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MEANS FOR FASTENING PLASTER BOARDS AND THE LIKE.

APPLICATION FILED SEPT. 9, 1918.

1,327,741. Patented Jan. 13, 1920.

Fig. 2.

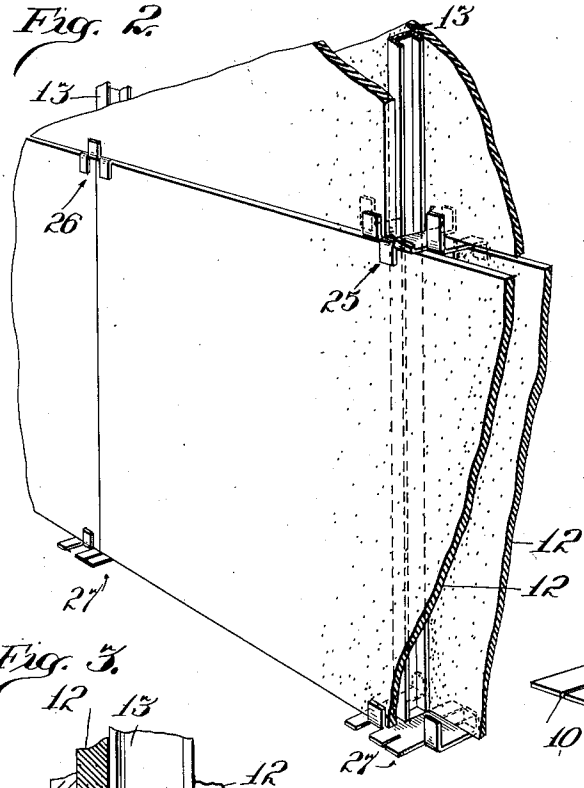


Fig. 1.

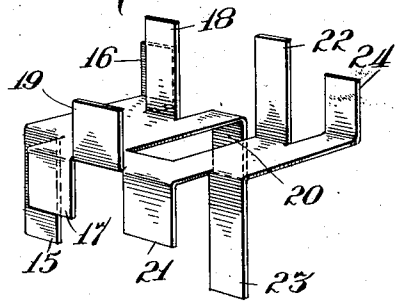


Fig. 5.

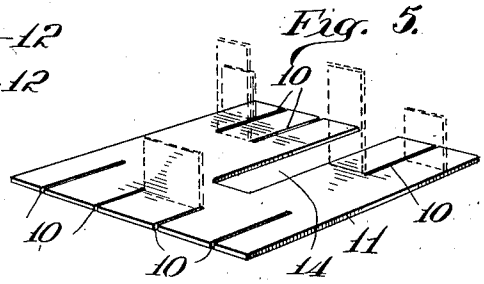


Fig. 3.

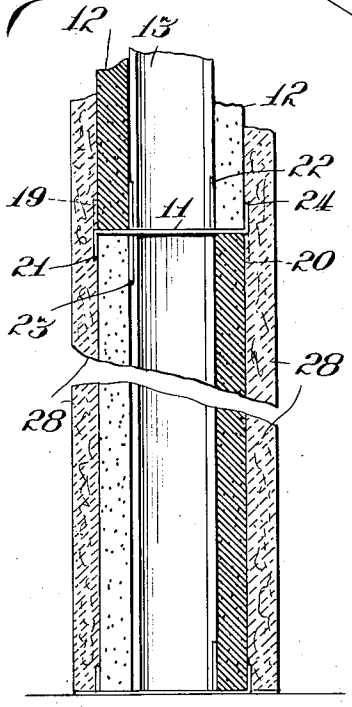
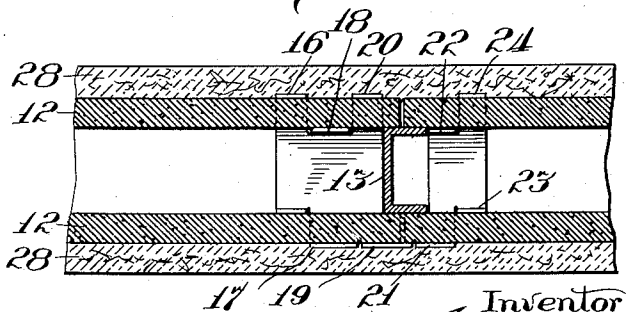


Fig. 4.



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UNITED STATES PATENT OFFICE.

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MEANS FOR FASTENING PLASTER-BOARDS AND THE LIKE.

1,327,741. Specification of Letters Patent. Patented Jan. 13, 1920.

Application filed September 9, 1918. Serial No. 253,191.

To all whom it may concern:

Be it known that I, CLEO G. SHUMAN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Means for Fastening Plaster-Boards and the like, of which the following is a description, reference being had to the accompanying drawing, which forms a part of my specification.

