

[54] SURFACE MASKING DEVICE FOR PAINTERS

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[51] Int. Cl. B05c 11/16

[58] Field of Search 49/404, 414; 118/504, 505; 117/8.5, 38; 161/167

[56] References Cited

UNITED STATES PATENTS

1,697,200	1/1929	Morgana et al.....	118/505
2,672,122	3/1954	Kupec et al.....	118/505
3,743,150	7/1973	Eckart.....	225/9

OTHER PUBLICATIONS

"Masks for Precision Painting," pub. in "Engineering," pp. 195, 196 and 197, Jan. 28, 1966.

"Accessories that help you paint like a Pro." Good Housekeeping, vol. 166, pp. 161-162, May, 1968.

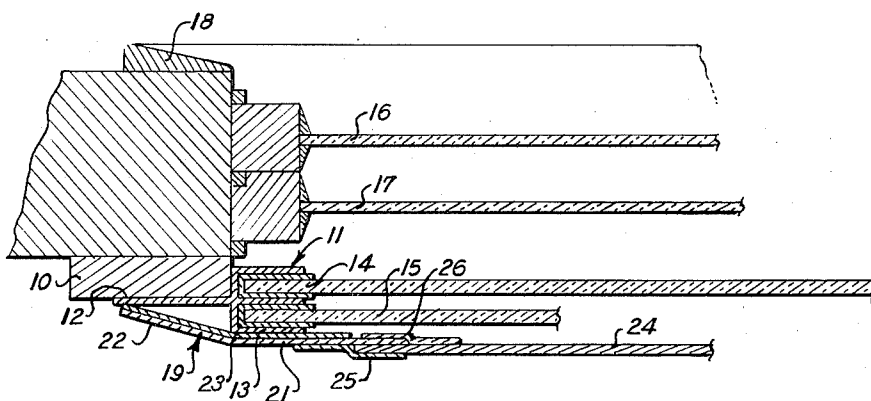
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[57] ABSTRACT

In the spray painting of houses, a vertical masking element is temporarily attached to a storm sash frame or channel and protects the same and adjacent window pane areas from the paint spray. A right angular horizontal masking element is handheld by the painter and protects horizontal sections of the storm sash frame or channel while allowing freedom of one hand for spray painting of surrounding areas. The masking elements embody reusable body portions of sheet metal or the like and replaceable cardboard extensions applied to the reusable components with adhesive tape. The invention effects a major saving in time compared to prior art systems.

9 Claims, 6 Drawing Figures



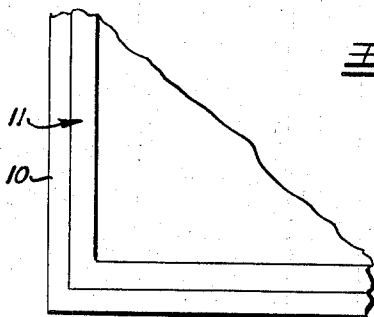
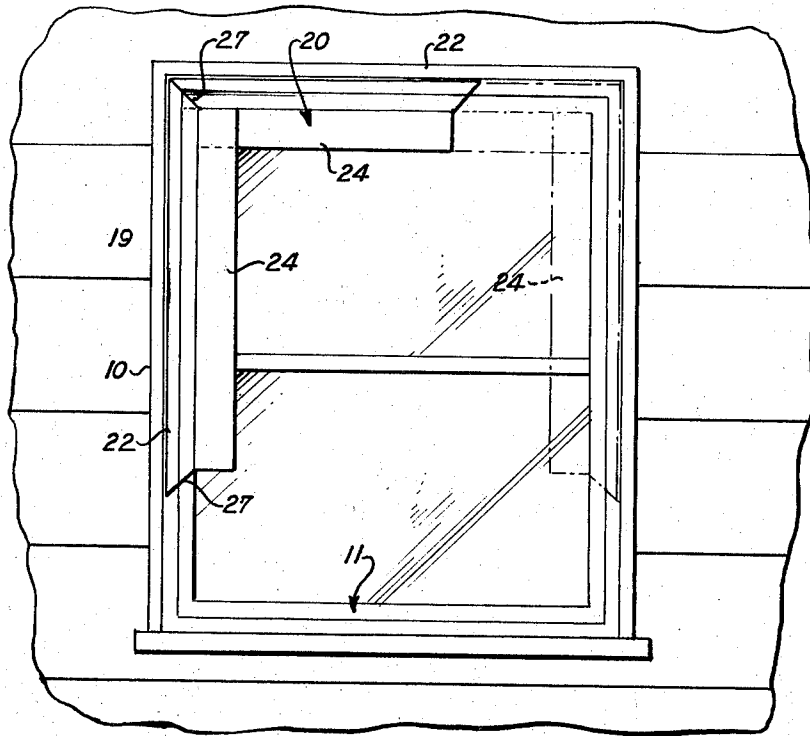


