

Jan. 4, 1927.

J. STRAND

1,612,993

WALL CONSTRUCTION AND METAL MEMBER THEREFOR

Filed March 13, 1924

Fig. 3.

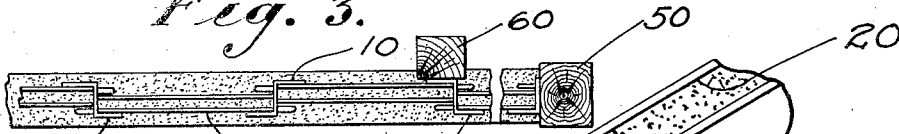


Fig. 1.

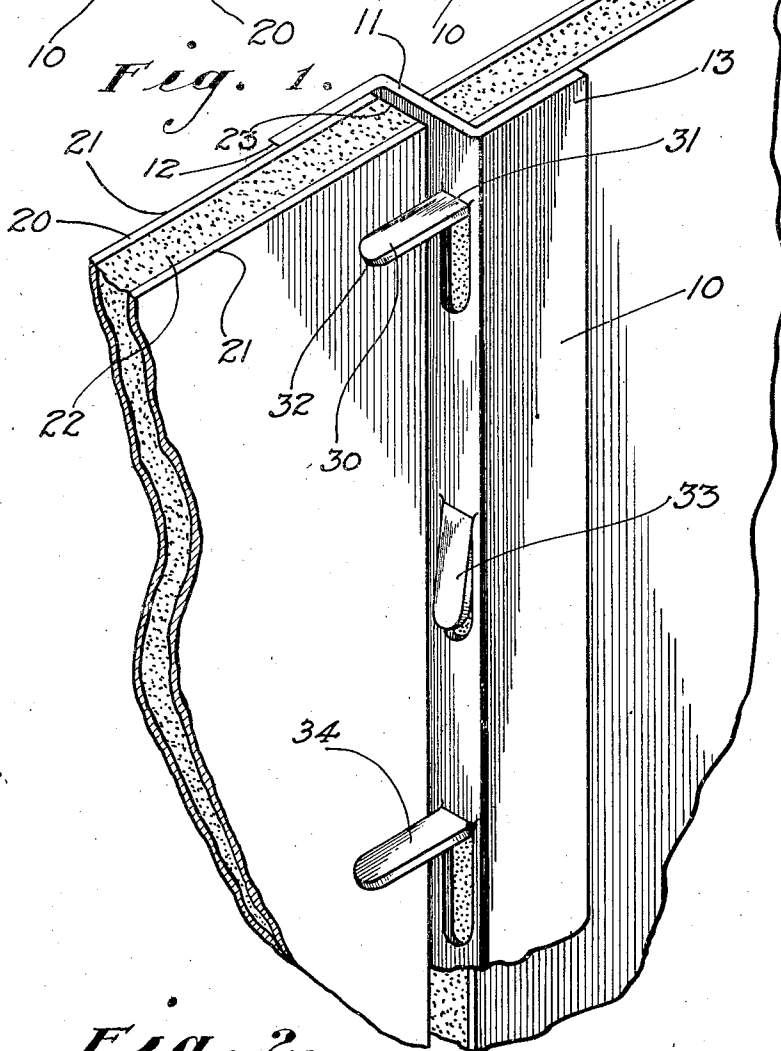
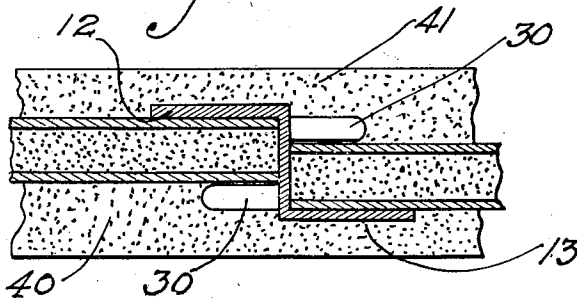


Fig. 2.



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Patented Jan. 4, 1927.

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UNITED STATES PATENT OFFICE.

JOSEPH STRAND, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO KLINCH LATH CORPORATION, OF LOS ANGELES, CALIFORNIA, A CORPORATION OF CALIFORNIA.

WALL CONSTRUCTION AND METAL MEMBER THEREFOR.

Application filed March 13, 1924. Serial No. 698,900.

My invention relates to building construction and more particularly to the construction of plaster walls, partitions and the like. It is common practice in building construction to provide walls and partitions which are formed of various structural members and which are coated with a plaster coating to give a smooth surface and a high degree of heat and sound resistance. It is also common practice to utilize what is known as plaster board for this purpose. Plaster board is formed of a thin layer of plaster between two sheets of paper, the plaster being allowed to harden in contact with the paper to form a thin flat sheet having a low first cost. My invention relates particularly to walls and partitions which are formed of such material.

My invention embodies the use of metal members which usually run vertically from the floor to the ceiling, plaster board sheets being supported between these members. My invention also embodies the manufacture of these metal members in quantity and the provision in these members of cheap and convenient means for securing the sheets of plaster board rigidly in place between the metal members.

Further objects and advantages will be made evident hereinafter.

Referring to the drawing which is for illustrative purposes only,

Fig. 1 is a perspective view of a portion of a wall equipped with my invention.

