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Hindall

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[54] **ADJUSTABLE PITCH POCKET STRUCTURE**

[76] Inventor: **George R. Hindall,** 21 Gessford Ct., S.E., Washington, D.C. 20003.

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[21] Appl. No.: **283,972**

Related U.S. Application Data

[63] Continuation of Ser. No. 95,729, Dec. 7, 1970, abandoned.

[52] **U.S. Cl.** **52/60,** 52/219
[51] **Int. Cl.** **E04d 1/36**
[58] **Field of Search** 52/58, 60, 61, 219, 27; 98/60, 67, 58; 138/163, 157

[56] **References Cited**

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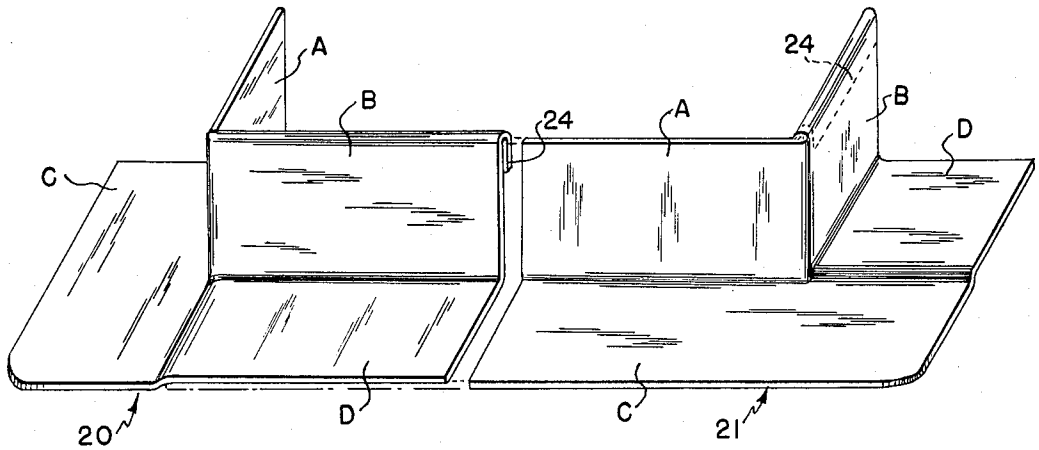
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Primary Examiner—John E. Murtagh

[57] **ABSTRACT**

A pitch pocket is formed on a roof about projecting structure members by interfitting four identical corner wall units together and the area enclosed by the pitch pocket is determined by the extent of overlapping of the interfitting wall sections of the units. Wall sections of straight wall units may be similarly interfitted with the wall sections of corner units to increase the normal length of the sides of the pitch pocket to increase the area enclosable by four corner units.