FIG. 1

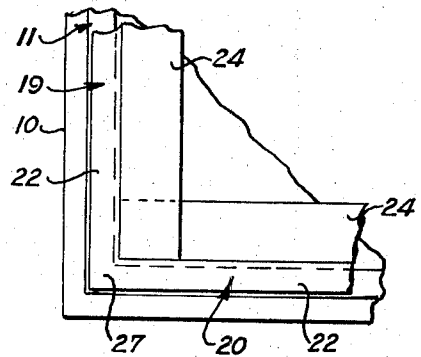


FIG. 2

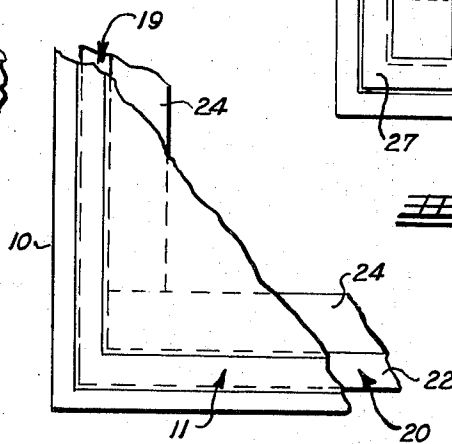


FIG. 3

FIG. 4

SURFACE MASKING DEVICE FOR PAINTERS

BACKGROUND OF THE INVENTION

Because of the ever-increasing demand for low cost housing and constantly increasing labor costs, it has become imperative to develop a system which enables the entire exterior of a house or other building to be spray painted. Traditionally, fine houses have always been brush painted in the interest of quality work. More recently, with improved paints and spray apparatus, it has become feasible to spray paint all major areas of the house, such as siding, and to brush paint doors and windows and closely surrounding areas, thus effecting a considerable saving of time and labor compared to traditional methods. One example of the patented prior art pertaining to this problem is U.S. Pat. No. 3,743,150 issued July 3, 1973. This patent deals with the preparation and application of adhesive-coated paper masking strips having miter cuts to window frames and particularly to covering and protecting the projecting open channels of aluminum storm sash during spray painting operations. The present invention has for its object to improve upon the prior art including the aforementioned patent by the provision of a more simplified covering or shielding device whose use will effect even a greater savings of time and labor. By means of the present invention, the spraying time for a window has been reduced approximately four minutes in comparison to the required time utilizing the system of U.S. Pat. 3,743,150. In comparison to hand brushing, thirty to forty minutes per window is saved.

The present invention additionally involves indefinitely reusable components formed of metal or plastic and attachment elements of cardboard or the like which can be discarded after a single use economically. Furthermore, a unique arrangement for temporarily adhesively attaching a section of the masking device to a storm window sash is included as an important feature of the invention and this feature adds to the overall efficiency of the system.

Other features and advantages of the invention will appear during the course of the following description.

BRIEF DESCRIPTION OF DRAWING FIGURES

FIG. 1 is a front elevation of a window illustrating the use of the masking device embodying the invention.

FIG. 2 is a fragmentary elevation showing one lower corner of the window frame without the invention.

FIG. 3 is a view similar to FIG. 2 with the invention in place.

FIG. 4 is a similar view showing the invention in use on the interior of the window frame.

FIG. 5 is an enlarged fragmentary horizontal section taken on line 5-5 of FIG. 6.

FIG. 6 is an enlarged fragmentary front elevation of the invention adjacent to one upper corner of a window frame.

DETAILED DESCRIPTION

Referring to the drawings in detail wherein like numerals designate like parts, the numeral 10 designates an exterior wooden window frame upon which is mounted a dual channel aluminum storm sash frame 11 including a lateral flat attachment flange 12 which overlies the forward face of the wooden frame 10. As best shown in FIG. 5, one channel of the aluminum frame 11 is recessed into the wooden frame 10 while

the forward channel 13 thereof projects forwardly of the wooden frame 10. As shown, the dual channel aluminum frame 11 receives the inner and outer storm sash 14 and 15 while the usual wooden sash 16 and 17 lie inwardly within the interior of the wooden window frame, the numeral 18 designating interior trim. The chief purpose of the invention to be described is to protect the entire aluminum storm sash frame 11 including the flange 12 and the two channels from paint during a spraying operation in which the entire surrounding structure up to and including the exposed portions of the wooden frame 10 may be rapidly spray painted.

Toward this end, the invention comprises a pair of shields or masks 19 and 20 shown in their entireties during use, FIG. 1, at the upper left hand corner of the window in that figure. The broken line illustration in FIG. 1 indicates the use of the two shields after they have been shifted to mask the upper right hand corner of the window. Similarly, the two portable shields are relocated to protect the lower corners of the window when these regions are being spray painted. The shields 19 and 20 can be produced in various lengths depending upon the sizes of windows being processed and it is thought that two or three standard lengths for the shields should satisfy the needs of all windows.

During use of the invention, as will be fully explained, the vertical shield 19 is temporarily adhesively mounted on the adjacent window structure while the painter manipulates and holds the second shield 20 in one hand. This leaves the other hand free to hold the spray gun and this method has proven to be the fastest method of painting utilizing the invention.

