Jan. 11, 1966 M. BEGIAN 3,228,165

EXTRUDED SNAP-ON MOLDING STRIP

Filed Aug. 27, 1962

FIG.1.

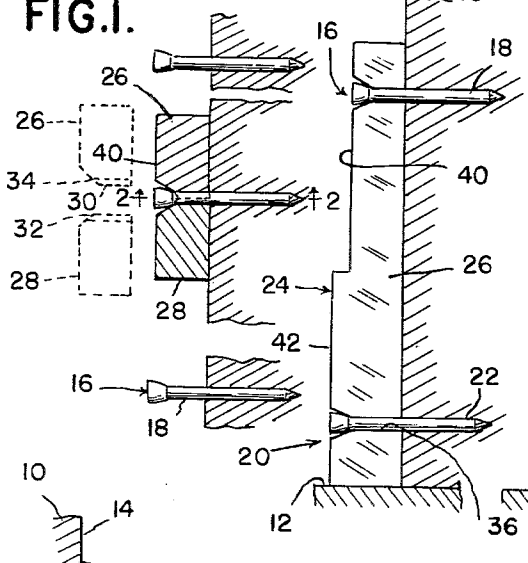


FIG.2.

FIG.3.

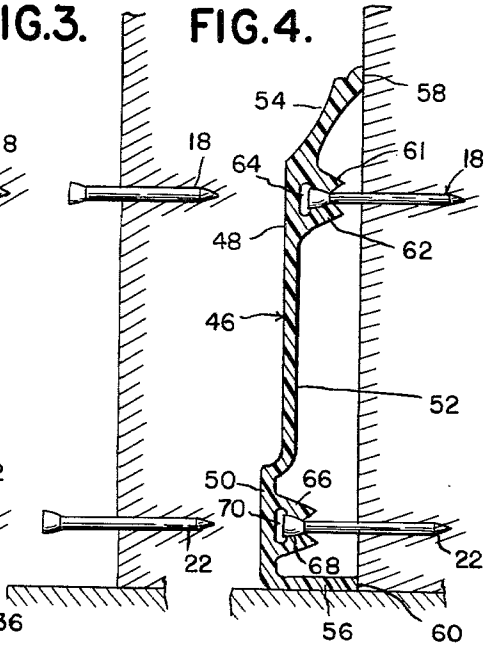


FIG.4.

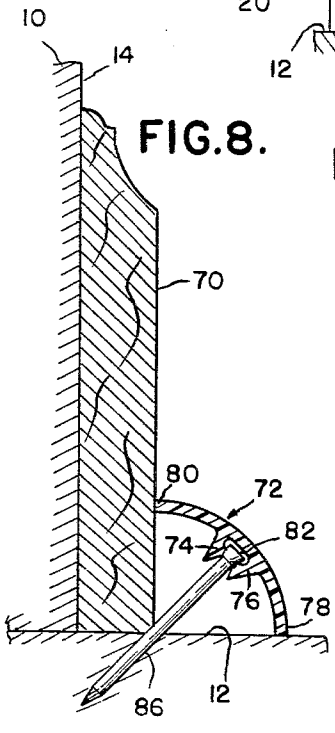


FIG.8.

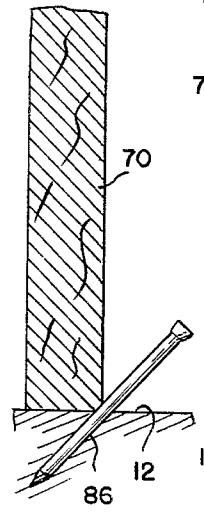


FIG.7.

