Aug. 21, 1934. C. A. WALKER ET AL 1,970,989

WALL BOARD

Original Filed Dec. 8, 1930 2 Sheets-Sheet 1

Fig. 1.

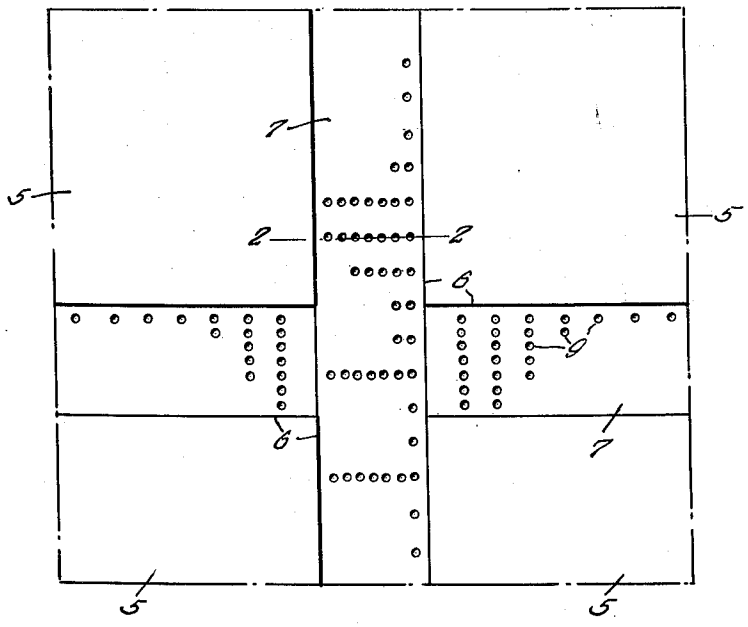


Fig. 2.

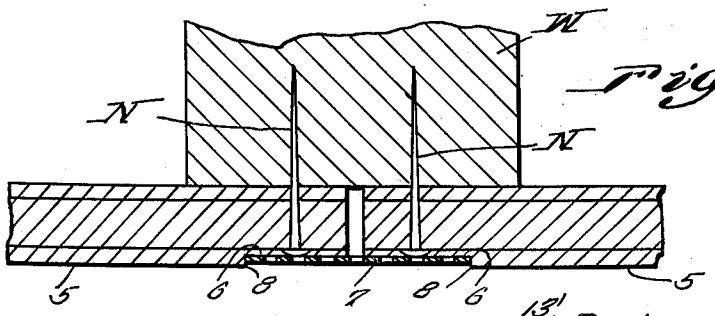
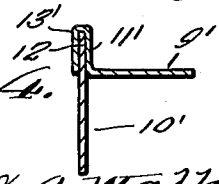


Fig. 4.



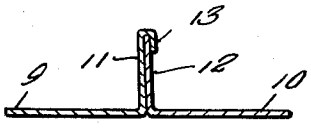


Fig. 3.

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Fig. 5.

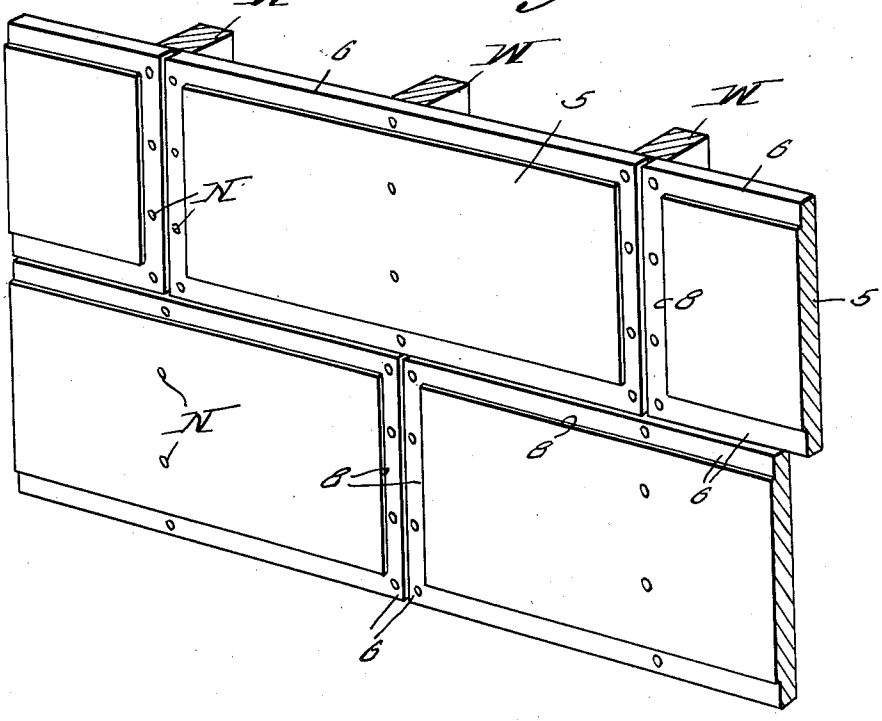
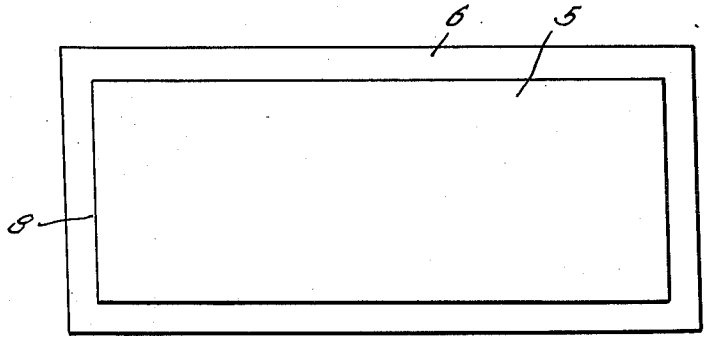


