

April 14, 1942.

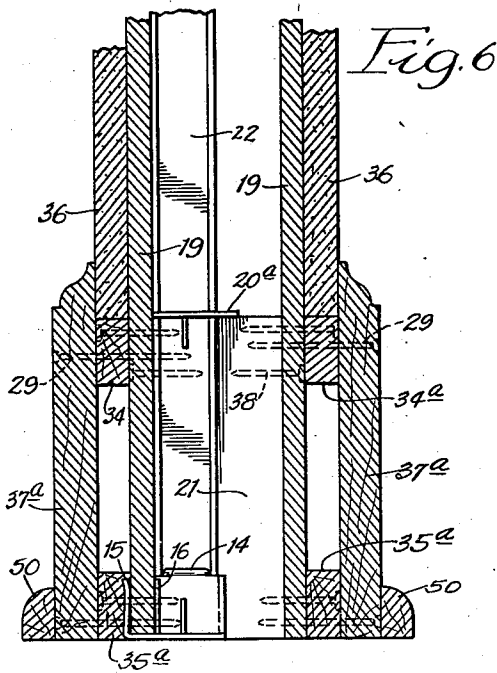
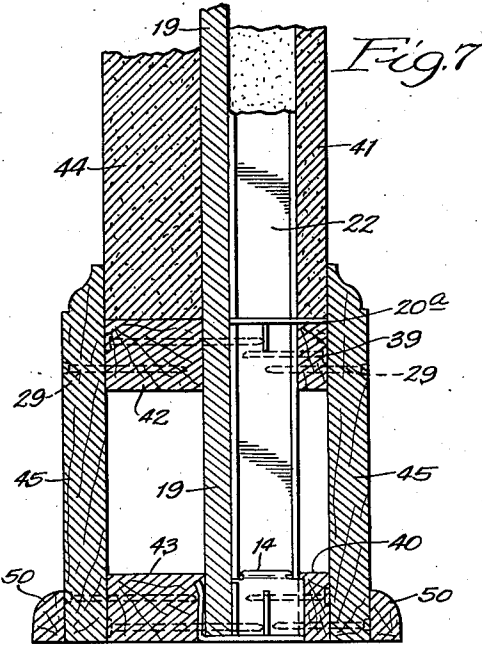
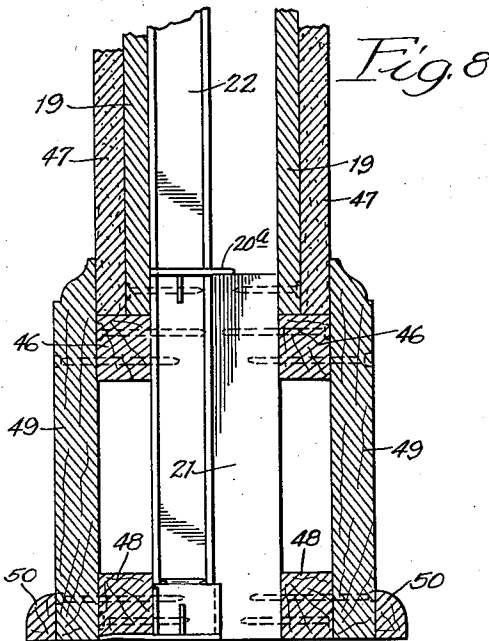
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2,279,898

WALL CONSTRUCTION

Filed Aug. 4, 1939

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,279,898

WALL CONSTRUCTION

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Application August 4, 1939, Serial No. 288,321

19 Claims. (Cl. 20-4)

The present invention is directed to the use of metal clips designed to engage with a beam or studding and provided with prongs adapted to permit the impalement of wooden nailing blocks for the purpose of securing a base board, cove, or the like, to the completed wall.

