J. B. WEBB.

FURRING STRIP.

APPLICATION FILED OCT. 24, 1914.

1,153,836.

Patented Sept. 14, 1915.

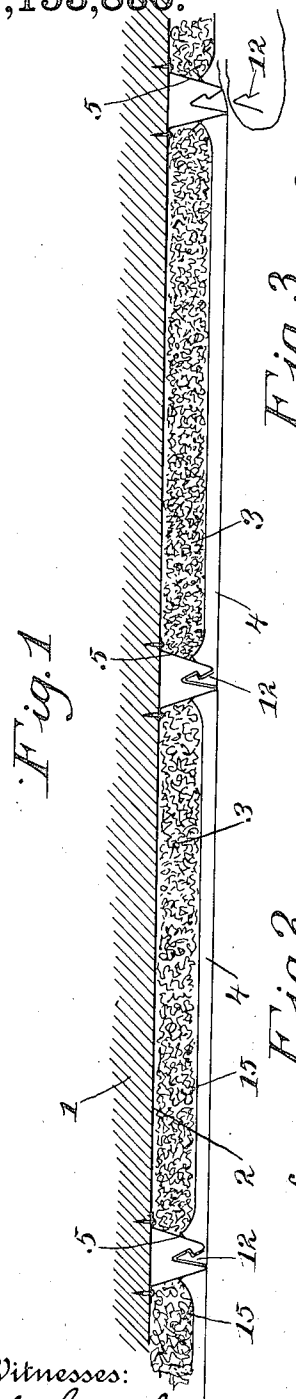


Fig. 1

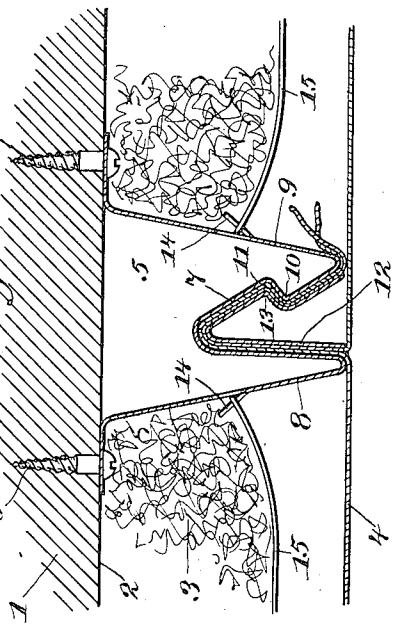


Fig. 3

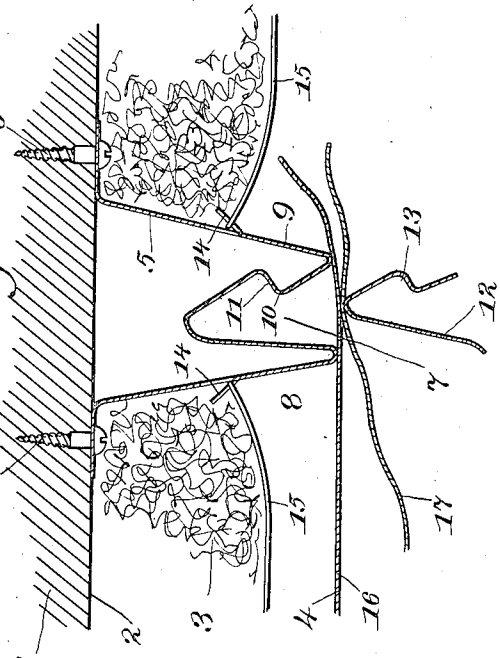


Fig. 2

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# UNITED STATES PATENT OFFICE.

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## FURRING-STRIP.

1,153,836. Specification of Letters Patent. Patented Sept. 14, 1915.

Application filed October 24, 1914. Serial No. 868,512.

*To all whom it may concern:*

Be it known that I, JERVIS BENNETT WEBB, a citizen of the United States of America, residing at Mount Vernon, county of Westchester, State of New York, have invented certain new and useful Improvements in Furring-Strips, of which the following is a specification.

