

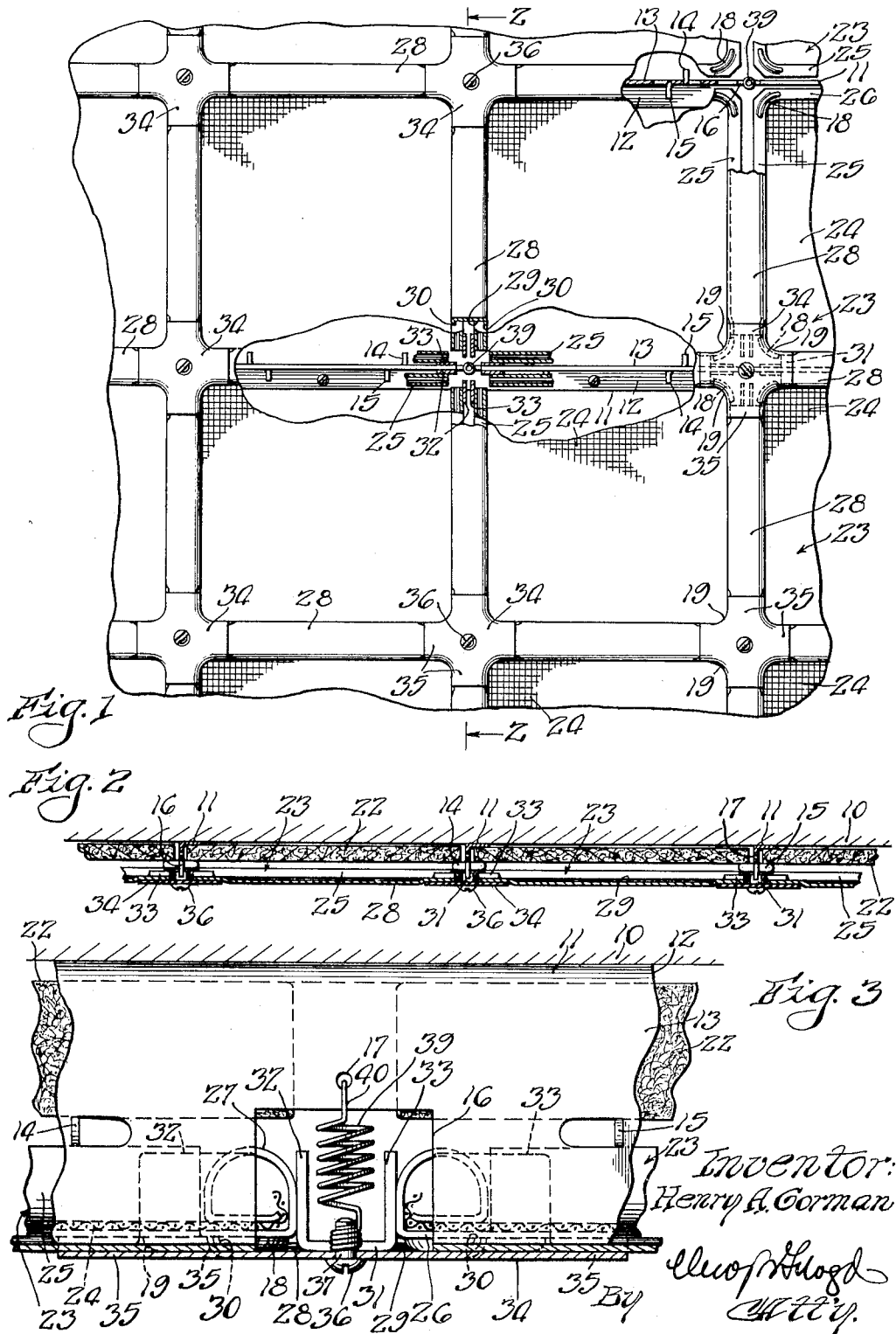
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WALL FINISHING MATERIAL

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WALL FINISHING MATERIAL

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The present invention relates to correlated units providing a wall covering and has particularly to do with an improved acoustic wall finishing material and the attachment thereof to a ceiling or to a wall.

