Jan. 13, 1942. J. J. MANOFSKY 2,269,677

BUILDING CONSTRUCTION

Filed March 7, 1941

Fig. 1.

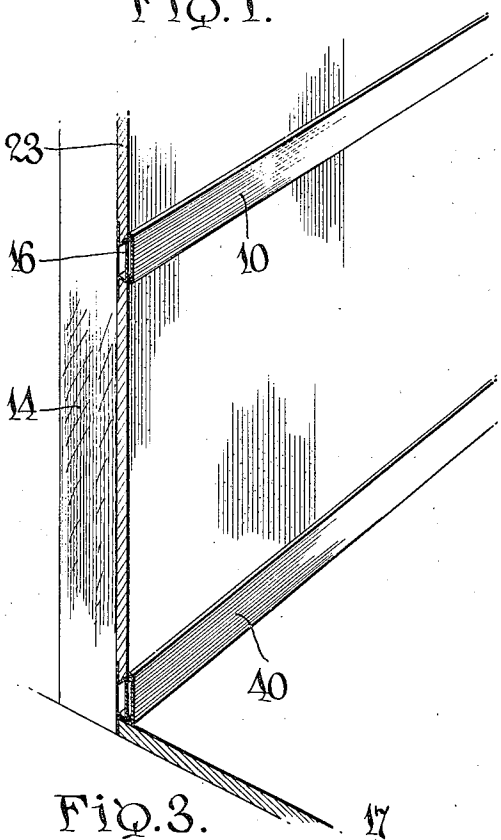


Fig. 5.

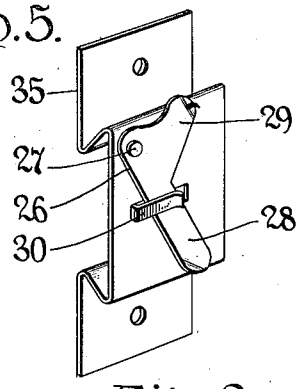


Fig. 2.

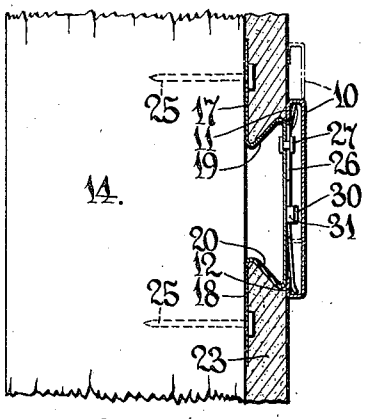


Fig. 3.

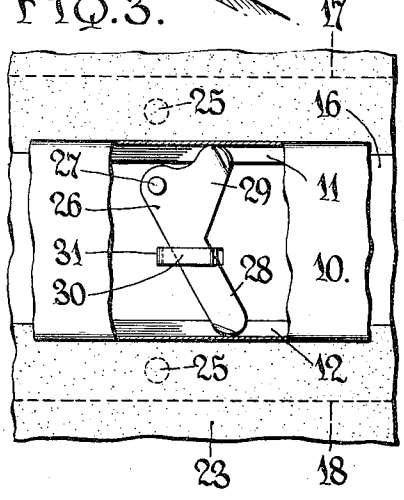
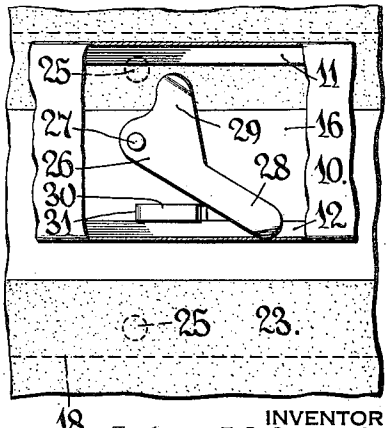


Fig. 4.



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BUILDING CONSTRUCTION

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Application March 7, 1941, Serial No. 382,108

11 Claims. (Cl. 189—88)

This invention relates to building construction and particularly to the novel association of a trim strip with a wall or other surface.

