Dec. 13, 1955 R. SAKS ET AL 2,726,419

CARPET ANCHORING STRIP

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fig. 2.

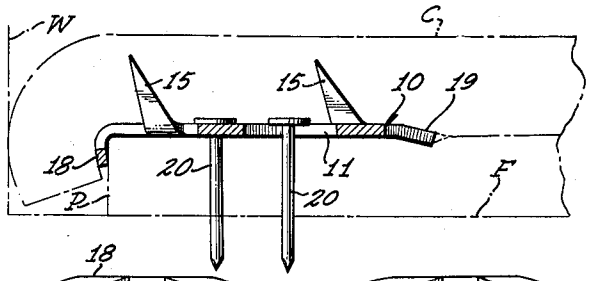


fig. 1.

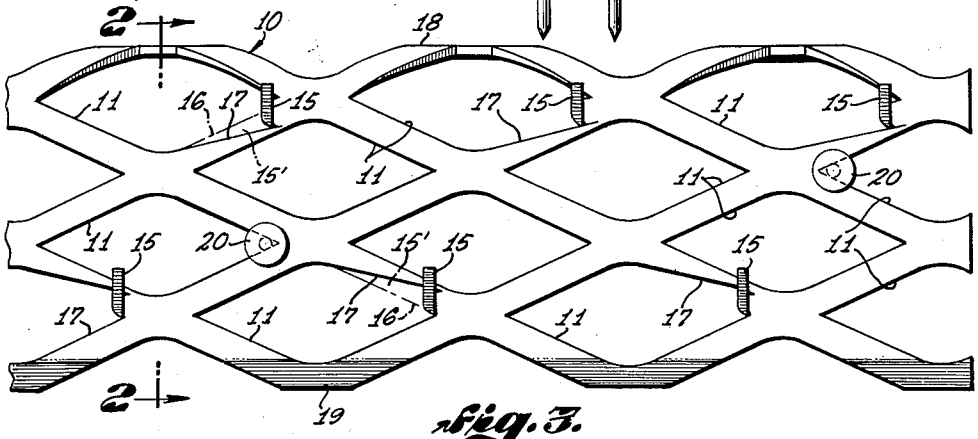


fig. 3.

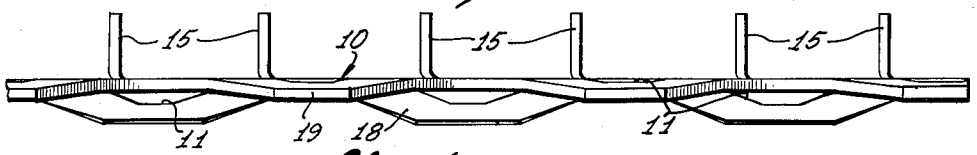


fig. 4.

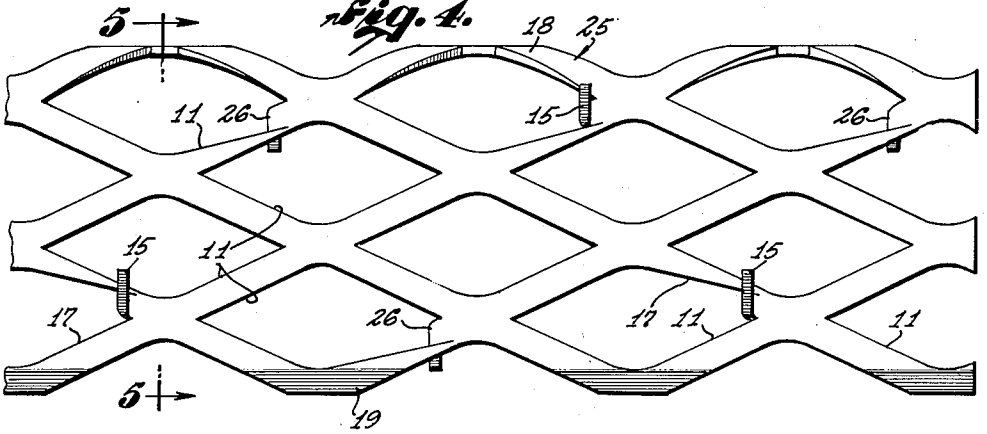
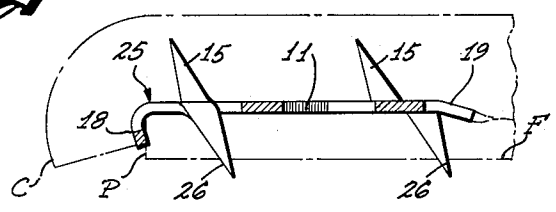


fig. 5.



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CARPET ANCHORING STRIP

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2 Claims. (Cl. 16—16)

This invention relates generally to securing or fastening devices and is concerned particularly with a fastening or holding strip of the type commonly referred to as a "carpet strip" employed to secure the edge portions of a stretched carpet to its supporting floor.

