July 9, 1929. W. EIERMANN 1,720,630

SQUEEGEE

Original Filed Nov. 10, 1925

Fig.1.

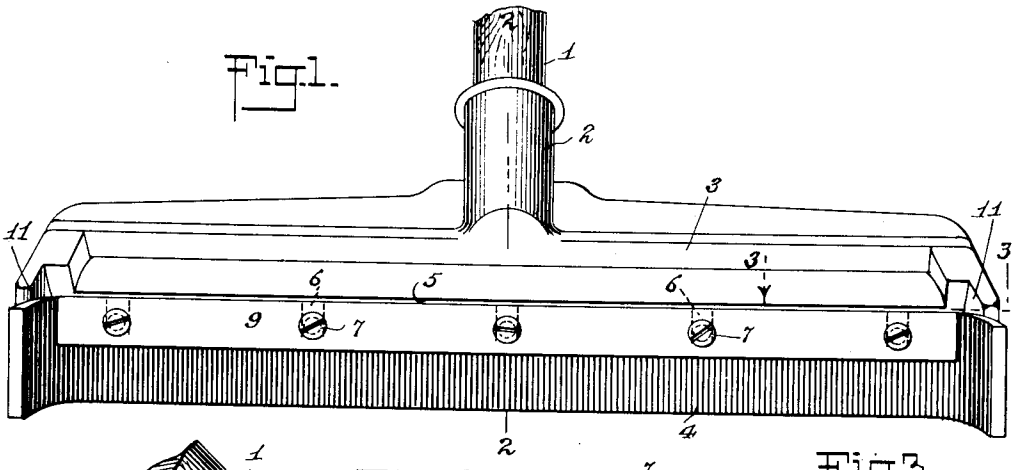


Fig.2.

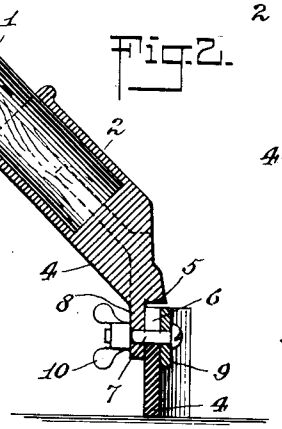


Fig.3.

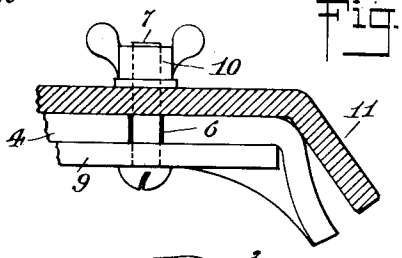


Fig.4.

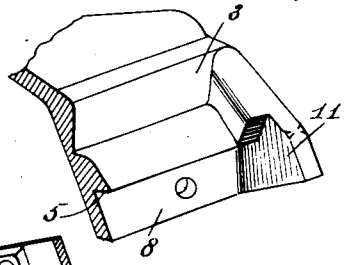


Fig.5.

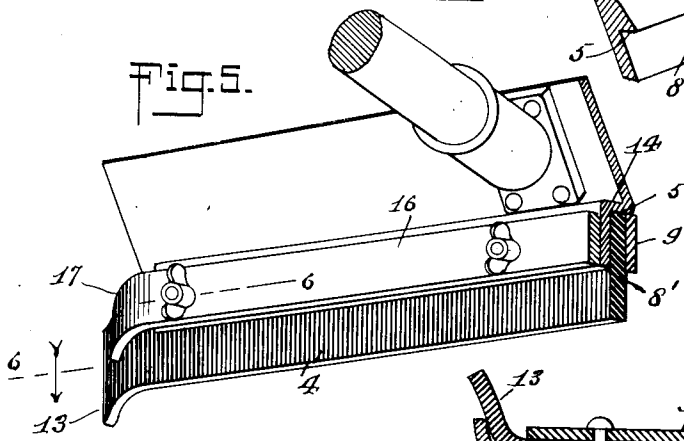
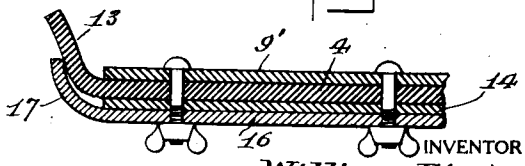


Fig.6.



WITNESSES

William A. Goebel

A. L. Kitchin

INVENTOR

William Eiermann

BY Munn & Co

ATTORNEYS

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UNITED STATES PATENT OFFICE.

WILLIAM EIERMANN, OF BROOKLYN, NEW YORK.

SQUEEGEE.

Application filed November 10, 1925, Serial No. 68,146. Renewed December 19, 1928.

This invention relates to scrapers, squeegees and the like and has for an object to provide an improved construction wherein metal or rubber blades may be used and readily applied and removed at any time.

