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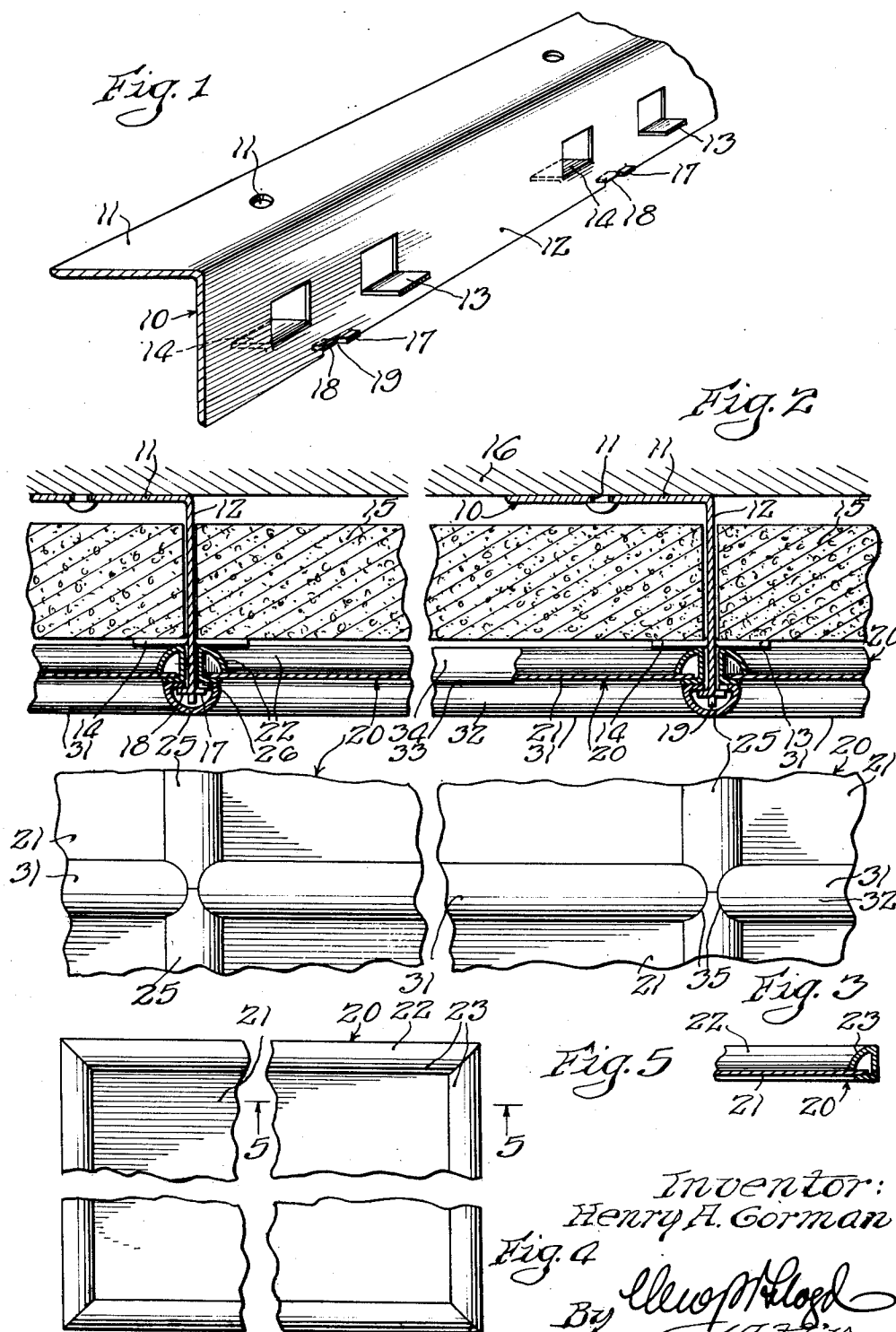
H. A. GORMAN

1,939,809

WALL FINISHING MATERIAL

Filed Feb. 24, 1930

2 Sheets-Sheet 1



Dec. 19, 1933.

