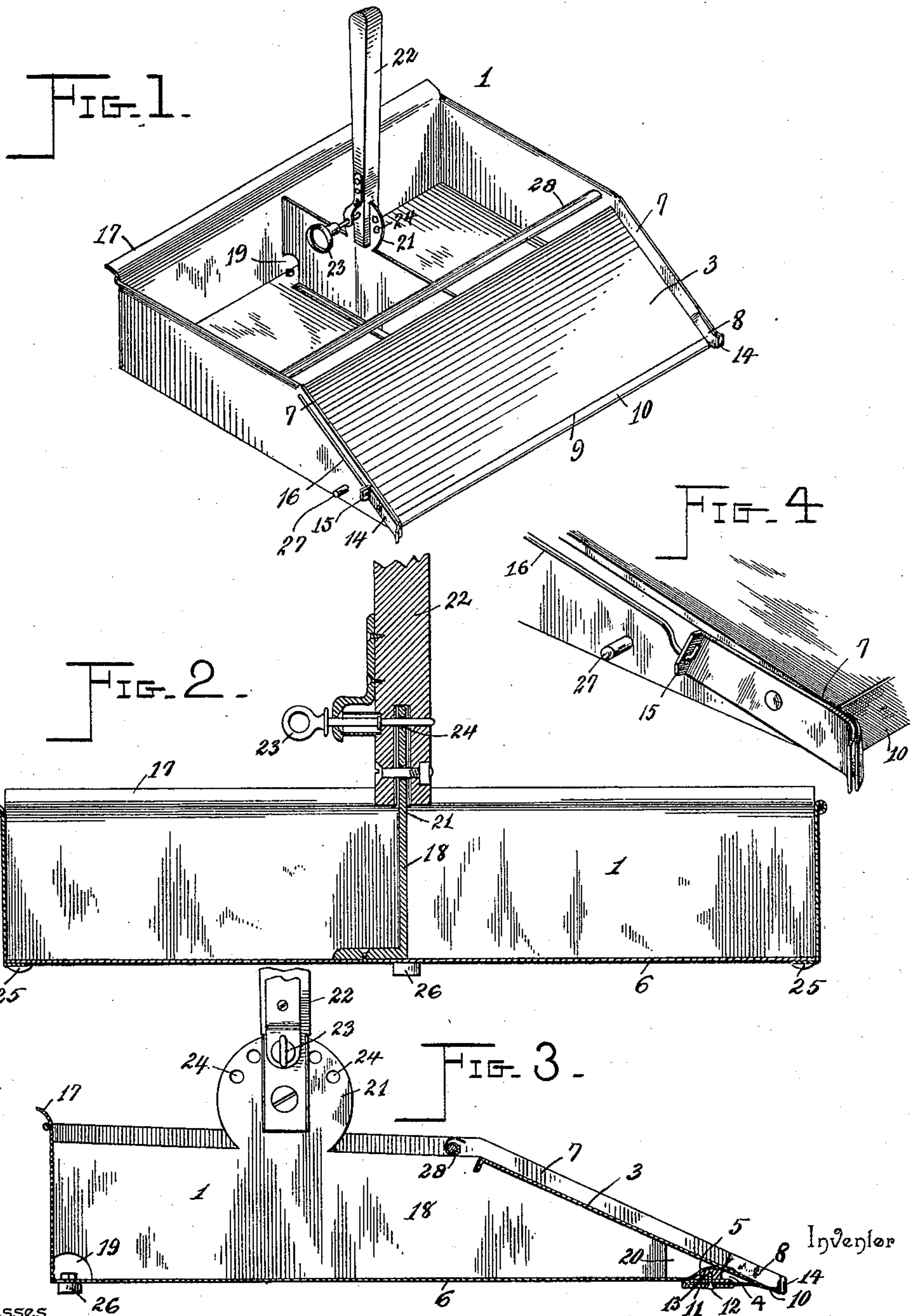


(No Model.)

F. W. RICHTER.
SCRUBBING APPLIANCE.

No. 601,678.

Patented Apr. 5, 1898.



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK W. RICHTER, OF CHICAGO, ILLINOIS.

SCRUBBING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 601,678, dated April 5, 1898.

Application filed June 3, 1897. Serial No. 639,365. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. RICHTER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Scrubbing Appliance, of which the following is a specification.

The invention relates to improvements in scrubbing appliances.

10 The object of the present invention is to improve the construction of scrubbing appliances and to provide a simple and comparatively inexpensive device designed to be used in connection with a cleaner or squeegee and
15 adapted to permit dirty water to be swept or propelled into it by the said cleaner or squeegee and capable, when stairs are being scrubbed, of being arranged against the risers to direct water into it.

20 A further object of the invention is to provide means for wiping a squeegee or cleaner and causing the dirty water from the same to fall into the pan or receptacle.

