United States Patent [19]

Leggiere

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[45] **Dec. 24, 1974**

[54] **MULTI-PURPOSE TRIM FOR DOOR AND WINDOW FRAMES**

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[21] Appl. No.: **109,335**

[52] **U.S. Cl.** **52/213,** 52/288, 52/495

[51] **Int. Cl.** **E06b 1/14,** E04b 1/40

[58] **Field of Search** 52/495, 501, 377, 213, 52/208, 214, 509, 730, 732, 287, 288, 474, 475

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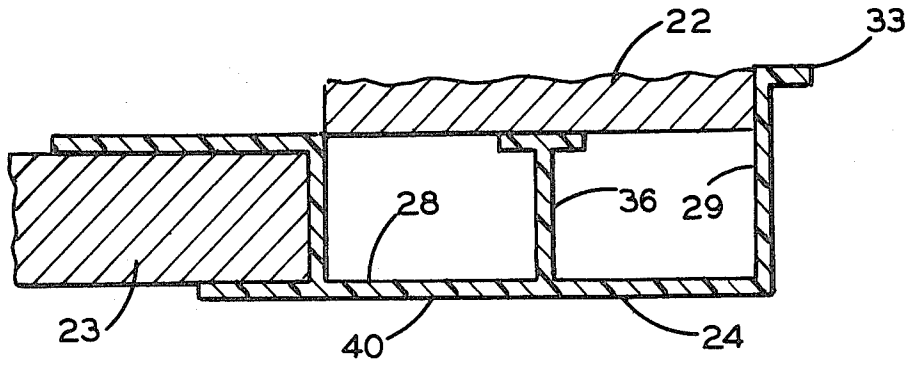
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[57] **ABSTRACT**

This invention encompasses a device having a shape adaptable for use in interlocking the adjacent or near-abutting ends of structural and surfacing components of a building, such components lying in a substantially mutually perpendicular plane relative to each other, in a structurally sound manner having an external view of a pleasing or decorative nature.

1 Claim, 16 Drawing Figures



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SHEET 1 OF 3

FIG. 1

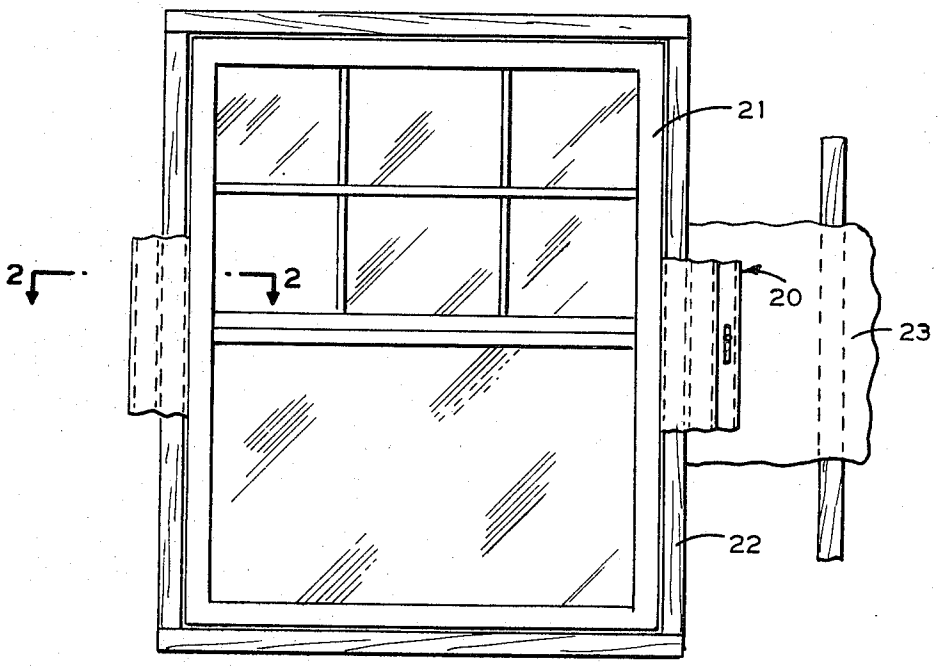
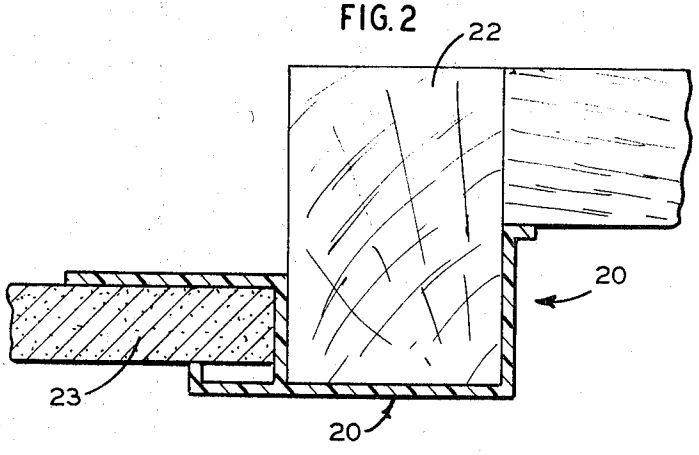