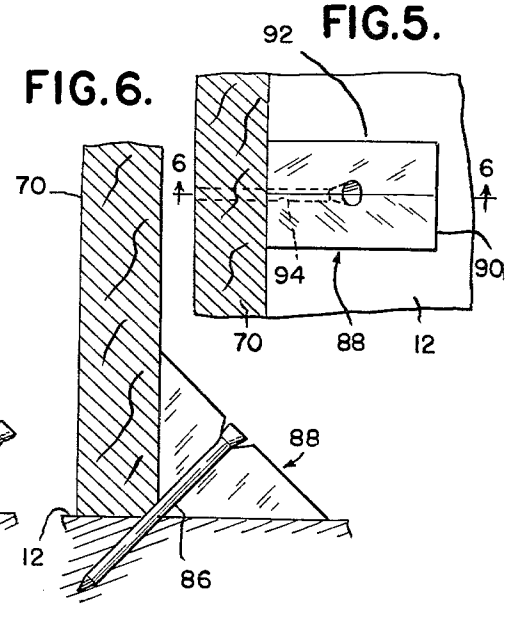


FIG.6.

FIG.5.

INVENTOR.
MEHRIN BEGIAN
BY
Whittemore, Hulbert & Belknap
ATTORNEYS

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EXTRUDED SNAP-ON MOLDING STRIP

Mehrin Begian, 18517 Heydan, Detroit, Mich.

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This invention relates to wall trim in the form of moldings applied at the lower edge of a wall immediately adjacent the floor and relates more specifically to the manner of attaching the molding to the wall or floor.

It is an object of the present invention to prepare the wall or floor of a building, dwelling, or the like for attachment thereto of an elongated snap-on molding element to permit the easy detachment of the molding from the wall or floor so that the wall and floor may be uncovered and conveniently cleaned and/or painted without the possibility of the molding becoming spattered with paint, cleaning material or the like.

Another object of the present invention is to utilize a shoe or molding to form part of a baseboard serving as interior trim for dwellings and the like. The invention is particularly usable as original installation and as molding where previously installed so that a baseboard of a wall or partition may be painted without any possibility of the paint dripping onto the shoe or molding or onto the floor adjacent the baseboard.

A further object of the present invention is to provide an elongated snap-on molding of the aforementioned type which is preformed or extruded and made entirely from a plastic material.

A still further object of the present invention is to provide a preformed or extruded elongated snap-on plastic molding which may take the form of a baseboard, shoe, or a combined baseboard and shoe.

Another object of the present invention is to provide a molding element of the aforementioned type having a pair of spaced parallel fastener-engaging flanges projecting from a surface thereof at points lying between its longitudinal edges, said fastener-engaging flanges being resilient and adapted to receive in the spaces therebetween the heads of a plurality of longitudinally spaced fasteners which are carried by the wall or the floor, depending on whether the element is in the form of a baseboard or shoe respectively.

Still another object of the present invention is to provide a molding element of the aforementioned type wherein each pair of fastener-engaging flanges is inclined toward each other to partially enclose the space therebetween.

It is thus another object of the present invention to provide a simplified low-cost structure of the aforementioned type having certain advantages contributing to efficiency, reliability, and long life, as well as ease of maintenance.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawing wherein a preferred form of the present invention is clearly shown.

FIGURE 1 is a top view of a nail guide and a wall, with the nail guide illustrated by the solid lines in an operative position and by the dotted lines in an inoperative position away from the wall.

FIGURE 2 is a vertical view of the nail guide and wall taken on the line 2—2 of FIGURE 1.

FIGURE 3 is a vertical view similar to FIGURE 2 with the nail guide removed and illustrating the prelocated nails.

FIGURE 4 is a vertical view similar to FIGURE 3 and illustrating the manner in which a preformed or extruded plastic molding, element, or strip is fastened to the wall.

FIGURE 5 is a top view of another embodiment, illustrating a nail guide in an operative position between a conventional baseboard made from wood and the floor.

FIGURE 6 is a vertical view of the nail guide and baseboard taken on line 6—6 of FIGURE 5.

FIGURE 7 is a vertical view similar to FIGURE 6 with the nail guide removed and illustrating one of the prelocated nails.

FIGURE 8 is a vertical view similar to FIGURE 7 and illustrating the manner in which a preformed or extruded plastic molding or shoe is fastened between the baseboard and floor.