The use of the pronged clips of the present invention permits a beam or studding to be held in proper relation to the floor, ceiling joist, or other structural element, as the case may be, and permits a nailing block to be readily impaled and held in place in contiguous relation to the beam or studding, or other structural element, as a nailing block for wooden strips known as grounds or the like, so that when the plastering of the wall has been completed an exposed nailing surface will be afforded for the securing of the base board, cove, or the like, in its intended position.

Further objects and details will appear from the description of the invention in conjunction with the accompanying drawings, wherein—

Figure 1 is a perspective view of the lower and upper clips of the present invention in a form designed to afford channels for the reception of the edges of the wall board sections;

Fig. 2 is a similar view showing the channel features omitted as in cases where metal lath or the like are employed;

Fig. 3 is a perspective view of the base portion of a wall illustrating the use of the invention of Fig. 1 as applied to a floor;

Fig. 4 is a perspective view of the form of the invention shown in Fig. 2 as applied to a ceiling employing metal lathing;

Fig. 5 is a perspective view of the upper clip illustrated in Fig. 1; and

Figs. 6, 7 and 8 are sections showing various uses of the present invention.

It will be understood that the description to be hereinafter given is intended to illustrate various applications of the invention but that it is not thereby intended to illustrate all of the combinations in which the clips of the present invention may be employed.

Referring to the form of the invention shown in Figs. 1 and 3, the lower clip consists of a flat base plate 10 having nailing apertures 11. The center of the clip is provided with spaced upstanding walls 12 connected by a bridge 13. Each of the walls on its upper edge is provided with an undercut T-shaped tongue 14.

The base plate, along one of its edges, is provided with outer tongues 15 and inner tongues 16, the latter extending at right angles to the

base plate while the former initially project outwardly and terminate in a flared tip portion 17 which affords a throat to facilitate the insertion of a wall board section 19 in cases where the tongues are first bent to channel forming relation, but in cases where the wall board section is first positioned it facilitates the bending up of the outer tongues, so that in either event a channel will be provided by inner and outer upwardly extending tongues standing in spaced relation to one another. The base plate is provided on each side of its center with an upwardly projecting pointed impaling prong 20 extending at substantially right angles thereto adapted to have the under side of a nailing block 21 thereonto in the manner shown in Fig. 3.

The clip is used in connection with a channeled beam, studding or joist 22, or the like, which in the exemplification shown in Fig. 3 abuts at its lower end directly against the floor 24. The clip embraces the edge walls of the beam or studding, and on the open channeled side the tongue 14 is struck down into the channel so as to afford an interlock for holding the beam or studding rigidly in position. Ordinarily only one of the two tongues 14 will be actively employed, but it is desirable to provide right and left tongues so that either may be used as conditions may warrant. The clip is held in place on the floor by nails 25 which are driven directly into the floor through the nailing apertures.

In order to more securely unite the nailing block and the beam or studding, an upper clip 20^a is employed, which is in the form of a stiff flat plate provided in its center with a T-shaped slot 21^a comprising a center leg 22^a terminating in cross notches 23^a. The inner edge of the plate is shouldered at the points 24^a so that the T-shaped slot along each of its edges is configured to fit into the open side of the channeled studding, sufficient clearance being afforded to permit the clip to be positioned as in Fig. 3 and in either right or left relation to the studding as conditions may require. The upper clip is provided with right and left pointed prongs 25^a struck down from the edges, either of which is adapted to impale the upper face of the nailing block 21. In addition, apertures 26^a are provided for the driving of a nail, which more firmly unites the plate to the nailing block and thus firmly supports the beam 22, which is not only anchored to the floor by the lower clip but firmly braced at a higher level by the upper clip.

In the arrangement shown in Fig. 3, the wall board section 19 has its lower edge fitted into

the channel provided, so that it stands in substantially abutting relation to the studding there shown. After the nailing block has been impaled on one of the prongs of the lower clip (two blocks may be thus impaled if desired) and the upper clip driven to place, the wall may be completed in any one of several ways presently to be described.