My invention relates to means, shown in the nature of a clip, whereby the elements or boards, adapted to constitute a partition or wall, as well as the elements or boards which may constitute a ceiling, are fastened or secured to the studding of a partition or to the runners of a suspended ceiling; the invention being more especially intended for use in connection with a well known type of plaster-board which is cut or formed to suitable dimensions so as to extend across two or more adjacently placed studding.

My invention is intended to secure the plaster-board so as to have it disposed across the studding and preferably in contact therewith; the fastening means being arranged to secure the plaster-board on opposite sides of the studding; in other words each clip is formed to fasten the boards on both sides of the studding and securely hold the same in place.

The invention contemplates means which may be readily secured to the studding and the plaster-boards without the use of other fastening elements and without the necessity of any special manipulation or bending on the part of the user.

The object and advantages of my invention will be more fully comprehended from the following detailed description of the drawing, wherein:—

Figure 1 is a perspective view of my improved fastening clip.

Fig. 2 is a perspective view of a section of a wall or partition illustrating the application of my improved means.

Fig. 3 is a vertical sectional view of a partition or wall section with my improved clip or fastening means in place.

Fig. 4 is a cross sectional view of a partition or wall section with my improved clip or fastening means.

Fig. 5 is a detail perspective view of a blank cut proper length and slotted and slit to form my improved fastening means or clips, prior to the bending of the various separated portions or slitted parts; illustrating in dotted lines a manner of bending certain of the portions when the clip or means is intended to be used adjacent the floor or ceiling.

My improved fastening means or clip is preferably formed of a sheet metal blank of suitable non-corroding metal, cut to proper dimensions and provided with a predetermined number of slits 10 disposed inwardly from opposite ends of the blank to a predetermined extent so as to leave the intervening or main body portion 11 which is adapted to be disposed intermediate of the plaster-boards 12, 12 arranged on opposite sides of the studding 13, namely within the wall.

The blank is also provided with a slot or cutaway portion, as at 14, disposed lengthwise of the blank from one end thereof, parallel with the slits 10, and of a width commensurate with the thickness of the studding 13; the latter being usually in the nature of a channel iron, as shown in Fig. 2, so that the slot 14 is of a width corresponding with the depth of the channel. The length of the blank is greater than the width of the channel or studding and the thickness of the plaster-boards arranged on opposite sides of the studding; in other words, the main or body portion 11 of the blank corresponds with the width of the studding or channel 13; while the slit portions of the blank are disposed beyond the edges or sides of the studding; and the slits are of a length sufficient to permit the various extensions or wings formed thereby to be bent in a predetermined manner so as to have alternate wings or extensions disposed on opposite sides of the same board or element.

The supporting means or clip, as illustrated in Fig. 1, has each end or side thereof provided with an equal number of wings or extensions, which in the exemplication is five in number; and the slits are of such lengths that the wings or extensions may be bent angularly at different vertical planes relative to the main or body portion of the clip. For example, the left hand side of the blank, as shown in Figs. 1 and 5, is slit so as to provide a wing or extension 15, which is bent at the inner end of the slit 10, namely at the juncture of the extension or wing with the main or body portion 11; while the wing 16 on the opposite end and same or left hand

side, of the clip, as viewed in Figs. 1 and 5, is bent at a point intermediate of its ends, namely at a point removed from the inner end of the slit 10. The adjacent wings or extensions 17 and 18 are formed in a reverse manner from that just described; that is to say, the wing 17 is bent at a point intermediate of its ends, while the wing 18 is bent at the inner end of the slits 10, namely at the juncture of the wings with the main portion of the clip; the wings 17 and 18, like wings 15 and 16, being preferably disposed in opposite directions from each other. The intermediate slits 10, on the end of the blank opposite to that provided with the slot 14, are of less length than the end slits, as clearly shown in Fig. 5, so as to leave an integral part of sufficient metal at the end of the slot 14. The portion intermediate of these slits is preferably bent in opposite direction to the adjacent wing or extension 17 to provide a wing or extension 19. The opposite end of the clip has a wing or extension formed by a slit 10 and the slot 14, and this portion is bent at a point intermediate of its ends to provide the angular wing 20 which is disposed in opposite direction to wing 19 and the adjacent wing 18. The portion of the blank adjacent to extension 19 is bent in opposite direction to wing 19 so as to provide wing 21 extending in the same direction as wings 17 and 15; while the opposite end of the blank, at a point corresponding with wing 21, is bent at the inner end of the slit to provide the wing 22, disposed in opposite direction to wing 21 and adjacent wing 20. The right hand side of the blank, as viewed in Figs. 1 and 5, is bent to provide a wing 23, preferably disposed in the same direction as wing 21, bent at the inner end of the slit 10, so as to be disposed in a different vertical plane, relative to the main or body portion of the clip from the plane of wing 21; while the opposite end at the right hand side of the blank has the extension or wing 24 bent at a point intermediate of its ends, namely at a point located in a different vertical plane, relative to the main portion of the blank, from the point where wing 22 is bent.