The objects of the invention, among others, include the provision of:—

An improved and cheaper acoustic wall finishing material.

10 An improved means for securing such a material to a ceiling or wall.

Unique linear suspension of an improved form for wall finishing materials and capable also of use with tiles, and having in association therewith an unique means for concealing the abutting edges of adjacent wall covering units.

20 A novel combination of a wall finishing member or unit, linear support therefor, concealing members at the edges thereof, and unique means for securing the concealing members and the wall finishing members associated therewith to the linear support.

25 A wall finishing unit of uniform size, and an effective linear support therefor, the unit and the support having associated therewith means for the concealment, spacing and added support for such unit.

30 A simple support for sound absorbing sheet material adapted to be disposed between linear supports.

35 A novel and unique means for supporting individual metallic or other tiles or wall finishing units in a manner whereby they are readily assembled in a finished wall and readily removed therefrom for cleaning or repainting.

40 An unique running strip to border and assist in the support of wall finished members in a ceiling or walls.

A readily removable support for wall finishing units suspended from linear supports disposed upon a ceiling or the like.

45 A unique linear supporting strip having deformable members for supporting a sound

deadening strip and providing a spacer or guide member for a wall finishing material associated therewith.

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 which constitute the single embodiment of the invention illustrated in the accompanying single sheet of drawing, hereby made a part of this specification, and in which:

Figure 1 is a plan view, partly in section, of a plurality of wall finishing units, linear supports therefor, and the edge concealing members thereon;

Figure 2 is a transverse section of the line 2—2 of Figure 1; and

Figure 3 is a fragmentary sectional detail of a linear member and associated elements.

Like reference characters are used to designate similar parts in the drawing and in the description of the invention hereinafter given.

Reference character 10 in the present instance is used to designate a ceiling which is a conventional surface for receiving acoustic treatment. On the ceiling 10 and in spaced parallel relationship, there are disposed a plurality of spaced apart angle irons 11. Angle irons 11 when positioned comprise a horizontal portion 12 adapted to be secured to said ceiling 10 in any suitable manner, as by nails, and an upright or vertical portion 13. Cut from the material of section 13, are tongues 14 which may be made to project in the opposite direction. By such treatment, the tongues 14 and 15 extend from the opposite side of said section 13.

Tongues or tangs 14 and 15 are generally somewhat tapering but may possess other selected shapes. Said tongues generally are formed by cutting or stamping the material of the linear support. Each tongue 14 or 15 has a body generally parallel to the material of section 13 and such body in the course of manufacture is articulated to a

position slightly offset from the material of flange 13. Such offset allows the insertion of a tooth between tongue and linear strip to provide ready articulation. For convenience of manufacture, such tongues 14 and 15 are generally regularly spaced, those on the opposite sides of the horizontal member 13 being adjacent to one another.

At regularly spaced intervals, the material of the linear member 11 is cut away to form a recess 16. Generally the recess is intermediate a tongue 14 and a tongue 15. The recess 16 has a lower edge parallel to the outer edge of the flange 13, and the material intermediate said edge and the flange 12 is apertured as shown, the aperture 17 being somewhat removed from the external edge of the linear member 11.

In the conventional installation of the strip 11, the tongues 14 and 15 provide a support for a strip of felt or other sound absorbing material 22 which may be drawn between the linear supports 11 from any portion or section of the strips, such sheet of felt or other sound absorbing material 22 being adapted to slide inwardly of the linear strips and over the tangs 14 and 15 while being positioned. When such material 22 has been forced inwardly of the tangs 14 and 15, said tangs are bent from parallelism with to a position normal to flange 13 by pliers or the like. When so bent, the tangs 14 and 15 provide a support for said strip 22, and also serve to space wall finishing material or units later to be described, the felt leaving an air space therebetween. While replaceable, it is seldom necessary to remove or change material 22, but by the present method of installation, such material 22 is readily removed and replaced as well as rapidly installed in the outstart by deforming the tongues 14 and 15 with pliers or similar instrumentalities.

