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VENETIAN BLIND LADDER TAPE

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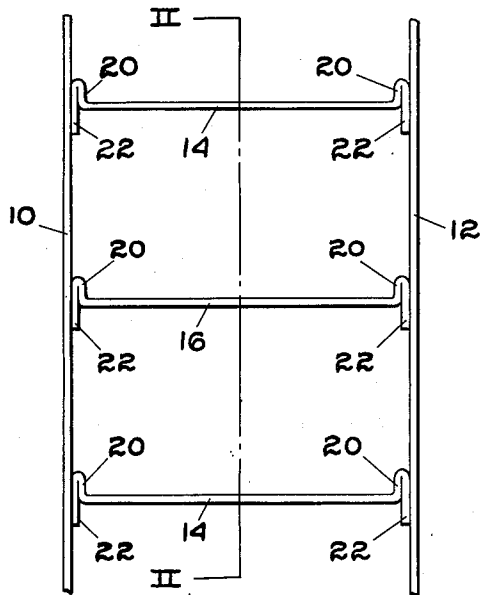


Fig. 1

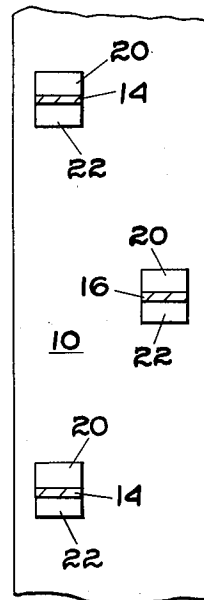


Fig. 2

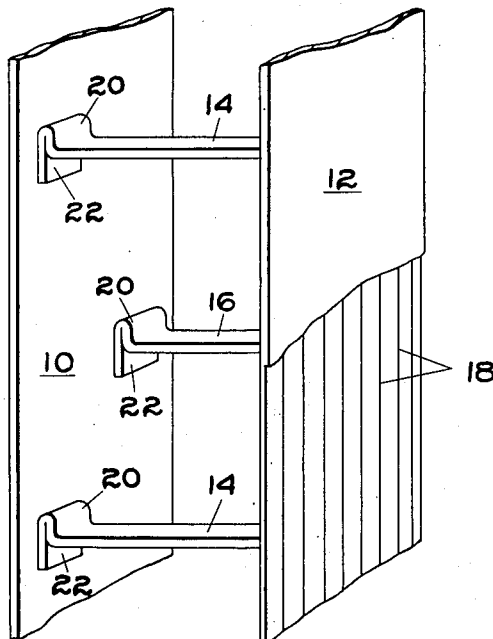


Fig. 3

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VENETIAN BLIND LADDER TAPE

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4 Claims. (Cl. 160-178)

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The present invention relates to a plastic Venetian blind ladder tape and more particularly relates to a plastic Venetian blind ladder tape wherein the ends of the rung tapes are attached to the side tapes in a manner to greatly increase their resistance to being torn therefrom.

One object of the present invention is to provide a plastic Venetian blind ladder tape wherein the ends of the rung tapes are securely attached to the side tapes.

Another object of the present invention is to provide a plastic Venetian blind ladder tape wherein a reinforced bond is provided between the ends of the rung tapes and the side tapes.

Another object of the present invention is to provide a plastic Venetian blind ladder tape wherein strain applied to the rung tapes thereof is distributed over a relatively large area of the side tape.

Another object of the present invention is to provide a plastic Venetian blind ladder tape having the ends of the rung tapes bent over and fused together and are bonded to the side tapes.

Other objects of the invention will be obvious and will in part appear hereinafter.

The invention accordingly comprises the product possessing the features, properties and the relation of components which are exemplified in the following detailed disclosure, and the scope of the application of which will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawing wherein:

Figure 1 is a side elevation of the plastic Venetian blind ladder tape of the present invention;

Fig. 2 is a sectional view thereof taken along the line II-II of Fig. 1; and

Fig. 3 is a perspective view thereof with parts broken away to show the construction of the side tapes.