It will, of course, be understood that clips of the same character may be employed with the prongs projecting downwardly into nailing blocks for securing the upper end of the studding in a like manner and nailed to a ceiling joist or other convenient structural element, and the exposed surface afforded by the nailing block will be available for the finishing of the wall, and that the terms "lower" and "upper" are used merely for purposes of convenient description and are not intended as terms of limitation with respect to the plane of the earth's surface, and that the term "outwardly" as used in the claims has reference to the plane of the clip and includes an upward, downward, or lateral projection therefrom, as the case may be.

The clip of Fig. 2 is in all essential respects identical with the clip of Fig. 1, save for the fact that the channel forming tongues are omitted. The clip of Fig. 2 is intended for use in cases where wall board sections are secured by nailing, or where metal lath 30 (Fig. 4) is employed in place of wall board sections, which metal lath is attached in the usual manner by wire ties 31 passed around the beam, studding, or other structural element supported by the clip. It will, of course, be understood that the clip of Fig. 2 may be nailed to the floor in the manner shown in Fig. 1, and that in all respects it embodies the same principles and may be substituted therefor where conditions warrant.

In Fig. 4 I have shown the clip nailed to a ceiling joist or beam 32 with a nailing block 33 impaled on the clip to afford a nailing surface for a cove strip or the like. In this instance the channeled beam extends horizontally to support the metal lath, but it will, of course, be understood that the clip of Fig. 4 may be used in connection with a vertically standing channeled beam, studding, or the like.

The clips of the present invention are formed of a single piece of sheet metal sufficiently stiff and rigid to afford the necessary support, but where tongues are employed they are sufficiently flexible to permit bending in the manner described. In some cases it may be desirable in the first instance to bend the outer tongue upwardly to afford the necessary channel, but in wall construction it will often be found desirable to defer bending of the outer tongues until the wall board section has been positioned, and in such cases the flared tips of the tongues when contacting a floor or the like afford a gap or crack, which permits the easy insertion of a tool and facilitates the upbending of the tongues.

The clips may be used in any one of several different ways in the completing of the wall structure. The wall illustrated in Fig. 3 is completed on one side by the application of a plaster surface 27, which is applied to the wall board 19 and is sufficiently thick to lie flush with the front face of the nailing block 21 which serves as a screed for regulating the thickness of the plaster coating. After the plaster has been applied, a base board 28 or the like may be nailed in place by the use of nails 29 driven into the exposed surface of the nailing block. The opposite side

of the wall in this instance is somewhat differently constructed, in that upper and lower grounds 34 and 35 are nailed through the face of the wall board and into the inner surface of the nailing block, and in this instance the grounds extend continuously, and the upper ground serves as a base for the application of a plaster coating 36, after which the base of the wall is finished by a base board 37 which overlaps the joint between the plaster and the upper ground.

In Fig. 6, the rear wall surface construction is duplicated in the front wall, and in this instance the wall board is butted against the floor and nailed to the front face of the nailing block, which extends outwardly beyond the studding and thus serves as a spacer for a hollow wall construction in which the wall board sections are employed in properly spaced relation to one another. In this instance upper and lower grounds 34^a and 35^a are nailed through the front wall board section, and if desired, additional nails 38 may be employed for directly uniting the wall board to the nailing block before nailing the grounds in position. In this instance a base board 37^a is employed to overlap the joint, so that both sides of the wall are built up and finished in substantially the same manner, the only difference being that on the left hand side the wall board abuts directly against the side face of the studding while on the right hand side the wall board stands in spaced relation thereto.