7 Claims, 6 Drawing Figures



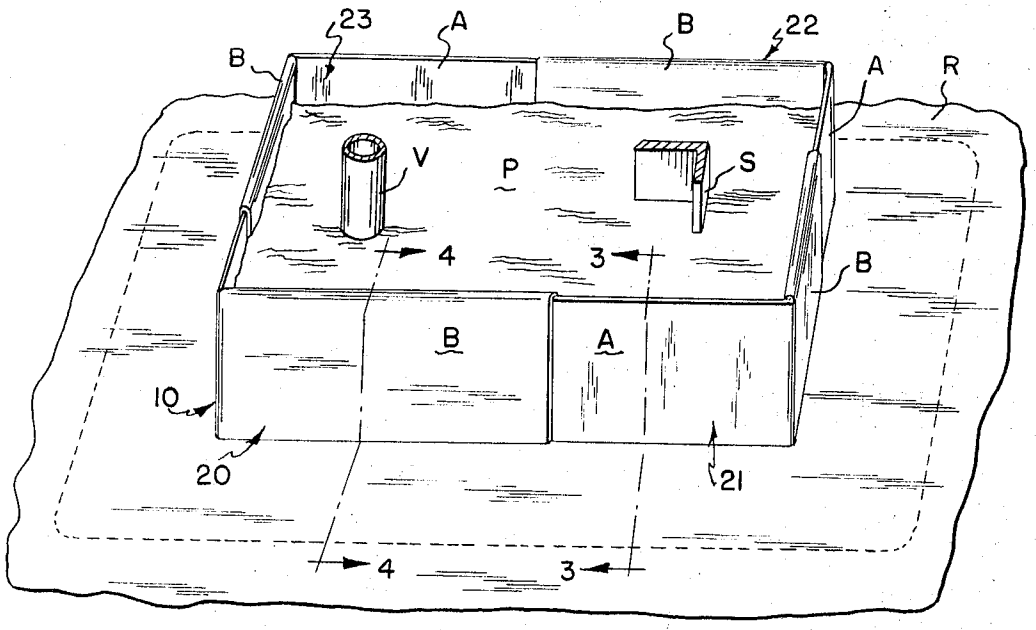


FIG.1

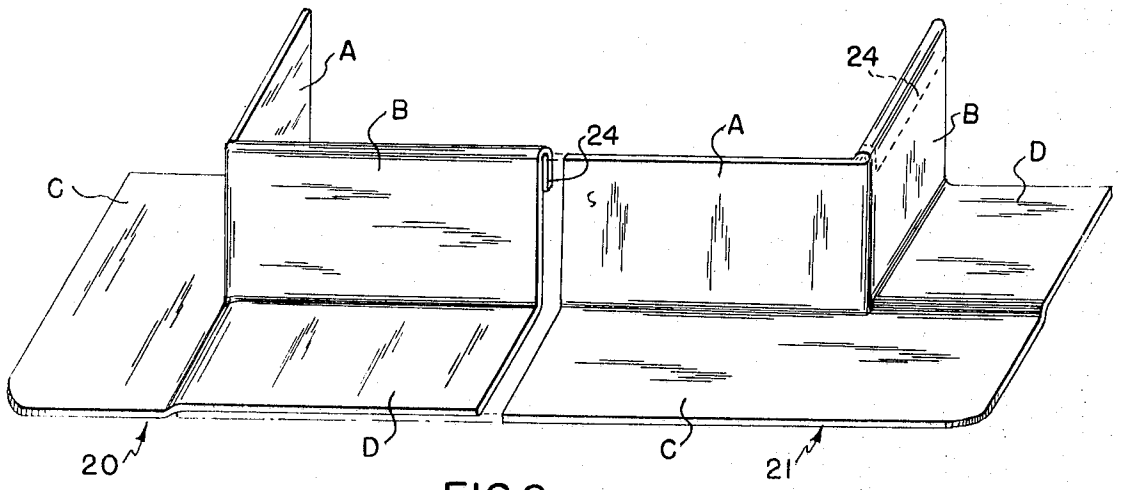


FIG.2

INVENTOR.
GEORGE R. HINDALL
BY
Watts, Hoffmann, Fisher & Heinke
ATTORNEYS

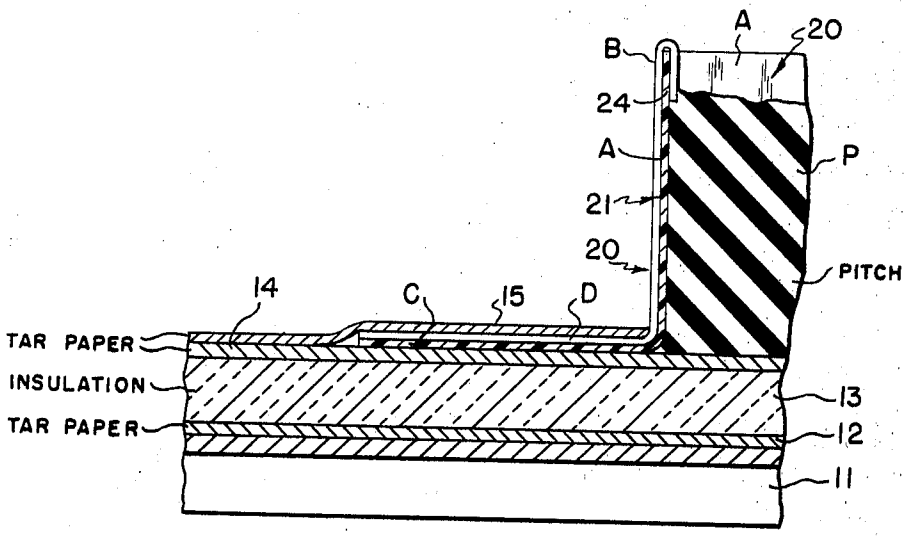


FIG. 3

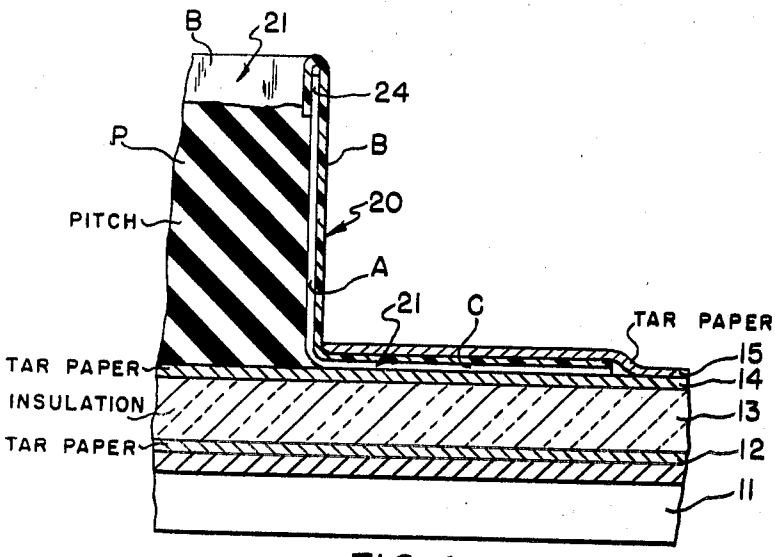


FIG. 4

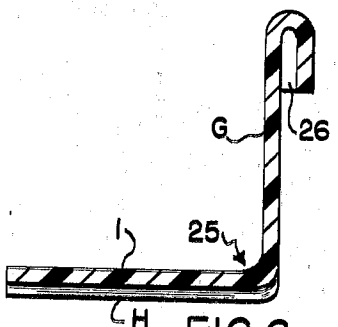


FIG. 6

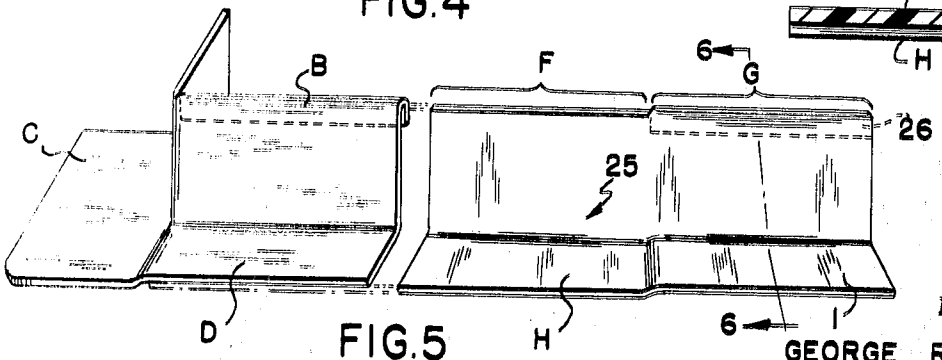


FIG. 5

INVENTOR.
GEORGE R. HINDALL
BY
Watts, Hoffmann, Fisher & Heinke
ATTORNEYS

ADJUSTABLE PITCH POCKET STRUCTURE

This is a continuation of application Ser. No. 95,729, filed Dec. 7, 1970, now abandoned.

BACKGROUND OF THE INVENTION

It is common practice to form a weatherproof seal between structure members, such as vent stacks and support struts, conduits, guy anchors, etc., projecting from the roof of a building and the adjacent roof area by forming a collar-like enclosure or pocket on the roof about the members and then pouring melted pitch or asphalt into the pocket to an appreciable depth. The pitch then solidifies and forms a thick durable weather and water tight flashing seal between the structure members and the portion of the roof encompassed by the enclosure and the pitch is retained in position by the walls of the pocket. The pitch receiving enclosure structure is commonly referred to as a "pitch pocket," "pitch pan," or "pitch box." Generally pitch pockets comprise an upright enclosure wall having a laterally outwardly extending base flange adapted to be cemented or otherwise sealed to the roof in an area surrounding the structure members. Heretofore pitch pockets were commonly formed of sheet metal and were tailor made for each flashing requirement inasmuch as the dimensions of structure members projecting through or from building roofs vary widely.

The fabrication of pitch pockets heretofore in use required the services of a tinsmith and were relatively expensive by reason of costs of labor, materials and equipment involved.

THE PRESENT INVENTION

A principal object of the present invention is the provision of a new and improved pitch pocket structure comprising identical corner wall units which can be inexpensively manufactured and subsequently assembled about one or more structure members or other irregular projections extending from or through a roof in such a manner that the pitch pocket will encompass an area to provide the most advantageous size flashing seal for the particular structure member or members involved.

More specifically, it is an object of the invention to provide a new pitch pocket structure comprising preferably four identical right angle corner wall units, each unit having two upright wall sections joined with one another to form a corner and including outwardly extending base flanges along the lower edges which are adapted to rest on a roof surface, a first wall section of each core unit having a downwardly facing slot or groove formation along the top edge, and the second wall section having a top edge portion adapted to be slidingly received into the slot forming portion of the first wall section of another corner unit. Preferably, the base flange of the wall section of each corner unit having the slot formation is offset upwardly relative to the plane of the base flange of the other wall section of the unit whereby the base flange of the wall section of a second corner unit inserted into the slot formation lies beneath the offset flange and in the plane of the other wall flange of the first mentioned corner unit.