The Venetian blind of the present invention comprises two spaced parallel tapes 10 and 12 of plastic material that are joined by rungs 14 and 16 also of plastic material. Rungs 14 and 16 are alternately staggered from each other to provide two aligned rows of rungs, one on each side of the tapes 10 and 12.

Rungs 14 and 16 are formed from a heat sealable or thermoplastic plastic or synthetic resin which may, for example, comprise a vinyl resin having a suitable percentage of a stabilizer such as lead carbonate and plasticizer such as tricresyl phosphate incorporated therein to leave it flexible and still substantially non-stretchable. Side

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tapes 10 and 12 are preferably formed by casting a fluid thermo-setting plastic of the plastisol type having a suitable percentage of stabilizer and plasticizer incorporated therein around a plurality of longitudinal stretch resisting cords 18. Side tapes 10 and 12 can be cast in the manner disclosed in my copending application Serial Number 225,187, filed May 6, 1951, for Method of Manufacturing Venetian Blind Ladder Tape. Stretch resisting cords 18 may be of any small diameter filamentary material possessing sufficient tensile strength to prevent side tapes 10 and 12 from stretching under the weight of a completed Venetian blind. For example, cords 18 may be rayon, nylon, Orlon, cotton, linen, etc., or they may be fine gage wire.

The ends of rungs 14 and 16 are bent at right angles thereto and in the same direction, i. e. both ends of each rung are bent to the same side of the rung to provide a first bent over portion 20. The bent rung ends are folded back upon themselves to provide a second bent over portion 22 substantially twice the length of portion 20. Portions 20 and 22 are bonded together so that they form a head or attaching flange having rung 14 or 16 extending from their mid point. The outer surfaces of portions 22 at each end of each rung are securely bonded to the inner surfaces of the side tapes 10 and 12 to securely attach the rungs to the side tapes.

It will be seen that the folded bent over rung ends provide a joint with the side tapes that will not easily tear loose. Any strain on the rung tape is applied to the middle of portion 22 and thus distributed over the whole area of the joint between portion 22 and the side tape and is not concentrated along a single line as is the case in prior art constructions of plastic Venetian blind ladder tape where the rung ends are simply bent to one side of the rung.

The folded rung ends can be bonded together in any convenient manner and portions 22 can be bonded to side tapes 10 and 12 in any convenient manner. However, it is preferred to fold the rung ends to provide the portions 20 and 22 and insert the rungs thus prepared between side tapes 10 and 12 after they have been cast and before they have been cured. After the rungs are positioned between side tapes 10 and 12 said side tapes are subjected to heat to cure them and bond portions 22 thereto. The heat applied to the side tapes to cure them fuses the thermoplastic material of bent over portions 20 and 22 and fuses them together to provide a unitary structure.

Since certain changes may be made in the

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above product without departing from the scope of the invention herein involved, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A plastic ladder tape for Venetian blinds comprising spaced plastic side tapes and plastic rung tapes, each end of said rung tapes being fastened to said side tapes by a bent over portion thereof, said bent over rung end portions each comprising a first part and a second part folded back upon said first part to form an attaching flange.

2. A plastic ladder tape for Venetian blinds comprising spaced plastic side tapes and plastic rung tapes, each end of said rung tapes being fastened to said side tapes by a bent over portion thereof, said bent over rung end portions each comprising a first part and a second part of greater length than said first part folded back upon said first part to form an attaching flange.

3. A plastic ladder tape for Venetian blinds comprising spaced plastic side tapes and plastic rung tapes, each end of said rung tapes being fastened to said side tapes by a bent over por-

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tion thereof, said bent over rung end portions each comprising a first part and a second part of greater length than said first part folded back upon said first part to form an attaching flange, said second parts being bonded to the adjacent surfaces of said side tapes.

4. A plastic ladder tape for Venetian blinds comprising spaced plastic side tapes and plastic rung tapes, each end of said rung tapes being fastened to said side tapes by a bent over portion thereof, said bent over rung end portions each comprising a first part and a second part of greater length than said first part folded back upon and bonded to said first part to form an attaching flange, said second parts being bonded to the adjacent surfaces of said side tapes.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,290,634	Clark, Jr.	July 21, 1949
2,535,926	Hunter et al.	Dec. 26, 1950