June 28, 1960 N. NELSSON 2,942,703

WALL FINISHING CONSTRUCTION

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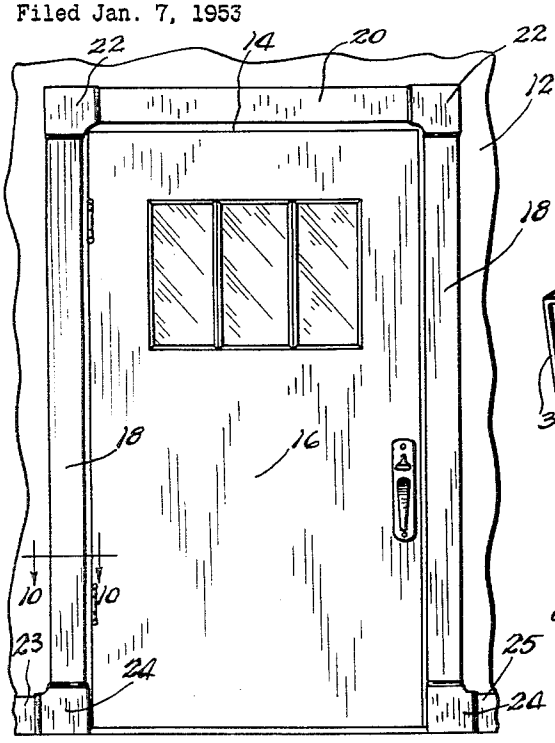


Fig. 1.

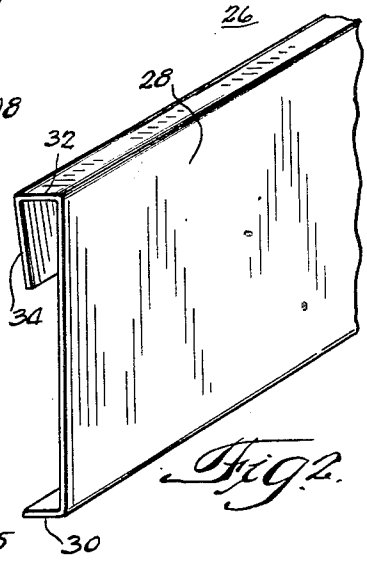


Fig. 2.



Fig. 3.

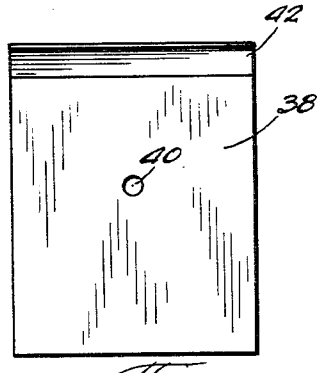


Fig. 4.

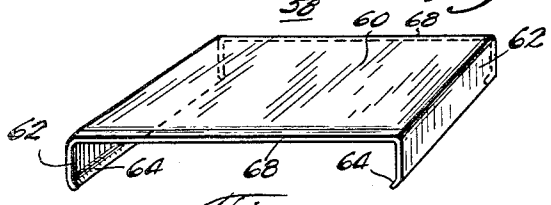


Fig. 5.

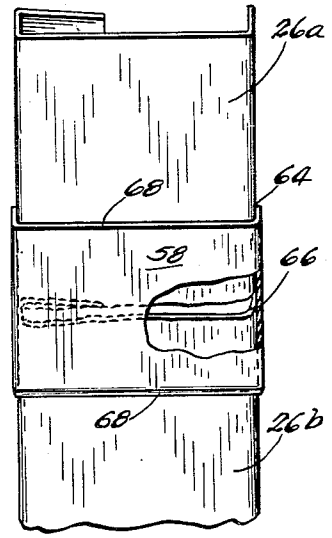


Fig. 6.

INVENTOR.
Nels Nelsson.

BY.
Thiess, Olson, Mecklenburger,
von Hulst & Coltman.