FIG. 2



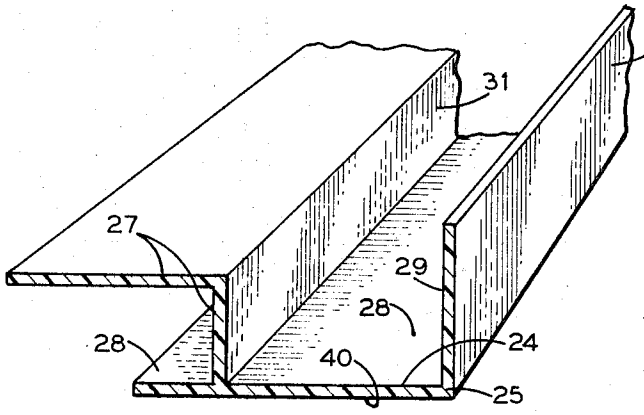


FIG. 3

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FIG. 4

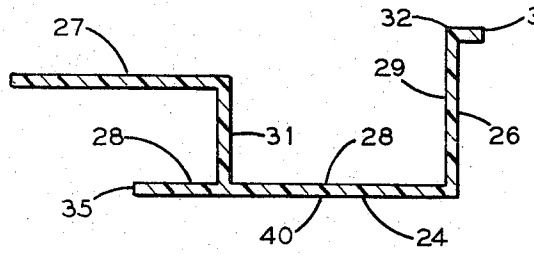


FIG. 6

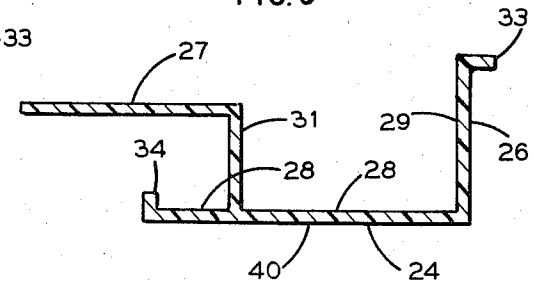


FIG. 5

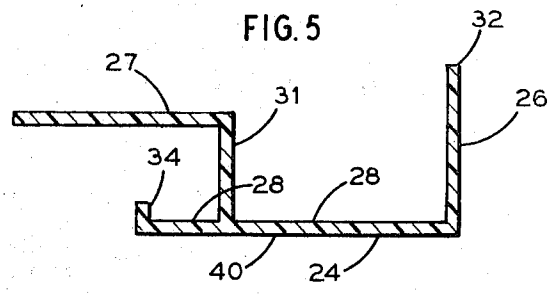


FIG. 7

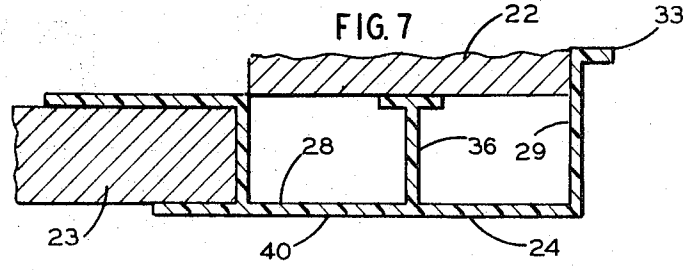


FIG. 8

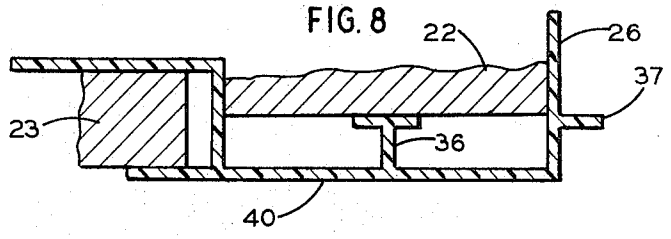
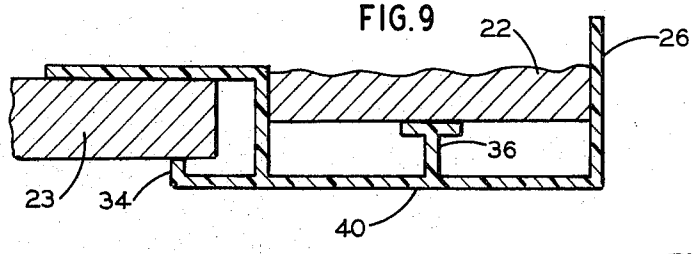


