

Sept. 2, 1969

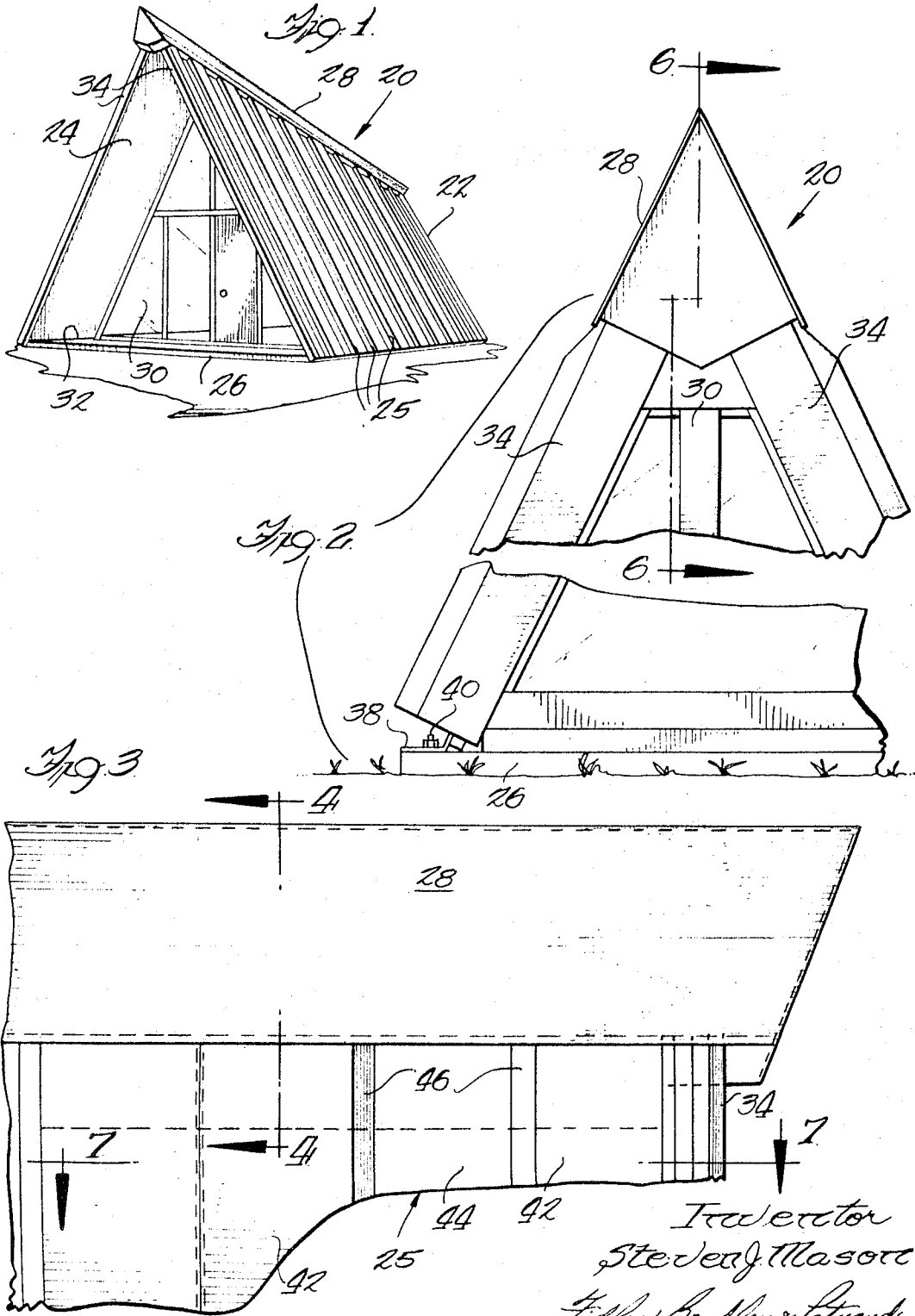
S. J. MASON

3,464,167

A-FRAME CONSTRUCTION

Filed July 13, 1967

4 Sheets-Sheet 1



Inventor
Stewart Mason
Lillian, Bradley & Patraude
