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PREFABRICATED ROOFING AND METHOD OF MAKING SAME

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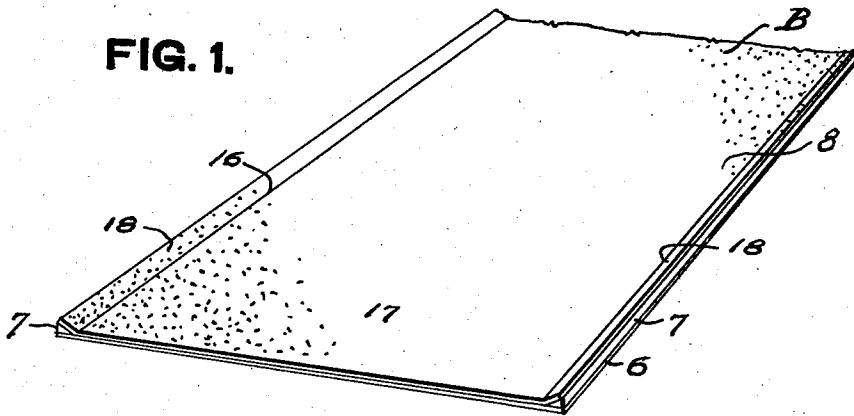


FIG. 1.

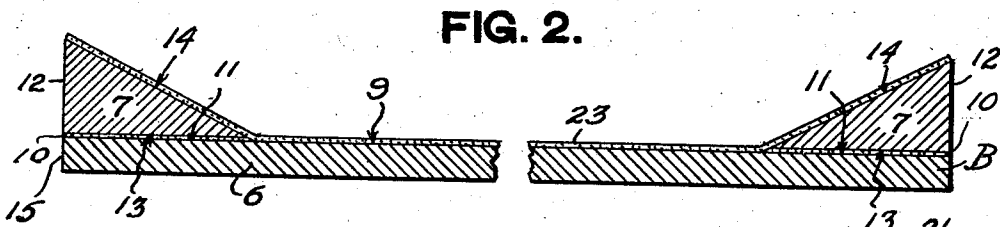


FIG. 2.

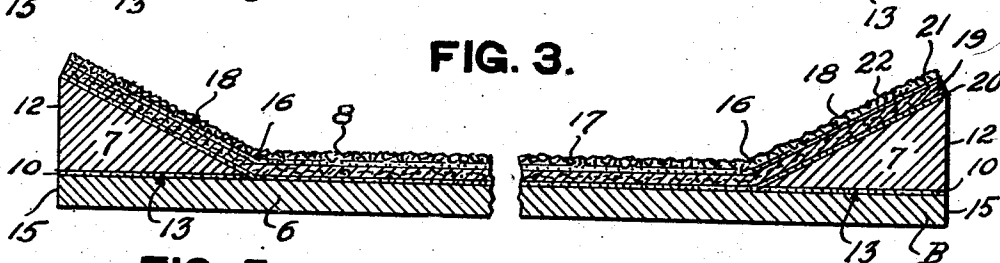
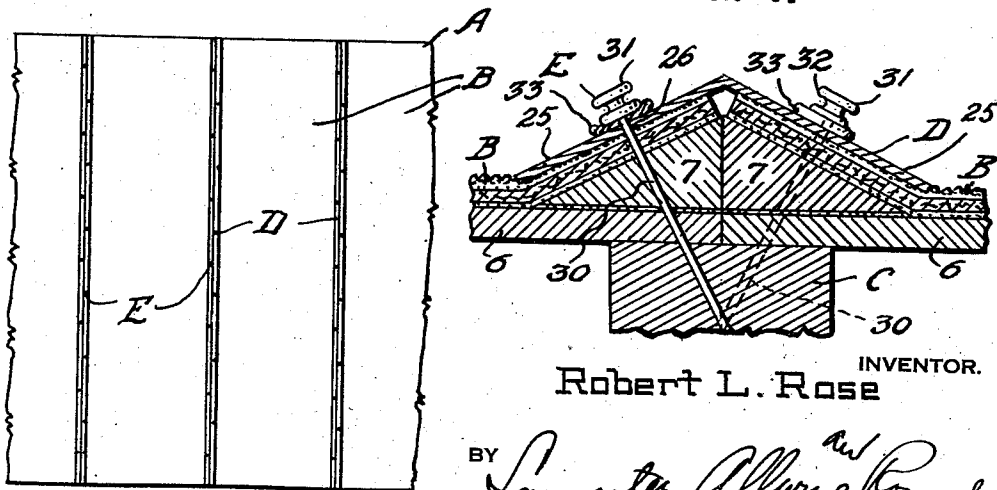


FIG. 3.