H. A. GORMAN
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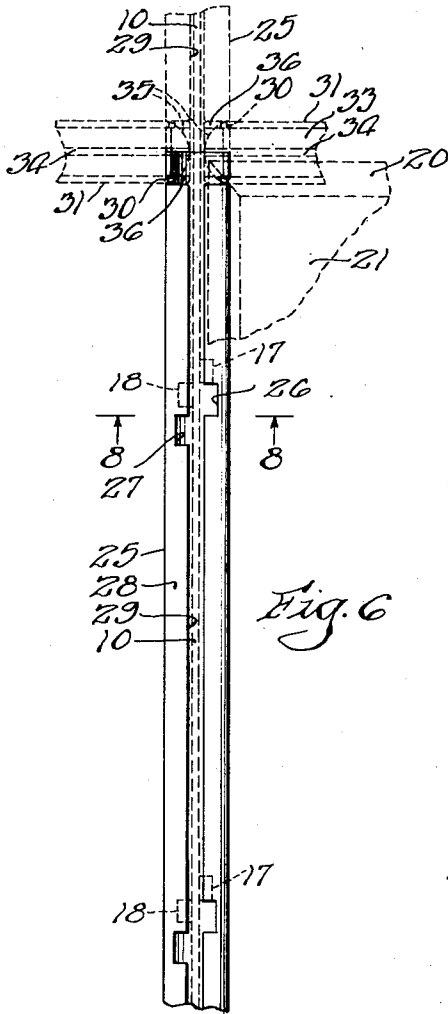


Fig. 6

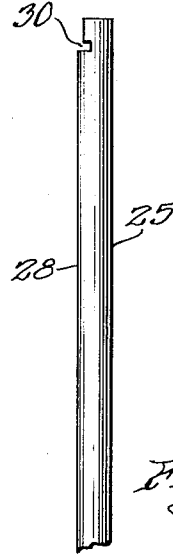


Fig. 7

Fig. 8

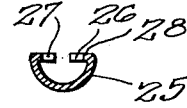
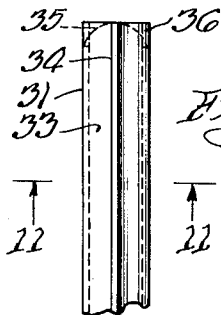


Fig. 9

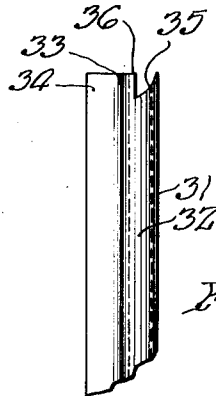


Fig. 10



Fig. 11

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UNITED STATES PATENT OFFICE

1,939,809

WALL FINISHING MATERIAL

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Application February 24, 1930. Serial No. 430,535

6 Claims. (Cl. 189—88)

The present invention relates to a wall or ceiling covering, and has particularly to do with the attaching of such covering, including the provision of an unique item of manufacture, as well as a new and improved locking apparatus adapted to be used in connection with such covering and other articles similarly used.

At the present time, there is a demand for ceiling and wall coverings of a type different from plaster or plaster board, and there is also a pronounced need for acoustic wall and ceiling material whereby the sounds within the room are largely absorbed by the walls thereof. In the present invention, the specific type of supporting means, as well as the particular covering material, and likewise the special locking device, are not necessarily limited to acoustic materials, but may be employed with equal facility in connection with other ceiling and wall covering.

The objects of the present invention, among others, include the following:—

An improved method of supporting wall and ceiling tile, membrane, or covering sheets or strips.

An unique supporting means for wall and ceiling covering materials.

An unique method of supporting an article used independently or as a facing to cover sound absorbing material.

An unique method of covering sound absorbing material, as well as support such material.

An unique locking device adapted to be secured to a supporting means for the purpose of securing thereto a wall or ceiling face.

A method of covering a wall or ceiling with a facing member independent of any associated material.

An unique method of locking a facing member upon a ceiling or a wall.

A method of combining a supporting member, and a facing material, with or without associated acoustic material, so that the facing member may be readily removed and replaced without disturbing the sound absorbing material, when present, or the supporting member.

A highly useful wall covering comprising a facing member, and supporting elements, with or without acoustic material, in which there may be unitary construction in respect to the facing member, but which member may be readily removed and replaced without disturbing the other elements of the apparatus.

An unique ceiling and wall covering.