Referring now to the drawing, the reference numeral 10 designates a wall or partition of a house, dwelling, building, or the like. The wall or partition 10 may be constructed of studs and plaster or from any other construction materials as are well known in the art. The floor of the structure is designated by the numeral 12 and represents the finished hardwood flooring material utilized in the construction industry. The upper face of the floor 12 is disposed at a right angle to the side 14 of the wall or partition 10. The novel snap-on molding as illustrated in FIGURE 4 is located at the aforesaid right angle.

In order to use the elongated snap-on molding of the present invention and of the type illustrated in FIGURE 4, it is first necessary to prelocate two rows of fasteners which are vertically spaced. Each row contains a plurality of fasteners such as nails, screws, or the like. In the present invention elongated finishing nails having enlarged heads are utilized. The upper row of fasteners is designated by the numeral 16 and contains a plurality of nails 18 while the lower row of fasteners is designated by the numeral 20 and contains a plurality of nails 22. The nails 22 have an exposed length greater than the exposed length of the nails 18. It should be observed that the heads of nails 18 are located closer to the surface 14 of the wall 10 than the heads of nails 22. In order to locate the nails 18 and 22 at the requisite height measured upwardly from the floor 12 and at the proper exposed length measured to the left of surface 18 (see FIGURE 3), a nail guide 24 is utilized.

The nail guide 24 includes a pair of sections 26 and 28 having adjacent vertical edges 30 and 32 respectively. An upper groove 34 and a lower groove 36 of part cylindrical configuration are formed in each of the vertical edges 30 and 32. When the sections 26 and 28 are manually moved together as best illustrated by the solid lines in FIGURE 1, the pair of upper grooves 34 and the pair of lower grooves 36 form upper and lower substantially cylindrical guide openings for nails. With such an arrangement it is possible to locate the nails 18 and 22 at the proper heights measured upwardly from the floor 12.

The sections 26 and 28 have back surfaces which are flat and adapted to bear against the surface 14 as best illustrated in FIGURE 1. The upper portion of each section 26 and 28 has a depth which is less than the depth of the lower portion of each of the sections. With such an arrangement the front nail abutment surfaces 40 of the upper portions of the sections 26 and 28 are closer to the surface 14 than are the front nail abutment surfaces 42 of the lower portions of the sections 26 and 28.

The pairs of upper and lower grooves 34 and 36 are enlarged immediately adjacent the nail abutment surfaces 40 and 42 respectively to receive the enlarged heads on the finishing nails 18 and 22.

A mechanic when utilizing the nail guide 24 of the present invention may utilize any desired longitudinal spacing between the nails in each row. As an example, a spacing between 10 to 14 inches may be utilized, the exact spacing depending on the particular application.

In operation, the mechanic starts at one end of the wall and locates an upper nail 18 and a lower nail 22. The nail guide 24 is then moved lengthwise of the wall 10 to a position depending on the selected nail spacing and additional nails 18 and 22 are located. This operation is repeated until a sufficient number of nails 18 and 22 have been located.

In use, when the guide sections 26 and 28 are moved together, upper and lower nails 18 and 22 are placed in the nail openings in the guide 24. The mechanic strikes each nail with a hammer and drives the nail into the wall 14 to a predetermined depth until the head of the nail is flush with the nail abutment surface 40 or 42, as the case may be.

The present invention employs an elongated plastic molding 46 which is a substitute for the wooden baseboard and shoe presently utilized in the construction industry. The molding 46 may be of any suitable configuration or cross-section and is designed and shaped to combine the functioning of the conventional baseboard and conventional shoe.

The molding 46 is preformed generally by a plastic extruding operation and made in standard lengths. The molding 46 is cut to the requisite length required for the dwelling and snapped into place by use of the nails 18 and 22 previously described.

The molding 46 is made entirely from a plastic material such as vinyl or other commercially available plastic material. Different color plastics may be utilized so as to lend the molding 46 to various designs and color schemes of the dwelling or building.