FIG. 5.

FIG. 4.



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PREFABRICATED ROOFING AND METHOD
OF MAKING SAME

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7 Claims. (Cl. 193-1)

The present invention relates to roofing particularly well adapted for portable or prefabricated houses, or those which are to be quickly erected and possibly later dismembered and re-assembled at new locations.

Among the principal objects of the invention are to provide prefabricated roofing or roofing sections which are inexpensive to manufacture, easily shipped and stored, and which do not require the placing of weather, heat or fire resistant material, such as roll roofing, shingles and the like over the sections after they have been secured in place.

Another object of the invention is to provide roofing which is inexpensive to manufacture and secure in place, and which excludes rain, snow, and sleet at joints between sections in a simple yet effective manner.

A further object of the invention is to provide a relatively thin roofing panel of considerable size which may be easily handled by few workmen, even though subjected to considerable wind force, without the likelihood of its being broken or permanently set in a warped condition while handling.

Another object of the invention is to provide a method of producing a prefabricated, weather-resisting roofing section with but few steps in the method and which may be carried out preferably at the factory, but which may be carried out partly at the factory and partly on the ground, or entirely on the ground where the roof is to be erected.

Other objects and advantages of the invention will appear in the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification, and in which drawing:

Fig. 1 is a fragmentary perspective view of a roof section or panel constructed according to my invention.

Fig. 2 is an enlarged, fragmentary, transverse sectional view through a partially completed roof section.

Fig. 3 is a similar view through the completed section.

Fig. 4 is a detailed fragmentary view in vertical section at adjacent roof sections or panel.

Fig. 5 is a plan view on a reduced scale, of a portion of a roof comprising roof sections or panels made according to my invention.

In the drawing, A designates a roof comprising a plurality of prefabricated roof sections B, supported in any suitable manner, such as by rafters C; caps D at joints between the sec-

tions; and means E for securing the caps to the panels and, in the example shown, also securing, or assisting to secure, the panels to the rafters.

5 The sections B each preferably comprise an elongated, board-like panel 6 of considerable size, say for example, four by fourteen feet; one or more reinforcing strips 7 secured to the upper face of the panel; and weather-resisting material 8 secured to the upper face of the panel and continuing onto at least one adjacent face of the reinforcing strip or strips.

10 The panel 6 may be made of any suitable material, such as ply-wood or "Masonite," preferably of a character having a face 9 capable of readily sticking to asphaltic compositions, as sheet or roll roofing material comprising asphalt saturated and granule coated felt.

15 The reinforcing strips 7 are of nailable material, such as wood. Intermediate roof sections or panels have such a strip secured, in any suitable manner, such as by an adhesive 10, or by nailing, along each longitudinal marginal portion 11 of the face 9.

20 I prefer to make each strip 7 of substantially right-angular, scalene triangular cross-section as shown in Figs. 2, 3, and 4, so as to provide a minor side 12, an intermediate side 13, and a major side 14. The strip is preferably positioned so that its minor side 12 is substantially flush with the adjacent edge face 15 of panel 6; its intermediate side confronting face 9 of the panel; and its major side 14, in obtuse angular relation to face 9. Thus the panel is effectively reinforced against longitudinal bending even though of considerable length, with a minimum of material, and there is not an abrupt bend of the sheet or roll roofing material 8 at the juncture 16 between the major portion 17 and the side flaps or flanges 18.

25 Any suitable weather resistant material 8 may be secured to the panel 6 and strips 7. In the example shown it is of a character comprising a layer of felt 19 saturated with asphalt, a lower coating 20 of asphalt, and an upper coating 21 of asphalt, the latter being surfaced with any suitable material 22 such as slate granules, flaked mica, ceramic quartz or merely fine mica and talc.

30 The preferred method of producing the prefabricated, weather-resisting roofing section, is to first secure the reinforcing strips in place and coat the exposed face 9 and the adjacent faces 14 of the reinforcing strips 7 with a solvent 23 such as naphtha and asphalt, and then press the

roofing material in firm contact with those faces 9 and 14 and hold it there until the solvent has acted upon the coating 20 to render it adhesive and at least until some of the constituents of the solvent have evaporated so as to firmly secure the material 8 to the panel 6 and strips 7.

Roofing sections thus constructed may be arranged in side by side relation on the substructure of the roof with comparative ease, and secured in place in any well known or approved manner, such as by nails driven through the panel or through the strips and panel, or by metallic angles secured at the inside of the roof to the panels and rafters.