Against the lower side of said tongues 14 and 15, wall finishing units are laid. The units 23 illustrated comprise a sheet of facing material 24 which may be wire mesh or any other selected material, having at the edges thereof, metal moulding 25, which moulding comprises a front or lower section 26 parallel with the sheet 24, and a beaded or rounded section 27. The end of each strip of moulding is mitered to provide a neat corner joint with the moulding strip abutting it.

Moulding 25 is firmly secured to sheet 24 in any suitable manner and thus a flat metal face for the wall finishing unit 23 with reinforced edges is obtained. Before it is desired to place units 23 in position, such units are generally chemically treated or painted or otherwise finished. Each unit 23 has at its corner an angular bead 18, and the depth of the moulding is slightly greater than the

distance from the lower edge of tangs 14 and 15 to the outer edge of the flange 13.

In the installation of units 23, sound absorbing material 22 is generally first inserted between linear strips 11 and the tangs 14 and 15 bent normal to flange 13. Such sound absorbing material infrequently is omitted.

Before positioning units 23 rosette 34, which comprises four legs or leaves 35, ninety degrees apart, is disposed on the members 11. Each leaf 35 comprises a channelled section of relatively short length and quite shallow. The edges of the channelled legs or leaves 35 turn upwardly, and the space therebetween is slightly greater than the overall width of spacing members 28 soon to be described. In the center of the rosette is an anchoring means of selected character, as shown, there is an anchor member 36 in the form of a spring, and between each leaf or leg 35 there is a bead 19 which bead is adapted to register with a bead 18 in a corner of a wall finishing unit 23. The anchor 36 may extend through the rosette 34 to provide a support 37 in the form of a threaded shank to which is attached a helical spring 39 having a hook 40 at the end thereof. Other spring or flexible fastening means may be used. Other methods of forming or anchoring the rosette may be substituted for that shown. For neatness, the material of rosette may be countersunk to seat the head of the support 37.

The hook end 40 of said spring 39, which is called the free end, is adapted to be seated in the aperture 17 upon a linear member 11. After the wall finishing units 23 are placed in position with a rosette at each corner, concealing strips 28 are placed in position on the linear strips 11, the strips 28 being positioned in registry with and under the proper leaf 35 of a rosette 34. The weight of a wall finishing unit 23 is relatively slight. The weight of the strips 28 on linear supports 11 and the two at the other edges of the wall finishing unit 23 is also very slight. The rosettes 34 with their connecting springs 39 are more than amply sufficient to firmly secure the units 23 in proper position when the strips 28 fail in position. Units 23 are laid in position, against the opposed articulated tongues 14 and 15, such members 14 and 15 forming spacing guides in the strips 11.

On the supporting strips 11, beneath adjacent rosettes 34 there are disposed linear spacing members 28 as indicated above. Each member 28 has a shallow channelled section 29, the edge portions 30 of which are relatively narrow. The edge portions 30 impinge the units 23 on their flat sections 26. The ends of the channelled members 28 include a short section having an extension 31 slightly wider than the thickness of a strip 11. The material at each side of said exten-

sion 31 is articulated to form pieces 32 and 33 which are parallel or constricted as the pieces extend away from the outer face of extension 31. One piece 32, may be of greater width than the opposite piece 33 to facilitate attachment. The pieces 32 and 33 form guides for the ready positioning of the strips 28 in the strips 11.

The space between the pieces 32 and 33 narrows as the inner edges thereof are approached to provide a friction grip on linear strips 11. The end pieces 32 and 33 are adapted to slidingly engage the opposite faces of a section 13 of the linear member 11 whereby to be accurately guided into position by such linear member to secure uniformity of relative position with the edge of a unit 23.