FIG. 9



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FIG. 10

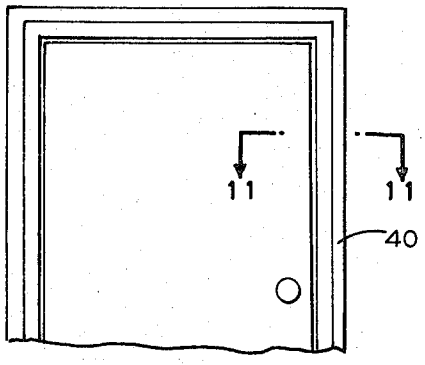


FIG. 11

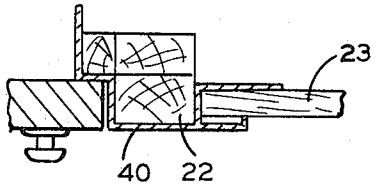


FIG. 12

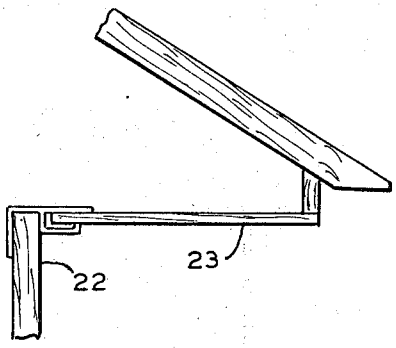


FIG. 13

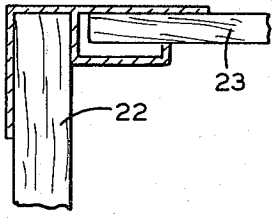


FIG. 14

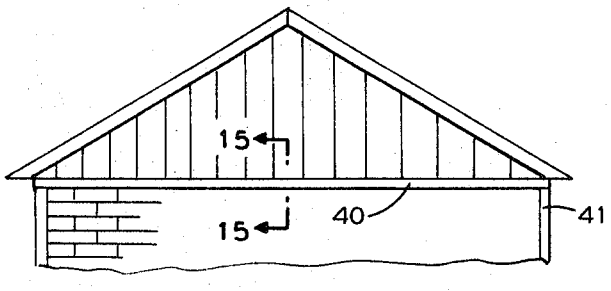
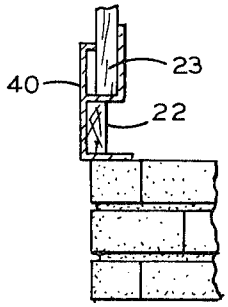


FIG. 15



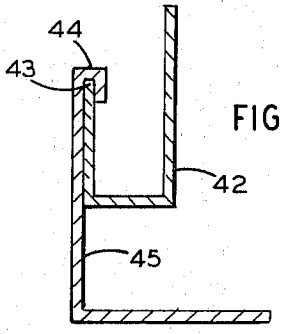


FIG. 16

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MULTI-PURPOSE TRIM FOR DOOR AND WINDOW FRAMES

This invention relates to a device for use in the fabrication or restoration of a building structure.

More particularly, this invention relates to a multi-purpose trim in the form of a structural junction for use in the initial fabrication, restoration or remodeling of a structure of the building variety relative to both the interior and exterior thereof.

During the initial fabrication and also in the restoration and remodeling of a building, there are many junctions or nearjunctions formed between adjacent or near-abutting components of a structural or surfacing nature having differing sizes, shapes, and compositions in both the interior and exterior thereof which must be taken into account during the process of fabrication. These must be finished in an acceptable fashion for both soundness of structure and decorative reasons. However, in any of the aforesaid situations, each of such juncture encountered in the building process is in its own way different and presents problems which, in many cases, only an experienced tradesman highly skilled in the field of carpentry could analyze, evaluate and solve in an acceptable manner. This particular type of work performance with its inherent requirement for many types of specialized equipment adds to the overall cost of the building process and many times is extremely tedious and highly time consuming to effectually complete in an acceptable manner.