My invention relates generally to coverings for walls and ceilings and has particular reference to a further development of the means disclosed in a co-pending application, filed of even date herewith and serially numbered 868,513 for applying covering fabric in a manner to present a continuous unbroken surface uniformly smooth and even throughout its entire area.

While the present invention is not limited in its application and is adaptable for various purposes, it finds its principal use in acoustical construction where walls, having one or more layers of felt or other sound-proofing and absorbing material applied thereto or formed in part therewith, are required to be given a surface finish by a covering of fabric which, in many cases, must be stretched over large areas or panels in which no molding is to appear.

In my co-pending application referred to, the means disclosed for uniting, stretching and securing widths of fabric as a covering for a wall or ceiling, is given the form of a two-part strip, which is designed to be constructed preferably of wood and the strip members secured together by screws, nails or the like. Further, in uniting several widths of fabric to form the covering, each width is required to be tacked along both of its edges to secure it to the supporting strips. Such a construction is objectionable in many instances, first, for the reason that it is not fire-proof, and second, owing to the time, labor and expense involved in securing the coöperating members of the strips together and the widths of covering fabric to the strips.

In order to overcome the above objections, I form the strips of stamped-up metal and give the members thereof such shape as to cause them, when assembled in operative relation, to automatically interlock and securely unite the widths of covering fabric along the line of their adjoining edges, without requiring the aid of additional fastenings of any kind. In addition to serving every purpose for which the wooden strip referred to is adapted, the present metal strip performs the further function of supporting or maintaining the sound-proofing and absorbing material in position on the wall or ceiling.

The covering fabric, applied in accordance with the present invention, serves not only to entirely conceal the sound-proofing and absorbing material but also the means by which the covering itself is secured in position. Thus arranged, surfaces of unlimited area may be covered without requiring the use of finishing strips at intermediate points and may be reinforced to any extent found necessary to insure solid construction.

Another feature of importance consists in supporting the fabric, forming the covering proper, out of contact relation with both the sound-proofing and absorbing material and the means employed to unite and secure the several widths of fabric in position. Thus supported, all surface inequalities in the covering are avoided, as well as discoloration from fading, collection of dust, etc., in sections or portions thereof.

The accompanying sheet of drawings illustrates the best form of device at present known to me for carrying my invention into effect.

In the drawings, Figure 1 is a sectional view illustrating the method of securing sound-proofing and absorbing material to a wall, ceiling or other surface and applying a covering fabric thereto, in accordance with the present invention. Fig. 2 is a detail sectional view showing the preferred form of two-part strip employed for securing the sound-proofing and absorbing material and covering in position, the members of the strip being shown separated, ready to engage the overlapping edges of adjoining widths of covering extending between them; and Fig. 3 is a similar view of a finished portion of the covering.

Referring now to the drawings, 1, represents a section of a wall, ceiling or the like, to the surface 2, of which, a backing of sound-proofing and absorbing material 3, and covering of fabric 4, is shown applied.

Ordinarily, the sound-proofing and absorbing material and covering, as applied

to walls or other surfaces, is divided into panels, each of which usually requires a number of widths of fabric to cover it and as it is desirable for many reasons, and often necessary, in meeting the requirements of specifications, to avoid the use of moldings or finishing strips excepting around the edge of such panels, means must be employed at intermediate points for securing and reinforcing both the sound-proofing and absorbing material and the covering in order to insure solid construction and further for presentably uniting the several widths of covering fabric in a manner to avoid objectionable surface inequalities.

A device suitable for serving the purposes above stated, is shown in the drawings as a two-part strip, which is preferably formed of stamped-up sheet metal. The member 5, of the strip is designed to be secured to the wall by screws 6, or other fastenings and is approximately W-shaped in cross section to provide a central channel or groove 7, extending throughout its length and supporting portions 8, and 9, on either side of the grooved section, the support 8, being made slightly longer than 9, as shown, for a purpose which will appear later on.

One side of the groove 7, is shaped in at 10, reducing the width of the groove at about the mid point of its depth and immediately below the point 10, the outward shaping of the same side of the groove gives the effect of an under-cut shoulder 11, as shown.