Attys

Sept. 2, 1969

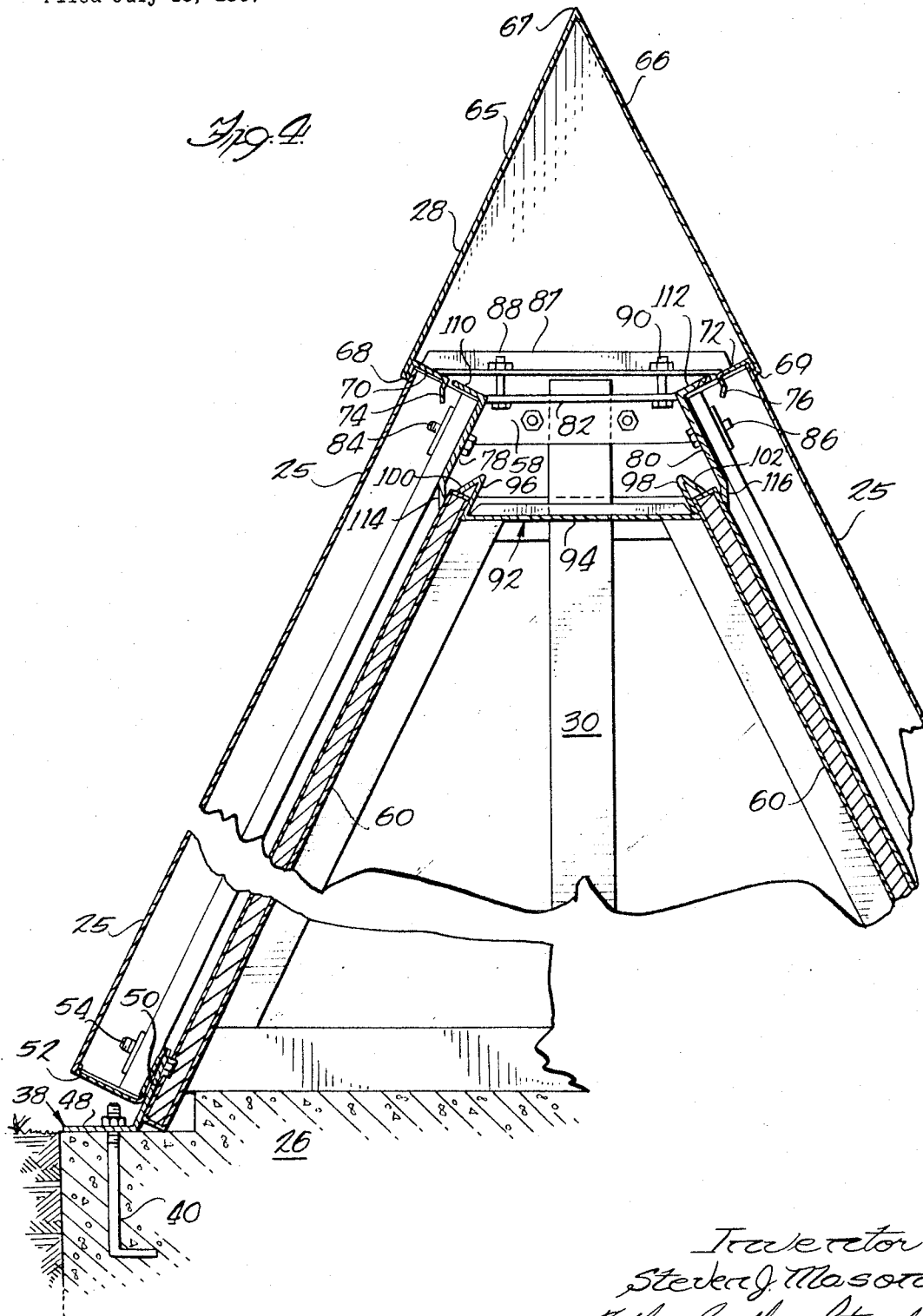
S. J. MASON

3,464,167

A-FRAME CONSTRUCTION

Filed July 13, 1967

4 Sheets-Sheet 2



Inventor
Steven J. Mason
