PACKAGE UNIT FOR SECTIONAL FRAME AND DOOR CONSTRUCTION

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The present invention relates to improved means for packing door and frame construction units and more particularly relates to such improved means that protectively enases the corner portions of the construction unit and holds the component elements of the latter from relative movement without marring, splitting or otherwise damaging the same.

While I am aware that heretofore various means have been provided for packing door and frame construction units, I have found that certain disadvantages arise from their use. For example, in some arrangements, corner embracing means are provided which directly contact and are tightly held against the molding or other like framework of the construction. Such direct contact results in splitting and marring the molding or the like. Such splitting or marring is, of course, highly undesirable.

Accordingly, it is a primary object of the present invention to provide means improved over that of the prior art so as to avoid such objectional splitting or marring, while not sacrificing any of the holding function of the corner packing means.

Another object of the present invention is to provide an improved packaging assembly wherein the component elements of the door and frame construction unit are firmly held from relative movement by releasable or detachable means and wherein assembly and disassembly are easily effected.

Other objects are to provide an economical and easily manufactured assembly for packaging prefabricated door and frame constructions. Various other objects and advantages will become apparent from the detailed description to follow. The preferred embodiment of my invention is for use with door and frame construction units comprised of side frame members joined at their upper ends by a header, with a door hingedly carried by one of the side frame members. The assembly of my invention is comprised of corner packing means for each of the corners of the construction to be packaged, the means including a rectangular box-like formation open at two adjacent sides and consisting of front and rear panels joined by right-angly extending wall portions. Certain of the wall portions have spacer blocks secured thereto for engagement in the peripheral channel of the construction unit for spacing the wall portions from the molding of the construction. Others of the wall portions, specifically those wall portions adjacent the bottom edge of the door, have extension portions held thereby from movement in a direction perpendicular to the plane of the door. The extension portions are detachably secured to the bottom edge of the door. A flexible strap encircles all of said corner packing means to hold the same in assembled relationship.

For materials, I prefer wood because of its inexpensive ness and ease of cutting to shape and ease of assembly. Of course, the strap may be of metal or other suitable material.

In the drawings:

Fig. 1 is a perspective view of a sectional frame and door construction as packaged by the means of the present invention;

Fig. 2 is a front elevational view, parts being broken away, of the arrangement of Fig. 1;

Fig. 3 is a detail perspective view, parts in section, and showing the sectional frame and door construction as being applied to the opening provided for such a construction;

Fig. 4 is a horizontal sectional view through one of the side frame members of the frame and door construction;

Fig. 5 is a perspective view of one of the corner packing means that is employed at the upper corner of the door and frame construction;

Fig. 6 is a view similar to Fig. 5 but showing a corner packing means that is employed at one of the lower corners of the construction;

Fig. 7 is a vertical sectional view through the packaged unit showing the relationship between the corner packing means and the door and frame construction; and

Fig. 8 is a vertical sectional view taken substantially along the line 8—8 of Fig. 7.

Referring more particularly to the drawings wherein like numerals refer to like parts, it will be seen that the assembly of my invention is adapted to be employed in combination with a door and frame construction unit such as is presently available on the market. Such a construction unit is designated generally by the numeral 10 and is comprised of side frame members 12 and 14 joined at their upper ends by a header 16 and having a door 18 hingedly carried by the side frame member 12.

Figures 2, 3, 4 and 7 show the construction unit with Figures 3 and 4 best showing the details of the side frame member 12, it being understood that the header and other side frame member are similar to the frame member 12.

The frame member 12 is comprised of front and rear molding strips 20 and 22 joined by the jamb sections 24, 26 and 28, the inner and outer jamb sections 24 and 28 being directly secured to the molding strips 20 and 22, respectively, by nails or other conventional means. Each of the jamb sections 24 and 28 have their opposing longitudinal faces at 30 and 32 provided with grooves 34 and 36, respectively. The intermediate jamb section 26 has outstanding tongues 38 and 40 at opposing longitudinal side faces thereof for engagement in the corresponding groove of the adjacent section. Nails 42 or other like securement means secure the intermediate jamb section 26 to the jamb section 24 while the other tongue and groove arrangement at 36, 40 is left unconnected for assembly of the frame within the opening at the point of use. Fig. 3 shows the vertical studding 44, 46 and wall plaster or the like at 48 and 50 such as will be encountered when assembly of the door frame and door is made in place. The molding strips and associated jamb sections are engaged from opposing sides of the door opening defined by the studding 44, 46 and the tongue 40 is engaged in the groove 36, adjusted and permanently secured by additional nails 42.

The door 18 is provided with the usual door knob set at 19 and is pivotally secured to the jamb section 24 by the conventional hinges 52 and 54.