25 The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

30 In the drawings, Figure 1 is a perspective view of a scrubbing appliance constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is an enlarged detail perspective view illustrating the
35 manner of mounting the pivoted plates.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

40 1 designates a tray or receptacle, preferably constructed of sheet metal and soldered or otherwise finished in such manner as to render it water-tight. This tray, which may be of any desired size or shape, is preferably rectangular, as shown, and the front side 3
45 of the tray, instead of being disposed vertically like the other sides, is inclined, being given a gradual slant, as shown. The front ends of the sides are slightly truncated at 4, and the front edge 5 of the bottom 6 is bent
50 upward and soldered or otherwise secured to

the inclined front side 3, which is provided at its ends with longitudinally - disposed flanges or guards 7, extending vertically from the face of the front side 3 and preferably formed integral with the side walls of the
55 tray. The guards or flanges 7 serve to confine the water as it is swept over the inclined front side 3 of the tray, as will be readily understood, and they have their front ends
60 8 projecting beyond the extended front edge 9 of the front side 3 to prevent a transverse strip 10 of celluloid or other suitable material, such as rubber, from being injured during the use of the device by coming in contact with walls or similar surfaces.

65 The extended ends 8 are deflected laterally to prevent them from coming in contact with the rubber of a squeegee or cleaner and to enable the latter to be of a length equal to the width of the inclined front, so that it will
70 fit snugly between the flanges 7 and effectively sweep water up the inclined front and into the pan or receptacle. The outwardly-bent ends 8 provide an easy entrance for the
75 squeegee or cleaner and prevent the rubber of the same from being cut.

The celluloid strip 10, which is secured to the lower face of the front end of the tray by a metal binding-strip 11 and suitable fastening devices 12, fits closely against a floor, step,
80 or other surface being scrubbed and facilitates the ready removal of water therefrom by preventing the same from getting beneath the tray as it is swept toward the front of the
85 same to direct it up the inclined front wall or side 3.

The particular construction of the front of the pan or tray forms a recess at the front thereof, and nuts or bosses 13, with threaded openings, are arranged therein and secured
90 by solder or other suitable means in position to be engaged by the fastening devices 12, which preferably consist of screws. The binding-strip 11, which is constructed of sheet metal, is folded longitudinally and covers the
95 upper and lower faces of the inner portion of the celluloid strip 10. By this construction the celluloid strip is detachably secured to the tray or pan and is firmly supported and
100 prevented from breaking at the fastening

devices, which pass through perforations of the sides of the binding-strip and the celluloid strip.

In order to cushion the pan or tray and prevent the celluloid strip from being readily broken or injured in placing it upon a floor or other surface, a pair of pivoted plates 14 is provided. These plates 14, which are arranged on the outer faces of the flanges 7 and the adjacent portions of the sides of the tray or pan, are pivoted between their ends and project beyond the extensions 8 of the said flanges, and they are provided at their inner ends with perforated flanges or lips 15, which are engaged by springs 16, whereby the front portions of the plates are thrown downward and caused to project beyond the lower face of the strip 10. These pivoted plates form yielding cushions for engaging the floor or other surface being scrubbed, and the springs 16, which are provided at their front ends with hooks for engaging the perforated lips 15, consist of substantially straight pieces of resilient wire and are soldered or otherwise secured at their inner or rear ends to the outer faces of the sides of the pan or tray. The extensions 8 of the flanges 7 and the pivoted plates form guards and prevent the rubber strip of a cleaner or squeegee from being injured by the pan or tray should a metal strip be substituted for the celluloid strip 10. When the strip 10 is not constructed of celluloid, the cushioning-plates 14, which project forward beyond the strip, are unnecessary and may be omitted. The springs 16, besides cushioning the plates 14, serve to hold them in proper position for protecting the celluloid strip and for preventing the same from coming in contact with an object during the use of the scrubbing appliance.

The rear wall of the pan or tray is extended and bent rearwardly to form a transverse lip or guard 17, which is adapted to be arranged against the riser, so that the dirty water being scraped or swept from the next above tread portion of the stairs will descend into the tray or pan.

The tray or pan is provided with a central longitudinal partition 18, extending from the front to the back of the same to prevent water from rushing from one side thereof to the other and unbalancing the device and rendering it difficult to manipulate, but the partition 18 is provided at its ends with openings 19 and 20, so that the water may be thoroughly emptied from the tray or pan without spilling a portion of it. The said longitudinal partition is provided with an integral vertically-disposed disk 21, to which is pivoted an adjustable handle 22, bifurcated at its lower end to receive the disk and carrying a transversely-disposed pin 23, mounted in a suitable housing and arranged to engage any one of a series of perforations 24 of the disk, whereby the handle is secured at the desired adjustment. The perforations are arranged

in a curved series, and the handle is provided with a transverse perforation adapted to register with any one of a series of perforations to permit the locking-pin to be passed through the same.

