

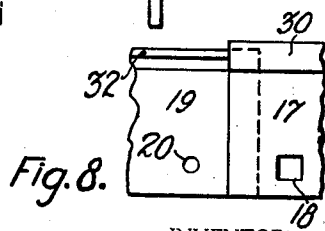
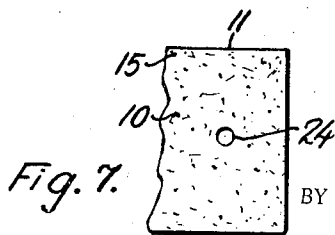
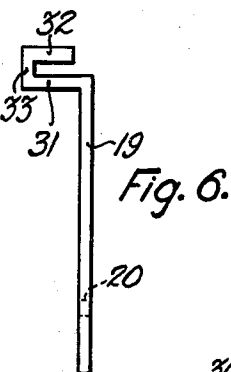
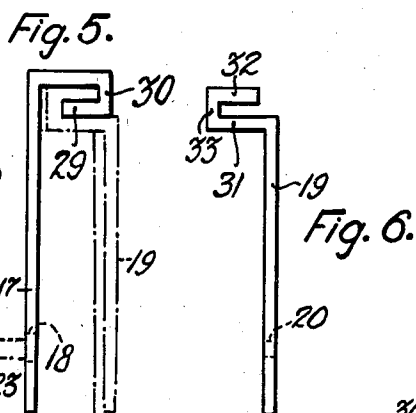
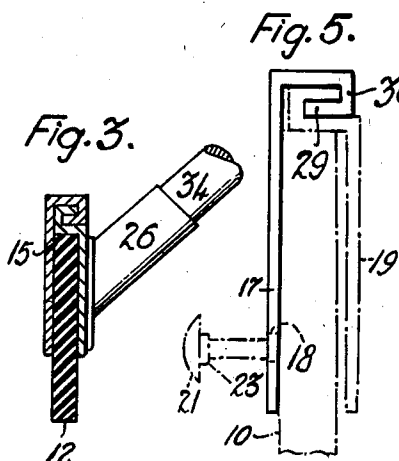
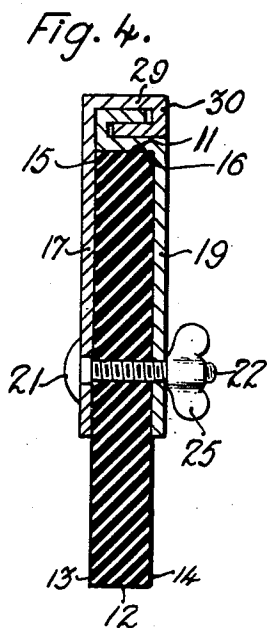
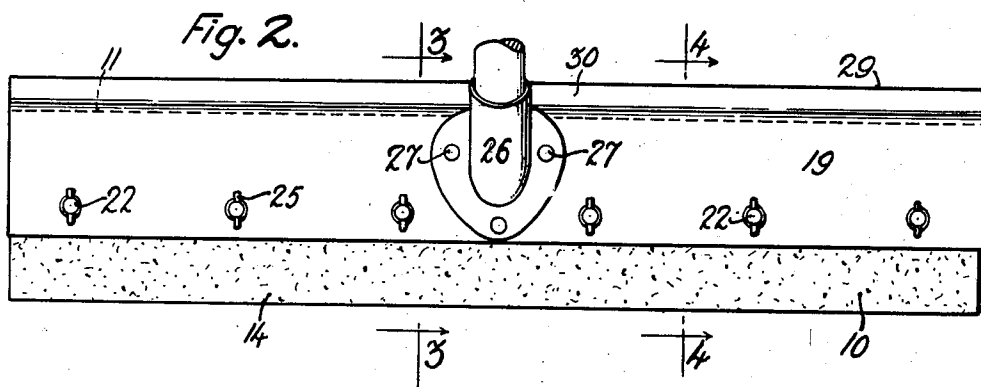
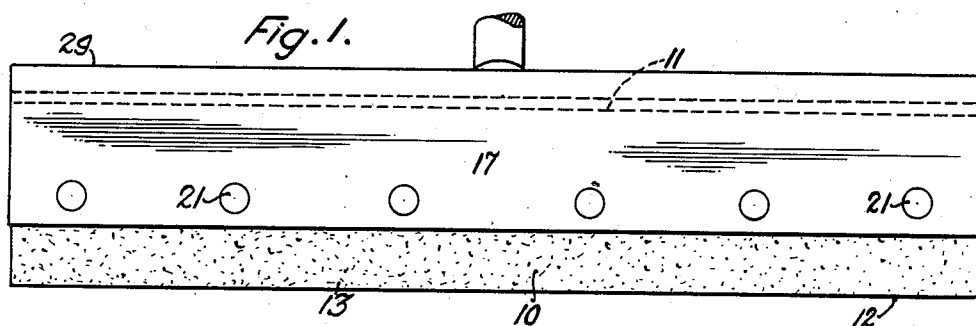
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L. EHRLICH