The molding 46 includes a baseboard section 48 and a shoe section 50. The shoe section 50 is laterally offset from the plane of the baseboard section 48 in a direction away from the surface 14 of the wall 10. The molding 46 has a substantially vertical web 52 which is provided with a baseboard flange 54 at the upper end thereof and a shoe flange 56 at the lower end thereof. The flange 54 extends in an upwardly and inwardly direction and terminates in an abutment surface 58 which bears against the surface 14 of the wall 10 throughout the entire length thereof when assembled.

The shoe flange 56 extends inwardly in substantially a horizontal direction and terminates in an abutment surface 60 which is in contact with the surface 14 throughout the entire length of the molding 46. The lower surface of the flange 56 rests against the top surface of the floor 12.

The sections 48 and 50 are each provided with a pair of spaced elongated resilient gripping flanges which are adapted to receive the heads of the various nails and which extend the entire length of the molding 46. The pairs of gripping flanges have the same vertical spacing as do the rows of nails 16 and 20.

The baseboard section 48 includes a pair of flanges 61 and 62 which are spaced apart vertically to define a space or channel 64 therebetween for the reception of the heads of the nails 18 in row 16. The inner surfaces of the resilient flanges 60 and 62 are curved inwardly and outwardly so as to partially enclose the space 64 therebetween.

The shoe section 50 includes a pair of resilient flanges 66 and 68 which are spaced apart vertically to define a space 70 therebetween for the reception of the heads of the nails 22 in row 20. The inner surfaces of the flanges 66 and 68 are likewise curved inwardly and outwardly so as to partially enclose the space 70 therebetween.

The inner surfaces of each pair of flanges are shaped to correspond to the shape of the heads on the nails. As mentioned previously, the flanges 60–62 and 66–68 are resilient so that the flanges in each pair may be moved apart to open the space therebetween to the heads of the nails. After the heads are in the space, the flanges contract to lock and grip the heads of the nails.

After the rows of nails have been located, the preformed molding 46 is snapped over the nails 18 and 22 by applying pressure at longitudinally spaced points on the molding 46 to thereby retain the molding 46 in an erected position and to provide a relatively firm fit or seal between the elongated flange 54 and the surface 14.

The molding 46 may be removed very easily for cleaning or painting the wall 10 or floor 14 by merely placing a screwdriver or like tool between the wall surface 14 and the flange abutment 58 and apply an outwardly directed force so as to separate the gripping flanges and thereby permit the molding 46 to be removed from the nails 18 and 22.

FIGURES 5–8 show another embodiment of the present invention. At the right angle between the wall 10 and floor 12 the usual wooden baseboard 70 is fastened to the wall 10 by nails in the usual manner. This embodiment relates essentially to a preformed elongated plastic shoe 72 which serves the same function as a conventional wooden shoe but is mounted in an entirely different manner.

The shoe 72 is made entirely from a plastic material such as vinyl and may be made from different colored plastic material as mentioned in connection with the other embodiment. Preferably the shoe 72 is formed in predetermined lengths by an extruding operation. The shoe or molding is cut to the requisite length and may have any desired shape. Usually, the shape of the outer surface is of part cylindrical configuration and, as illustrated, has an angular extent of 90°. The shoe 72 is of integral construction and includes a pair of resilient, closely spaced, elongated gripping flanges 74 and 76 which extend the entire length of the shoe 72 and are located approximately midway between the longitudinal edges 78 and 80 of the shoe 72.

The resilient gripping flanges 74 and 76 are separated by a space 82 which is adapted to receive the heads of nails as will be subsequently explained. The inner surfaces of the resilient flanges 74 and 76 are curved inwardly so as to partially enclose the space 82 therebetween.

A single row of finishing nails is utilized. The nails 86 are properly spaced lengthwise; as an example, 10 to 14 inches between adjacent nails. The nails are driven into the floor 12 by a hammer at approximately a 45° angle with respect to the horizontal. In order to locate the nails 86, a nail guide 88 is utilized. The nail guide 88 is made in two sections 90 and 92. The adjacent edges of the sections are provided with downwardly and inwardly extending grooves which define a nail opening 94 when the sections are assembled.