The caps D are preferably inverted V-shaped strips of firm material, such as metal, the wings 25 of each cap being adapted to engage over the side flaps or flanges 18 of the material 8 as shown in Fig. 4. The cap may be provided with perforations 26 suitably spaced apart longitudinally of each wing 25, the perforation of one wing being in staggered relation to the perforation of the other wing. These perforations, in the example shown are for the reception of the shanks 30 of nails 31 constituting an example of means E for securing the cap in place and the cap and roofing sections for the roof substructure, such as the rafter C.

If it is likely the roof is apt to be removed and reassembled, it is advisable to use nails having a double head 32 as shown in Fig. 4. To seal the perforations 26 washers 33 of lead or other suitable material may be interposed between the head 32 and cap D.

It is to be understood that the materials specified for the panel 6, the strips 7 and the material 8; the cross section and specific location of the strip 7; as well as the shape and means of securing the cap D and the cooperating parts to the substructure of the roof are by way of example since the invention is susceptible of modification, without departing from the spirit of the following claims:

I claim:

1. A roofing section comprising an elongated rectangular board-like panel, a reinforcing strip of nailable material, secured along each longitudinal marginal portion of one face of the panel, each strip being of substantially right-angular scalene triangular cross-section with its minor side substantially flush with its adjacent edge of the panel, and its intermediate side confronting the face of the panel, and a weather resistant material secured to the said face of the panel and onto the major sides of said strips.

2. A roofing section comprising an elongated rectangular board-like panel, reinforcing strips of nailable material, secured along each longitudinal marginal portion of one face of the panel, each strip being of substantially triangular cross section with one side confronting said face of the panel, another side substantially flush with its adjacent edge of the panel, and its third side in obtuse angular relation to the face of the panel intermediate said strips, and a weather resistant material secured to the said face of the panel and onto the said obtuse angularly related sides of the strip.

3. As an article of manufacture, a roofing section comprising an elongated rectangular board-like panel, a reinforcing strip of nailable ma-

terial, secured along each longitudinal marginal portion of one face of the panel, each strip being of polygonal cross section with one face secured in face-to-face relation with the panel, another face substantially flush with its adjacent edge of the panel, and a third face having a juncture line with the said face of the panel, and weather resistant material secured to said face of the panel and continuously onto at least the major portion of the third face of each strip.

4. As an article of manufacture, a prefabricated roofing section comprising an elongated board-like panel, a reinforcing strip of nailable material secured to at least one marginal portion of one face of the panel, said strip being of polygonal cross section with its one face secured in face-to-face relation with the panel and another face having a juncture line with said face of the panel, and weather resistant material secured to said face of the panel and continuously onto and secured to at least the major portion of the last mentioned face of said strip.

5. A roof comprising at least two side-by-side elongated rectangular board-like panels, a reinforcing strip of nailable material, secured along each adjacent longitudinal marginal portion of the upper faces of said panels, a weather resistant material secured to the upper face of each panel and continuously onto an adjacent side of its respective reinforcing strip, and a cap strip secured to and extending along the top and sides of said reinforcing strips to render the roof weatherproof between the panels.

6. The method of providing a prefabricated, weather-resisting, roofing section which consists in securing a reinforcing strip of nailable material, capable of sticking to asphaltic compositions, to at least one marginal portion of a face of a board-like panel, of material also capable of sticking to asphaltic compositions so as to provide a wide exposed panel face and a narrow strip face with a juncture line between the two faces; painting said exposed face of the panel and at least a portion of said face of the strip next adjacent said juncture line with a solvent; and pressing and holding a sheet of roofing composition containing asphalt at its lower face upon said solvent treated faces of the panel and strip until the roofing composition firmly adheres to said painted faces and is continuous over said juncture line.

7. The method of providing a prefabricated, weather-resisting, roofing section, which consists in securing a reinforcing strip of nailable material, capable of sticking to asphaltic compositions, to at least one marginal portion of a face of a board-like panel of material also capable of sticking to asphaltic compositions so as to provide a wide exposed panel face and a narrow strip face with a juncture line between the two faces; and securing a sheet of roofing composition, containing asphalt at its lower face, to said exposed face of the panel and to at least a portion of said face of the strip next adjacent said juncture line by dissolving some of the asphalt of the roofing composition at its under face, pressing the roofing material to said faces, and holding it there until the roofing material firmly adheres to the panel and strip and is continuous over said juncture line.

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