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ADJUSTABLE FLOOR SQUEEGEE

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INVENTOR:

LEO EHRLICH:

ATTORNEY.

UNITED STATES PATENT OFFICE

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ADJUSTABLE FLOOR SQUEEGEE

Leo Ehrlich, Bronx, N. Y.

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3 Claims. (Cl. 15—245)

This invention relates to cleaning devices of the squeegee type and has particular reference to a device of this kind which is adapted for rugged or heavy duty, such as the cleaning of floor surfaces, decks, pavements or the like, although it is not limited to the cleaning of such surfaces.

In the disclosed embodiment of this invention, the squeegee or rubber member is provided with opposed, angular working edge portions, and certain objects of the invention reside in the provision of features which adapt said member for being readily changed or reversed, so that when one edge portion becomes worn through use, another portion may be changed to the working side, thereby to effect both efficiency of operation, and economy of structural material.

Surfaces of the nature above referred to frequently become covered or spread over to an undesirable extent with materials of an adhesive or solid nature, as well as with oils and other liquids, which necessitate use of constantly efficient instrumentalities, and since the present squeegee member is provided with reversible front and rear edges on its normally lower or under longitudinal margin, another object is to provide front and rear working edges on the normal top or upper margin, so that said margins may also be conveniently reversed, to place either lowermost.

The upper margin is reinforced and held by elements which include front and back plates, and a feature of these plates is that they interlock and are thus held against transverse movement, except for fine adjustment. These plates are relatively movable longitudinally, for purposes of assembly, and have limited transverse or front, to rear, movement, also for assembly purposes.

With the above objects and advantages in view, as well as others which will hereinafter appear, the particular embodiment of the invention selected for disclosure is herein clearly described and illustrated in the accompanying drawing, in which:

Fig. 1 is a front elevational view of a squeegee constructed in accordance with the present invention;

Fig. 2 is a rear elevational view thereof;

Fig. 3 is a vertical section on the line 3—3 of Fig. 2;

Fig. 4 is an enlarged vertical section on the line 4—4 of Fig. 2;

Figs. 5 and 6 are end elevational views of plate

members; said Fig. 6 also showing other parts in different positions;

Fig. 7 is a plan view of a fragment of a squeegee member; and

Fig. 8 is a fragmental plan view of telescoping holding plate members.

Referring in detail to the drawing, the illustrations thereof show a squeegee member 10, which has a flat top face 11 and a like bottom face 12, at which is a front longitudinal working portion 13, opposite a similar back edge portion 14. The top part of the rubber member 10, adjacent the face 11, is formed with front and back longitudinal portions 15, 16, like the portions 13, 14, said member being of rectangular cross section, and a feature of its construction is considerable depth between its front and back surfaces.

Holding means for the member 10 include a front plate 17 having therein angular or square apertures 18, each of which is alike. A back plate or rigidifying member 19 cooperates with the front plate, in general registry, and has therein circular openings 20, the latter being coaxial with the square apertures in the assembled device.

Fastening elements, in the form of bolts, each includes a head 21, a threaded stem 22, and an angular or square tang 23, which fits into an aperture 18, to prevent turning movement. The apertures 20 in the back plate 19 receive the stems of the bolts, and in the member 10 are like circular apertures 24, through which said stems also pass. Each stem is provided with a wing nut 25.

A handle includes a socket portion 26, which is metalically attached to the plate 19, the means of attachment at present used being rivets 27 or the like, said rivets being in an attaching flange, as shown, and the socket member being a metal casting.

The front plate 17 is provided with a right angularly disposed flange 28, a shallow flange 29 parallel therewith, and an integral interposed flange 30. The flange 29 provides a space, on one of its sides, at the edge face 11 of the squeegee member, and also a space at its opposite side, under the flange 28.