Adapted to coöperate with the grooved member 5, there is a tongue 12, formed in cross-section to fit snugly within and conform to the groove, into which it is designed to be sprung. On entering the groove, the tongue becomes removably locked therein by the shaped portion 13, thereof engaging or taking under the shoulder 11.

Extending outwardly from opposite sides of the supporting portions 8, and 9, of the strip member 5, there are a series of hook-like lugs 14, over which is looped the wire or wire netting 15, employed to support the sound-proofing and absorbing material in position.

In the use of the above described stripping in applying sound-proofing and absorbing material and covering fabric to a panel or like surface, a number of the grooved strip members 5, the length of the panel, are arranged in parallel relation, on centers ordinarily from 18 to 48 inches, and fastened to the wall. Then the acoustical felt or other sound-proofing and absorbing material is placed between successive lines of stripping and secured in position by wire or wire netting looped over the lugs of the strip members 5. Next, a width of covering fabric such as is indicated, for example, at 16, in Fig. 2, is suitably secured along one edge to the left hand marginal strip of the panel, (not shown) and after being well drawn over the grooved strip member 5, is held thus, while a second width of fabric, indicated at 17, in Fig. 2, is arranged face down on the first width 16. Next the tongue member 12, is placed on the overlapping edges of the two widths of covering fabric immediately over the groove, as in Fig. 2, and on being pressed or forced inward, carries both thicknesses of material with it into the groove (see Fig. 3) in which it becomes locked by the projection 13, thereof springing under the shoulder 11, as above described. As a result of causing the overlapping edges of both widths of covering fabric to be carried into the groove by the tongue, they become securely united along the line of such overlapping edges, and at the same time, the width 16, is subjected to a further stretching action which takes up any remaining fullness and draws the fabric sufficiently to free it of wrinkles and give it a perfectly smooth and even surface, as represented in Fig. 1. The width 17, is then folded over and drawn toward the next grooved strip and the operation above described repeated and so on to the completion of the surface to be covered. In thus applying the covering, it will be observed that the two-part strip employed as just described to unite and secure the widths 16, and 17, of the fabric to the wall along the line of their meeting edges, will be entirely concealed by the covering, and as arranged, will lie wholly below that portion of the fabric forming the covering proper, as the short side 9, of the grooved strip member clears the covering and the long side 8, thereof engages only the inturned edges. Exteriorly, the effect at the meeting edges of any two widths of fabric is similar in all respects to a finished seam produced by a line of stitching. The above described two-part metal stripping may be employed at the edges of the panel as well as at intermediate points therein, it being the practice when so employed to cover it by suitable finishing strips or moldings.

As the many important advantages of the invention will be apparent to those skilled in the art, it is not deemed necessary to further enlarge upon the brief statement of the same contained in the foregoing description.

I wish it understood that I do not limit myself to the exact form or details of the two-part strip herein shown and described, as various changes may be made therein without departing from the spirit or scope of my invention. Strips of other cross-sectional form, for example, may be employed and assembled in other relations, provided they are adapted to perform the same or substantially the same functions of the strip shown.

Other means may be substituted for the tongue and groove features, if capable of interlocking in a manner to unite and secure adjoining edges of two widths of covering fabric in position without requiring the aid of other fastening means.

The above mentioned and like changes have not been illustrated, as I look upon all such as obvious modifications and clearly within the present invention.

Having, therefore, described my invention, I claim:—

1. In coverings for walls and ceilings, fastening means comprising interlocking members adapted to secure two widths of covering to the wall or ceiling along the line of their adjoining edges, the said fastening means being concealed by the covering.

2. In coverings for walls and ceilings, fastening means comprising interlocking members adapted to secure two widths of covering to the wall or ceiling along the line of their adjoining edges, the said means being concealed by the covering and shaped to hold said covering clear of the wall or ceiling.

3. In coverings for walls and ceilings, fastening means comprising interlocking members adapted to unite two widths of covering along the line of their adjoining edges, one of the members of said fastening means being secured to the wall or ceiling and both members thereof concealed by the covering.

4. In coverings for walls and ceilings, fastening means comprising interlocking members adapted to secure two widths of covering to the wall or ceiling along the line of their adjoining edges, the said means being concealed by the covering and having no contact relation with the outer surface thereof.

