted in the recess rabbeted in the lower face, a spring in each of the recesses in said upper forward part, a link for each, passing through said squeegee strip, a bolt for all said links, said spring adapted to pull the strip against the upper wall of the recess, and additional means adapted to hold said strip in place.

2. In a cleaning device in combination, a brush frame, a detachable brush, means for holding said brush on said frame, said frame having recesses for springs rabbeted therein and a recess for a squeegee strip rabbeted in said frame above the brush, a multigrooved squeegee strip, a plate secured to the underside of said frame and having a projection engaging a groove, springs mounted one in each of said spring recesses, links, one to each spring and means whereby said links are adapted to engage said strip.

3. In a cleaning device, a wooden frame having a recess for a squeegee strip rabbeted in the front under part thereof, a squeegee rubber strip having several grooves adapted to be seated in said recess, a clamping plate, having an upwardly projecting part adapted to be screwed to the underside of said frame with its projecting part engaging one of said grooves, elastic means engaging the forward part of the strip to hold it in place, and a reservoir above said strip, the strip and the reservoir being so arranged that when the strip is drawn over a wet surface, the strip will be separated far enough from the reservoir to enable the water to pass into the reservoir, the said strip by its elasticity springing back and closing the downwardly opening mouth of the reservoir, when tractive pressure is removed.

4. In a cleaning device, in combination, a wooden frame having recesses in its front face or back, having a rabbeted recess on the under side thereof, at the front, a multigrooved and slotted squeegee strip adapted to be secured in said rabbet, springs mounted upon the front face of said frame one in each recess, links connected one to each spring, said links being long enough to pass through the slots in said strip, a bolt extending lengthwise of the strip and passing through said links below the strip, and strip retaining means adapted to engage any desired groove of said strip, the links being arranged to swing accordingly, and a reservoir.

In testimony whereof I have hereunto set my hand.

GEO. L. LAMB.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."