The back plate 19 is provided with a right angular flange 31, a shallow flange 32 spaced therefrom, and an integral interposed flange 33. The flanges 31, 32 of the back plate 19 engage, with a sliding fit, in the aforesaid spaces, as provided by the front plate flanges, and since the flange 29 of said front plate fits slidably in

the space between the flanges 31, 32 of the back plate, the organization forms a substantially solid, compact joining means.

On assembly (see Figs. 1 and the others thereat), one end of the back plate 19 with its flanges, may be introduced at one end of the plate 17, the respective flanges being in interlocking slidable position, then the plates are moved telescopically into registry, for receiving the rubber member 10 therebetween.

For the purpose of gripping the squeegee member, the front and back plates have limited front to rear movement. Said plates are shown in tightened position in Fig. 4. In Fig. 5, where some parts are shown in broken lines, the positioning is rather exaggerated, for clarity. The plates are moved outwardly or expanded, as illustrated, until the flanges 32 and 29, of the different plates, about the interposed flanges, so that the squeegee member may be readily inserted, or removed for renewal or reversal.

The apertures 20 are disposed on the longitudinal central line of the member 10. The two innermost apertures, as 20, in which are the stems 22, are equally distant from the structural center of said member, and the apertures on the outer sides of said two inner apertures are equally spaced apart. Therefore, it is immaterial, as on first insertion of said member, how it is aligned in position between the front and back plates, since said apertures always register with apertures in said plates, and any edge portion adjacent a face 11 or 12, becomes a working portion.

Fig. 5 also illustrates another method of assembly, according to which the member 10 may first be placed in position on the front plate 17. The bolts 21 are partly inserted, as shown, to hold said member in its position. Then the rear plate 19 is moved longitudinally into its position, the flanges of the plates being clasped, whereupon said bolts are urged home and the manipulating members 25 placed on the stems, as shown in Fig. 4.

The device is suitable for manufacture in different sizes, a small size device being appropriate for glass or window cleaning purposes, and in this case said device is capable of use without any projecting handle, it being seen that the structure at the head portion or flange 29 forms top part that may be manually grasped.

The socket 26, moreover, may be used as a handle by itself, and a wooden handle member 34 may be of any desired length.

What I claim is:

1. A squeegee including a holding plate having thereon and forming a recess throughout its length two right angularly disposed flanges, a second holding plate also having thereon and

forming a recess throughout its length two right angularly disposed flanges, one of the flanges of the first plate being disposed in the recess formed by the second mentioned flanges, one of the flanges of the second plate being in the recess formed by the flanges of the first plate, one of said flanges forming a seat between said plates, the latter being spaced apart, and a rectangular squeegee member held in the space between said plates and having one of its faces seated against the last mentioned flange.

2. A squeegee comprising in combination a squeegee member including flat sides and having a working face and an opposite flat face, and plates holdingly engaging portions of said sides adjacent said flat face, said plates having thereon and disposed at right angles thereto pairs of flanges, said flanges being interlocked, the flanges of one plate being telescopically engaged with the flanges of the other plate, the engagement of said flanges being such as to substantially prevent outward movement of said plates, whereby said plates are relatively slidable longitudinally for assembly purposes, one of said flanges being outermost and forming with said plates manipulable means, another of said flanges being innermost and being engaged against said flat face.

3. A squeegee comprising in combination a front holding plate including a flat outer side and having a top right angular flange integral therewith, a second flange parallel with the first flange, and an interposed flange connecting the first two flanges, said plate having therein angular apertures; a squeegee strip having one side of its top part engaged against a major portion of the inner face of said plate; said strip including a lowermost working portion and having a flat face on said top part, a back holding plate having an inner face engaging the opposite side of said part, a right angularly disposed flange extending from said back plate and being engaged between the flat face of said top part and the adjoining face of the second mentioned flange of the first plate, the back plate also having a flange between the first and second mentioned flanges of the first plate, a flange connecting the first two flanges of the back plate and having its front face engaged against the other portion of the inner face of said front plate, said back plate and said strip having therein registering apertures, the latter being coaxial with said angular apertures, bolts having angular tangs in the angular apertures, said bolts having stems in the registering apertures, and manipulable nuts on said stems; the rear face of said back plate and the rear face of said interposed flange being flush and having an area equal to that of the aforesaid outer side face.

LEO EHRLICH.