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J. F. STUCKERT

ROOFING STRUCTURE

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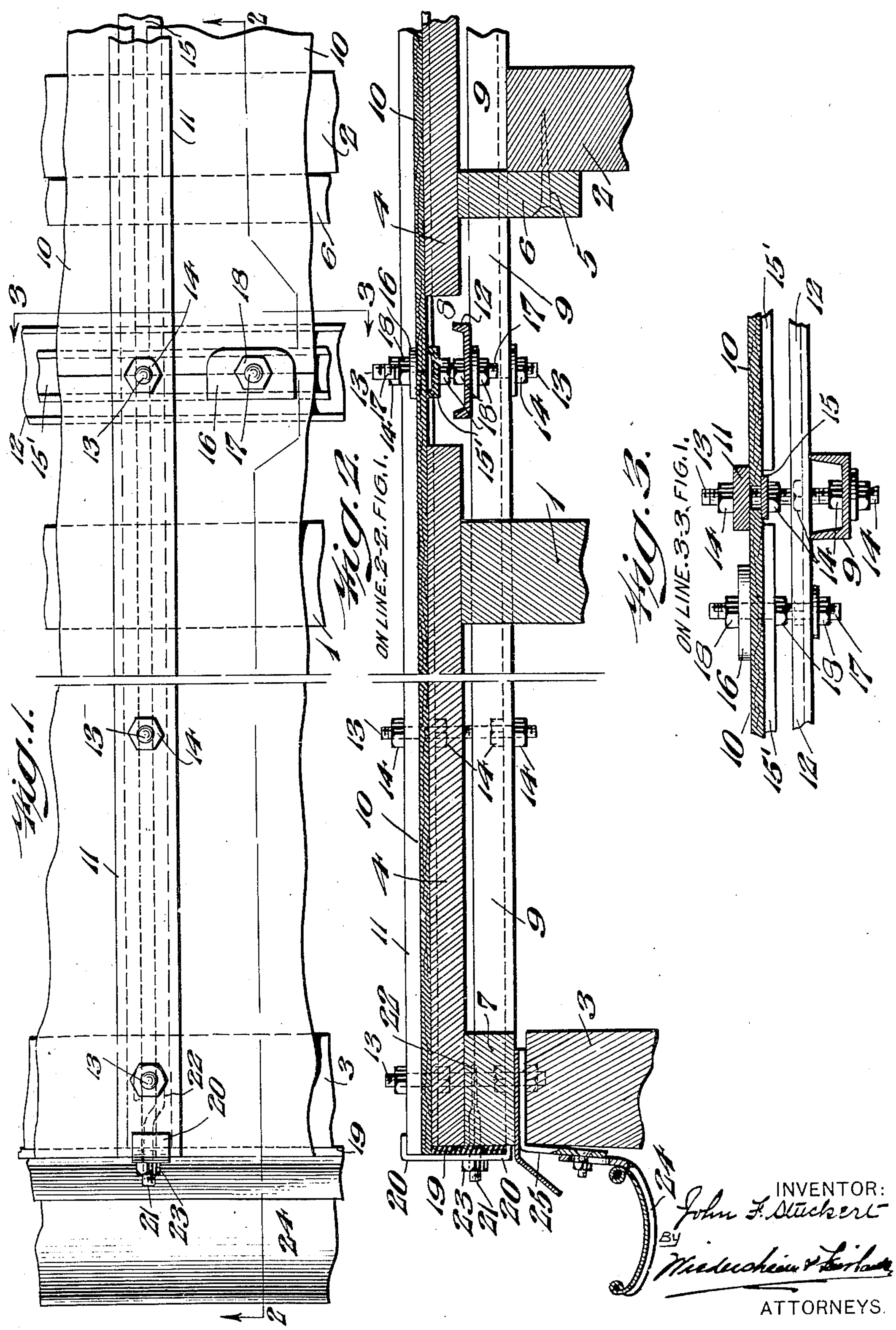

Fig. 1.

Fig. 2. ON LINE 2-2. FIG. 1.

Fig. 3. ON LINE 3-3. FIG. 1.

INVENTOR:
John F. Stuckert
By Wiedersheim & Fairbanks
ATTORNEYS.

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JOHN FRANKLIN STUCKERT, OF PHILADELPHIA, PENNSYLVANIA.

ROOFING STRUCTURE.

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To all whom it may concern:

Be it known that I, JOHN F. STUCKERT, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Roofing Structure, of which the following is a specification.

This invention, generally stated relates to building construction and has more especial relation to a roofing structure.

In the building of roofs it has not been practical from an engineering viewpoint to place thin sheets of roofing material as asbestos or felt upon rafters for the reason that, first, the rafters frequently are of varying heights; and, second, because even if of uniform height sufficient supporting structure is not present to efficiently sustain thin sheets of roofing material in position and guarded against breakage.

The leading object of the present invention is to overcome the above described disadvantageous features, provide a roofing structure in which the thin sheets of roofing material as asbestos may be efficiently supported.

A further object resides in the novel arrangement and construction of parts for attaining the results sought by the leading object.

A further object is to provide means for adjustably clamping thin sheets of roofing material in proper and safe position upon roofing boards.

A still further object of the present invention resides in the provision of a vertical end wall board for cooperating with the roofing material to prevent penetration of the elements beneath the roofing material.