A further object of the invention is to provide a new pitch pocket structure of the character described and including extender wall sections which can be slidingly joined or interfitted with the respective wall sections of

corner units and with one another to provide extended sides to a pich pocket structure. The extender wall sections each comprises first and second wall sections like the respective two wall sections of each corner unit except that the wall sections lie at 180° to one another and are adapted to be slidingly assembled with the interfitting wall sections and flanges of other extender sections or with wall sections and flanges of corner units.

Other objects and advantages of the invention will be apparent from the following description of a preferred form of the invention, reference being made to the accompanying drawings wherein:

FIG. **1** is a fragmentary perspective view of a building roof having an electrical conduit and a support strut projecting through the roof and embedded in a pitch or asphalt seal formed by the novel pitch pocket;

FIG. **2** is a perspective view of two corner wall units according to the invention positioned for joining to form portions of two adjoining walls of a pitch pocket;

FIG. **3** is a sectional view taken substantially along lines **3—3** of FIG. **1**;

FIG. **4** is a sectional view taken substantially along line **4—4** of FIG. **1**;

FIG. **5** is a perspective view of a corner wall unit for a pitch pocket and an extender wall positioned for joining with the corner wall unit to increase the length of one side of a pitch pocket; and

FIG. **6** is a sectional view taken substantially along line **6—6** of FIG. **5** and on a larger scale.

Referring to the drawings, a pitch pocket structure **10** embodying the invention is shown enclosing a body **1** of pitch surrounding portions of an electrical conduit V and the securing bolts, not shown, for the base of a support strut S projecting upwardly through openings in a roof R. The pitch P forms a weatherproof seal between the projections V and S and the walls of the roof openings through which they extend. The pitch pocket **10** retains the pitch P in position about the conduit V and strut S.

The roof may be of any suitable construction and for illustration is shown comprising a ribbed steel roof deck panel **11**, a layer of roofing material or vapor barrier **12**, a panel of insulating material **13** over which two layers **14, 15** of tarred roofing paper are applied. A suitable surfacing material, not shown, is applied as is conventional in built up roof construction.

The pitch box **10**, is comprised of four identical corner wall units **20, 21, 22, 23.** The corner wall units are assembled into a rectangular pitch pocket about the conduit V and the strut S and is secured to the roof. Melted pitch P is then poured into the pitch pocket until it is full.

Referring particularly to FIGS. **2, 3** and **4,** the two identical corner wall units **20, 21** are shown in detail prior to assembly into a pitch pocket. Each unit is preferably formed of a suitable molded plastic material which is relatively rigid and durable. However, the units could be formed of any other suitable material, if desired. Each of the units has two vertical wall sections A and B which are disposed at right angles to one another and are joined at the corner formed thereby. The vertical wall sections A and B have base flange sections C, D, respectively, which extend laterally at 90° thereto. The flange sections C, D are preferably joined and the section D is raised or offset in a plane above the

plane of the flange section C. The extent of the offset of flange D from flange C is sufficient to permit the flange C of an identical corner wall unit, or its equivalent, to be inserted or received beneath the flange D when the units are resting on a plane surface, as seen in FIGS. **3** and **4.**

The top edge portions of the wall sections B of each corner wall unit has a downwardly facing slot formation **24.** The width of the slot **24** is such as to slidingly receive the top edge portion of the wall section A of any of the corner wall units. The depth of the slot **24** is such as to provide a firm guide and support for maintaining the wall sections A and B in general alignment when a wall section A of one unit is inserted to a greater or lesser extent longitudinally into the slot **24** of the wall section B of another unit. It will be noted that when the wall section A is inserted in the slot **24** of a wall section B, the flange D of the wall section B will nest on the top surface of the flange C of the wall section A.

A pitch pocket like the pitch pocket **10** is easily and conveniently formed by merely inserting the wall sections A of the respective units **20, 21, 22, 23** into the slots **24** of the wall sections B of the respective units. The dimensions of the pitch pocket can be chosen according to the degree of overlapping of the interfitting wall sections A, B of the respective units. After a pitch pocket of a suitable size has been formed about the structural members projecting through a roof top, the flanges C, D of the units are cemented to the roof and built up roofing material is applied over the flanges C, D stripping them into the roof proper, as seen with reference to the pitch pocket shown in FIG. **1.** Suitable sealing material, not shown, is then applied to the interior joints of the pitch pocket at the exposed end edges of the overlapping wall sections to prevent leakage of pitch through these joints.