Fig. 2 is a section through a portion of such wall.

Fig. 3 is a view on a much reduced scale showing diagrammatically the position of the metal and plaster board members.

In the form of the invention shown, I utilize metal members 10 which are preferably formed in Z-shape, each of these members consisting of a web 11 and two oppositely disposed parallel flanges 12 and 13. When used in a wall or partition, the members 10 extend vertically from the ceiling to the floor, being spaced apart as shown in Fig. 3 by a distance substantially equal to the width of the plaster board sheets 20 which it is desired to use. These plaster board sheets usually consist of two layers of paper 21 and a central layer of plaster 22. The edges 23 of the sheets of plaster board 20 are placed in abutment on the web 11 on either side thereof, the sides of the plaster

board sheets 20 adjacent to these abutting edges 23 being in contact with the flanges 12 and 13. Punched in the web 11 are a plurality of tongues 30, these tongues being joined to the web at 31 and having a free end 32. They are initially in the position shown at 33 in Fig. 1, being bent out only slightly from the plane of the web from which they are formed. This allows the plaster board to be pushed into place against the flanges 12 and 13. After the plaster board has been pushed into place, the tongues 30 are bent upwardly into the position shown at 34 in Fig. 1. The tongues 30 then extend outwardly substantially at right angles to the web 11 and rest against the plaster board, holding it in firm contact with the flanges 12 and 13. By referring to Fig. 2, it will be seen that there are two series of tongues 30, one series cooperating with the flange 12 and the other cooperating with the flange 13. In forming a partition the plaster board is put in place and secured by the tongues and two layers of plaster 40 and 41 are then applied, covering the metal members 10 and the plaster board 20 and forming a smooth wall. Where the wall abuts against a column, as shown at 50 in Fig. 3, one of the flanges 13 and one set of the tongues may be omitted, the web of the member 10 being nailed or otherwise secured to the member 50. Where this construction is used in a wall, the members 10 may be secured to vertical studding, such as that shown at 60 in Fig. 3. The metal member 10 is preferably formed of thin sheet iron which is readily formed into the shape required. By my construction it is possible to very cheaply build walls and partitions which are quite rigid and which remain flat under all ordinary conditions met with in practice. The metal members 10, when embedded in the plaster, greatly stiffen such a wall or partition and the use of studdings 60 may generally be dispensed with.

I claim as my invention:

1. A metal member for use in plaster board wall construction comprising: a metal member having a pair of flanges and a web, said web being wider than the thickness of the plaster board with which the member is to be used; and horizontal tongues formed of said web in such a position as to cause their respective inner edges to engage said plaster board and hold it against said

flange, the major surfaces of said tongues being disposed in horizontal planes.

2. A metal member for use in plaster board construction comprising: a web; a flange formed on said web and projecting at right angles from one edge of said web; a second flange formed on the other edge of said web and projecting at right angles to said web in a plane parallel to said first named flange but in an opposite direction; and horizontal tongues cut from said web in such a manner that they can be bent out to cause their respective inner edges to cooperate with said flanges to support sheets of plaster board having their edges abutting on said web and their sides, adjacent to said abutting edges, abutting on said flanges.

3. A metal member for use in building construction comprising: a web; two flanges oppositely extending in parallel planes from the two edges of said web; and two series of horizontal tongues cut from said web, one series immediately adjacent to one of said flanges and the other series immediately adjacent to the other of said flanges, said tongues each having a free end adapted to be bent in a vertical direction outwardly to throw the tongue into a horizontal position at right angles to the vertical plane of the adjacent flange.

4. A metal member for use in building construction comprising: a web; two flanges oppositely extending in parallel planes from the two edges of said web; and two series of horizontal tongues cut from said web, each of said series positioned adjacent one of said flanges, the tongues of said series extending in an opposite direction to the adjacent flange with each tongue disposed at right angles to the plane of said flange.

5. A metal member for use in plaster board construction comprising: a web; a flange formed on said web and projecting at

right angles from one edge of said web; a second flange formed on the other edge of said web and projecting at right angles to said web in a plane parallel to said first named flange but in an opposite direction; and means disposed edgewise relative to the plane of the cooperating plaster board and formed entirely from said web cooperating with said flanges to support sheets of plaster board having their edges abutting on said web, and their sides adjacent to said abutting edges abutting on said flanges.

6. A metal member for use in building construction comprising: a web; two flanges oppositely extending in parallel planes from the two edges of said web; and two series of tongues cut from said web, one series immediately adjacent to one of said flanges and the other series immediately adjacent to the other of said flanges, said tongues each having a free end adapted to be bent out to throw the tongue into a position at right angles to said web whereby the flat surfaces of said tongues may be disposed in a plane substantially at right angles to said wall board.

7. A metal member for use in building construction comprising: a web; two flanges oppositely extending in parallel planes from the two edges of said web; and two series of tongues cut from said web, one series immediately adjacent to one of said flanges and the other series immediately adjacent to the other of said flanges, said tongues each having a free end adapted to be bent out to throw the tongue into a position at right angles to said web whereby the edge of said tongue may engage the side of said wall board.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 3rd day of March, 1924.

JOSEPH STRAND.