Other and further objects not at this time more specifically referred to will appear hereinafter.

The invention consists of the novel construction hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, and in which:

Fig. 1, is a fragmentary view in plan of certain of the parts going to make up the roof structure embodying the present invention.

Fig. 2, is a view in longitudinal section taken upon the line 2—2 of Fig. 1, and

Fig. 3, is a view in cross section taken upon the line 3—3 of Fig. 1.

For the purpose of illustrating my invention I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

Referring to the drawings in detail, the reference numerals 1 and 2 designate rafters and the reference numeral 3 designates a wall plate of a building structure. In the structure shown particularly illustrated in Fig. 2 it is to be noted that the rafter 1, rafter 2, and wall plate 3 are all of different heights. According to the present invention I build up rafter 2 and wall plate 3 to the same height as rafter 1 to accommodate roofing boards 4. The rafter 2 has nailed thereto as at 5 a roofing board supporting strip 6 and upon the top of wall plate 3 I position another strip 7. Thus the wall plate 3 and rafters 1 and 2 all become the same height. Upon the supporting structure thus provided I lay the roofing boards 4 and at certain intervals leave spaces 8 as clearly shown in Fig. 2. I position upon the rafters and wall plate a channel beam 9 and in the case of rafter 1 cut an opening therethrough to accommodate said channel beam. Upon the roofing boards 4 I lay the roofing material 10 comprising thin sheets of asbestos, felt, or the like. Along the meeting edges of the roofing material 10 I place a rigid strip 11 to cover the meeting edges of said roofing material. Passing vertically up through the channel beam 9 and across channel beam 12 and up through roofing material and the strip 11 is a bolt 13, a plurality of nuts 14 being present for operating the said bolt. These above described parts are accommodated in the spaces 8 between the roofing boards previously referred to. The reference numeral 15 designates a longitudinally extending metal strip immediately below the roofing material 10 and paralleling strip 11 so that the roof-

ing material may be permanently clamped between the parts 11 and 15 by the upper set of nuts 14. The lower set of nuts 14 secure the channel beam 9 in position. It is thus apparent that by proper adjustment of the various nuts 14 the roofing material 10 may be clamped with respect to the roofing boards and with respect to channel beam 9. The sheets of roofing material 10 may be clamped together at their meeting edges, laterally considered in Fig. 1, by means of clamp plates 16. A bolt 17 passes vertically up through channel beam 12. Plate 15', roofing material 10, clamp plate 16, and nuts 18 are provided for clamping the plates 16 in place.

Referring now to the left hand side of Figs. 1 and 2 there is disclosed a vertical end wall board designated 19. This end wall board may be of asbestos or felt and is positioned so that its upper edge abuts the underside of the roofing material 10 and its inner face abuts against the ends of the roofing boards and the end of strip 7. The purpose of this end wall board is to prevent the elements from penetrating the roofing structure below the roofing material 10. At intervals I seeure clips 20 over the top edge of strip 11 and beneath the lower edge of the wall board and make use of a horizontal bolt 21 having a hooked end 22 which hooked end engages around an adjacent vertical bolt 13, use being made of a nut 23 to clamp the plate 19 in position.

24 designates a gutter supported by a gutter-hanger 25 upon the top of wall plate 3. Use may be made of an adjacent bolt 13 for securing the gutter-hanger in position, the gutter hanger in such case being arranged between the top of wall plate 3 and the bottom of strip 7 as clearly shown at the left hand side of Fig. 2.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a roof construction, including complemental rafters, the combination of channel beams supported upon said rafters, roofing boards arranged above said channel beams, relatively thin sheets of roofing material superimposed upon the roofing boards, rigid strips of material arranged upon the roofing material along meeting edges thereof and vertical means, arranged between the channel beams and said roofing material for predetermined adjustment of securing of said roofing material at the time the same is fitted in place.

2. In a roof construction, including complemental rafters, the combination of channel beams supported upon said rafters, roofing boards arranged above said channel beams, relatively thin sheets of roofing material of asbestos superimposed upon the roofing boards, rigid strips of material arranged upon the roofing material along meeting edges thereof, and vertical means, arranged between channel beams and said roofing material for predetermined adjustment of securing of said roofing material at the time the same is fitted in place.

3. In a roof construction, including complemental rafters, the combination of channel beams supported upon said rafters, roofing boards arranged above said channel beams, relatively thin sheets of roofing material superimposed upon the roofing boards, rigid strips of material arranged upon the roofing material along meeting edges thereof, and vertical means including bolts and nuts arranged between channel beams and said roofing material at meeting edges of said roofing material for predetermined adjustment of securing of said roofing material at the time the same is fitted to place.

4. In a roof construction, including complemental rafters, the combination of channel beams supported upon said rafters, roofing boards arranged above said channel beams, relatively thin sheets of roofing material superimposed upon the roofing boards, rigid strips of material arranged upon the roofing material along meeting edges thereof, and vertical means arranged between channel beams and said roofing material for predetermined adjustment of securing of said roofing material at the time the same is fitted in place, a vertical end wall board abutting against the underside of said roofing material and against the edge of the roofing boards and means including a horizontal bolt having a hooked end for engaging around said vertical adjusting means to clamp said wall board to place.

JOHN FRANKLIN STUCKERT.