According to my invention means are provided for securing an elongate trim strip of metal, or the like, to a prepared wall without the use of tools and in a manner which results in an entirely concealed attachment. I have shown my invention particularly in the form of what is known in the art as a chair rail or dado rail, that is, a trim strip extending horizontally around a wall of plaster, or the like, at about the level of the top of a chair to prevent marking of the plaster or other wall surface by contact of the tops of chairs. Such strips are especially commonly used in offices, and the like.

While particular reference herein, by way of example, only, is made to such chair rails, it is to be understood that the principles of my invention may be applied with equal facility to base boards, foot strips, ceiling moldings, and, in fact, to many other forms of wall trim. In using and attaching the trim strip disclosed herein the completed and finally attached trim strip leaves absolutely no visible fastening means, either in the form of nails, screws, or otherwise. The positioning and assembling movements of the strip itself are utilized, in a novel manner, in effecting movement of means disposed therebehind, for interlockingly engaging the trim strip to support it rigidly in assembled position substantially at the wall surface.

As indicated above, the form of my invention illustrated in the drawing and described in detail in the following description is by way of exemplifying the principles of my invention and the invention itself will admit of mechanical changes which will readily occur to those skilled in the art without departing from the principles thereof. The invention is accordingly not to be considered limited otherwise than as defined in the appended claims.

In the drawing:

Fig. 1 is a fragmentary perspective view of an interior building wall provided with one form of the trim strip of my invention;

Fig. 2 is a fragmentary cross sectional view on larger scale and taken perpendicularly to the wall;

Fig. 3 is a fragmentary elevational view looking at the wall, with a portion of the trim strip broken away for added clearness;

Fig. 4 is a view similar to Fig. 3 but with the trim strip and associated parts in an intermediate position preliminary to final assembly; and

Fig. 5 is a perspective view of an alternative form of trim strip securing device.

In the drawing like characters of reference denote like parts and the numeral **10** designates a trim strip comprising a vertical web or face portion and upper and lower return bent flanges **11** and **12** at its rear face, such flanges providing longitudinally extending recesses or channels for the reception of securing means.

The form of wall with which the trim strip is to be associated is more or less immaterial but by way of teaching a single operative example of the principles of my invention reference is had to a building wall of conventional form and the numeral **14** designates one of a series of spaced upstanding studs or scantlings. In a preferred form of practicing my invention trim strip supporting means are secured to such studs or other building framework prior to the application thereto of plaster, wall panels or other wall-forming material.

In the illustrated instance such supporting means takes the form of an elongate member **16** having an intermediate web portion and opposite marginal flanges **17** and **18** offset from said web portion but extending parallel thereto. Portions **19** and **20** which connect the flanges with the web portion preferably form re-entrant angles so that when and if plaster is applied over the studding, as at **23** in the drawing, such plaster will key into the re-entrant angles as appears clearly in Fig. 2.

The outer surface of the web portion of the member **16** may, if desired, serve as a convenient screed or guide for the plasterer in applying the finish plaster coat. Suitable lathing or other reinforcement will be provided in conventional manner although such lathing is not shown in the drawing, being immaterial to an understanding of the present invention. The securing flanges **17** and **18** may be fastened to the studs **14** by nailing, as indicated at **25** in the drawing, or otherwise.

A locking element **26** is pivotally secured to the exposed face of the web portion of the member **16** at intervals along its length as by means of rivet **27** and such element preferably includes a pair of arms **28** and **29** whose outer terminal portions are adapted to engage, when in assembled position, within the recesses formed at the opposite longitudinal edges of the trim strip by virtue of the return bent flanges **11** and **12**. To facilitate such engagement the outer terminal portions of the trim strip are flared somewhat.

The arm **28** will be seen to be substantially

longer than the arm 29 and it will be noted that clockwise rotation of the element 26 about its pivotal attachment to the member 16 is restricted by engagement of the longer arm 28 under an ear 30 which may be struck directly from the web of the supporting member 16. When the supporting member 16 is in assembled position against studding or other building framework and prior to association of the trim strip therewith, the pivotal locking elements 26 will all assume their most clockwise position with the longer leg 28 of each element resting against the transverse portion 31 of its associated ear 30.