Fuller, Bradley & Patnaude
Attys

Sept. 2, 1969

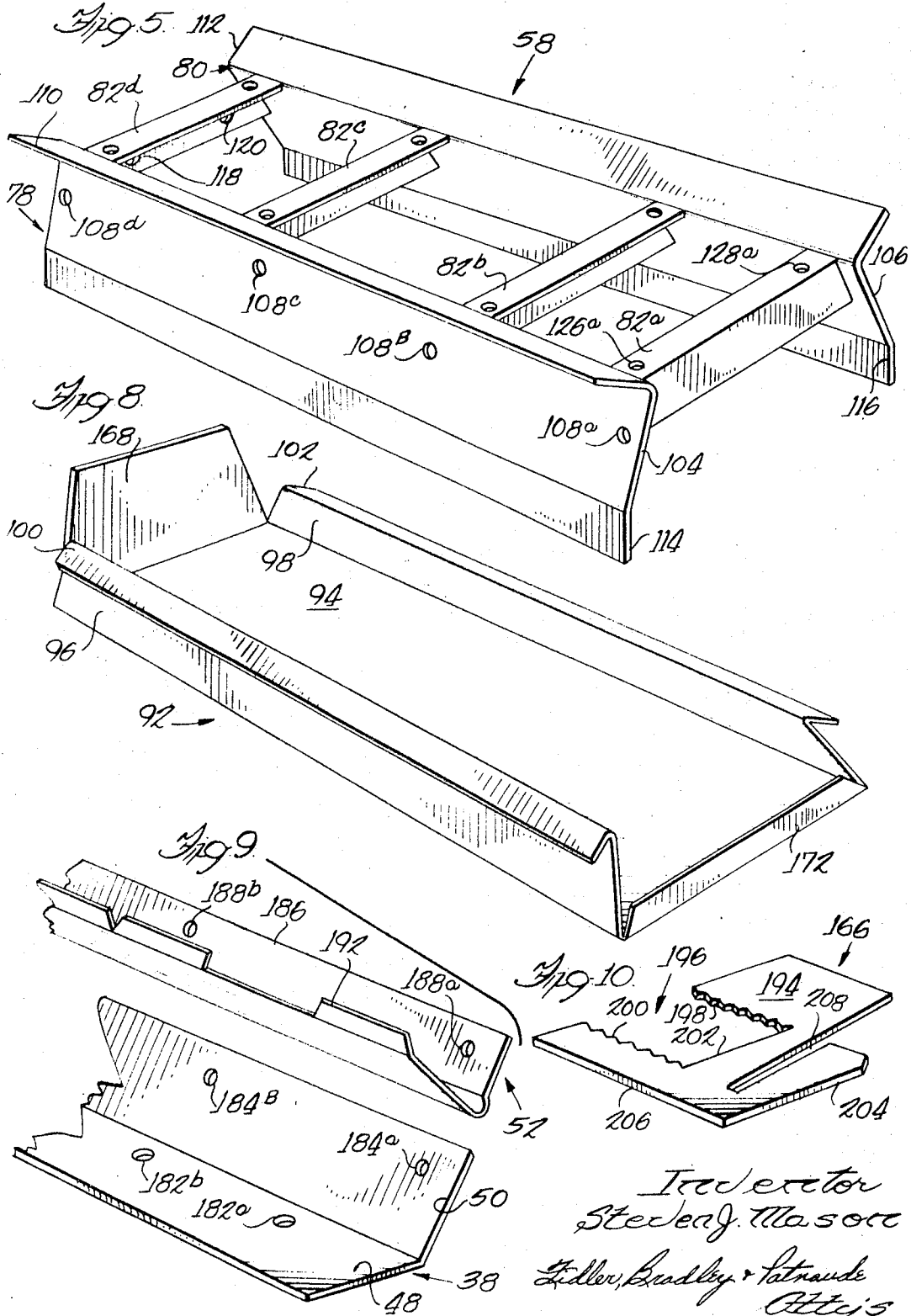
S. J. MASON

3,464,167

A-FRAME CONSTRUCTION

Filed July 13, 1967

4 Sheets-Sheet 5



Inventor
Steven J. Mason