The pan or tray is provided with enlargements or bosses 25, located on the lower face of the bottom at the back thereof to form feet or rests to prevent the bottom of the pan resting flat upon a floor or other supporting-surface. The back of the pan is cushioned by a buffer 26, consisting of a disk of rubber secured to the bottom at a point between the enlargements or bosses 25, and it is of greater thickness than the same in order to contact with the floor first. The buffer or cushion and the enlargements or bosses by maintaining the bottom of the pan slightly above the floor prevent the pan or tray from being readily worn, and it may be constructed of material other than rubber. By supporting the back of the pan or receptacle at one point the front of it is enabled to fit more closely against an uneven floor, especially when the pan or receptacle is more or less full.

The pan or tray is provided at opposite sides with projections or lugs 27, adapted to rest upon a pair of nails or hooks designed to be driven into a wall or other supporting-surface to form a support for the device when the same is not in use.

In order to enable the cleaner or squeegee to be wiped and also to cause the dirty water removed from the same to fall into the pan or receptacle, a transverse scraper-bar 28 is employed. The scraper-bar 28, which is located slightly in rear of the inclined front 3, is curved in cross-section, presenting an upper convex face and a lower concave face, and is secured to the sides of the pan or receptacle and to the partition 18. It is adapted to scrape dirty water from a squeegee or cleaner and cause the same to fall in the pan or receptacle, and it is arranged adjacent to the upper edge of the front 3, in the path of the squeegee or scrubber, in convenient position so that it may be readily engaged by the said squeegee or scraper after it has been swept up the inclined front of the tray or receptacle. The front 3 is provided at its upper or rear edge with a depending flange arranged at a slight inclination, as clearly shown in Fig. 3 of the accompanying drawings.

It will be seen that the scrubbing appliance is simple, easily constructed, and inexpensive, that it will save time and labor, and that it will enable the dirty water on a floor to be removed without returning it into a pail or other receptacle containing clean water. It will also be apparent that the device will form an effective dust-pan.

What I claim is—

1. The herein-described scrubbing appliance comprising a substantially rectangular tray, an inclined upwardly and rearwardly disposed side to said tray, and a correspond-

ingly-inclined lip or guard projecting from the opposite side of the tray, the said inclined side being provided with end flanges or guards extending above its upper surface, substantially as described.

2. The herein-described scrubbing appliance comprising a substantially rectangular water tray or receptacle, a gradually inclining or slanting side to said receptacle, vertically-disposed flanges or guides at the extremities of said inclined side, and an adjustable handle secured within said tray, substantially as and for the purpose described.

3. The herein-described scrubbing appliance comprising a tray or receptacle having an inclined front, a transverse lip projecting rearward from the upper edge of the back of the tray or receptacle, a vertical partition disposed longitudinally of the tray or receptacle and provided at its ends with openings, and an adjustable handle mounted on the partition, substantially as described.

4. The herein-described scrubbing appliance comprising a tray or receptacle having an inclined front and provided at the ends thereof with vertical flanges extended beyond the inclined front to form guards, and a flexible strip secured to the bottom of the tray or receptacle at the front thereof, adapted to fit closely against a floor or other supporting-surface and terminating short of the projecting ends of the flanges, substantially as described.

5. In a device of the class described, the combination with a tray or receptacle provided at its front with a strip, of guards located at opposite sides of the tray or receptacle, yieldingly mounted on the same and projecting beyond the strip to form cushions, substantially as described.

6. In a device of the class described, the combination with a tray or receptacle, of a pair of plates pivoted at opposite sides thereof and projecting forward therefrom to form guards, and springs mounted on the tray or

receptacle and connected with the inner or rear portions of the plates, whereby the latter are yieldingly mounted and form cushions, substantially as described.

7. In a device of the class described, the combination of a tray or receptacle having an inclined front extended beyond the bottom to form a transverse recess, a flexible strip provided with a rigid binding-strip and extending beyond the inclined front, and guard-plates arranged at opposite sides of the tray or receptacle and extending beyond the flexible strip, substantially as described.

8. In a device of the class described, the combination of a tray or receptacle having an inclined front extending beyond the bottom and forming a transverse recess, bosses arranged in the recess and provided with threaded openings, a flexible strip provided at its inner edge with a binding-strip and arranged on the bottom of the tray and projecting beyond the front thereof, and screws passing through the flexible strip and the binding-strip and engaging the threaded openings of the lugs, substantially as described.

9. In a device of the class described, the combination of a tray or receptacle having an inclined front, provided at its upper or rear edge with a depending flange, and a transverse scraper-bar mounted on the tray or receptacle and located slightly in rear of the inclined front in position to be engaged by a squeegee or scraper after the same has been swept up the inclined front, said scraper being curved in cross-section and presenting a convex upper face and a concave lower face, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRED. W. RICHTER.

Witnesses:

A. J. FORMAN,
E. W. SCOTT.