To assemble a trim strip, beginning at this point, the following procedure is followed. The trim strip is disposed with its lower flange 12 behind the terminal portion of the depending longer arm 28 and with the upper flange 11 held slightly away from the surface of the wall coating 23 so as not to interfere with the upper and shorter arm 29. The trim strip is then moved upwardly to the position illustrated in Fig. 4 and in dotted lines in Fig. 2, and it will be noted that such movement, by virtue of the engagement of the lower flange 12 with the lower terminal portion of the arm 28, results in counterclockwise pivotal movement of the locking element 26 to the position shown in Fig. 4.

In this manner the effective vertical height of each element 26 is shortened and the upper edge of the trim strip may now be moved against the wall to dispose the upper flange 11 thereof over the upper terminal portion of the shorter arm 29. The trim strip is then moved downwardly substantially in contact with and parallel to the wall and the upper flange 11 thereof engages behind the terminal portion of the arm 29 and rotates the locking member 26 in a clockwise direction until it assumes the position illustrated in Fig. 3 where such member has been cammed into firm locking engagement with its upper and lower arms 29 and 28 extending completely into the channels formed by the upper and lower flanges 11 and 12, respectively.

It will be noted that a slight lateral springing or bowing of the locking member 26 is occasioned by the locking action, since the outer portions of the arms 28 and 29 are now displaced from the plane of the central pivotal portion of the member 26 by the thickness of the metal of the flanges 12 and 11, respectively, as appears in Fig. 2. This springing or bowing is advantageous in maintaining a resilient interlock between the supporting member 16 and the trim strip 10 through the medium of the locking member 26.

It is to be understood that the embodiment of the invention illustrated in Figs. 1 through 4 contemplates the use of continuously extending horizontal supporting elements 16 with locking members 26 disposed therealong at intervals as desired, there being at least two for every individual trim strip 10. According to the modification of Fig. 5 individual supporting elements 35, similar in vertical cross section to the member 16, are provided, each having pivoted thereto a locking member 26 in the same manner as in the case of the modification of Figs. 1 through 4 and likewise having a struck out ear 30 to preliminarily position the locking member 26. As many individual supporting members 35 as may be desired may be employed, each being nailed to a vertical stud or otherwise secured to the building frame work.

The general view Fig. 1 shows incidentally the use of a trim strip according to the present invention as a base board, designated 40. It will be seen that various inversions of the elements of the new combination may be effected without changing the essential nature of the invention.

What is claimed is:

1. Building construction comprising an elongate wall trim strip having transversely spaced formations at its rear face for engagement with locking means, and locking means comprising a lever pivotally attached to the building and having a pair of angularly disposed projecting arms, said arms being each adapted to engage one of said transversely spaced formations to support said trim strip in assembled position by engaging one of said arms with one of said formations and rotating said lever by transverse movement of said trim strip to direct the other of said arms into firm engagement with the other of said formations.

2. Building construction comprising an elongate wall trim strip having spaced parallel, longitudinally extending formations at its rear face for engagement with locking means, and locking means comprising a plurality of longitudinally spaced levers pivotally attached to the building, each lever having a pair of angularly disposed projecting arms each adapted to engage one of said longitudinally extending formations to support said trim strip in assembled position by engaging one of said arms with one of said formations and rotating said lever by transverse movement of said trim strip to direct the other of said arms into firm engagement with the other of said formations.

3. Building construction comprising an elongate wall trim strip having a central web portion and return-bent, longitudinal, marginal flanges at its rear face to provide a pair of transversely spaced facing longitudinal recesses, and locking means comprising a lever pivotally attached to the building and having a pair of angularly disposed projecting arms, said arms being each adapted to engage in one of said transversely spaced recesses to support said trim strip in assembled position by engaging one of said arms in one of said recesses and rotating said lever by transverse movement of said trim strip to direct the other of said arms into firm engagement with the other of said recesses.