In the construction shown in Fig. 7, a single layer of wall board is employed, which is socketed at its lower edge into the channel afforded by the lower clip, and upper and lower, relatively thin, grounds 39 and 40 are nailed directly to the front face of the nailing block, which in this instance lies flush with the front edge of the studding, after which the plaster coating 41 is applied in front of the wall board 19 and of sufficient depth to extend around and completely embed the studding, the grounds serving as a screed for regulating the depth of the plaster. Where a plaster coating of equal thickness is required on the opposite side of the wall, relatively thick grounds 42 and 43 are nailed through the wall board and into the nailing block and a plaster coating 44 is applied, after which the opposite sides of the wall at the base are finished by base boards 45 which may be nailed into the grounds, or nailed through the grounds and into the nailing block. In this instance the lower edge of the wall board is socketed within the channel provided by the clip, but it might terminate at a higher level and be nailed directly to the nailing block. Fig. 7 shows a solid wall construction in which the wall board furnishes the core with relatively thick layers of plaster on opposite sides thereof.

Fig. 8 shows a hollow wall in which the upper grounds 46 are nailed to the respective faces of the nailing block, which may project outwardly beyond the studding to any desired degree depending upon the desired spacing of the wall sections, or may lie flush with the edge of the studding. The upper grounds in this instance are relatively thick and are secured below the top of the nailing block so that a surface is afforded above the upper grounds for butt contact of the lower edges of the wall board sections which are nailed directly to the nailing block. In this instance the grounds are of greater depth or thickness than the wall board sections so that they project beyond the same and on each side of the wall afford a ledge for the lower

edge of the plaster coating 47, the grounds also acting as a screed to regulate the depth of the plaster. In this instance lower grounds 48 of equal depth are employed which are nailed directly into the nailing block, and base boards 49 overlapping the plaster are employed to finish the wall.

This arrangement is one which permits wall board sections of standard width to be employed in the construction of the wall without trimming or cutting at the ceiling level, since the upper grounds, which support the wall board sections, can be secured at the required height to compensate, within limits, for variations in the height of the ceiling, which of course reduces the labor cost in trimming the edges of the wall board sections.

In all of the instances described, if desired quarter rounds or other finishing strips 50 may be employed in the customary manner at the floor level. In view of the fact that the wall board sections of Fig. 8 are butted against the upper grounds, it is preferred to employ a lower clip of the character shown in Fig. 2 without the channel forming tongues, although the clip of Fig. 1 may be employed and the tongues bent out of the way, since in this construction they serve no useful purpose.

Furthermore, it will be understood that such terms as "upper" and "lower" are employed merely for purposes of convenience and not as terms of limitation, and that they are not necessarily intended to refer to the relation of the parts to the earth's surface, since a reverse arrangement would be applicable to the upper ends of the studdings, and any other angular disposition of the respective parts, required to meet local conditions of use, is contemplated.

The invention is one which permits the studdings, beams, or other structural elements to be quickly positioned and supported at the desired points, and thereafter affords channels for the reception of the wall board sections where such are employed, and at the same time the provision of pointed prongs affords a quick and convenient means for positioning and holding the nailing blocks in close relation to the studdings, beams, or the like, and in position to be embedded by the plaster, save for the exposed nailing surface. The nailing blocks, in conjunction with the upper and lower clips, afford firm sockets for the anchorage of the studdings, and the nailing blocks or grounds secured thereto, which also afford gage blocks or screeds for regulating the depth of the plaster coating, and after the wall has been completed, the finishing strips, base board, cove strips, or the like, can be readily nailed in position against a firm nailing surface.

I claim:

1. A clip of the class described, comprising a base plate having in its medial portion angularly extending spaced walls connected by an angularly extending bridge to provide a channel shaped socket for the reception of a beam or studding, and having a nailing prong projecting from the base plate at substantially right angles thereto and terminating in an outwardly presented point and adapted to have a nailing block forced by direct pressure thereonto.

2. A clip of the class described, comprising a base plate having in its medial portion angularly extending walls connected by an angularly extending bridge to provide a channel shaped socket for the reception of a channeled beam or

studding, one of said walls being provided with a tongue adapted to be struck down into the open face of the channel to afford an interlock, and the base plate being provided with an outwardly struck pointed prong extending at substantially right angles thereto and terminating in an outwardly presented point adapted to have a nailing block forced by direct pressure thereonto.