It is apparent that the corner wall units may be inexpensively manufactured and that pitch pockets can be readily formed of four corner units by relatively unskilled labor merely by interfitting parts of the corner wall units together as just described. The dimensions of the pitch pockets formed can be varied to suit particular requirements by more or less overlapping the wall sections A and B. Thus, the cost of installing pitch pockets by use of the invention is substantially reduced over previous practices. A pitch pocket thus constructed, is nonelectrolitic, and non-corrosive. The plastic material is an insulator, it retards the cooling of the melted pitch thereby reducing contraction as solidification takes place.

In the event a pitch pocket is required having greater dimensions than that provided by four corner wall units, one or more straight wall units may be inserted between two corner wall units to increase the length of the walls. Referring to FIGS. **5** and **6,** a straight wall unit **25** is shown in position for sliding connection with the wall section B of a corner wall unit like unit **20.** The wall unit **25** comprises a vertical, straight wall having two wall sections F and G, and a laterally extending base flange comprised of sections H and I. The dimensions and forms of the wall sections F and G are the same as wall sections A and B, respectively, of a corner wall unit like the unit **20,** for example. That is to say, the wall section F is plane, while a downwardly facing slot formation **26** is formed along the top edge portion of wall section G. The slot **26** corresponds in dimensions to the slot **24** of wall section A described hereinbefore. Likewise, the flange section I is offset relative to flange section H in the same manner as the flange section D of the corner wall unit is offset relative to the flange section C.

It will be apparent that wall section F of the straight wall unit can be inserted into the slot of a wall section B of a corner wall unit and the flange section D will nest on the flange section G. A wall section A of another corner unit or the wall section H of another straight wall unit may be similarly inserted into the slot **26** of the wall section G to further extend or complete a side of the pitch pocket. Thus, pitch pocket structures of various dimensions can be fabricated at the site of use merely by slip assembly of a plurality of like corner wall units and straight wall units.

I claim:

1. A wall unit for constructing a polyangular pitch pocket structure or the like and comprising first and second upright plane wall sections joined at one end and disposed at less than **180°** to one another to form two contigious sides of a corner of the pitch pocket structure, the extended end portions of said wall sections terminating in the plane of their respective wall sections whereby said wall sections are adapted to lie alongside and overlap wall sections of like wall units to form sides of the pitch pocket structure having lengths greater than the lengths of the individual wall sections, a base flange extending laterally from the bottom edge of each wall section, and means forming a downwardly facing slot along the top edge of said first wall section, said slot having a width at least the thickness of said second wall section and adapted to receive the top edge portion of the second wall section of another wall unit like said wall unit, the bottom surface of the base flange extending from said first wall section lying in a plane offset upwardly relative to the plane of the upper surface of the base flange extending from said second wall section, said offset of the first mentioned plane being approximately the thickness of the last mentioned base flange.

2. A wall unit as defined in claim **1** further characterized by said first and second upright wall sections joined at one end being disposed at 90° to one another.

3. A wall unit as defined in claim **1** further characterized by said downwardly facing slot being disposed at the side of said first wall section opposite the side from which said base flange of said first wall projects.

4. A wall unit as defined in claim **1** further characterized by said flanges being disposed on said wall sections so as to project from the outer sides of the corner formed by said wall sections.

5. A wall unit as defined in claim **2** further characterized by said downwardly facing slot being disposed at the side of said first wall section opposite the side from which said base flange of said first wall projects.

6. A wall unit as defined in claim **2** further characterized by said flanges being disposed on said wall sections so as to project from the outer sides of the corner formed by said wall sections.

7. A polyangular pitch pocket structure comprised of a plurality of descrete like corner units, each unit comprising first and second upright planar side wall sections joined at one end and extending from one another at less than 180° to form a corner of the pitch pocket, the first wall section of one corner unit lying alongside at least a portion of the second wall section of a second

corner unit and cooperating therewith to form a side of the pitch pocket between two adjacent corners thereof, a base flange extending laterally from the bottom edge of each of said wall sections, and means forming a downwardly facing slot along the top edge of said first wall section of each unit, said slot of said one corner unit receiving the top edge portion of said second wall section of said second corner unit, the bottom surface of the base flange extending from said first wall section of said first corner unit lying in a plane offset upwardly from the plane of the top surface of the base flange extending from said second wall of the second corner unit and receiving the last mentioned base flange therebeneath.

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