These objects, and such other objects as may hereinafter appear, are obtained by the novel construction, unique arrangement, and improved combination of the several elements illustrated in the accompanying drawings, hereby made a part of this specification, and illustrating one embodiment of the invention, and in which:—

Figure 1 is a fragmentary view of a suitable supporting strip in perspective;

Figure 2 is a transverse section, fragmentary in nature, of a complete wall installation, including such supporting strip, acoustic material, a facing member, and locking elements;

Figure 3 is a plan view of a portion of a ceiling employing the elements just mentioned;

Figure 4 is a fragmentary plan view of one form of facing member;

Figure 5 is a transverse section through one of the members shown in Figure 4;

Figure 6 is a bottom view of one of the longitudinal locking elements;

Figure 7 is a side view of such locking element;

Figure 8 is a transverse section thereof;

Figure 9 is a plan view of a cross lock element;

Figure 10 is a side view thereof; and

Figure 11 is a transverse section therethrough.

Like reference characters are used to designate similar parts in the drawings and in the description of the invention which follows.

In some of the heretofore proposed forms of acoustical wall and ceiling devices, facing material may be combined with acoustical material in a single unit, called a "tile". Such tile may be secured to a wall in various ways, and in most instances, the acoustic material and the facing material therefor are in a single frame, the frame forming a support for the acoustic material which is cut to fit therein.

In the present invention, such a condition does not exist, the acoustic material, when used, and the facing member being separate, and for the purpose of securing the facing member and the acoustic material to the wall or ceiling, a supporting member, independent of both such acoustic material and the facing member, is employed. This supporting member is shown best in Figure 1.

Said member comprises an angle iron 10 of relatively light gauge, one face 11 thereof having perforations 11 therethrough at spaced intervals, for the purpose of attaching the angle iron 10 to the wall. Said member 10 may be of any suitable length, and it is customary to attach it to the wall or ceiling by nails or screws as the

initial step toward installing the present form of wall covering.

In that portion 12 of the angle iron which is used for supporting the acoustic material and facing element and which is normal to that portion 11 attached to the wall, are two entirely different series of tangs generally spaced predetermined distances apart.

As is shown in Figure 1, there are two tangs 13 and 14 of equal size disposed about one half of the distance from the fastened section 11 to the outer edge of the supporting wing 12. Tang 13 is at one side of the flange 10 and normal thereto, and tang 14 is on the opposite side and also normal to the face of wing 12. The faces of tangs 12 and 13 are in parallel alignment. It is upon these tangs 13 and 14 that acoustic material rests.

Such acoustic material 15 may be in strips and may be threaded into the support therefor from adjacent one end of the room such material 15 generally being of considerable thickness, but flexible. Such material 15 is threaded between the supports 10, and may be run from one end wall to the other end wall adjacent the ceiling, resting on one side on tang 13 and on the other on tang 14.

In the present arrangement, it is proposed to space the acoustic material 15 from the ceiling 16 (or adjacent wall) and also to provide a space intermediate the acoustic material 15 and the facing member. The acoustic material 15 is naturally unsuited for use as an exposed wall covering, nor lending itself to painting, being incapable of decoration, and being of loosely gathered fibers. Such material is generally of a relatively soft composition, and hence is wholly unsatisfactory as a wall surface.

Upon the supporting member 10, there are also tangs 17 and 18 arranged adjacent its edge. The tangs 17 and 18 are normally intermediate the larger tangs 13 and 14, and, as in the case of the larger tangs, one tang 17 is turned in one direction normal to the flange, and the other 18, in the opposite direction. A slot 19 is formed as a result of forming the tangs 17 and 18 from the material and the bending of such material in opposite directions, as indicated.

Against the tangs 13 and 14 is disposed a tile or sheet or membrane 20. Said membrane 20 comprises any suitable facing material 21 having about its edges a reinforcing frame 22, as is shown in Figures 4 and 5. The frame 22 generally is a sheet or strip of material which is crimped upon the surface element 21 and which, in respect to the under surface, is flat, but, in respect to the upper and inner surface, has a configuration 23 semi-circular in cross section, as is shown in Figure 5.

Such semi-circular cross section 23 is adapted to engage the under surface of the tang 13 or 14, as the case may be, to space the sheet 21 from the acoustic material 15. To secure the plates or sheets or frames 20 in position, longitudinal strips 25 following the direction of the angle irons 10 are provided.

Said strips 25 are normally of the same length as the plates or tiles 20. Each element 25 comprises a sheet of metal which is rolled, as is indicated in Figure 8, and which at spaced intervals has cut out portions 26 and 27 corresponding to the tangs 17 and 18. As the material is arranged, see Figures 6, 7, and 8, there is a flat surface 28 on one side of the strip having

a longitudinal opening 29, which permits of the locking element 25 being longitudinally disposed upon and along a supporting angle iron 10.