Stiller, Bradley & Patnaude
Attys

Sept. 2, 1969

S. J. MASON

3,464,167

A-FRAME CONSTRUCTION

Filed July 13, 1967

4 Sheets-Sheet 4

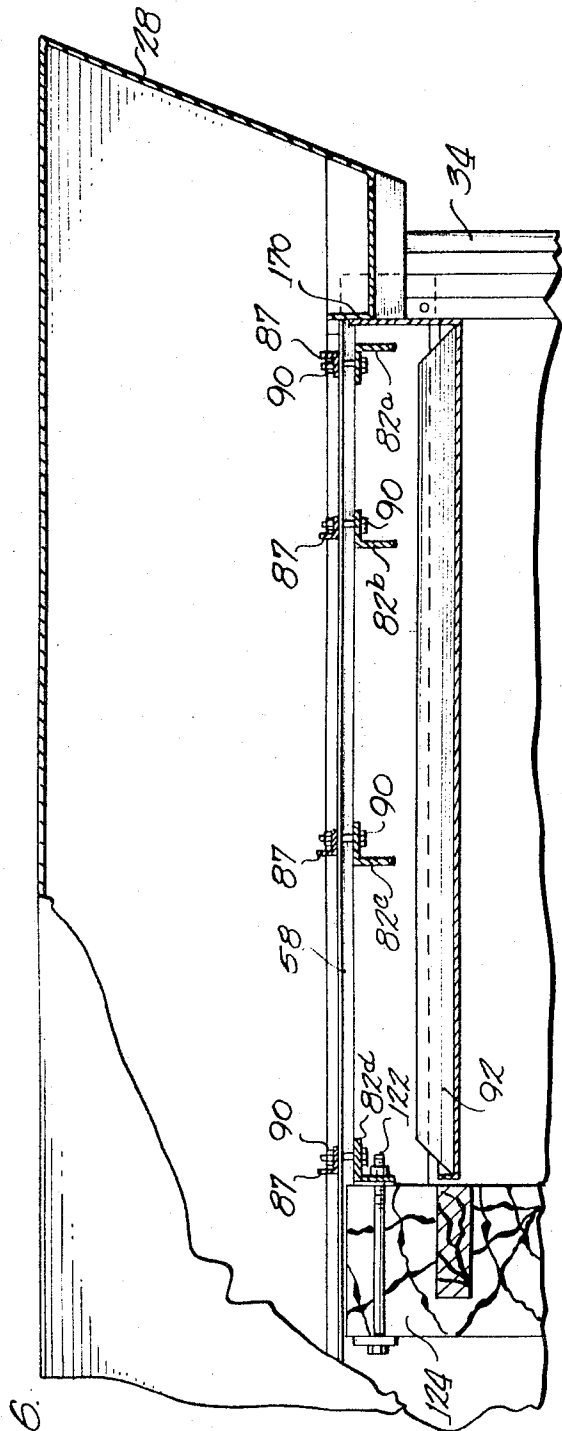


Fig. 6.