5. In coverings for walls and ceilings, fastening means comprising interlocking members adapted to secure two widths of covering to the wall or ceiling along the line of their adjoining edges, the said means being concealed by the covering and having contact relation with the meeting edges only thereof.

6. In coverings for walls and ceilings, fastening means interposed between the covering and the wall or ceiling and comprising interlocking members adapted to secure two widths of the covering together along the line of their adjoining edges, one member only of said fastening means being attached to the wall or ceiling.

7. In coverings for walls and ceilings, a plurality of widths of covering having their adjoining edges overlapping, and fastening means comprising interlocking members arranged one on each side of the said overlapping edges and adapted to unite and secure the several widths of covering to the wall or ceiling along the lines of such overlapping edges, the said means being concealed by the covering.

8. In coverings for walls and ceilings, a plurality of widths of covering arranged with their adjoining edges turned inward toward the wall or ceiling, and interlocking fastening members uniting and securing the several widths of covering to the wall or ceiling along the lines of their inturned edges, the said members being concealed by the covering and arranged in contact relation with the inturned edges only thereof.

9. In coverings for walls and ceilings, a plurality of widths of covering arranged with their adjoining edges overlapping, and a two-part fastening means the members of which interlock automatically to unite and secure the several widths of covering to the wall or ceiling along the lines of their overlapping edges, the said fastening means being concealed by the covering.

10. In coverings for walls and ceilings, a plurality of widths of covering arranged with their adjoining edges overlapping, and a two-part fastening means the members of which interlock automatically and have the said overlapping edges of the covering extending between them, one member of the said fastening means being secured to the wall or ceiling and the other member concealed within a fold of the covering.

11. In coverings for walls and ceilings, two widths of covering material arranged with their adjoining edges overlapping, and a two-part fastening means the members of which interlock automatically to unite and secure the widths of covering to the wall or ceiling along the line of their overlapping edges, one member of the fastening means being concealed within a fold of the covering.

12. In coverings for walls and ceilings, two widths of covering material arranged with their adjoining edges overlapping, and tongue and grooved members adapted to unite and secure the widths of covering to the wall or ceiling along the line of the overlapping edges, the grooved member having a longitudinally extending shoulder formed therein and the tongue member being concealed within a fold of the covering and shaped to conform to the groove.

13. In coverings for walls and ceilings, two widths of covering material arranged with their adjoining edges overlapping, and interlocking tongue and grooved members adapted to unite and secure the widths of covering to the wall or ceiling along the line of their overlapping edges, the said members being concealed by the covering.

14. In coverings for walls and ceilings, two widths of covering material arranged with their adjoining edges overlapping, and interlocking tongue and grooved members adapted to unite and secure the widths of covering to the wall or ceiling along the line of their overlapping edges, the grooved member having a longitudinally extending

shoulder formed in one wall thereof and the tongue member being shaped to the groove and concealed within a fold of the covering.

15. In coverings for walls and ceilings, two widths of covering material arranged with their adjoining edges overlapping, and interlocking tongue and grooved members adapted to unite and secure the widths of covering to the wall or ceiling along the line of their overlapping edges, the said overlapping edges extending between the interlocked tongue and grooved members.

16. In coverings for walls and ceilings, two widths of covering material arranged with their adjoining edges overlapping, and interlocking tongue and grooved members adapted to unite and secure the widths of covering to the wall or ceiling along the line of their overlapping edges, the said overlapping edges extending between the interlocked tongue and grooved members and the said members being concealed by the covering and shaped to clear that portion thereof lying in a plane parallel with the wall or ceiling.

17. In coverings for walls and ceilings, a plurality of widths of covering fabric, fastening means comprising interlocking members uniting and securing the several widths of covering to the wall along the lines of their adjoining edges, the said fastening means being concealed by the covering and provided along opposite sides with a series of projections, a layer of sound-proofing and absorbing material interposed between the wall and the covering, and supporting wires engaging the projections of the fastening means and maintaining the sound-proofing and absorbing material clear of the covering fabric.

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Witnesses:

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