Nov. 27, 1956 J. W. TOOTHMAN 2,771,626

SPRING ACTUATED SQUEEGEE HOLDING CLAMP

Filed Sept. 9, 1953

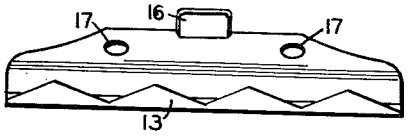


FIG_4

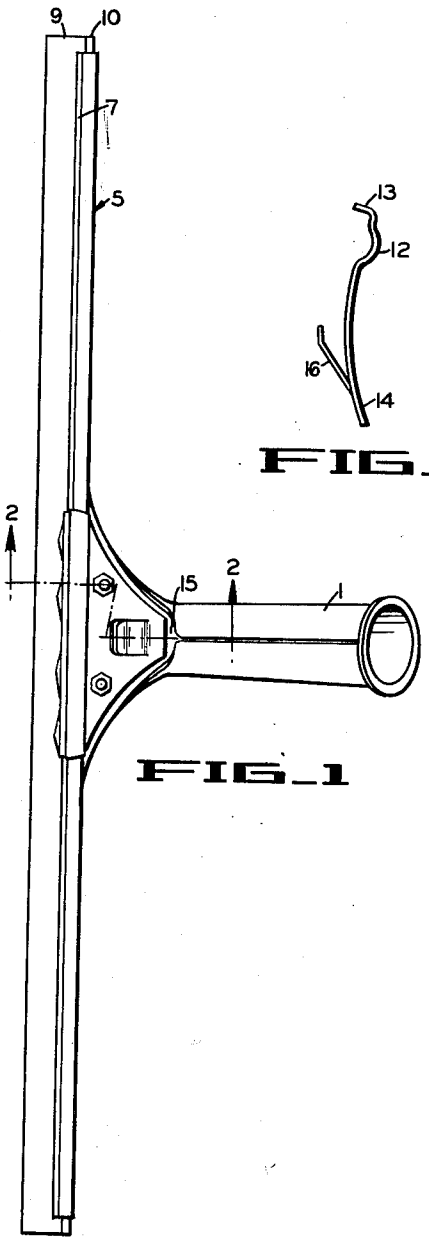


FIG_1

FIG_5

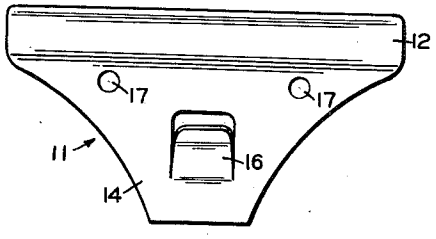


FIG_3

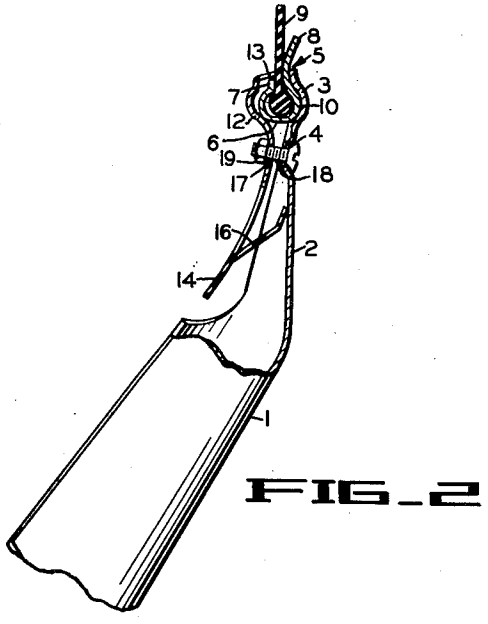


FIG_2

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SPRING ACTUATED SQUEEGEE HOLDING CLAMP

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Application September 9, 1953, Serial No. 379,137

1 Claim. (Cl. 15—245)

This invention relates to a squeegee of the type used by professional window washers, and is more particularly directed to the manner in which the squeegee blade is fastened to the handle portion of the device.

In the window washing trade it is sometimes necessary to shift the blade of the squeegee with relation to the handle in order that the blade may be extended between two panes of glass where there is not sufficient room to insert the handle portion. It was formerly the practice that in a situation such as this the window washer was forced to make use of a screw driver to release the clip member holding the blade to the handle portion, shift the blade longtitudinally until the handle portion was adjacent one end thereof and retighten the screws holding the clip which fastened the blade to the handle.

One object of the instant invention is to provide a novel spring actuated clip for fastening the blade of a squeegee to the handle member whereby it is merely necessary for the operator to press on a portion of the clip with his thumb in order to release the blade so that it may be moved longitudinally and then reengaged with the handle merely by releasing the thumb pressure.

Various other objects of the invention will become apparent in reading the following detailed specification in conjunction with the drawing wherein:

Fig. 1 is a plan view of a squeegee embodying principles of my invention, and showing a novel form of clip member engaging the squeegee blade.

Fig. 2 is a sectional view taken on lines 2—2 of Fig. 1.

Fig. 3 is a plan view of the novel clip member.

Fig. 4 is an end view of said clip member showing the teeth on the forward end thereof.

Fig. 5 is a side view of the clip shown in Figs. 3 and 4.

