Aug. 1, 1939. F. M. SMALL 2,167,816

FURRING STUD OR STRIP

Filed Oct. 17, 1936

Fig. 1.

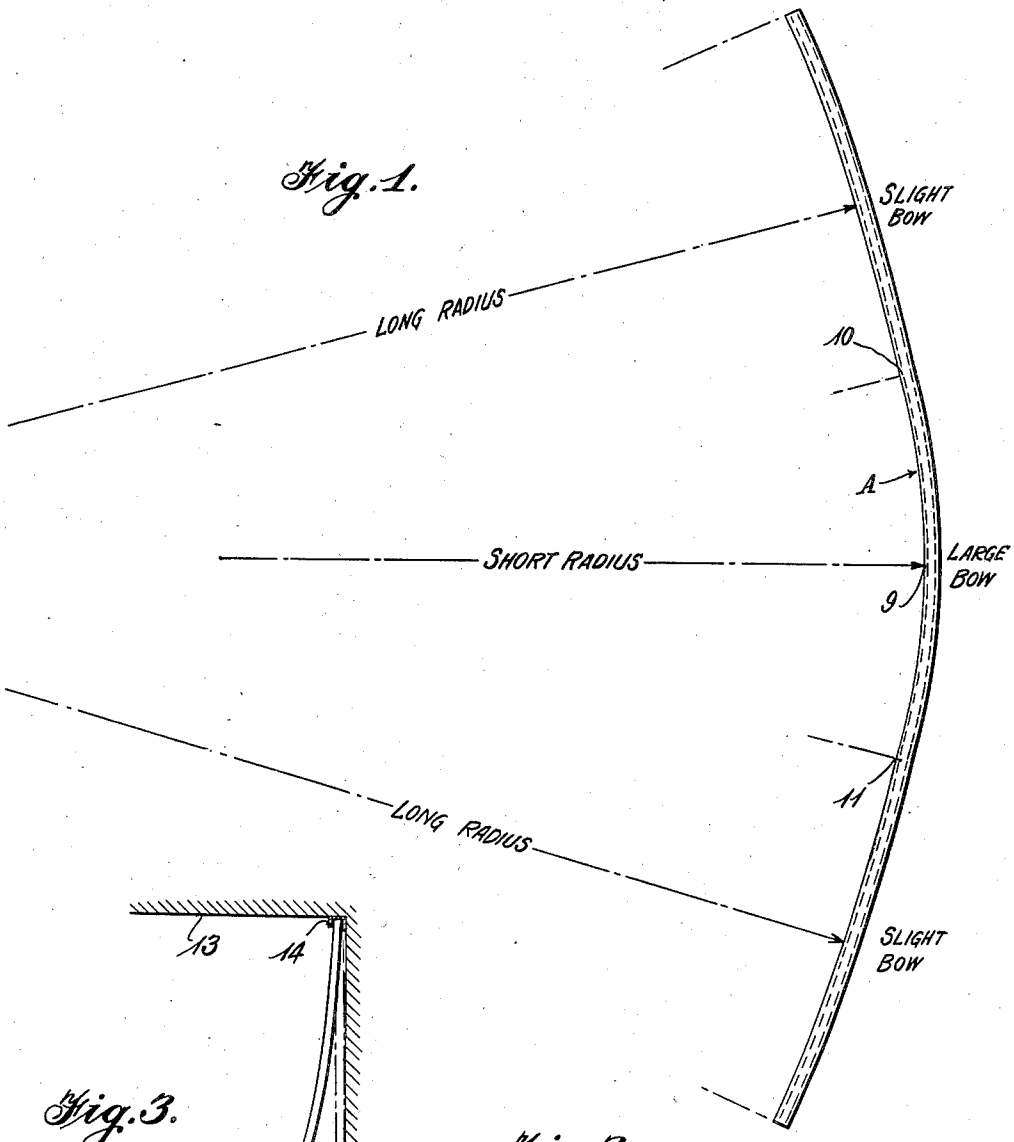


Fig. 3.

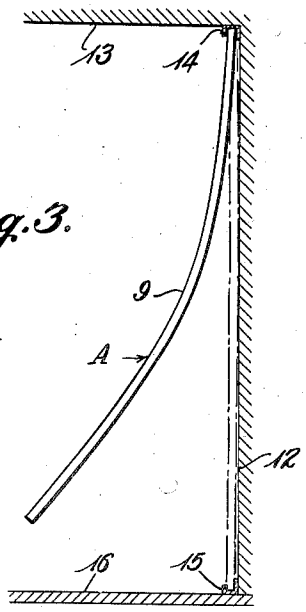
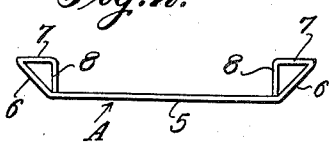


Fig. 2.



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FURRING STUD OR STRIP

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4 Claims. (Cl. 189—85)

This invention relates to new and useful improvements in furring studs or strips.

In refinishing or covering the old walls of a room with paneling, it is very desirable to be able to support the panel units with the fewest number of anchored connections with the old wall as possible. This is desirable not only for economic reasons but contract requirements often specify that the old wall structure be left intact or without anchoring devices driven or imbedded therein.

In applying paneling to an old wall surface, it is necessary to provide some form of furring or framework to which the panel units are applied. Such furring or framework preferably is constructed of metal. It naturally is desirable to employ metal furring strips or frame members which are formed of thin gauge sheet metal, for the thinner the gauge of metal used, the less expense involved in erecting the furring or frame.

It is a primary object of this invention to provide a furring stud or strip for use in securing paneling units to old walls with the furring stud or strip formed of very thin gauge metal and constructed and adapted to be arranged relative to the wall surface to be paneled so that a minimum number of points of anchorage need be provided.