Member 25 may be made to register with the tangs 17 and 18 on said supporting member, so that when it registers openings 27 and 28 therewith, and thereafter member 25 may be slidably moved along said angle iron 10 to cause the element 25 to surround tangs 17 and 18 and thus hold element 25 against displacement except longitudinally. When in such registering position, the locking member 25 is moved longitudinally along the supporting member 10 so that the tangs 17 and 18 are wholly within or bear upon the interior of the locking member 25. Thus, a tile 20 resting upon a locking element 25 is locked in position upon the supporting member 10 with the semi-circular framed edges of the facing element 20 engaging the larger tangs 13 and 14.

Each locking member 25 has at its end a portion 30 cut from its under surface to facilitate its engagement with a transverse locking device 31, shown in Figures 9, 10, and 11. Each transverse locking member 31 comprises a strip of metal rolled to provide a half round surface 32 with a flat under surface 33 from which a depending flange 34 extends. The depending flange 34 is adapted to engage the edges of adjacent tiles 20, to hold them slightly separated but in position, and to prevent the tiles 20 from sliding along the longitudinal support 10. Each end of the transverse member 31 has a cut out part 35 therein, illustrated in Figures 10 and 11, so that the element 31 may abut the longitudinal locking strip 25 and provide a close joinder therewith.

The under cut section 35 is adapted to engage the periphery of the longitudinal locking member 25, there being a tang or extension 36 upon the transverse member 31 which is adapted to be inserted beneath the under cut portion 30 of the longitudinal locking member 25.

By the employment of the two locking members 25 and 31, the facing member 20 is held in position and prevented from displacement relatively to the longitudinal supporting members 10, and each member 20 is independently held in a locked position in selected symmetrical arrangement along the said supporting members.

For the purpose of removing the member 20 and replacing them with fresh members 20 and with fresh locking members 25 and 31, it is but a simple expedient to remove the longitudinal locking members 25 after which the transverse locking members 31 may be removed, the removal of these members permitting of the displacing of the facing members 20, after which new facing members 20 or the old facing members cleaned and repainted may be readily replaced on the supports 10 with freshly painted or cleansed locking members 25 and 31, so that the removal of a wall surface covered by the present invention and its replacement with fresh external material is a simple mechanical operation, and requires but little time and labor.

I claim:

1. A wall covering comprising a strip adapted to depend vertically from a support and having opposed tangs intermediate top and lower edges, a locking member having a slot to enclose the edge of said strip, the slot in said locking member being enlarged at spaced intervals to register with the tangs on said strip along which said member is slidable, and a plate supported by

said member when disposed on said strip with its enlarged slot out of registry with said tangs.

2. A wall covering comprising a strip, having spaced apart tangs adjacent to and away from its depending edge, a plate having an outer frame, and a supporting member for said plate comprising a tube having a slot of the width of the edge of said strip and having enlarged sections registering with the tangs adjacent the edge of said strip, said locking member when supported by the tangs on said strip maintaining said plates with its frame engaging the tangs remote from the edge of said strip.

3. A wall covering, as described in claim 2, and having acoustic material supported by the tangs remote from the edge of said strip.

4. Mechanism for holding acoustical material in spaced relationship to a wall and comprising parallel strips depending from said wall by an edge, there being tangs projecting normally to said strips adjacent to their edge disposed away from said wall and other tangs projecting from said strips at a greater distance than the first mentioned tangs from the secondly mentioned

edge, wall plates spaced from said acoustical material, and tubular strips having a flanged longitudinal opening slidably receiving a section of one of said strips and provided with notches in said flange, intermediate the ends of said tubular members, for admitting said first mentioned tangs into said opening, the secondly mentioned tangs being in support of a section of said acoustical material disposed between said strips and in said spaced relationship, and said tubular members being in support of said wall plates and adapted for coupling with said parallel strips when slid longitudinally thereof sufficiently to move said notches out of registry with said first named tangs.

5. A wall covering, as described in claim 4, and in which said acoustic material is disposed upon said secondly mentioned tangs.

6. A wall covering, as described in claim 4, and in which said acoustic material is disposed at the side of said secondly mentioned tangs opposite to said plates.

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