July 11, 1967 H. W. ROWE, JR 3,330,253

PAINT SHIELDING DEVICE

Filed March 18, 1965

Fig. 1

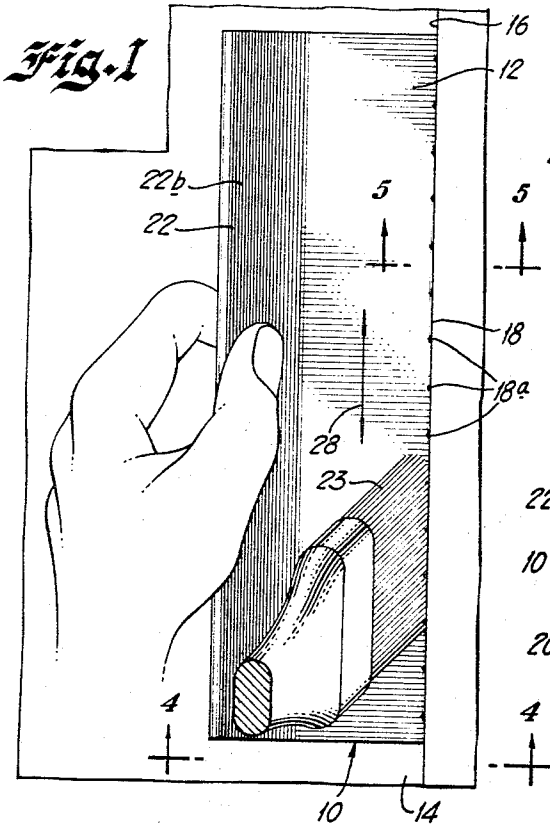


Fig. 2

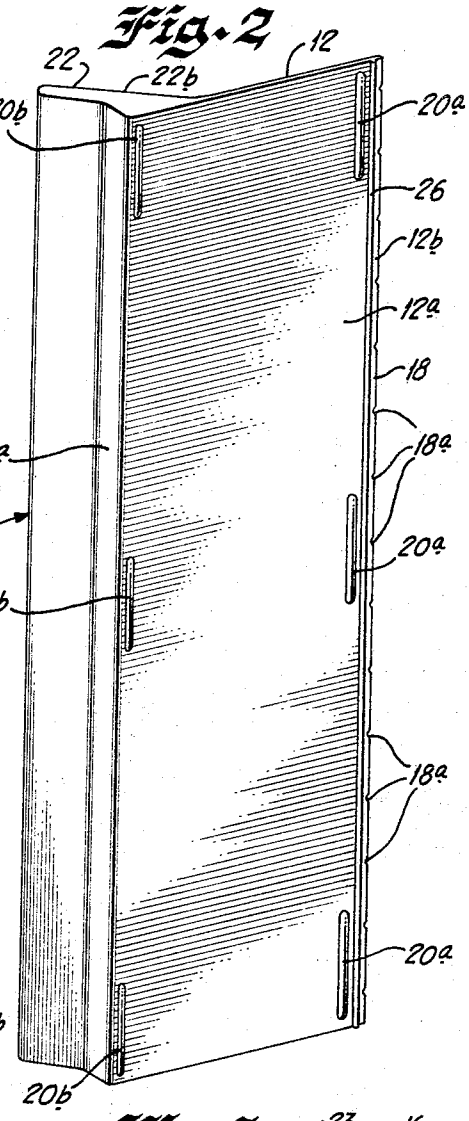


Fig. 4

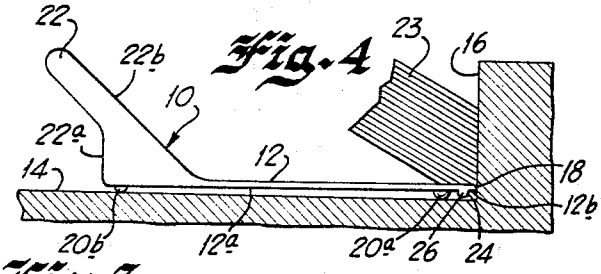


Fig. 3

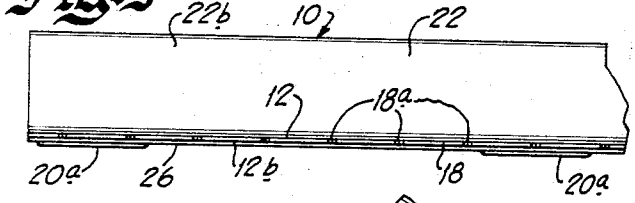


Fig. 6

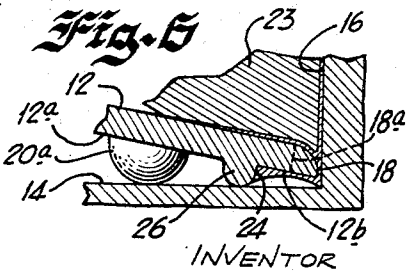
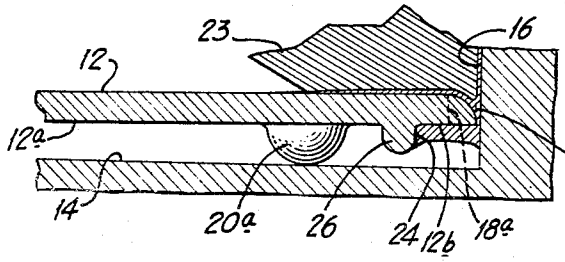


Fig. 5



INVENTOR
HERBERT W. ROWE, JR.

by Mason, Kolehmainen, Rathburn and Wyss
ATTORNEYS

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PAINT SHIELDING DEVICE

Herbert W. Rowe, Jr., 64 N. John St., McHenry, Ill. 60050

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The present invention relates to a paint shielding device and more particularly relates to painting shields for use when applying paint to surfaces such as windows and door frames, muntins, trim, and the like which are immediately adjacent a wall or glass surface which is not to be painted.

When painting window frames and the like it is difficult for an unskilled painter to prevent paint from getting on the glass, particularly if the painter's hand is unsteady. Heretofore a variety of different shields or edges have been used in trying to eliminate this difficulty, many with less than satisfactory results. One of the main difficulties with many types of paint shields previously used is that the paint tends to run under the shield and smear the adjacent glass as the shield is withdrawn. Some shields have atempted to correct this difficulty by providing a shield edge which is spaced from the surface of the glass and, accordingly, a small portion of the frame adjacent the glass is sometimes left uncovered with paint. This is undesirable on the exterior of windows because of water penetrating the unpainted portion causing rotting and eventual disintegration of the wood or putty.

It is therefore an object of the present invention to provide a new and improved paint shielding device which eliminates the aforementioned difficulties.

Another object of the present invention is the provision of a new and improved paint shielding device which prevents the application of unwanted paint on a surface immediately adjacent or intersecting a surface to be painted.

Yet another object of the present invention is the provision of a new and improved paint shielding device which prevents the application of unwanted paint to a surface while permitting the area immediately adjacent thereto to be completely and fully covered by the paint.