As or after each additional unit 23 is laid it is usual to place therebetween and the next adjacent unit and transversely of linear strips 11, another member 28. Each of said strips 28 so laid has no frictional engagement with a linear member to hold it in position, hence it is maintained in assembled relation by placing the opposite ends thereof under the proper wing 35 of a rosette 34. Such strip 28 in such position rides upon the edges of adjacent units 23, the pieces 32 and 33 providing spaces between adjacent units to obtain the uniformity of position longitudinally as well as laterally necessary to give to the wall finish a neat and uniform appearance. It is usual to separate the adjacent units 23 by supporting strips 28 as said units 28 are placed in position under the rosettes 34, but this may be done later. Complementary beads 18 and 19, heretofore mentioned, when in registry prevent relative movement of the strips 28 and rosettes 34.

The spring 39 supporting each rosette 34 provides sufficient flexibility or elasticity to permit of the insertion of each of strips 28, or their ready removal, without disturbing the other supporting strips 28 in juxtaposition to the one being manipulated. Thus, a covering for a ceiling or wall may be rapidly laid by placing rosettes 34 in position, then arranging the wall finishing units 23 thereunder, and then placing the spacing strips 28 at the side of and between the units 23, continuing along an area defined by two linear members 11 in the manner indicated until the area described is completely covered.

To remove any unit 23, or any series of units 23, it is but necessary to remove the necessary strips 28 and then the units 23, which is readily done because of the flexibility of the support for the rosette 34, so that in a very short time, any unit 23, or group of units 23, or a whole ceiling or wall covering may be detached. Thus, when wall finishing material units 23 become soiled, they

may be removed for cleansing or for painting remote from the room where used. As one set of units 23 is taken down, another set may be rapidly installed making it unnecessary to have a bare ceiling for any length of time.

Wall finishing units, supporting strips and rosettes may be all of the same color, or they may be of different colors whereby to obtain novel decorating effects.

A readily removable series of metallic or other units 23 may thus be provided to conceal a strip of felt or other sound absorbing material. When metal wire units 23 are used, the mesh in the metallic unit 23 is adapted to break up sound waves and to facilitate the absorption of such sound waves by the sound absorbing material 22 adjacent thereto. The units 23 are resiliently and elastically supported by the tension of the rosette springs 39, as are the edge strips 28, held, and because of such elastic support, there is no possibility of a unit 23 ever working loose. For the same reason, the units 23 are free from vibration or the production of any noise incident to vibration of the supporting surface 10 therefor.

I claim:

1. A wall covering comprising linear members, wall finishing units therebetween, strips upon said linear members to space said units, and elastic supports comprising spaced apart springs disposed upon said linear member for said units.

2. A wall covering comprising linear members, wall finishing units therebetween, strips loosely secured upon said linear members to space said units, engaging members for said strips and units, and a spring intermediate said linear members and said engaging members and exerting a tension normal to said strips.

3. A wall covering comprising linear members, wall finishing units therebetween, strips on said linear members to maintain said units in spaced relation, and elastic supports for said units and strips and exerting a tension normal to said strips.

4. A wall covering comprising linear members, wall finishing units therebetween, removable strips along said linear members, elastic supports for said units and strips and exerting a tension normal to said strips, and similar strips transversely intermediate said tiles and supported by said elastic supports.

5. A wall covering comprising linear members, wall finishing units therebetween, removable strips engaging said members, similar strips transversely intermediate said units, corner members engaging the ends of said strips, and elastic means intermediate said linear members and said corner members and exerting a tension normal to said linear members.

6. A linear holding strip for wall finishing

material, and having a body normal to the plane of its supporting object, said body having deformable tangs intermediate away from its lower edge, said tangs normally being in parallelism with said body and being deformable to a position normal thereto.

7. A strip for supporting wall finishing material and having a body with spaced apart notches, there being a connecting member anchored in each notch, and a deformable tang at the sides of each connecting member.

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