Looking now at Figure 5, one of the corner packing means 56 will be described. The corner packing means 56 is for use at the upper corners of the door and frame construction unit as above described and as shown. The means 56 is of rectangular box-like formation with two adjacent sides omitted for reception of the upper corner portions of the construction to be packaged. The formation includes inner and outer panels 58 and 60 joined in spaced...
parallelism by a pair of right-angularly extending wall portions 62 and 64. Spacer blocks 66 and 68 are secured to the inside faces 70 and 72 of the wall portions 62 and 64, respectively, adjacent their free edges and remote from the juncture at 74, by nails 76. The spacer blocks have a depth, as measured from the faces thereof contacting the faces 70 and 72 of the wall portions 62 and 64 to the opposite faces of the spacer blocks, which is greater than the depth of the channel as provided by the molding strips and jamb sections and as measured from the edges 78 and 80 of the molding strips to the faces 82 and 84 of the jamb sections 24 and 28 so that, as shown in the upper portion of Fig. 7, the right-angularly extending wall portions 70 and 72 are held in spaced relation to the molding strips, the spacing being shown at 86 and 88. Furthermore, the spacer blocks are of less length than the spacing between the molding strips so as to be spaced therefrom when assembled, as best seen in Fig. 8.

In Fig. 6, one of the corner packing means 90 for engagement on the lower corners of the construction unit is seen to comprise inner and outer panels 92 and 94 joined in spaced parallelism by the right-angularly extending wall portions 96 and 98, in the same manner as above described. Spacer blocks 100 and 102 similar to the above-described blocks are secured in spaced relation on the face 104 of the wall portion 98 by nails 106 for engagement in the channel at 108 against the jamb section surface at 110 so as to maintain the lower corner packing means wall portion 98 in spaced relation to the adjacent molding strip portions.

Additionally, the packing means 90 has associated therewith the extension piece 111 which is of a width snugly received between and held from sidewise movement by the panels 92 and 94 and on the wall portion 96 but spaced from the spacer block 100. As seen in Fig. 7, the extension piece extends outwardly from the supporting wall portion 96 and is secured thereto by nails 112. When assembled, the extension piece 111 is abutted against the inner side face of the lower end portion of the side frame member 14, as at 113, and is detachably secured to the bottom edge of the door as by the nails or the like at 114.

In packaging a door and door frame unit as above described one of the means 56 of Fig. 5 is engaged over each upper corner of the unit and one of the means 90 of Fig. 6 is engaged over each lower corner, with the extension pieces 111 secured to the bottom edge of the door above described. Finally, means in the form of a single piece of metallic strap is tightly encircled about the four corner packing means and the ends thereof are secured together as at 116 in Figs. 1, 2 and 7.

While it is to be noted that the door knob 19 of Fig. 1 extends outwardly from the plane of the visible panels of the corner packing means, it will be understood that in stacking the packaged units the door knob of one unit will project into adjacent space in the next adjacent packaged unit.

As this invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, the present embodiment is therefore illustrative and not restrictive, since the scope of the invention is defined by the appended claims rather than by the description preceding them, and all changes that fall within the metes and bounds of the claims or that form their functional as well as conjointly cooperative equivalents, are therefore intended to be embraced by those claims.

I claim:

1. A packaging assembly for preformed frame and door constructions comprised of side frame members and a header joining the upper ends of the side frame members with a door hingedly carried by one of the side frame members, the side frame members and header including molding strips joined by jamb sections providing a channel-like cross-section, said assembly comprising corner packing means for each of the corners of the construction to be packaged, means detachably secured to the bottom of the door and engaged with the adjacent corner packing means for holding the door from movement relative to said corner packing means, and means for holding all of said corner packing means in assembled relation to the construction, the corner packing means on the upper corners including right-angularly extending wall portions, a spacer block carried by each of said wall portions adjacent the free end thereof and engaging the outer side face of the adjacent jamb section and being of a depth greater than the depth of the channel so as to maintain said wall portions in spaced relation to the outer edges of the molding strips.

2. A packaging assembly of the construction defined in claim 1 and in which the means for holding all of the corner packing means in assembled relation to the frame construction consists of a flexible strap member encircling the frame and the corner packing means in a plane parallel to the frame construction, said strap member engaging outer face portions of the corner packing means and securely holding the same to the frame construction.

3. A packaging assembly of the construction defined in claim 1 and in which the spacing blocks carried by the wall portions of the corner packing means on the upper corners of the frame construction are of less width than the distance between the opposing inner side faces of the molding strips and are disposed in spaced relation therewith.

References Cited in the file of this patent

UNITED STATES PATENTS

1,667,279 Allen Apr. 24, 1928
1,770,516 Griffith July 15, 1930
2,489,029 Guerrant Nov. 22, 1949
2,666,234 Lester, Jr. Jan. 19, 1954