The combined sections 90 and 92 are in the shape of a right angle triangle with the aforesaid nail opening 94 being perpendicular to the longest side of the triangle and intersecting the other two sides as best illustrated in FIGURE 6.

The nail guide 88 is used in the same manner as the nail guide 24 as set forth previously. The nail opening 94 is enlarged adjacent the longest side thereof to receive the head of the nail 86.

After the nails 86 have been located, the shoe 72 is put in place by snapping the flanges 74 and 76 over the heads of the nails 86. With such an arrangement the longitudinal edges 78 and 80 are held in sealing engagement with the floor 12 and baseboard 70 respectively.

Referring once again to FIGURE 4, the entire front portion of the molding 46 could be made straight or flat thereby eliminating the offset relationship between sections 48 and 50. The resulting structure would take the place of and serve the purpose of the conventional wooden baseboard and could be substituted for the baseboard 70 in FIGURE 8. With this construction the flanges 66 and 68 would be located the same distance from the surface 14.

It should be understood that only one half of each nail guide 24 and 88 is actually required in practice. In

addition, other types of fasteners may be utilized such as screws, etc.

The ends of adjacent moldings located 90° apart, may be beveled so as to provide a smooth juncture at the intersection thereof devoid of any space therebetween. If the ends of the moldings are not beveled, then a clip could be utilized at the corners to close the space between the ends of the moldings.

The present invention provides a means of replacing painted wood trim and moldings with extruded or preformed snap-on forms. The various embodiments of the present invention include a combined baseboard and shoe, a separate baseboard, and a separate shoe. The extruded elements may have any desired cross section to suit the particular design of the building. Generally, the extruded moldings are made in length, as an example, between 19'–24'. The moldings are cut in the field to suit particular jobs.

When it is desired to paint the wall or floor of the building, the extruded elements are easily removed by simply removing the element from the fasteners. This simplifies the decorating of the dwelling. Even if paint should drip onto the floor adjacent the wall, the paint dripping would be covered up by the moldings when replaced.

It should be understood that the snap-on strips, elements, or members of the present invention may also be used as trim for windows, doors, or the like. Also, the snap-on moldings or trim may be made from other materials, such as metal.

The drawing and the foregoing specification constitute a description of the improved extruded snap-on molding strip in such full, clear, concise, and exact terms as to enable any person skilled in the art to practice the invention, the scope of which is indicated by the appended claim.

What I claim as my invention is:

In combination with an elongated support which is provided with two laterally spaced-apart rows of relatively slender elongated fasteners having enlarged heads, the fasteners in each row being longitudinally spaced and each fastener having a mounting portion including the head protruding from said support, an extruded preformed elongated snap-on molding element made from a resilient plastic material and removably mounted on the

mounting portions of said fasteners against said support, said molding element comprising a pair of sections, each of said sections having an integral elongated flange at the longitudinal edge terminating in a lip which engages said support, each of said sections having a pair of relatively close but spaced-apart resilient fastener-engaging flanges projecting laterally from the inner surface thereof and terminating a predetermined distance from said support, the terminal outer ends of said fastener-engaging flanges facing said support, each pair of said last-mentioned flanges extending longitudinally of said molding element substantially the entire length thereof, the opposing surfaces of each pair of fastener-engaging flanges being generally inclined toward each other starting adjacent the inner surface of the corresponding section to define an elongated partially enclosed fastener-receiving channel of varying transverse depth, said channel having its smallest depth adjacent the terminal outer ends of the corresponding fastener-engaging flanges for receiving the heads of the fasteners in one of the rows, said molding element being assembled by lateral movement thereof towards said support and fasteners under sufficient force to urge each pair of said fastener-engaging flanges apart by the insertion of the heads of the fasteners into the corresponding channel so that the fastener-engaging flanges thereafter frictionally grip the heads of the fasteners and the lip of each integral elongated flange engages said support.

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FRANK L. ABBOTT, *Primary Examiner.*

HENRY C. SUTHERLAND, JACOB L. NACKENOFF, *Examiners.*

J. L. RIDGILL, *Assistant Examiner.*