As will be understood from the foregoing and from the drawing, the clip is provided at both ends with a plurality of wings or extensions, with some of the wings or extensions at both ends of the clip disposed in one direction, while the other portion is disposed in the opposite direction.

As shown in Fig. 1, a major portion of the wings or extensions at both ends of the blank or clip are disposed in the same direction, but in different parallel planes; namely in the specific construction disclosed, adjacent extensions or wings at the sides of the blank or clip and both ends are disposed in the same direction, while the intermediate extensions or wings at both ends are disposed in the opposite direction. The distance between the wings disposed in the same direction at the same end of the blank, but occupying different parallel planes, corresponds with the thickness of the plaster-boards intended to be held thereby.

In practice, the studding of the partitions or walls are usually of channel iron, as shown at 13 in the drawing, although the studding may be of any suitable material and formation, preferably rectangular in cross-section; and the slot or cut-away portion 14 in the blank or clip is of length and width sufficient to adapt the blank to be forced edgewise onto the studding so as to straddle and extend transversely thereof and at the same time permit the opposite ends of the blank, namely the wings heretofore described, to extend beyond opposite sides of the studding so as to enable them to be disposed or bent in the manner described and enable the plaster-board to be disposed between adjacent wings occupying different parallel planes.

In practice, the plaster-board 12 is usually formed or cut into lengths greater than the distance between adjacent studding; the length of the board and distance apart of the studding, however, being such that the abutting ends of the same "run" or row of board will come adjacent a studding or upright 13, as shown in Fig. 2. The clip is forced onto the studding immediately above the boards in such manner that a majority of the extensions or wings on the adjacent end of the blank will be disposed downwardly so as to have the clip extend across the joint between the adjacent boards and permit a pair of wings or extensions to engage with opposite sides of the end of each board. The plaster-board is usually installed so as to have the boards on opposite sides of the studding, as well as on the same side but in different horizontal rows come into abutting relation so as to stagger the joints between the plaster-boards. With this practice, therefore, the clips, which are to hold the plaster-boards intermediate of their ends, are forced onto the studding so as to have the intermediate extension of wing 19 or 20, as the case may be, extend downwardly over the upper edge of the plaster-board intermediate of its ends, as shown at 25 in Fig. 2; while the major portion of the extensions or wings will be disposed upwardly to overlap the abutting ends of different plaster-boards in the row above; the next succeeding clip, however, will be reversed from that just described so as to have the majority of wings extend downwardly to engage the ends of abutting boards in the same row as shown at 26.

As my improved clip or means is formed of sheet metal, which may be readily bent

into the formation shown in Fig. 1, the same blank or clip may be employed to provide suitable means for holding the plaster-boards in place adjacent the ceiling and the floor. For such purpose, the clip may be flattened out into the blank form shown in Fig. 5, to permit it to lie flat on the floor or against the ceiling construction, as the case may be, and a pair, or all of the wings or extensions at both ends of the blank bent in the same direction; with one or more of the wings occupying a different, but parallel plane from that of the other wings or extensions at the same end of the blank. For example, Fig. 2 shows the blank at 27 with one wing or extension bent upwardly to overlap the outer side of the plaster-board 12; while another wing or extension, at the same end of the blank, is bent so as to overlap the rear side of the plaster-board; the same condition existing on the opposite side of the wall or partition, while the remainder of wings or extensions are left flat and parallel with the main or body portion of the blank or clip; the blank or clip being, of course, inserted or forced edgewise on to the studding in the manner previously described.

After the plaster-boards have thus been properly clipped or fastened into place, the plastering is then applied, as shown at 28 in Figs. 3 and 4, to the desired thickness, thereby completely covering the extensions or wings of the clips which overlap the outer sides of the plaster-boards.

It will be readily understood that the clips of fastening means may be made of any suitable size to fit different sized studding and thickness of walls; and that the wings or extensions which are bent at the end of the slits are intended to extend flush with or in the same vertical plane as the edge of the studding.

I have shown and described what I believe to be the simplest and best form of my invention, but alterations may be made in certain details without, however, departing from the spirit of my invention.