One such juncture or junction is that formed by adjacent or near-abutting building components of a structural and surfacing nature which lie in substantially mutual perpendicular planes relative to each other. A junction such as that described above may be encountered in many instances in the area adjacent a window, door, roof, floor and the like and would present a problem that only the aforesaid experienced tradesman could handle. It would be extremely difficult, if not altogether impossible for the ordinary person of normal skill to undertake and effectually finish, in a relatively short time, the joining of such components in a structurally sound and efficient manner with acceptable results of a pleasing or decorative nature relative to external view.

What is needed in the art is a fast, inexpensive, easy and simple means for joining the aforesaid adjacent or near-abutting structural and surfacing components in a relatively sound structural fashion which is pleasing to the external view. In addition, such means should be amenable to manipulation in an effective and substantially professional manner by the average person having ordinary experience in the field of carpentry.

The subject invention answers the needs of the art, without encountering aforesaid difficulties, with special emphasis on a device which is amenable to manipulation by the ordinary person, in an effective manner, for the attainment of optimum efficiency and for the achievement of the intended purpose of the device in the shortest possible time.

It is therefore an object of this invention to provide a device for joining adjacent or near-abutting structural and surfacing components of the construction variety which lie in substantially mutual perpendicular planes relative to each other.

Another object is to provide a multi-purpose trim of the aforesaid nature whose external appearance is pleasing to view.

A further object is to provide an interior and exterior trim in the form of a casing for the areas adjacent the periphery of windows and doors which has the structure of the aforesaid device.

An still another object is to provide a device for accomplishing the aforesaid purposes of low fabrication and maintenance cost having facileness in use and high durability under a wide variety of service conditions relative to the fabrication and restoration of the structural, surfacing and decorative components of a building.

Other objects and many of the attendant advantages of this invention will be more readily understood from a reading of the following detailed description when taken with the following drawings wherein:

FIG. **1** is a front view showing the device of this invention being utilized as a casing for a window.

FIG. **2** is a sectional view of the device of FIG. **1** taken on line **2—2.**

FIG. **3** is a perspective view of another embodiment of the device of FIG. **2.**

FIGS. **4** to **9** are sectional views showing other embodiments of the device of FIG. **2.**

FIG. **10** is a front view of the device in place in a door frame.

FIG. **11** is an enlarged sectional view of FIG. **10** taken on line **11—11.**

FIG. **12** is a sectional view of the device in place relative to the overhang of a roof.

FIG. **13** is an enlarged sectional view of the junction of FIG. **12.**

FIG. **14** is a side view of the upper section of a building.

FIG. **15** is a sectional view of the device in place in the building of FIG. **14** taken on line **15—15.**

FIG. **16** is a cross-sectional view of an alternative embodiment of the device of this invention.

In the broad sense, the device of this invention is a multi-purpose unitary structural junction adapted for structurally joining adjacent or near-abutting building materials of differing sizes in thickness and natures, which lie in substantially mutually perpendicular planes, in a sound structural and decorative manner.

More specifically, the present device is a multi-purpose trim for use in joining structural and surfacing components of a building nature where such components lie in proximity to one another and in substantially mutual perpendicular planes, relative to each other.

In one preferred embodiment, as shown in FIG. **1,** the multi-purpose device of this invention is utilized in this instance as a trim in the form of a casing **20** for a window **21** and the cross-section of a typical device for such use is shown in FIG. **2.** In the broad sense, the device as, heretofore stated, is in the form of a linear structural junction of near-abutting adjacent ends of structural and surfacing components **22** and **23** of a building.

The basic cross-sectional shape of such a device is shown in FIG. **3** wherein a substantially horizontal base **24** is provided with a substantially vertical extension **26** at the end **25** thereof and integral therewith. In addition, an L-shaped extension **27** is provided integral the inner surface **28** of the horizontal base in spaced rela-

tion to the vertical extension **26** in the manner shown and forms a U-shaped slot with the horizontal base **24** for receptive engagement of the surfacing component **23.** A second slot is formed by the inner surface **31** of the L-shaped extension **27** with both the inner surface of the horizontal base **28** and the vertical extension **29** for receptive engagement of a structural component **22.**