3. In a wall construction, the combination of a clip having a base plate provided with an outwardly struck pointed nailing prong and having in its center a pair of spaced angularly extending walls connected by a bridge to afford a socket and having a tongue on the edge of one of said walls, a channeled beam or studding entered within the socket thus afforded and having the tongue extending into the open side of the channel to afford an interlock, a nailing block impaled upon the prong, a wall filling having its outer surface in flush relation with the nailing block, a finishing strip nailed to the exposed surface of the nailing block, and a wall forming element on the opposite side of the wall filling.

4. In a wall construction, the combination of a clip having a base plate provided with an outwardly struck pointed nailing prong and having in its center a pair of spaced angularly extending walls connected by a bridge to afford a socket and having a tongue on the edge of one of said walls, a channeled beam or studding entered within the socket thus afforded and having the tongue extending into the open side of the channel to afford an interlock, a nailing block impaled upon the prong, a wall filling having its outer surface in flush relation with the nailing block, a finishing strip nailed to the exposed surface of the nailing block, a wall board section on the opposite side of the wall filling, and tongues on the clip affording a channel for the reception of the edge of the wall board section.

5. In a wall construction, the combination of a lower clip having a base plate provided with an upwardly extending pointed nailing prong, a channeled beam or studding with which the base plate is engaged, a nailing block impaled upon the prong, and an upper clip engaged with the beam or studding and having a downwardly struck nailing prong entered into the upper end of the nailing block.

6. In a wall construction, the combination of a lower clip having a base plate provided with an upwardly extending pointed nailed prong, a channeled beam or studding with which the base plate is engaged, a nailing block impaled upon the prong, and an upper clip engaged with the beam or studding and having a downwardly extending pointed prong entered into the upper end of the nailing block, a wall filling having its outer surface in flush relation with the nailing block, a finishing strip nailed to the exposed surface of the nailing block, a wall board section on the opposite side of the wall filling, and tongues on the lower clip affording a channel for the reception of the lower edge of the wall board section.

7. In a wall construction, the combination of a lower clip having a base plate provided with an upwardly extending pointed nailing prong, a beam or studding with which the base plate is engaged, a nailing block impaled upon the prong, a ground secured to the nailing block, a wall filling having its outer surface in flush relation to the ground, a finishing strip nailed to the ground, and a wall board section on the opposite side of the beam or studding against which the wall filling abuts.

8. In a wall construction, the combination of a lower clip having a base plate provided with an upwardly extending pointed nailing prong, a beam or studding with which the base plate is engaged, a nailing block impaled upon the prong, and an upper clip engaged with the beam or studding and having a downwardly extending pointed prong entered into the upper end of the nailing block, a ground secured to the nailing block, a wall filling having its outer surface in flush relation to the ground, a finishing strip nailed to the ground, and a wall board section on the opposite side of the beam or studding against which the wall filling abuts.

9. In a wall construction, the combination of a clip having a base plate provided with means for impaling a nailing block and configured to engage a beam or studding, a beam or studding engaged by the clip, a nailing block impaled upon the clip, a wall filling partly embedding the nailing block, and a finishing member secured to the nailing block.

10. In a wall construction, the combination of a clip having a base plate provided with means for impaling a nailing block and configured to engage a beam or studding, a beam or studding engaged by the clip, a nailing block impaled upon the clip, a wall filling partly embedding the nailing block, a wall board section secured in fixed relation to the nailing block behind the wall filling, and a finishing member secured to the nailing block.

11. In a wall construction, the combination of a clip having a base plate provided with an outwardly struck pointed nailing prong and having in its center a pair of spaced angularly extended walls connected by a bridge to afford a socket and having a tongue on the edge of one of said walls, a channeled beam or studding entered within the socket thus afforded and having the tongue extending into the open side of the channel to afford an interlock, a nailing block impaled upon the prong, a wall filling partly embedding the nailing block and a finishing member secured to the nailing block, and a wall board on the opposite side of the wall filling and serving as a backing therefor.