4. Building construction comprising a wall trim member having spaced formations at its rear face for engagement with locking means, and locking means comprising a lever pivotally attached to the building and having a pair of angularly disposed projecting arms, said arms being each adapted to engage one of said spaced formations to support said trim member in assembled position by engaging one of said arms with one of said formations and rotating said lever by movement of said trim member in the plane of the wall to direct the other of said arms into firm engagement with the other of said formations.

5. Building construction comprising a wall trim member having spaced formations at its rear face for engagement with locking means, and locking means comprising a lever pivotally attached to building framework and having a pair of angularly disposed projecting arms of unequal length, said arms being each adapted to engage one of said spaced formations to support said trim member in assembled position by engaging the shorter of said arms with one of said formations and rotating said lever by movement of said trim member in the plane of the wall to direct the

longer of said arms into firm engagement with the other of said formations.

6. Building construction comprising a wall trim member having return-bent flanges at opposite marginal edges thereof to provide a pair of spaced facing recesses at the rear of said trim member for receiving locking means, and locking means comprising a lever pivotally attached to the building and having a pair of angularly disposed projecting arms, said arms being each adapted to engage in one of said spaced recesses to support said trim member in assembled position by engaging one of said arms in one of said recesses and rotating said lever by movement of said trim member in the plane of the wall to direct the other of said arms firmly into the other of said recesses.

7. Building construction comprising a wall trim member having return-bent flanges at opposite marginal edges thereof to provide a pair of spaced facing recesses at the rear of said trim member for receiving locking means, and locking means comprising a lever pivotally attached to the building wall and having a pair of angularly disposed projecting arms of unequal length, said arms being each adapted to engage in one of said spaced recesses to support said trim member in assembled position by engaging the shorter of said arms in one of said recesses and rotating said lever by movement of said trim member in the plane of the wall to direct the longer of said arms firmly into the other of said recesses.

8. Building construction comprising a flat wall trim member having an exposed face adapted to be disposed in a substantially vertical plane and having a pair of vertically spaced formations at its rear face for engagement with locking means, and locking means comprising a lever pivotally attached to the building and having a pair of angularly disposed arms of unequal length whereby the lever tends to assume a pivotal position wherein the longer of said arms extends downwardly under the force of gravity, said arms being each adapted to engage one of said spaced formations to retain said trim member in assembled position by first engaging the longer arm with the lower formation and thereby rotating the lever until the effective vertical height thereof is shortened to permit engagement of the shorter arm with the upper formation.

9. Building construction comprising an elongate wall trim strip having a central web portion and opposed marginal longitudinal flanges forming a pair of facing channels at the rear face of said strip, securing means for said strip comprising a member pivotally attached to said building construction and having a pair of angularly extending arms, one of said arms comprising cam means when in engagement with one of said channels for urging the other of said arms firmly into the opposite channel through the medium of force applied to said trim strip externally

10. Building construction comprising an elongate wall trim strip having a central web portion and opposed marginal longitudinal flanges forming a pair of facing channels at the rear face of said strip, means pivotally secured to said building construction and having a pair of ears for engagement in said channels to maintain said trim strip in assembled position, said ears being movable to and from assembled position by pivotal movement of said means, said ears being jointly movable whereby force exerted on one of said ears through said strip moves the other ear into firmly assembled position in one of said channels.

11. Building construction comprising an elongate wall trim strip having opposite marginal longitudinal flanges forming channels, a lever pivotally attached intermediate its ends to building framework, said lever having angularly disposed projecting arms of unequal length whereby rotation of said lever on its fulcrum varies its effective width in a given direction, the terminal portions of the projecting arms being adapted to be disposed in the opposed channels of the wall trim strip by predisposing the levers in a position of low overall dimension in the direction which is transverse to the extent of said trim strip with one of the channels of the trim strip embracing the terminal portion of the shorter arm whereby said trim strip may be moved transversely of its longitudinal extent to bear upon said shorter arm to rotate the lever and move the longer arm firmly into the opposite trim strip channel.

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