The squeegee consists primarily of a tapered cylindrical handle member adapted to receive therewithin a wooden handle. The forward end of said cylindrical handle is opened up to form a flat triangular shaped portion 2. Adjacent the forward end of the triangular shaped portion 2, there is located a transversely extending rib or indentation 3 in the surface of the sheet metal material, usually brass, of which the handle member is composed. The purpose of this depression or rib 3 will become apparent in conjunction with structure which will be described later. Adjacent the depression 3 there are provided two holes 4 through which bolts are adapted to extend for securing together the handle member and a clip member to be described.

The squeegeeing portion of the device consists primarily of an elongated brass channel member generally indicated at 5 having an enlarged portion 6 at the lower end thereof and an upstanding flange portion 7 on one side and a longer flange portion 8 at the opposite side, the flange 8 being turned slightly outward with respect to the center line of the channel. Within the brass channel member is a rubber squeegee element 9 having adjacent its inner end an enlarged portion 10 which is slidably received within the enlarged portion 6 of the brass channel member 5. The manner in which the rubber squeegee element 9 is retained within the brass channel member will be described later.

Cooperating with the handle member in order to retain the rubber squeegee element in its proper relationship to the handle there is provided a clip member 11 generally triangular in shape and having a transverse depression or rib 12 formed in the surface thereof adjacent one of its sides. This rib 12 is complementary to and adapted to cooperate with rib 3 on the handle portion of the device. The forward edge of the clip member, the edge adjacent and parallel to the rib 12, is turned inwardly and is formed with a plurality of teeth 13. The end of the clip member opposite from the teeth 13 is bowed upwardly and has a flat surface 14 adapted to be pressed down by the thumb of the person using the squeegee. When the clip member is properly assembled with relation to the handle member, the portion 14 lies in the open portion 15 of the handle 1, which open portion is formed by the unfolding of the material of the handle member to form the flat surface 2. There is a U-shaped cut formed in the surface of the clip member 11 the base of the U being toward the edge of the clip having the teeth 13 thereon. The material 16 inside of said U-shaped cut is bent downwardly in relation to the rest of the clip member along the line joining the open end of the U. The opposite end of the portion 16 so formed by said U-shaped cut is bent slightly toward the rest of the clip member 11, when the squeegee is properly assembled, said portion 16 of the clip 11 bearing against the underside of the portion 2 of the handle member and acts as a spring.

The device is assembled in the following manner: As best shown in Fig. 2, the rubber squeegee element 9 is slid longitudinally into the brass channel member 5. The brass channel member is then placed in the rib 3 on the handle surface 2 with the short side of the channel facing outwardly, and the clip member 11 is placed with the rib 12 adjacent the short side of the channel member. The bolts 18 are then inserted through the holes 4 in the handle member and the complementary holes 17 in the clip member and are fastened therein by means of the nuts 19. When so assembled, the rib portions 3 and 12 cooperate to grip the channel 5 and retain the channel in position with respect to the handle member. Similarly, the teeth 13 on the forward edge of the clip member 11 extending beyond the short flange 7 of the channel member 5 are forced into engagement with the rubber squeegee element 9, biting therein to retain said element 9 in position with respect to the channel member 5 and with the handle member 1.

When the parts are in this assembled relation, the lower edge of the spring portion 16 of the clip member 11 is in engagement with the flat surface 2 of the handle member 1. The brass channel member and the rubber squeegee element 9 may be released from their gripping position merely by pressing down on the pressure surface 14, thereby tensioning the spring member 16 and pivoting the forward edge of the clip member 11 about the point where the bolts 18 extend therethrough away from the forward edge of the handle, much in the same manner as the way in which a pair of pliers operates.

From the foregoing specification it is evident that I have provided a novel means whereby the squeegee element may be released from its attachment to the handle of the device, relocated with respect to said handle, and reengaged with said handle merely by depressing the portion 14 of the clip member 11 with the thumb in order to release the squeegee element and releasing the same to reengage the squeegee element.

While I have shown and described the preferred form of my invention, it is to be understood that other forms of the invention are within the concepts disclosed herein,

and that the invention is not to be limited to the specific form shown herein but rather is to be limited only by the scope of the appended claim.

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

In a squeegee construction, a handle terminating in a flat triangular portion, a substantially semicircular rib extending transverse to said handle adjacent the forward end of said triangular portion, a substantially triangular clip member pivotally fastened to said triangular portion of said handle, a substantially semicircular rib adjacent the forward edge of said clip member and complementary to the rib in the handle portion, an elongated U-shaped metal channel member having an enlarged portion at the bottom of the U adapted to be received in the said complementary ribs, said U-shaped channel member being substantially longer than the width of said triangular handle portion whereby said channel member may be shifted longitudinally in said complementary ribs, an elongated rubber blade member carried by said U-shaped channel member, said blade member having an enlarged portion received in the enlarged portion of said channel member, said clip member being provided with teeth extending along the forward edge thereof at approximately right angles to the surface thereof, said teeth extending beyond the flange of said U-shaped channel

member and biting into and gripping said rubber blade member, said triangular clip member having a thumb engaging surface adjacent the rear corner thereof whereby pressure may be exerted on said thumb engaging surface in the direction toward said handle portion to pivot the forward edge of said clip member away from the forward edge of the handle portion to permit shifting movement of said channel member with respect to said handle, and spring means integral with said clip member and bearing against the triangular portion of said handle normally urging said thumb engaging surface of said clip away from said handle to urge said clip rib into engagement with said channel member and said clip teeth into engagement with said blade member.

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