Still another object of the present invention is the provision of a new and improved paint shielding device of the type described which is low in cost, simple of construction, light in weight, and easy to manipulate so that even an unskilled painter may use the device with the above-mentioned results.

Yet another object of the present invention is the provision of a new and improved paint shielding device of the type described, wherein the device itself is utilized to apply and spread the paint accurately into areas which are difficult to cover.

Still another object of the present invention is the provision of a new and improved paint shielding device which utilizes the surface tension of the paint itself to control the application of the paint.

For a better understanding of the present invention reference should be had to the following detailed description taken in conjunction with the drawings, in which:

FIG. 1 is a top plan view of a paint shielding device constructed in accordance with the present invention and illustrates the device as it is utilized by a painter;

FIG. 2 is a perspective view of the device of FIG. 1 illustrating details of the underside thereof;

FIG. 3 is a front view of the device of FIG. 1 illustrating the forward edge thereof;

FIG. 4 is an end view taken substantially along the lines 4—4 of FIG. 1;

FIG. 5 is a transverse sectional view taken substantially along lines 5—5 of FIG. 1 and illustrating the device in one of its operative positions; and

FIG. 6 is a transverse view similar to FIG. 5 but illustrating the device in another of its operative positions.

Briefly, the foregoing and other objects of the present invention are accomplished by the provision of a new and improved paint shielding device comprising a shield body adapted to overlie a first surface which is to be shielded. The body includes an undersurface and an elongated edge adapted to closely abut a second surface on which paint is to be applied. Support means are provided to maintain at least a portion of the undersurface adjacent said edge in spaced relation above said first surface when the device is positioned in overlying relation thereon. Means defining a paint-retaining pocket are provided on the undersurface of the shield body for holding paint adjacent the edge and above the first surface. When painting windows, wherein it is desired to insure that the paint gets down into the corner or intersection between the glass and wood, the device can be rocked slightly, causing the edge to move downwardly so that the paint in the pocket may be accurately deposited on the wood exactly down to the glass surface.

