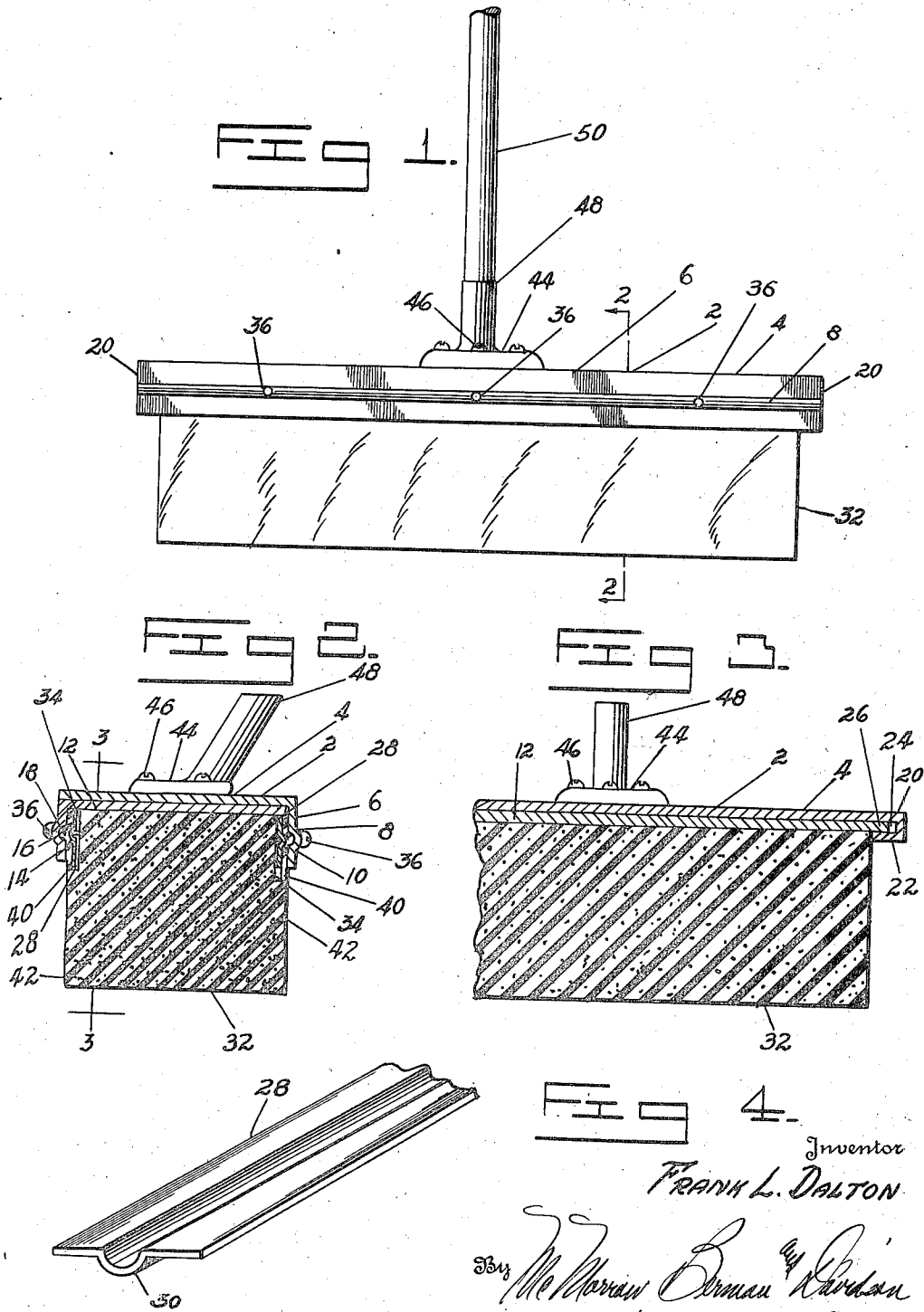


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SPONGE CLEANING DEVICE
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SPONGE CLEANING DEVICE

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3 Claims. (Cl. 15-244)

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This invention relates to cleaning devices.

An object of the invention is to provide a cleaning device having a main body portion or back with provision for securing thereto a cleaning member in the form of a sponge and the like.

Another object of the invention is to provide a cleaning device including a mop frame using a sponge secured thereto as a cleaning member, and having a novel type of construction for securely holding the sponge against dislodgment from the mop frame.

A further object of the invention is to provide a cleaning device which is simple in construction, inexpensive to manufacture, and effective in use.

Other objects and advantages of the invention will become apparent from the following description of a preferred embodiment thereof as illustrated in the accompanying drawings, and in which

Figure 1 is an elevational view of my improved cleaning device,

Figure 2 is a transverse sectional elevation taken on line 2-2 of Figure 1,

Figure 3 is a longitudinal sectional elevation in fragment, taken on line 3-3 of Figure 2, and

Figure 4 is a perspective view of one of the sponge gripping members forming part of the device.