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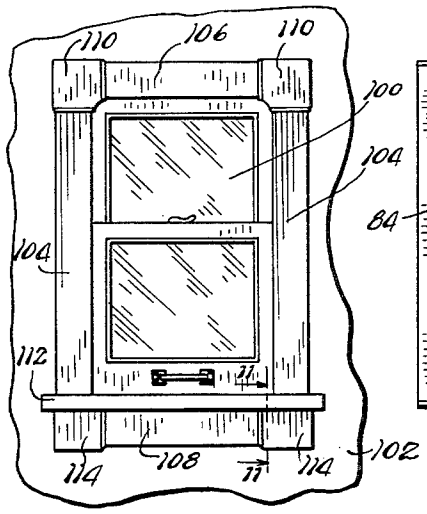


Fig. 7.

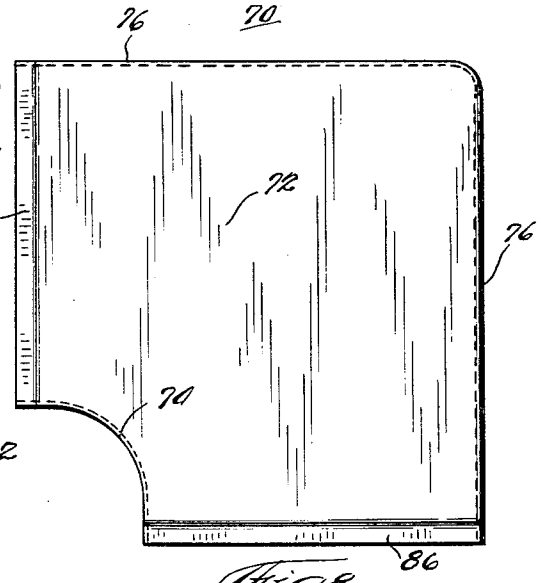


Fig. 8.

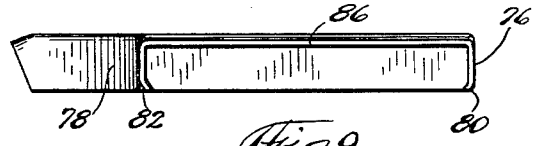


Fig. 9.

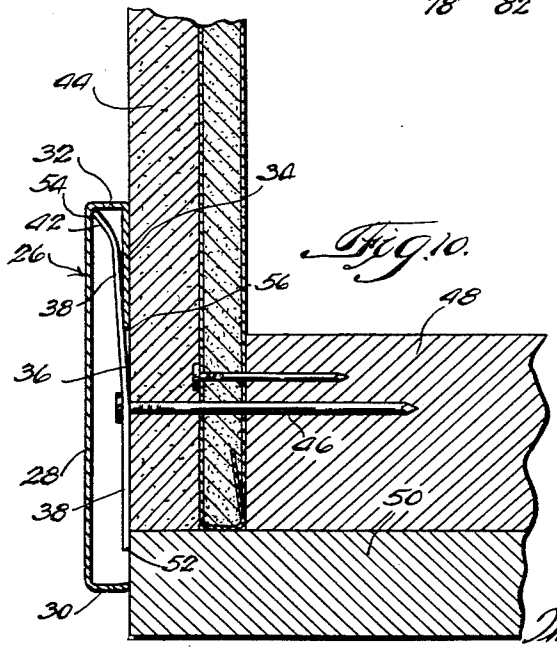


Fig. 10.

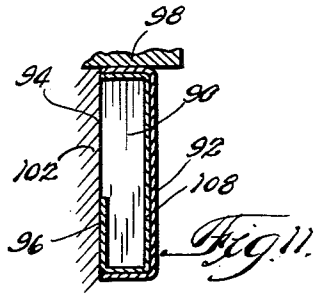


Fig. 11.

INVENTOR.
Nels Nelsson.
BY.
Theiss, Albon, Mecklenburger, von Holst & Coltman. Attys.