Referring now to the drawings, therein is illustrated a paint shielding device **10** constructed in accordance with the present invention. The device **10** is adapted for use when painting window and door trim, mullions, muntins, etc., wherein it is desired to shield or protect an adjacent glass or wall surface from the application of unwanted paint. The device includes an enlarged shield body **12** adapted to overlie and protect a glass or wall surface **14** from paint being applied to an adjacent intersecting surface **16**, such as a window frame, door trim, muntin, mullion, etc. The body **12** is constructed of metal or plastic material and includes an elongated forward edge **18** adapted to abut the surface **16**, and an enlarged undersurface **12***a* adapted to overlie the glass or wall surface **14** in spaced relation therewith. In order to support the shield body **12** so that the underside **12***a* thereof is in spaced relation to the surface **14** when the device is in overlying position thereon, a plurality of support legs or feet **20***a* and **20***b* are formed to depend from the undersurface **12***a*. The feet extend in two parallel rows parallel to the edge **18**, and within each row are spaced from one another so that any bumps or protuberances in the supporting surface **14** will not engage the undersurface **12***a* causing the revice to be unsteady when placed in overlying relation on the surface **14**. The feet **20***b*, adjacent the rearward edge of the body, are somewhat smaller in depth than the feet **20***a*, near the forward edge **18**, so that the undersurface **12***a* slopes slightly upwardly away from the glass surface **14** toward the forward edge **18** when the device is placed thereon.

Adjacent the rearward edge of the body **12** there is provided an upwardly and rearwardly extending elongated handle portion **22** so that the device may be easily grasped and positioned by the painter. Because the handle **22** is adjacent the rear of the shield body and slopes away from the window edge surface **16**, a paint brush **23** can be easily manipulated between the hand holding the device and the surface **16** to apply paint thereon. As illustrated in FIGS. 1, 4, 5, and 6, the paint brush can be manipulated to extend angularly toward the corner or intersection of the surfaces **14** and **16** with little obstruction, and painting strokes along the edge **16** are easily accomplished. Since the handle portion **22** extends the length of the shield body **12**, it stiffens the device considerably, and the position of the painter's hand along the handle when grasping the device, can be changed from time to time as the painting proceeds. It should be noted that the cross

section of the handle (FIG. 4) is shaped to provide a heel surface **22***a* whereon the fingers of the painter may be placed to force and hold the forward edge **18** of the body in contact with the surface **16**, and the thumb of the painter (FIG. 1) may be placed on an upper sloping surface **22***b* of the handle to force and hold the device firmly on the surface **14**.

A paint-collecting pocket or shoulder is formed on the undersurface **12***a* of the body adjacent the edge **18** for collecting and holding any paint flowing around the edge on to the underside and maintaining the collected paint closely adjacent the edge **18** above the surface **14**. In the device as illustrated, the pocket is formed by a small edge portion **12***b* of the undersurface **12***a* and a shoulder or surface **24** adjacent thereto. The shoulder **24** is formed by the edge surface of an elongated depending ridge **26** extending the length of the shield (FIG. 2) closely parallel to the edge **18**. The ridge **26** prevents the paint reaching the underside of the shield body from spreading rearwardly away from the edge **18** and holds the collected paint adjacent the edge in the pocket. If the edge **18** of the body is held firmly against the window edge surface **16**, only a relatively small amount of paint will reach the undersurface **12***b* and this paint will be maintained in the pocket by means of the surface **24** of the ridge, which acts as sort of a dam preventing the further spreading of the paint on the undersurface of the shield.

Referring to FIG. 5, the relatively small amount of paint collected in the pocket is maintained above the surface **14** because of the surface tension therein and forms an inverted concave meniscus between the window edge surface **16** and the surface **24** of the ridge **26**. The forward edge of the meniscus touches the window edge surface **16** at a point slightly above the corner or intersection thereof with the surface **14** and leaves a small portion of the surface **16** free of paint. This small portion is on the order of 1/32 of an inch, and after the shield is removed the paint may flow down into the corner covering this surface. By manipulating the shield back and forth a time or two with short strokes in the direction of the arrows **28** (FIG. 1), the paint on the window edge will be agitated slightly and will spread downwardly to the corner intersecting the surface **14**. The edge **18** is formed with a plurality of small, spaced notches **18***a* which permit a small amount of fresh paint to flow into the pocket. The notches are very small and let only a limited amount of fresh paint bypass the edge **18** to maintain the paint in the pocket in a more fluidized state so that it will flow onto the surface **16** more readily. The edges of the notches **18***a* also aid in distributing paint along the surface **16** when the shield is manipulated by short strokes in the direction of the arrows **28**. However, from time to time, as the shield is used, the paint in the pocket may start to dry or set and/or the pocket may become full of paint. If this occurs, a quick wipe with a rag is all that is necessary to remove the excess or partially dried paint from the pocket.