Cross-sectional views of various other structural embodiments of the device are shown in FIGS. **4** to **9.** For instance, as shown in FIG. **4,** the free end **32** of the vertical extension is integrally provided with an outwardly projecting substantially horizontal extension **33** for sealing abutment with a storm window (not shown) when the device is utilized as a casing trim as shown in FIGS. **1** and **2.** Referring now to FIG. **5,** in a further structural embodiment, a second substantially vertical extension **34** of variable size is integral the free end **35** of the horizontal base **24** adjacent the inner surface thereof **28** in spaced relation to the L-shaped extension **26** for snubbing engagement of a surfacing component. In this manner, the device is adaptable for engagement of surfacing components having varying thicknesses and depths of insertion. Additive advantage of the latter two improvements of the basic invention may be taken advantage of in a device having a cross-section such as that shown in FIG. **6.**

A further embodiment is shown in FIG. **7** wherein a T-shaped support **36** is integral the inner surface **28** of the horizontal base in spaced relation between the inner surface **31** of the L-shaped extension and the inner surface **29** of the vertical extension. This T-shaped structural element **36** is utilized to support the horizontal base **24** against collapse when the structural element **22** is in the near-abutting position relative to the surfacing component **23.** The T-shaped support may be of a varying height, as shown in FIGS. **7** to **9** for abutment of an end of the structural component **22** which may be engaged at varying depths. Additive advantage may again be taken of the horizontal projection **33** and the vertical extension **34.** Note should also be taken that if the device is used as a casing for a window and the recessment of the storm window is not relatively deep in depth, the outwardly projecting extension **37** may be integral the outer surface of the vertical extension **26** in predetermined spaced relationship between the ends thereof for suitable sealing abutment.

In FIG. **10,** as shown, the device of this invention in another preferred embodiment is in place as an interior or exterior casing trim for a door frame. An enlarged cross-sectional view, FIG. **11,** shows the device receptively engaging the near-abutting wooden structural element **22** and a surfacing component **23,** the latter being in the form of a wall-board. The same type engagement is shown in FIG. **12** wherein the device engages both a surfacing panel **23** in place in the overhang of a building and a structural component **22** of the wall of a building. FIG. **13** is an enlarged sectional view of FIG. **12** showing the receptive engagement of these similar types of wooden members by the device. In another showing of utility, the device as shown in FIGS. **14** and **15** is in abutment to a brick wall **41** while engaging materials of a similar nature of the structural and surfacing variety such as wooden paneling **23** and wooden structure **22.**

In general, the device of this invention may be prepared or longitudinally fabricated in the form of a linear unitary structure through the use of a conventional extruder from commercially available raw materials for the formation of a plastic product of desired hardness, durability and wear. The linear device of this invention, if desired, may then be provided to the tradesman in predetermined lengths for subsequent on-site cutting or shearing into smaller substructures of appropriate size by conventional equipment or the exact length of the linear device for standard applications, such as casings for windows and doors, may be initially fabricated in the plant for direct use without any substantial amount of modification.

Also, the outer surface **40** of the horizontal base is in most instances the external viewing surface of the device and is in the form of a substantially planar surface having a pleasing view but may be ornamented by way of relief through the use of mechanical techniques such as embossment and the like for decorative purposes.

Obviously, there are many modifications and variations which will become apparent to one skilled in the art from a reading of the aforesaid detailed description. For instance, the form of the linear unitary structure representing the device of this invention may be fabricated from or constructed of two interlocking substructural pieces. For instance, as shown in FIG. **16,** a first substructure **42** in the form of a U-shaped slot having an extremital end portion **43** of the male variety may be engaged in interlocking relation to the female slot provided on the extremital end portion **44** of a second substructure **45** having a substantially L-type shaped and this in effect would be equivalent to the aforedescribed device. However, the latter adaptation is considered within the broad and specific concepts of this invention as described by the foregoing specification and is set forth in the claims below.

What is claimed is:

1. An interior and exterior casing trim for doors and window frames in the form of a linear unitary structure joining near-abutting and adjacent ends of structural components and surfacing components of a building nature lying in a mutual perpendicular plane, said device having a cross section comprising

A substantially horizontal base having an inner surface,

A substantially vertical extension integral one end of said horizontal base adjacent said inner surface, and

An L-shaped extension having an extremital end integral said inner surface in spaced relation to said vertical extension forming dual slots, one of which with said horizontal base and the other of which with both said vertical extention and said horizontal base,

said slots receptively engaging said structural component and said surfacing component at right angles to each other,

A second vertical extension integral the free end of said horizontal base adjacent said inner surface thereof in spaced relation to said L-shaped extension for snubbing engagement of said surfacing component,

A outwardly projecting horizontal extension for use in sealing abutment with a storm window, said latter horizontal extension secured in spaced relation to the ends of said first vertical extension, and

A T-shaped support integral said inner surface of said base between said L-shaped extension and said vertical extension for support of both said horizontal base and said structural component.

* * * * *