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WALL FINISHING CONSTRUCTION

Nels Nelsson, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a corporation of Illinois

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2 Claims. (Cl. 189—88)

This invention relates to a wall finishing construction or system, and more particularly to a construction for decoratively finishing various openings and discontinuities in building surfaces.

It is a principal object of this invention to provide an improved system of wall finishing for buildings.

Modern building construction methods have rendered the use of wood trim and woodwork, extensively used in the past, obsolete in homes and office and industrial buildings. Wood trim has many disadvantages which are overcome by the teaching of this invention. Woodwork is costly to manufacture and install and requires extensive care and frequent refinishing. Furthermore, woodwork is subject to shrinkage and expansion in response to varying climatic conditions, as well as warpage and deterioration resulting from age. Moreover the wood wall trim heretofore employed has been easily damaged and marred, especially in commercial installations.

Therefore, it is a further object of this invention to provide an improved wall trim construction which is easily manufactured from relatively inexpensive and readily available materials.

It is another object of this invention to provide a wall trim construction which will enhance the appearance of walls when finished with moldings, baseboards, door frames, window frames, chair rails or the like, in accordance with this invention.

It is another object of this invention to provide an improved means for mounting wall trim.

It is a further object of this invention to provide improved means for joining adjacent trim sections of wall trim.

It is another object of this invention to provide an improved means for detachably securing the wall trim to various building surfaces.

It is still a further object of this invention to provide an improved trim construction free from visible attaching means such as filled nail holes and the like.

Further and additional objects of this invention will become manifest from a consideration of this description, the accompanying drawings, and the appended claims.

In carrying out this invention in one form, a wall trim construction is provided comprising a plurality of elongated channel-shaped trim members detachably secured to a wall surface and having cover means resiliently engaging the terminal portions of the channel members to cover the adjacent ends of said elongated channel members, thus providing continuous decorative trim for building surfaces.

More particularly, the trim construction of this invention is fastened to any building surface by first affixing a plurality of clips to the wall substantially aligned along a wall opening or edge. A channel-like ornamental web having a clip-engaging portion adapted to resiliently engage said plurality of aligned clips is forced into position thus detachably maintaining said ornamental web in the desired position.

For a more complete understanding of the invention

reference should now be made to the accompanying drawings, wherein

Figure 1 illustrates the wall trim system of this invention as applied to a doorway;

Fig. 2 is a partial perspective view of an elongated ornamental channel member;

Fig. 3 illustrates in section a clip utilized to support the elongated channel member of Fig. 2;

Fig. 4 is an elevational view of the clip of Fig. 3;

Fig. 5 is a perspective view of a cover means for joining two adjacent axially aligned channel members;

Fig. 6 illustrates, in perspective, the application of the cover plate of Fig. 5 to two ornamental channel members;

Fig. 7 illustrates the wall trim of this invention as applied to a window opening;

Fig. 8 is a plan view of the cover plate adapted to engage angularly disposed adjacent channel members;

Fig. 9 illustrates an end view of the cover plate shown in Fig. 8;

Fig. 10 is a cross-sectional view of a trim section similar to a view which might be taken along line **10—10** of Fig. 1 showing the manner in which the trim system of this invention is applied to a wall; and

Fig. 11 is a view in section taken along line **11—11** of Fig. 7, showing a terminating cover plate applied to an ornamental channel member.

Referring now to the drawings, and more particularly to Fig. 1, a wall **12** is shown having a doorway **14** therein in which a door **16** is hingedly mounted. In modern building construction it is possible to construct a doorway with an invisible metal or wooden frame substantially concealed by the completed wall. This, however, is found to produce an unaesthetic, cold appearance, and it is considered desirable to provide an ornamental wall trim surrounding the aperture forming said doorway. Such a system of wall trim, as shown in Fig. 1, may consist of a pair of elongated ornamental channel members **18** forming vertical trim sections and a horizontal elongated channel member **20** secured to the wall edges in a manner to be described.