In the use of cleaning devices of the kind which have a main body portion or back which may be secured to a long handle and having a mopping portion such as a sponge and the like carried by the main body portion, it has been found that it is quite difficult to retain the sponge on the main body portion, and this is a constant source of bother and annoyance to those using the cleaning device. The present invention discloses a construction which effectively secures the sponge portion against dislodgment from the main body portion or back.

Reference is now had to the drawings in which like reference characters denote similar parts throughout the several views. As shown there is a main body portion 2 formed of an outer back member 4 formed of sheet material with its back edge turned down forming a depending rear flange 6 which is beaded longitudinally at 8 to form an inner longitudinal groove 10. An inner back member 12 is formed of sheet material with its front edge turned down forming a depending front flange 14 which is beaded longitudinally at 16 to form an inner longitudinal groove 18. As shown, the left and right side marginal edges 20 of the outer back member 4 are bent over and turned back inwardly to form side flanges 22.

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It is to be noted that the inturned side flanges 22 are spaced from the marginal edge portions 20 as seen in Figure 3, thereby providing a channel 24 along each edge 20 for the slidable reception and support of the inner back member 12 along its side edges 26, thus holding it securely to outer back member 4.

Sponge gripping inserts 28, shown in detail in Figure 4 and in section in Figure 2, are formed of sheet material with a longitudinal bead 30 formed therein to fit into the grooves 10 and 18 respectively in the flanges 6 and 14.

A sponge member 32 formed of absorbent elastic cellular material or the like, has parallel upwardly open slots or recesses 34 formed therein for the reception of the insert members 28. The beads 8, 16, and 30 have aligned holes formed therein for the reception of screws 36 which thus extend through their respective flanges 6 or 14, through the marginal portions 40 of the sponge left between its side surfaces 42 and the slots 34, and thence into the aligned holes formed in the insert clamping members 28. Since the said marginal portions 40 of the sponge are tightly clamped between the clamping inserts 28 and their abutting flanges 6 or 14 as explained, with some of the sponge being pressed into the grooves 10 and 18, of the flanges, it is obvious that the sponge is securely held against dislodgment.

The sponge thus fits snugly up inside of the frame against the underside of the inner back member 12 and has its marginal portions clamped as shown, thus making it impossible for the sponge to slip out of the frame when in use or out of use. Nor can it be pulled out of place when properly inserted and clamped, thus making a secure assembly. To remove the sponge, it is only necessary to take out the screws 36 and withdraw the sponge. A handle base 44 is secured to the outer back member 2 by means of screws or rivets 46, and has a hollow socket or ferrule 48 for the reception of the lower end of a handle 50.

Although I have described a preferred embodiment of my invention in specific terms, it is to be understood that various changes may be made in size, shape, materials and arrangement without departing from the spirit and scope of the invention as claimed.

I claim:

1. A cleaning device comprising an outer back member formed of sheet material and having a depending first flange along one back edge thereof, an inner back member formed of sheet material and having a depending second flange

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along one front edge thereof, each of said flanges being provided with a groove extending longitudinally of its inner surface, said outer back member having its opposite side edges turned under to form guide channels for the reception of the side edges of the inner back member, whereby the said outer and inner members are held in engagement with their opposed flanges forming a sponge receiving channel for the reception of a sponge-like cleaning element therein; said cleaning element having upwardly open slots therein, clamping inserts receivable in said slots and provided with heads receivable in said grooves, and screw means for biasing said inserts toward adjacent flanges thereby compressing between said flanges and inserts and the grooves and heads thereof portions of said cleaning element and holding the same securely in said sponge receiving channel.

2. A cleaning device comprising a back member formed with depending flanges along opposite sides thereof, said flanges being provided on their inner surfaces with longitudinally-extending grooves, a sponge-like cleaning element receivable between said flanges and provided at each side with an upwardly-open slot, clamping inserts adapted to be disposed one in each of said slots and provided with a bead receivable in the groove of the adjacent flange, and means for drawing the positioned insert toward the adjacent flange for clamping the intervening portions of the cleaning element between the flanges and inserts and the grooves and beads thereof.

3. A cleaning device comprising a back mem-

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ber formed with depending flanges along opposite sides thereof, said flanges being provided on their inner surfaces with longitudinally-extending grooves, a sponge-like cleaning element receivable between said flanges and provided at each side with an upwardly-open slot, clamping inserts adapted to be disposed one in each of said slots and provided with a bead receivable in the groove of the adjacent flange, said flanges and inserts being provided with aligned openings, and screws insertable in said openings and adapted to be advanced therein for clamping the intervening portion of the cleaning element between the flanges and inserts and the grooves and beads thereof.

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