Prior to the last few years it was the common practice, when laying carpeting to secure the carpet material to the floor by means of tacks driven through edge portions of the stretched carpet and onto the floor. This procedure was unsatisfactory for the reason that it was practically impossible to secure the edge portions of the carpet material uniformly without a wavy appearance. Moreover, due to tensioning of the carpet, the tacks had the tendency to loosen and become displaced from the carpet and this not only presented a hazardous condition but impaired the appearance of the floor covering. Furthermore, when removal of the carpet from the floor for the purpose of cleaning the same became necessary, removal of the tacks and reapplying the same, to secure the carpet to the floor, was necessary.

In an effort to obviate the disadvantages noted above, it has become standard practice to utilize a multi-fastening device, known as a "carpet strip," which is secured to the floor along a line where it is desired that the edge of the carpet extend. One such strip consists of a length of plywood which is nailed to the floor and has small upstanding nails or brads providing inclined prongs over which the edge portion of the stretched carpet is hooked. While such a carpet strip has been widely used, it has the disadvantage that due to its thickness it elevates the fastened edge of the carpet material to detract from the appearance of the floor covering that results in a raised edge across which persons may catch the toes of their shoes and this is particularly true when the fastened edge is located, for example, across a doorway. In addition, such plywood carpet strips are relatively expensive to produce and the fastening thereof against the floor by means of small nails driven therethrough is a slow procedure resulting in decreased costs of installation.

In order to alleviate the conditions mentioned above, it has been proposed to employ thin metal carpet strips provided with upstanding, integral prongs over which the edge portions of a carpet are stretched to be impaled thereon. Such strips are constructed as metal stampings and have punched holes through which tacks are driven into the floor to secure the strip in place. While such metal strips are quite practical and efficient in use, they are relatively expensive to produce, due to the special dies required to punch the nail holes and to strike up the many carpet-holding prongs. Such prior metal strips have depending fingers or prongs providing small feet which, in effect, either bow the strip upwardly or elevate the same bodily above the floor so that the strip may tend to spring downwardly when stepped upon.

The present invention contemplates the provision of a metal carpet strip designed to obviate the deficiencies and disadvantages of prior carpet strips, as discussed

above, and it is an object to provide a highly practical, efficient and inexpensive strip for the purpose.

According to the invention, the present improved carpet strip consists of a suitable length of light-weight, open net-like material, such as that material commonly referred to as "expanded metal," said strip of metal having integral, carpet-engaging prongs projecting upwardly therefrom. In one form of the invention, the expanded metal strip is secured against the floor by means of large-head nails disposed within the acutely pointed ends of the diamond-shaped apertures in the metal, thus avoiding the necessity for providing separate nail holes in the metal strip. In another embodiment of the invention, the expanded metal strip is provided with integral, downwardly directed prongs adapted to be driven into the floor to secure the strip thereto.

As a particular feature of the invention, the carpet-engaging prongs are formed as portions of the metal at the inclined sides of the diamond-shaped apertures of the expanded metal strip, thus making it possible to provide the prongs simply as sheared portions of the metal without the use of expensive dies. In a like manner, the lower prongs for driving into the wooden floor are formed as sheared points at the sides of the diamond-shaped apertures. It is thus seen that the present carpet-securing strip is adapted for economical manufacture from standard expanded metal and this reduced cost of production is reflected in minimum cost of installing the carpet material on the floor.

Other features and advantages of the present invention will be apparent from the following detailed description, particularly when taken in connection with the accompanying drawing, in which:

Figure 1 is a plan view of one form of the carpet strip embodying the present invention;

Figure 2 is a cross-sectional view through the carpet strip, taken along line 2—2 of Figure 1;

Figure 3 is a longitudinal edge view of the strip shown in Figure 1;

Figure 4 is a view similar to Figure 1, illustrating a carpet strip of alternative structure; and

Figure 5 is a cross-sectional view, taken along line 5—5 of Figure 4.

Referring first to Figures 1 to 3 in detail, the present improved carpet strip **10** consists of an open net-like metal strip having a plurality of substantially diamond-shaped apertures **11**. The metal strip of the illustrated embodiment of the present invention is formed of so called expanded metal. As is standard practice, expanded metal is formed by feeding the sheet metal through dies which operate to slit the metal at longitudinally and transversely spaced intervals. With the metal thus slit, the sheet is stretched transversely to open or expand the slits and thus form the diamond-shaped openings or apertures **11** throughout the area of the sheet.

While the expanded metal strip **10** may be of any selected width, it has been found that an expanded strip of approximately 1¼ inch wide is suitable for the purpose. Such an expanded strip may be made from a solid metal strip of approximately ½ inch width or if found desirable, the strip **10** may be cut from a larger sheet of the expanded metal. The strip **10** may be made in any desired length and it has been found that a strip three or four feet long is convenient to handle and is in other respects suitable for the purpose. An expanded steel strip of the length, width and thickness mentioned above weighs less than four ounces and when it is considered that the cost of sheet or strip steel is based upon the weight thereof, it will be appreciated that the cost of the base material is extremely low.