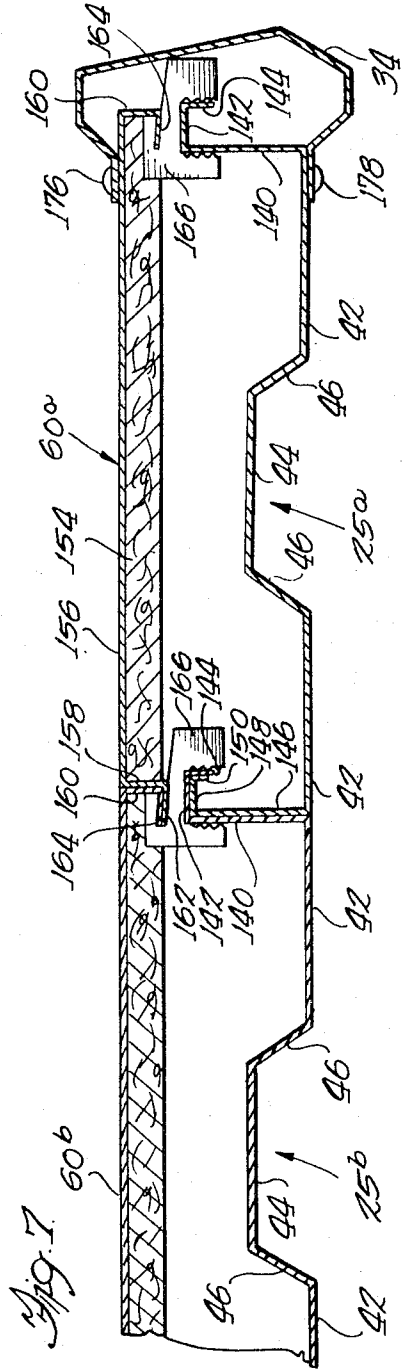


Fig. 7.

Inventor
 Stevan J. Mason
 Liller, Bradley & Strande
 Attys

1

2

3,464,167

A-FRAME CONSTRUCTION

Steven J. Mason, The Ledges, Roscoe, Ill. 61073

Filed July 13, 1967, Ser. No. 653,225

Int. Cl. E04b 7/06, 7/02; E02d 27/32

U.S. Cl. 52—22

15 Claims

ABSTRACT OF THE DISCLOSURE

An A-frame building includes a ridge member, parallel spaced base angle members, and sculptured metal wall panels. The ridge member has two parallel side plates connected together by a plurality of spacers, each of the side plates having an outwardly extending top flange, an angular side and a straight bottom flange. The sculptured metal wall panels are fastened to the angular sides of the side plates with the outwardly extending flange resting against one end thereof, the other end being fastened to a base angle member. The base angle member is mounted to a concrete foundation by anchor bolts.

This invention relates to buildings and more particularly to self-framing buildings.

Buildings are generally framed by columns and girders to provide necessary structural strength. Recently, self-framing buildings have been designed, which are more economically constructed because they do not require a separate frame. Such buildings are designed in the form of lean-tos and derive some structural support from the main building to which they are attached.

Conventional buildings which have frames are expensive because of the added cost of the framing members and the expense of erecting these members. Heretofore, however, self-framing buildings have suffered from the serious disadvantage that such structures have not had sufficient structural strength to stand by themselves.

Accordingly, it is an object of this invention to provide an improved building.

It is a further object of this invention to provide an attractive self-supporting building which can be economically constructed.

It is a still further object of this invention to provide a prefabricated building and an improved method of erecting the same.

It is a still further object of this invention to provide a clear span, self-framing building.

It is a still further object of this invention to provide an A-frame building having a novel ridge member and base members for supporting the self-framing side members.

In accordance with the above and further objects of the invention, an A-frame building is provided having a ridge member, a plurality of exterior wall panels adapted to provide structural support and cover in one unit, base channels, and base angle members. All can be fabricated from conventional structural material, for example, steel. The ridge member includes two parallel side plates connected to each other at a distance by means of a plurality of parallel spaced-apart spacer members, e.g., angle irons, each having one end fastened to the angular side of one of the parallel side plates and the other end fastened to the angular side of the opposite side plate. Each of the side plates of the ridge member has an angular side, an outwardly extending flange at the top of its angular side and a straight flange at the bottom of its angular side.

A plurality of exterior wall panels are secured at one end along the longitudinal lengths of the angular sides of the ridge member side plates with the top outwardly extending flanges thereof supported by the ends of the

panels. The other ends of the wall panels are secured to one or the other of the two parallel spaced-apart base channels and base angle members, the latter members being fastened to a concrete foundation by means of anchor bolts or the like to support the wall panels at the proper angle. The exterior wall panels are constructed in one-piece sections from foundation to roof line and shaped for interlocking fit with fastening means hidden so that no through-wall fastenings are required. By utilizing sculptured steel panels, structural strength can be obtained while keeping weight to a minimum.

A ridge cap is positioned on top of the ridge member and secured thereto to form the exterior top of the A-frame building. The inside roof of the building can be formed by using soffit panels which are hung on the upper edge of interior liner panels which are in turn mounted to the sculptured steel panels. Pre-fitted end wall framing is provided to close the ends of the A-frame structure.