The junctures of the various channel members are concealed and decorated by cover plates adapted for resilient engagement over the adjacent ends of the channel members. A pair of cover plates **22** are herein shown for joining the vertical and horizontal channel members in substantially perpendicular relationship. If the wall opening is of such dimensions that a single channel member cannot be utilized over the entire length or height of such an opening, two or more elongated channel members are placed in end-to-end relationship in order to enclose the entire opening. In the event that such end-to-end mounting is necessary, a cover plate is provided by this invention, although not shown in Fig. 1, to decoratively enclose the ends of adjacent aligned channel members. Angular cover plates **24** are provided to enclose the lower terminating ends of vertical channel members **18** and to provide a smooth aesthetic juncture of the door frame vertical channels **18** and baseboard channels **23** and **25**. One possible construction of the elongated channel members and various cover plates will be hereinafter described in conjunction with the remaining figures of the drawings.

A portion of an elongated channel member **26** is shown in Fig. 2 and consists of a web portion **28**, a wall-abutting flange **30** formed at right angles to the web portion **28**, a spacer flange **32** formed at the opposite edge of the web portion **28** and substantially coextensive with the wall-abutting flange **30**, and a spring-like clamping member **34** integral with and extending from the spacer flange **32**. The clamping member **34** is formed slightly convergent upon the web portion **28** whereby forcing of the free edge of clamping member **34** to a wall surface will pro-

duce rigid engagement of the spacer flange 32 and wall-abutting flange 30 against said wall surface. The channel members 26 may be made of any appropriate sheet material, either metal or plastic, though sheet steel has been found to be especially well adapted for the construction.

The channel member 26 is secured to a wall by a plurality of spaced clips shown in detail in Figs. 3 and 4. The clip 36 has a substantially planar surface 38 with an aperture 40 centrally located therein and having an angularly disposed portion 42 extending from one edge thereof. The aperture 40 is adapted to receive any appropriate clip mounting means such as a nail or screw. The clip 36 is constructed of a material and dimensions such that the angularly disposed portion 42 and the upper edge of the planar portion 38 may be forced away from the wall surface a suitable distance to accommodate the clamping member 34 of the channel 26. The angular disposed portion 42 is formed at an appropriate angle whereby the free edge of the clamping member 34 is guided toward a supporting wall. The angular portion 42 is also of a suitable length to insure engagement by the free end of clamping member 34.

The manner in which the clip 36 and channel 26 are secured to a wall is best shown in Fig. 10, where the clip 36 is shown mounted against a plastered wall 44 by a nail 46 driven into a studding 48 which forms an aperture in said wall in cooperation with a finishing board 50. In Fig. 10 the manner in which the channel member 26 is mounted is clearly shown. It can be seen that the web portion 28 is substantially parallel to the surface of the wall 44, and the wall-abutting flange 30 and spacer flange 32 are abutting against the surface of wall 44 and maintaining the ornamental web portion 28 in spaced relationship therefrom. The channel member 26 is maintained in this position by engagement of the clamping member 34 under the planar portion 38 of the clip 36. The clip 36 is here shown extending transversely across the width of web member 26, with the end 52 of the clip 36 disposed a substantial distance from the wall abutting flange 30. By such a choice of respective dimensions of the over-all length of clip 36 and the transverse width of channel member 26, a degree of freedom is available in the application of the clips 36 to the wall 44. A relatively unskilled worker may apply the clips 36 to a surface in a substantially aligned relationship, and the channel 26 when driven into place thereover will conceal any slight misalignments of the clips. The clips 36 will engage the clamping member 34 with sufficient tenacity to prevent inadvertent shifting of the channel member once the installation is completed.

In assembling, the clips 36 are first applied to the wall 44 in substantially aligned, spaced relationship with the angularly disposed portions 42 substantially parallel. The ornamental channel member 26 is then placed against the plastered wall with the free end 56 of the clamping member 34 in engagement with the surface of the angularly disposed portion 42 of the clip 36.