Fig. 6.



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UNITED STATES PATENT OFFICE

1,970,989

WALL BOARD

Carl A. Walker and Leonard D. Booth,
San Antonio, Tex.

Original application December 8, 1930, Serial No. 500,895, now Patent No. 1,936,317, dated November 21, 1933. Divided and this application October 25, 1933, Serial No. 695,177

1 Claim. (Cl. 72—16)

This invention relates to certain new and useful improvements in wall boards, and the primary object of the invention is to provide a wall board construction, which will permit of providing a joint between the several sections of such a character that when the wall formed from the sections is completed, the joints between the several sections will be practically unnoticeable. As is well known in the art, walls formed from wall boards include a plurality of wall board sections arranged in edge to edge relation and a metallic strip or tape is secured to adjacent edge portions of the sections and the strip or tape maintained in position through the medium of a plastic material such as putty or the like which must be tapered out from the strip far enough to attempt to hide the joint. This particular manner of joining the wall board sections so as to hide the joints therebetween has failed to accomplish its particular purpose since the putty and strip applied to the surface of the wall board section will not present a surface flush with the surface of the wall board so that upon almost casual observation one may determine just where the corresponding edges of adjacent wall board sections abut one another.

The manner in which we overcome this difficulty will be best understood from a study of the following description, taken in connection with the accompanying drawings wherein is illustrated a preferred embodiment of the invention.

The present application is a division of our application for Wall board and metal joint cover Serial No. 500,895 filed by us December 8, 1930 and allowed May 2, 1933 and issued as Patent No. 1,936,317, November 21, 1933.

In the drawings:

Figure 1 is a plan view showing two wall board sections embodying the features of the present invention and illustrating the manner of concealing the joints therebetween in accordance with the present invention.

Figure 2 is a transverse sectional view taken substantially on the line 2—2 of Figure 1.

Figure 3 is a transverse sectional view through a modified form of metal tape.

Figure 4 is a similar view through still another form of metal tape.

Figure 5 is a perspective view illustrating a portion of a wall and the preferred manner of mounting the improved wall board thereon, and

Figure 6 is a plan view of the improved wall board.

With reference more in details to the drawings it will be seen that the improved wall board section which is formed from gypsum, plaster of Paris, or like material is designated generally by the reference character 5, and on one face at its marginal edge provided with a recess or groove 6 extending along all its marginal edge portion. The recess 6 is formed by reducing the marginal edge portion in thickness whereby the grooved face side of the board is provided with a raised portion providing inwardly from the marginal edge of the board a continuous shoulder 8.

When the sections are arranged in edge to edge relation for completing a wall structure, it will be seen that the joint between the sections, that is to say where the corresponding edges of adjacent sections confront one another, the reduced portions 6 provide grooves for accommodating a strip or tape 7 of metal. The strip or tape 7 is of such a width as to have its edges contact the shoulders 8, the strip thus fitting snugly within the groove between opposed shoulders 8 and intersecting the joint between the confronting edges of adjacent wall board sections.