Another object of the invention is to provide a scraper or squeegee having a body and handle receiving socket of appreciable weight whereby a momentum may be secured when the device is in use in order to give a quick flow or shearing action to an object to be removed from a given surface.

A further object, more specifically, is to provide a scraper wherein a removable rubber blade is provided, the structure being such that the ends of the blade are bent at an angle to the general direction of the blade.

In the accompanying drawing—

Figure 1 is a front view of a scraper or squeegee disclosing an embodiment of the invention, the same being shown in operative position.

Figure 2 is a fragmentary sectional view through Figure 1 on line 2—2.

Figure 3 is a fragmentary sectional view through Figure 1 on line 3—3.

Figure 4 is a fragmentary perspective view of one end of the scraper body shown in Figure 1.

Figure 5 is a rear perspective view of part of a scraper disclosing a modified form to that shown in Figure 1.

Figure 6 is a fragmentary sectional view through Figure 5 on line 6—6.

Referring to the accompanying drawing by numerals, 1 indicates a handle of any desired kind which is adapted to be fitted into the socket 2 preferably cast integral with the body 3. The body 3 and socket 2 are made comparatively heavy and socket 2 is provided with a solid portion 4 whereby some considerable momentum may be produced as the device is used whereby the blade 4 will properly engage articles to be moved over a surface or removed therefrom. The blade 4 is preferably a good grade of rubber though it could be metal or other material. Where the device is used for scraping hard substance off of floors or other surfaces, a metal blade is used but where the device is used as a squeegee for washing or cleaning surfaces, the rubber blade 4 is used.

In constructing the body 3, the same is provided with a shoulder 5 against which the inner edge of the blade 4 presses when the device is in use. In Figures 1 and 2 it will be noted that the blade 4 is provided with a number of notches 6 whereby the blade may be slid into position so that the various bolts 7 will extend through the notches, through the rear plate 8 formed as an extension of body 3 and a front clamping plate 9 which clamps the upper part of the blade in position. After the blade has been properly positioned, the wing nuts 10 are rotated until the blade is firmly clamped against shifting. It is, of course, evident that other forms of nuts could be used without departing from the spirit of the invention.

At each end of the body 3 there is a turned over or projecting end abutment 11 which causes the end of the blade 4 to extend at an angle to the main part of the blade whereby inclined sections 12 and 13 are presented adapted to cause water or other matter to flow toward the center of the squeegee as the same is moved over the surface instead of to flow outwardly. If the blade 4 was perfectly straight for its full length, it would clean the surface for its full length but in case of water on the floor or other surface a movement would be given to the water which would cause the same to flow laterally from each end of the blade. This would be objectionable where one of the adjacent surfaces was already clean. To prevent this and to hold the water or other material in the place desired, the end sections 12 and 13 are provided and created from a flat strip of rubber by reason of the abutments 11 co-acting with the clamping bar or plate 9. If a metal plate was used, the ends could be turned or the blade could be sufficiently short to come between the abutments 11 and thereby function merely as a scraping or cleaning blade.

Under some circumstances it is desired to make the scraper or squeegee out of sheet metal, as for instance, when the device is to be made comparatively wide.

In Figures 5 and 6, the same inventive idea is provided whereby turned end portions 13 are presented but the parts which clamp the blade 4 in position are of sheet metal. In this form of the invention it will be observed that a piece of flat sheet metal is bent at points 14 and 15 for providing the shoulder 5′ and also for providing the extension or rear plate 8′. The front plate 9′ is of the same structure as plate 9 but an extra rear plate 16 is provided having a turned end 17 whereby the end por-

tions 12 and 13 are formed. The turned end 17 acts as the abutment 11 and thereby causes the blade 4 to function as described in respect to Figure 1.

What I claim is:

1. In a squeegee, the combination of a body comprising an elongated plate, straight approximately throughout its length, but provided with an abutment projecting forwardly from each end, a shoulder extending along one longitudinal edge between said abutments, and a handle socket extending obliquely from said plate, a rubber blade of greater length and breadth than said plate resting on the face of the plate against said shoulder and abutments, a second plate, of a length approximately that of the first plate, and means clamping the blade between the plates whereby the ends of the rubber plate will be projected in direction of said abutments.

2. A squeegee, comprising a handle socket having at its front end a downwardly extending elongated plate standing at angle to the socket and a shoulder at the juncture of the plate with the socket, the said plate having at its ends forwardly projecting abutments standing at angles thereto, a rubber plate on the first mentioned plate, said rubber plate being of greater length and width than the said plate and engaging the shoulder and abutments thereof, a clamping plate of a length approximately that of the plate and overlying the rubber plate, and bolts passing through the several plates and clamping the rubber plate, in position.

WILLIAM EIERMANN.