By applying a force against the spacer flange 32 the clamp member 34, which is angularly disposed with respect to and somewhat convergent upon the web portion 28, will be forced toward the surface of the wall 44 while sliding along the surface of angularly disposed portion 42. Further force applied to spacer flange 32 will move the clamp member 34 under the planar portion 38 of the clip 36 whereby the clamp member 34 will maintain the channel member 26 securely against the surface of wall 44. Additional force applied to spacer flange 32 will produce further downward motion of the channel member in Fig. 10, thus causing wall-abutting flange 30 to ride along the surface of planar portion 38 of the clip 36 until the end 52 of the planar portion is reached, at which time the wall-abutting flange 30 will snap over the clip 36 and abut against the wall. The upper edge 54 of clip 38 will determine the extreme position of trim section 26. To remove the web member 26 it is desirable to place a pry between the abutting flange 30 and the wall, forcing the flange 30 outwardly from the wall against the force of clamping member 34. Applying a force against the wall-abutting flange 30 will then force the web member 26 upwardly in Fig. 10 to remove the clamp member 34 from its resiliently engaged position between the wall 44 and the planar portion 38 of the clip 36.

By this method of attachment any number of ornamental trim members may be applied to a wall surface to provide baseboards, moldings, door or window frames, or the like. To form aesthetic junctures between adjacent ornamental channel members 26 a cover plate 58, as shown in Figs. 5 and 6, is utilized. The cover plate 58 has a web portion 60 of substantially rectangular shape and a pair of flanges 62 extending from opposite edges of the rectangular web 60. The free edges 64 of the flanges 62 are formed inwardly whereby they will resiliently engage the adjacent terminal portions of the wall-abutting flange 30 and spacer flange 32 of adjacent web members 26.

This is clearly shown in Fig. 6, wherein an upper channel member 26*a* and lower channel member 26*b* are shown mounted in end-to-end relationship. The adjacent ends of said channel members may be contiguous or may be roughly cut and spaced apart as shown in Fig. 6. Therein the edge 66 of channel 26*b* is shown spaced from the corresponding edge of channel 26*a*, and both edges are shown having an extremely rough contour. To conceal this joint a cover plate 58 is forced over the terminal portions of web members 26*a* and 26*b* whereby the turned-in edges 64 of the flanges 62 of the cover plate 58 resiliently engage the corresponding flanges of the adjacent trim members 26*a* and 26*b*. The free edges 68 of the rectangular web portion 60 of the cover plate 58 are formed inwardly at a slight angle whereby a firm positive lineal juncture will be formed between the cover plate 58 and the juxtaposed channel members 26*a* and 26*b*. Thus even though the web portions of channel members 26*a* and 26*b* and the rectangular web 60 are not perfectly flat planar surfaces, the slight angular deformation at the edges 68 of the web portion 60 will produce a continuous juncture across the entire transverse dimension of the web portions, thus preventing sharp edges or small gaps from existing along the edge 68.

As shown in Figs. 8 and 9, a cover plate 70 is provided which is similar to that shown in Fig. 5 but adapted for use in joining angularly disposed trim members. The cover plate 70 shown in Figs. 8 and 9 is designed to accommodate trim members which meet at substantially right angles. The cover plate 70 has a planar L-shaped web portion 72 having curved portion 74 formed along the inner edge of said web. Along the two outer edges of the planar web 72 a continuous flange 76 is formed which is adapted to engage the spacer flange 32 of adjoining channel members 26. The curved portion 74 of plate 70 has a flange 78 extending therefrom at substantially right angles which is adapted to engage the wall-abutting flange 30 of the adjacent channel members.

As described with respect to the structure of Fig. 5, the flanges 76 and 78 of the cover plate 70 have their respective free edges 80 and 82 formed inwardly to resiliently engage the spacer and wall-abutting flanges of the trim members whereby the cover plate is securely supported in the desired position. Further, as described above with respect to Fig. 5, the free edges 84, 86 of the planar portion 72 are formed at a slight angle to said planar portion to produce an edge which resiliently engages the web portions 28 of the associated channel members 26.