A further important object of the invention is to provide a furring stud or strip which is shaped so that it may be held in tight contact with a wall surface throughout its length with the furring stud or strip anchored at its ends.

A further object of the invention is to provide a furring strip or stud which possesses a novel cross sectional shape and a novel longitudinal contour.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side or edge elevational view of the novel form of furring strip or stud embodying this invention,

Figure 2 is a transverse sectional view of the furring stud or strip disclosed in Fig. 1, and

Figure 3 is a vertical sectional view taken through a room, the walls of which are to be refinished with paneling and illustrates the manner in which the novel furring stud or strip embodying this invention is applied.

In the accompanying drawing, wherein like reference numerals designate like parts throughout the same, the reference character A designates in its entirety the furring stud or strip embodying this invention. This furring stud or strip, due to its particular cross sectional shape and longitudinal contour, may be made of very thin gauge sheet metal. Sheet steel of No. 26 gauge has been found to work very satisfactorily and to be sufficiently strong to efficiently perform its intended work.

Figure 2 discloses the preferred cross sectional shape of the furring strip or stud. The said strip or stud embodies a longitudinally extending, plain body portion 5 with reinforced longitudinal edges 6. One form of reinforcement for the edges of the stud or strip is illustrated and is of hollow or tubular flanged formation. This hollow or tubular formation is of triangular shape so as to provide flat contact areas 7. These flat contact areas are braced relative to the body portion 5 by inwardly directed edge flanges 8.

For the purpose of causing the furring stud or strip A to snugly hug the wall to be paneled, with the said stud or strip anchored at its opposite ends only, and with the stud or strip formed from very thin gauge sheet metal, it has been determined that if the stud or strip is bowed throughout its length, the desired results will be accomplished. When thin gauge metal is used, for example No. 26, it has been discovered that when the furring stud or strip is of a length corresponding approximately to the normal height of a side wall of a room and is uniformly bowed throughout its length, the intermediate portion of the stud or strip may be pulled away from the wall without much difficulty. It will be appreciated, therefore, that the central or intermediate portion of a furring stud or strip which is uniformly bowed throughout its length cannot be relied upon to support very much weight. If, however, the central or intermediate portion of the furring strip is bowed or curved on a shorter radius than the radius of curvature of the end portions of the stud or strip, the central or intermediate portion of the furring member will tightly hug the wall to be paneled and will support as much weight as any other portion of the length of the furring member. In other words, with the furring stud or strip anchored at its ends only, and with the central or intermediate portion of the same bowed on a shorter radius than the radius of curvature of the end portions, said stud or strip will uniformly resist throughout its length any forces tending to pull

the stud or strip away from the wall to be paneled.

Figs. 1 and 3 illustrate the manner in which the furring stud or strip A is to be bowed. The center 9 of the furring stud or strip, or the portion lying approximately between the points 10 and 11 will be bowed on a shorter radius than the end portions of the stud or strip lying outwardly of the points 10 and 11.

In applying this stud or strip to a side wall 12 of the room disclosed in vertical section in Fig. 3, the upper extremity of the stud or strip is first confined or anchored in any desired way to the ceiling 13, the side wall 12 or to both. No attempt has been made to illustrate any particular form of anchoring means. The anchoring element 14, therefore, is intended to merely illustrate the principle and not to restrict the invention.

After suitably anchoring the upper end of the stud or strip A in the vicinity of the angle between the side wall 12 and ceiling 13, the said stud or strip is forced toward the side wall 12 until it occupies the dotted line position illustrated in Fig. 3. When this position is reached, any suitable form of anchoring means 15 is provided for tying the lower end of the stud or strip against the wall 12 in the vicinity of the floor 16. It will be appreciated that the stud or strip A, when occupying its dotted line position in full length contact with the wall 12, will be held under compression throughout its length. That is, all portions of the length of the stud or strip will be exerting a force tending to return the stud or strip to its initial, normal bowed condition. These forces will be directed inwardly toward the wall 12 and outwardly against the anchor devices 14 and 15. The anchor devices and the wall, however, will completely restrain the stud or strip. Due to the non-uniform curvature of the stud or strip, the central or intermediate portion of the same will exert as much force against the wall 12 as the end portions or, in other words, will resist forces tending to pull the central portion away from the wall to the same extent as the end portions of the stud or strip.

With a furring stud or strip of the construction described above, associated with a wall in the manner disclosed, all portions of the length of the stud or strip may be used for directly supporting paneling units, or the like.

It is to be understood that the form of this invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Thus I recognize that the strip need not be bowed throughout its length but that, on the other hand, it may be provided with various forms of shapes for the purpose of resiliently resisting the straightening thereof.

Having thus described the invention, I claim:

1. An article of manufacture comprising a furring stud or strip, said stud or strip being longitudinally bowed and opposed longitudinal edges being angularly bent to form hollow reinforcing flanges, each having a rearwardly disposed flat contact surface for the strip.

2. An article of manufacture comprising a furring stud or strip, said stud or strip being longitudinally bowed and longitudinal edges being angularly bent to form hollow reinforcing flanges, each extending outwardly and rearwardly of the body portion of the strip.

3. An article of manufacture comprising a longitudinally bowed furring stud or strip, the central portion of said strip being bowed on a shorter radius than remaining portions and longitudinal edges of the stud or strip being angularly bent to form hollow reinforcing flanges, each having a rearwardly disposed flat contact surface for the strip.

4. An article of manufacture comprising a longitudinally bowed furring stud or strip, the central portion of said strip being bowed on a shorter radius than remaining portions and longitudinal edges of the stud or strip being angularly bent to form hollow reinforcing flanges, each extending outwardly and rearwardly of the body portion of the strip.

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