According to the invention, the carpet strip **10** is provided with a plurality of pointed prongs **15** which are

staggered lengthwise of the strip. The prongs **15** are integral portions of the strip and are formed along the inclined edges **16** of the diamond-shaped openings **11**. In order to form the prongs, the metal along the edges **16** is slit or sheared along lines indicated by the reference numeral **17** to provide acutely-pointed tabs **15'** which are then bent upwardly substantially normal to the plane of the strip to provide the prongs **15**. As shown in Figure 2, the prongs **15** are inclined in a direction transversely of the strip.

In the illustrated embodiment of the present invention, the longitudinal edge of the strip **10**, toward which the prongs **15** are inclined, is sharply bent downwardly to form a laterally extending flange **18**. The opposite longitudinal edge of the strip is slightly deflected downwardly to provide a pressure flange **19** for a purpose to be later explained.

Assuming that floor covering material C is to be applied to a floor F in wall-to-wall fashion, a carpet pad P is first placed upon the floor as shown in Figure 2 with its edges spaced slightly from each wall W. The carpet strips **10** are next placed upon the edge portions of the pad P with their flanges **18** overlying the edges of the pad and arranged at a slight distance from the walls W. Nails or long tacks **20** are then placed within selected intersections of the sides of the diamond-shaped openings **11** and driven through the pad P to anchor the carpet strip in place, it being noted that the heads of the nails overlie and engage the portions of the metal strip which define the acutely-angled ends of the openings to thus hold the strip down against the pad.

With the lengths of carpet strip **10** thus secured to the floor adjacent the walls W of the room, the carpet C is placed upon the pad P and one of its side edges is pressed down against the strip **10** at a side wall to cause the prongs to penetrate the carpet material and thus retain this edge of the carpet adjacent the wall. The workman then stretches the carpet in a direction toward the opposite or second side wall by means of a conventional "pole stretcher" or a "knee kicker" commonly used for this purpose. The free edge of the stretched carpet C is then pressed downwardly onto the prongs **15** of the metal strip **10** at said second wall to cause its backing threads to become anchored thereto, the extreme edge of the carpet being tucked into the space occuring between the edge **18** of the strip and the wall W as shown in Figure 2, the flange **18** providing a rounded corner over which the carpet material is folded. The opposite flange **19** compresses the pad P slightly to clamp the latter against the floor F.

It will be observed from the foregoing that the carpet C is effectively held in its stretched condition between the walls of the room, it being understood that the operation outlined above in connection with the width of the room is repeated with reference to the length of the room so that the carpet is held stretched in both directions. It will also be noted that the edges of the carpet C may be released from the prongs **15** to free the carpet when it becomes necessary to remove the carpet from the floor for the purpose of cleaning the carpet. To reinstall the carpet, the procedure explained above is followed.

Attention is directed to the fact that the presently preferred carpet strip **10** is made from lengths of conventional expanded metal so that it is very light in weight and very economical to produce without the use of expensive dies. As a particular feature of the invention, the carpet-holding prongs are formed as integral portions of the expanded metal by a simple shearing operation to minimize the production costs. Due to the extremely low costs of production, the over-all expense involved in applying the carpet to the floor is substantially reduced. This is an important consideration from the standpoint of the carpet dealer who may include the cost of laying the carpet in the selling price of the carpet material.

Referring now to Figures 4 and 5, the invention contemplates an alternative carpet strip **25** which is generally similar to the strip **10** described above, like reference numerals representing identical parts. However, in this embodiment of the invention, additional prongs **26** are provided at the lower surface of the strip **25**. As shown, the prongs **26** are similar to the prongs **15** but are somewhat longer and project downwardly and slope in the opposite direction, that is, they are inclined in a direction toward the edge **19**. By this provision, the prongs **26** may be driven into the wooden floor F to anchor the strip thereto, to thereby make it unnecessary to employ the anchoring nails **20**. As a result, laying of the carpet upon the floor may be further expedited to reduce the cost of the operation.

Each embodiment of the present invention provides a feature which is not had with prior carpet anchoring strips. Although the body element of the strip of the present invention is substantially rigid in its own plane, by transversely shearing all but the outermost strip of metal the strip can be very easily formed about a corner or other angularly related wall elements in a room and thereby greatly facilitates laying of the carpet upon a floor in this area. In this operation the remaining strand of the strip acts somewhat as a hinge and permits the adjacent portions of the strip to be easily bent into the desired angular relationship.

Although the now preferred embodiments of the invention have been shown and described herein, it is to be understood that the same are not to be limited thereto for the present invention is susceptible to changes in form and detail within the scope of the appended claims.

We claim:

1. A carpet securing strip, consisting of a thin strip of expanded metal having spaced, diamond-shaped apertures throughout its area and having carpet-engaging prongs projecting upwardly from the plane of the strip, each prong being a part of the metal defining a side of one of said apertures.

2. A carpet securing strip, consisting of a thin strip of expanded metal having spaced, diamond-shaped apertures throughout its area and having a first set of prongs projecting upwardly from the plane of the strip, and a second set of prongs projecting downwardly from said plane, said first and second prongs each being pointed and formed as sheared portions of the metal defining a side of one of said apertures, said first prongs being inclined in a first direction transversely of the strip and said second prongs being inclined in a direction opposite to said first direction.

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