Under and over the strip 7 is applied a plastic material such as putty or the like, and the strip 7 is provided with perforations 9 to insure proper contact of the plastic material with the strip for securing the strip in position. The plastic material is then leveled so as to provide a surface flush with the surface of the wall board section. When completed the wall will have a smooth flat surface, and when painted, or finished in any other manner the joints between the wall boards will be slightly if at all discernible.

The wall board sections 5 are secured to the wall studding W by suitable nails or other fastening elements N, and the nails or fastening elements are preferably driven through the reduced edge portions of the sections at the ends of the section, and through the thickest portion of the body of each section when nailed to a studding between the ends of the section.

Usually, and as shown in Figure 2 the strip of metallic tape 7 is flat on both faces. We propose however, to substitute for the flat strip a strip that is substantially T-shaped in cross section as shown to advantage in Figures 3 and 4. While the T-shaped strip may be, and preferably is formed of one piece, said strip in the present instance is formed from two elongated pieces or sections 9 and 10 respectively provided at said contacting edges with flanges 11 and 12, the upper portion of the flange 11 being bent over the upper edge of the flange 12 and clinched as at 13. Thus the sections are secured together and the flanges 11 and 12 provide as it were a rib of the T-shaped strip. The strip is adapted to be in-

serted in the space between the confronting edges of the two adjacent wall board sections 5 with the main body portions of the strips 9 and 10 resting in the groove provided by the reduced edge portion of the wall board sections. In that embodiment of the invention shown in Figure 4 the tape therein is of angular construction being best adaptable for use at corners and angles for concealing the joint. In this connection it will be seen that the tape comprises two sections 9', 10', respectively disposed at right angles to each other. The section 9' adjacent one edge thereof is provided with a lateral flange 11' which overlaps one edge portion of the section 10', the free edge portion of the flange 11' being bent over the edge portion of the section 10' as at 13' whereby to provide at the junction of the sections 9' and 10' the rib 12'.

From the foregoing then it will be seen that in providing a wall board or as may be stated a wall board section that is countersunk or reduced adjacent its marginal edges the joints between the adjacent wall board section comprising the wall structure may be rendered substantially invisible, especially to the casual observer.

When securing the wall boards to the studding there are preferably arranged as shown in Figure 5 so as to break the vertical joint between the ends of the board. The end edge portions of the board seat against and are secured to the stud of the wall, the intermediate portion of each board all of which is clearly illustrated in said Figure 5.

By forming a continuous groove 6 all around the wall boards, especially when such boards are made from gypsum, plaster of Paris, or other material which does not require the application thereto of a thin plaster coat as is required by composition wall boards, such wall boards of gypsum, plaster of Paris, or the like may be arranged as shown in Figure 5.

At the present time wall boards formed of gypsum, plaster of Paris and similar substance, when provided with grooves, have such grooves only adjacent two opposite longitudinal edges thereof requiring the board, in the construction of a wall, for example, to be placed perpendicularly precluding any such arrangement of the boards as suggested in Figure 5 whereby to break the vertical joints between the ends of the board as is now possible, we have found, where such boards have the grooves or reduced portions at all of its marginal edges.

In actual practice it has also been found that by having wall boards formed of the material above suggested provided with a groove or reduced portion at all of its marginal edges there is a great saving of material in completing the wall for the reason that through the medium of a suitable tool, and when it is necessary to cut away or dispense with a portion of the board 5 a groove corresponding to the groove 6, and paralleling the line of cut may be made during the cutting operation so that when the cutting operation is completed, the edge of the board formed by the cut will present a groove forming a continuation of the groove 6. In other words, after a cutting operation the board will have in every respect the appearance of the original board 5, differing from the original board 5 only in size.

Further, and as is obvious where the boards are provided only on each of two side edges with a reduced or recessed edge portion the joints at the other two ends or edge portions of the board will not of course be of the same nature as the joints between the confronting smooth edges of adjacent wall board; or in other words, the joints between confronting edges of the adjacent boards will not be uniform.

What is claimed is:

A wall structure consisting of a plurality of wall boards in edge to edge relation and joint strips between the boards, each board being formed of gypsum or the like and having a marginal recess in its outer face, whereby all four edges of the board are of less thickness than the major part of the board, said recess being of greater depth than the thickness of the joint strips placed in the recesses of adjacent boards, whereby the outer faces of said strips are located in planes inwardly of the planes of the outer faces of the major portions of the boards, said recess being formed in the outer face of the composition material from which the board is formed and both the side edges and the end edges of the board being straight and unbroken.

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