Continuing to refer to the drawings, each shield 19 and 20 embodies a relatively rigid preferably sheet metal marginal body portion 21 including an exterior flange 22 disposed at an angle of about 15° to the remainder of the body portion 21. During use, FIG. 5, the angular flange 22 overlies and protects the aluminum attaching flange 12 of the dual channel aluminum storm sash frame. The body portion 21 of the vertical shield 19 during use is temporarily adhesively attached to the front face of the forward aluminum channel 13 by adhesive tape 23 which is adhesive coated on both sides for attachment to the shield body portion 21 and also to the channel 13, FIGS. 5 and 6. The metal body portion 21 projects somewhat inwardly of the sash frame 11 and carries a relatively wide discardable or replaceable extension panel 24 of cardboard or the like. This extension panel is temporarily attached to the body portion 21 in slightly overlapped relation thereto by external and internal adhesive tape sections 25 and 26 which are preferably coextensive in length with the elements 21 and 24. While the metal body portion 21 can be used indefinitely, the extension panel 24 of cardboard can be periodically detached and replaced by a fresh section and this can be done following each use of the shield if desired. The double gummed tape section 23 need not extend for the full length of the body portion 21 but should be sufficiently large to provide firm adherence of the shield 19 to the aluminum channel 13 during use.

The metal body portions 21 of both shields 19 and 20 are mitered at their opposite ends as shown by the numeral 27 to allow covering or shielding of the entire corner area of the window frame. The cardboard extensions 24 need not be mitered and their square cut ends may simply overlap during usage as depicted in dotted

lines in the drawings. Except for possible differences in length where desirable, and the fact that the hand-held shield 20 does not require the mounting tape 23, the two shield sections are identically formed and the above description of one serves to describe both. The purpose of the extensions 24 is of course to protect the adjacent window glass from paint. The extensions 24 can be wider or narrower than shown herein depending upon needs.

FIG. 3 shows the use of the two shields after shifting thereof from their positions in FIG. 1 to facilitate spray painting a lower corner of the window and adjacent areas of siding. By similarly shifting or relocating the two shields, the entire window frame area and surrounding area may be rapidly spray painted. At each relocation of the two shields, one of them, usually the shield 19, is temporarily adhesively attached as described while the other shield, usually the horizontal shield 20, is hand-held. In some cases, this could be reversed and the vertical shield 19 could be hand-held while the horizontal shield 20 is temporarily adhesively supported by a double gummed tape similar to the described tape 23. In still other cases, it may be desirable to temporarily adhesively attach both the vertical and horizontal shields to the work in the described manner during the use of the invention, and this latter mode of use enables the painter to have both hands free during the operation. In any case, it will be seen that the invention is quite versatile as to its usage so as to meet the needs of individual painters and individual jobs.

FIG. 4 illustrates that the invention may also be utilized to protect the interior of a storm sash frame or other window frame or sash during painting. The construction and mode of use of the invention is essentially unchanged whether used externally or internally in relation to a window frame. The invention may be utilized in relation to the storm sash frame 11, FIG. 5, with the storm sash 14 and 15 in place or removed.

It is to be understood that the form of the invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of the invention or scope of the subjoined claims.

I claim:

1. A surface masking device for masking selected corners of rectangular window frames including storm

5 window sash channels and adjacent portions of a window pane, said masking device comprising a pair of shields each having at least one complimentary mitered end, each shield including a marginal body portion and an interior extension panel and having means for attaching said extension panel to said body portion, said masking device having adhesive attaching means on at least one of said shields enabling said shield to be temporarily attached to a window frame section and self supported thereon during a painting operation.

2. The structure of claim 1, and each shield including a reusable marginal body portion and an interior discardable extension panel temporarily attached to the body portion.

15 3. The structure of claim 2, and said body portion formed of sheet metal, said extension panel formed of cardboard, and a section of adhesive tape attaching said extension panel releasably to said body portion.

4. The structure of claim 3, and said adhesive tape section comprising exterior and interior adhesive tape sections approximately coextensive lengthwise with said body portion and extension panel and each tape section adhered to both.

25 5. The structure of claim 1, and said attachment means on one shield comprising a section of adhesive tape having opposite sides thereof gummed for adhesion simultaneously to said shield and to an adjacent window frame portion.

30 6. The structure of claim 5, and said shield including a sheet metal reusable body portion to which said oppositely gummed tape section is adhered, and a discardable extension panel of cardboard temporarily adhesively attached to said body portion inwardly of said tape section.

35 7. The structure of claim 6, and said body portion including an exterior flange disposed at a shallow angle to the remainder of the body portion at said extension panel.

8. The structure of claim 7, and said shallow angle being approximately fifteen degrees.

40 9. The structure of claim 3, and said body portion including a part lying in a parallel plane with said extension panel and an external angular flange adapted to project outwardly and inwardly of a storm sash channel to cover and protect a flat exterior mounting flange of the storm sash channel.

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