Fig. 7 illustrates the trim construction of this invention as applied to a window opening. Therein a window sash 100 is shown mounted in an opening in a wall 102. The opening has mounted about its periphery a

pair of vertical channels **104**, a lintel channel **106**, and a base channel **108**, all secured to the wall by the clip means above described. The lintel channel **106** is joined to the vertical channels **104** by angular cover plates **110** while the lower end of the vertical channels **104** will abut against the window sill **112**. The base channel **108** is finished at its ends by terminating cover plates **114** which are somewhat similar to the cover plate described with respect to Figs. 5 and 6 but employ an additional wall-abutting flange.

As shown in Figs. 7 and 11, the cover plate **114** is provided for terminating the free ends of trim members to produce an aesthetic and safe termination. The terminating cover plate **114** is constructed similar to the cover plate **58** of Fig. 5, differing only in that one of the free edges has a flange **90** extending therefrom formed at substantially right angles to the planar web portion **92** and is of sufficient length to resiliently engage the wall surface **102** at the free edge **94** of the terminating flange **90**. The remaining free edge incorporates a small angular bend therein whereby the channel member **108** forms a sharp lineal juncture with the web portion **92** of the cover **114**. A clip member, not shown in Fig. 11, is in engagement with the clamping member **96** and retaining said clamping member against the wall **102** whereby the channel **108** and terminating cover plate **114** are rigidly supported against the window still **98**.

Thus a wall trim construction is provided which may be adapted to decoratively finish any wall, aperture, or discontinuity, the assembly being simple in construction and easily applied by relatively unskilled workmen. While the invention has here been described as applied to a doorway and a window, it will be immediately apparent that without any modification the construction may readily be applied to window openings, the juncture of wall and ceiling or wall and floor, or various vent openings required in the heating and ventilation of modern buildings.

Furthermore, it will be apparent that while cover plates are here shown for decoratively connecting adjacent trim members which are either mounted in longitudinal alignment or in perpendicular relationship, a cover plate may be manufactured to accommodate trim members mounted at any desired angle. Many modifications of the structure herein taught will immediately become apparent to one skilled in the art and are included within the spirit and scope of this invention.

Without further elaboration, the foregoing will so fully explain the character of my invention that others may, by applying current knowledge, readily adapt the same for use under varying conditions of service, while retaining certain features which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claims.

I claim:

1. The combination of an ornamental trim construction and a wall comprising a plurality of elongated channel-shaped trim members mounted in end-to-end relationship, each of said trim members having an ornamental substantially planar web portion, longitudinal flanges normally affixed to said web portion and spacing said web from said wall, a clamp portion partially coextensive with said web, said clamp portion contacting said wall and normally affixed to one of said flanges; clip means substantially aligned on said wall resiliently and slidably engaging said clamp portion and securing said channel-shaped members in aligned relationship along said wall, said web portion of said trim member overlying said flanges, said clamp portion and said clip means, said clip means having a planar portion partially engaging said wall and an angularly disposed portion extending outwardly therefrom, said planar portion resiliently and slidably contacting said clamp portion, said clamp portion being frictionally engaged between said planar portion and said wall, the transverse dimension of said clip means being substantially less then the transverse dimension of said trim members, whereby each of said trim members is subject to limited transverse movement relative to said clip means and said wall; decorative cover means engaging adjacent ends of said trim members and maintaining said trim members in locked alignment, said cover means having a substantially rectilinear web portion and co-extensive flange portions extending from opposite sides of said web portion resiliently engaging said channel-shaped trim members.

2. A combination as in claim 1 wherein said ornamental trim construction comprises a terminating cover means enclosing the otherwise open ends of said channel-shaped trim members, said terminating cover means having a substantially rectilinear web portion and substantially co-extensive flange members extending on three sides thereof, two of said flange members being on opposite sides of said web portion and resiliently engaging the end of said channel-shaped trim member and the third of said flange members forming an end closure for said channel-shaped trim member.

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