What I claim is:—

1. Means for fastening plaster-boards to studding, composed of a blank of sheet metal provided with a plurality of slits of predetermined length extending from both ends of the blank whereby a plurality of separated extensions or wings are provided, the extensions or wings at both ends of the blank being bent substantially at right angles to the main portion of the blank, with a portion of the extensions or wings being bent at their juncture with the main portion, while another portion of said extensions or wings are bent at a point intermediate of their ends, some of the wings being disposed in one direction while the others are disposed in the opposite direction, the blank being provided with a slot extending from one end of the blank parallel with said slits and of length and width to adapt said means to straddle and extend transversely of the studding and permit the extensions or wings to extend parallel with opposite sides of the studding.

2. Means for fastening plaster-boards to studding, comprising a blank of sheet metal provided with a plurality of slits of predetermined length extending part way from both ends of the blank, whereby a plurality of separated extensions or wings are provided, the extensions or wings at both ends of the blank being bent substantially at right angles to the main portion of the blank, with one portion of the extensions or wings at each end of the blank being disposed in one plane while the other portion of the extensions or wings are disposed in a different plane parallel to the plane of the first mentioned portion, with some of the wings of each portion being disposed in opposite directions, the blank being provided with a slot extending from one end thereof parallel with said slits so as to adapt the blank to straddle and extend transversely of the studding.

3. Means for fastening plaster-boards to studding, comprising a blank of sheet metal provided with a plurality of slits of predetermined length extending from both ends of the blank whereby a plurality of separated extensions or wings are provided, the extensions or wings at both ends of the blank being bent substantially at right angles for the main portion of the blank, a majority of the extensions or wings at one end of the blank being disposed in the same direction but in different parallel planes, while a majority of the extensions or wings at the other end of the blank are disposed in the same direction, opposite to the direction of the wings at the first mentioned end, but in different parallel planes, the blank being also provided with a slot extending from one end of the blank parallel with said slits so as to adapt the blank to be forced edgewise onto the studding and extend transversely thereof.

4. Means for fastening plaster-boards to studding, composed of a blank of sheet metal provided with a plurality of slits of predetermined length extending from both ends of the blank to provide a plurality of separated extensions or wings, the extensions or wings at both ends of the blank being bent substantially at right angles thereto, with adjacent extensions or wings at both ends of the blank disposed in the same direction but in different parallel planes, while an intermediate extension at both ends of the blank is disposed in opposite direction to the extensions at the same end of the blank but in the same plane as a portion of said first mentioned extensions, the

blank at a point intermediate of the extensions at one end thereof being provided with a slot whereby the blank may be forced edgewise onto the studding so as to extend transversely thereof.

5. Means for fastening plaster-boards to studding, composed of a blank of sheet metal having a plurality of slits of predetermined length extending from both ends of the blank to provide a plurality of separated extensions or wings, the extensions or wings at both ends of the blank being bent substantially at right angles to the main portion of the blank, a portion of the extensions or wings being bent at their juncture with the main portion, while the other portion of said extensions or wings are bent at a point intermediate of their ends, the extensions or wings on opposite sides of the blank but at the same end thereof being disposed in the same direction, with the wings adjacent to the first mentioned wings being disposed in the same direction as the first mentioned wings but in a different plane parallel to the plane of the first mentioned wings, while the intermediate wing at each end of the blank is disposed in a direction opposite to that of the other wings at the same end of the blank, the blank being provided with a slot extending from one end thereof parallel with said slits and of length and width to adapt the blank to be forced edgewise onto the studding so as to be disposed transversely thereof.

6. Means for fastening plaster-boards to studding, composed of a blank of sheet metal having a plurality of slits of predetermined length extending from both ends of the blank to provide a plurality of wings, the wings of both ends of the blank being bent substantially at right angles to the main portion of the blank, one portion of the wings at each end of the blank being disposed in one plane while the other portion of the wings are disposed in a different plane parallel to the plane of the first mentioned portion, with the distance between the wings at the same end of the blank but in different planes corresponding with the thickness of the plaster-board so as to permit certain of the wings to overlap the front side of the board while the remaining wings overlap the rear side of the board, the blank being provided with a slot or cut-away portion extending from one end thereof parallel with the slits and at a point intermediate of the sides of the blank, the slot or cut-away portion being of such dimensions as to adapt the blank to be forced edgewise onto the studding and extend transversely thereof.

7. As an article of manufacture, a rectangular blank of sheet metal provided with a plurality of slits extending from opposite ends thereof for a predetermined distance to provide a plurality of separated portions, of equal number, at both ends of the blank, the intermediate slits at one end of the blank being of less length than the adjacent slits in said end, while the slits in the other end of the blank are all substantially of equal length, and providing said blank with a slot extending from one of said ends of the blank to a greater distance than the slits in said end, to adapt the blank to be forced edgewise on to the studding of a wall or partition so as to extend substantially equal distances beyond opposite sides of the studding and provide an equal number of slit portions on both sides of the studding adapted to fasten parallelly arranged plaster-boards on both sides of the studding.

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