When it is desired to insure thatt he paint on the surface **16** is positively spread downwardly into the corner adjacent the surface **14**, the device may be rocked slightly, as shown in FIG. 6. The rocking action moves the edge **18** downwardly so that the lower edge of the paint pocket meniscus touching the surface **16** moves downward to contact the intersecting corner of the surfaces **14** and **16**. The amount of rocking action will control the downward spread of paint into the corner, and accordingly, the amount of coverage can be varied by the painter. If, for instance, it is desired to cover completely into the corner and a small amount of the glass surface **14**, the edge **18** of the shield can be rocked downward until the ridge **26** actually touches the surface **14**. This action will deposit a small width of paint (approximately 1/32 of an inch) on the glass surface in an even line, as is sometimes required in painting specifications. The ridge **24** prevents the spread of paint on the surface **14** and serves as a stop or limit

to the rocking action. The support feet **20***a* depend below the bottom of the ridge **26** and, when the shield is rocked to a position as shown in FIG. 6, the maximum angle is limited by the feet and the ridge. After the rocking action is accomplished, it is sometimes desirable to move the device back and forth with a few strokes in the direction of the arrows **28** before withdrawal of the shield, to smooth out the paint and make an even edge. It has been found that even an unskilled painter can use the device in the manner described, with little difficulty and a great improvement in the work quality.

Because the paint is held in a pocket above the surface **14**, there is little chance that paint will be applied inadvertently to the surface. With prior art devices, much difficulty is encountered in keeping paint off the surface which is not to be painted, because the paint running under the edge of these devices is not collected or prevented from spreading on the undersurface and usually winds up as a smear of paint on the glass when the device is withdrawn.

When the shielding device **10** of the present invention is manipulated with rocking action or short strokes, as described, the edge **18** itself performs some spreading action of the paint in a controlled manner on the surfaces which are to be covered. The device is easy to use; even an unskilled painter can obtain much improved results over those obtained with other shielding devices.

While there have been illustrated and described various embodiments of the present invention, it will be apparent that various changes and modifications thereof will occur to those skilled in the art. It is intended in the appended claims to cover all such changes and modifications as fall within the true spirit and scope of the present invention.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. A device for shielding a first surface from paint applied to an adjacent second surface, said device comprising a shield body having an elongated edge adapted to abut said second surface and an underside adapted to overlie and shield said first surface, support means for maintaining a portion of said underside adjacent said edge in spaced relation above said first surface when said shield body is placed in overlying relation thereon, means defining an elongated shoulder on the underside of said shield body adjacent said edge for retaining paint adjacent said edge and above said first surface, and said edge including spaced notches to facilitate the flow of paint into said shoulder-defining means.

2. Apparatus as defined in claim **1** wherein said support means position the underside of said body at a slight upward angle with respect to said first surface.

3. Apparatus as defined in claim **1** wherein said support means is spaced from and extends below said shoulder-defining means to permit downward movement of the edge of said shield body.

4. A device for shielding a first surface from paint applied to an adjacent second surface, said device comprising a shield body having an elongated edge adapted to abut said second surface and having an underside adapted to overlie and shield said first surface, support means for maintaining a portion of said underside adjacent said edge in spaced relation to said first surface when said body is placed in overlying relation thereon, means defining an elongated paint-retaining pocket closely adjacent said edge for holding paint adjacent said edge and above said first surface, said support means being so positioned with respect to said pocket that by pivotal motion of said shield body about said support means paint in said pocket may be accurately applied to said second surface, and said edge including spaced notches to facillitate the flow of paint into said shoulder-defining means.

5. Apparatus as defined in claim **4** wherein said pocket includes means depending from said underside adapted to engage said first surface on pivotal movement of said shield body for limiting the flow of paint from said pocket onto said first surface.

6. Apparatus as defined in claim 5 wherein said support means extends below said pocket-defining means, whereby said edge is spaced above said first surface when said shield body is pivoted to engage said depending means against said first surface.

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MORRIS KAPLAN, *Primary Examiner.*