12. In a wall construction, the combination of a clip having a base plate provided with means for impaling a nailing block and having in its center a pair of spaced angularly extending walls connected by a bridge to afford a socket and having a tongue on the edge of one of said walls, a channeled beam or studding entered within the socket thus afforded and having a tongue struck down into the open side of the channel to afford an interlock, a nailing block impaled upon the clip, a wall filling partly embedding the nailing block, a wall board section on the opposite side of the studding and held in fixed relation to the nailing block and serving as a backing for the wall filling, and a finishing member secured to the nailing block and overlapping the wall filling.

13. In a wall construction, the combination of a lower clip having a base plate adapted to be secured by nailing to a nailing block, a beam or studding with which the base plate is engaged, a nailing block having its lower end secured by nailing to the upper face of the lower clip, and an upper clip engaged with the beam or studding and presenting its lower face to the upper end of the nailing block and secured thereto by nailing, wall material extending across the face of the beam or studding, and a member extending

transversely of the beam or studding and secured by nailing to the nailing block and in abutting relation to the wall material.

14. In a wall construction, the combination of a lower clip having a base plate provided with an upwardly extending pointed nailing prong, a beam or studding with which the base plate is engaged, a nailing block impaled upon the prong and an upper clip engaged with the beam or studding and having a downwardly extending pointed prong entered into the upper end of the nailing block, a wall board section adjacent the rear side of the beam or studding, a filling abutting against the forward face of the wall board section and in depth at least sufficient to extend to the front face of the nailing block, and a member secured by nailing to the front face of the nailing block and extending transversely in front of the beam or studding and in abutting relation to the filling.

15. In a wall construction, the combination of a lower clip having a base plate provided with an upwardly extending pointed nailing prong, a beam or studding with which the base plate is engaged, a nailing block impaled upon the prong, and an upper clip engaged with the beam or studding and having a downwardly extending pointed prong entered into the upper end of the nailing block, a wall board section adjacent one face of the beam or studding, a filling abutting against one of the faces of the wall board section, and a member extending transversely of the beam or studding and secured by nailing to the nailing block and in abutting relation to the filling.

16. A clip of the class described, having a base plate adapted to rest flatwise upon the intended support and provided with an outwardly struck nailing prong extending at substantially right angles therefrom and terminating in an outwardly presented point adapted to be forced by direct pressure into a nailing block, the base plate also having means for clamping the clip to a beam, studding or the like, in combination with a nailing block having one of its faces abutting against the base plate and having the nailing prong entered into its abutting face.

17. A clip of the class described, having a base plate adapted to rest flatwise upon the intended support and provided with an outwardly struck nailing prong extending at substantially right angles therefrom and terminating in an outwardly presented point adapted to be forced by direct pressure into a nailing block, the base plate also having a tongue normally upstanding therefrom and adapted to be struck down into the open face of a channeled beam or the like, in combination with a nailing block having one of its faces abutting against the base plate and having the nailing prong entered into its abutting face.

18. A clip of the class described, having a base plate adapted to rest flatwise upon the intended support and provided with an outwardly struck nailing prong extending at substantially right angles therefrom and terminating in an outwardly presented point adapted to be forced by direct pressure into a nailing block, the base plate also having a tongue normally upstanding therefrom and adapted to be struck down into the open face of a channeled beam or the like, in combination with a nailing block having one of its faces abutting against the base plate and having the nailing prong entered into its abutting face.

19. A clip of the class described, having a base

plate adapted to rest flatwise upon the intended support and provided with an outwardly struck nailing prong extending at substantially right angles therefrom and terminating in an outwardly presented point adapted to be forced by direct pressure into a nailing block, the base plate also having upstanding spaced walls connected by a bridge to afford a channel for the

reception of a channeled beam or the like, the bridge having formed thereon a tongue adapted to be struck down into the open face of the channeled beam, in combination with a nailing block having one of its faces abutting against the base plate and with the nailing prong entered into its abutting face.

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