The novel structure of the present invention is simple and economical to erect. Firstly, a concrete foundation is laid and the base angle members are fastened to it by conventional means, such as anchor bolts. The top ends of a few of the sculptured steel, exterior wall panels are bolted to the opposed side plates of the ridge member and it is lifted on them above the foundation and between the base angle members. The bottom ends of the sculptured steel panels are then bolted to the base channel and base angle member. The rest of the exterior wall panels are then bolted in place. Interior panel liners are secured to the inside of the sculptured steel panels by means of conventional fastening means such as panel clips to finish the inside walls. The ceiling is formed by simply hanging soffit panels from the wall panels. The ridge cap is easily fastened on top of the ridge member to finish the exterior structure. Pre-cut end walls are bolted in place onto the ridge member to close the A-frame structure at each end.

The above and other features of the invention will be better understood from the following and detailed description when considered with reference to the accompanying drawings in which:

FIGURE 1 is a perspective view of one embodiment of the invention showing a completed A-frame building;

FIGURE 2 is an enlarged elevational end view partially broken away of portions of the embodiment of FIGURE 1;

FIGURE 3 is a fragmentary side view of the embodiment of FIGURE 1 showing the end of the porch at the front of the building;

FIGURE 4 is a sectional view taken through the lines 4—4 of FIGURE 3 showing the unique ridge member and further details of construction;

FIGURE 5 is a perspective view of the ridge member in accordance with an embodiment of the invention;

FIGURE 6 is a sectional view taken through lines 6—6 of FIGURE 2 showing roof detail in the area of the front porch;

FIGURE 7 is a sectional view taken through lines 7—7 of FIGURE 3 showing further details of the wall construction;

FIGURE 8 is a perspective view of a soffit panel as used in an embodiment of the invention;

FIGURE 9 is a fragmentary perspective view of the base channel and the base angle member in accordance with an embodiment of the invention; and

FIGURE 10 is a perspective view of a liner panel clip in accordance with an embodiment of the invention.

General features

In FIGURE 1 an A-frame building 20, constructed in accordance with an embodiment of the invention is

shown, having two inclined sides 22 and 24 formed of sculptured steel panels mounted on a concrete foundation 26 which forms the floor of the A-frame building and coming together under a ridge cap 28 at the top of the A-frame building. The ridge cap 28 together with the sides 22 and 24 form continuous intersecting angular slopes typical of an A-frame building, which slopes include parts that serve as both roof members and side members at the same time in a manner typical of A-frame buildings. The ridge cap 28 also serves as a roof member. The sculptured steel panels 25 forming the sides 22 and 24 have architecturally sculptured faces with deep ribs and a trapezoidal return extending from the foundation to the roof line. Preferably, the exterior wall panels are finished in a baked-on enamel coating of thermosetting acrylic enamel for endurance. The front end wall 30 shown in FIGURE 1, is recessed within the sides 22 and 24 to form a porch 32. The end walls are pre-cut and fastened in any of a plurality of places within the side walls 22 and 24. They are framed, include a door and, if desired, glass panels.

As best shown in FIGURE 2, the connecting hardware for the sculptured steel panels and the end walls is not visible from the ends of the building, causing it to have an attractive appearance. The gable-shaped ridge cap 28 fits over the top end of walls 24 and 22 and extends over the connections for the end wall. The walls 24 and 22 are closed at their ends by a specially designed fascia 34. Preferably, the ridge cap and fascias are zinc-coated steel of no less than 26 gauge and have the same finish as the sculptured steel panels which comprise the side walls 22 and 24. The fascias 34 are fastened with rivets or bolts or the like to the exterior panels and liner panels as will be explained hereinafter in the description of FIGURE 7.

The exterior side walls 22 and 24 are supported on the concrete foundation 26 by means of two parallel, base angle members, one base angle member 38 being shown in FIGURES 2 and 4. It is fastened into the concrete slab 26 by means of the anchor bolts 40. The concrete slab has a stepped portion with the higher level forming the porch and bottom of the A-frame and the lower portion supporting the base angle member 38.

As best shown in FIGURES 3 and 7, the sculptured exterior wall panels 25 include two deep ribs 42 separated by a trapezoidal return 44 including the inclined surfaces 46. The top ends of the wall members 22 and 24 are hidden by the edge of the ridge cap. The combination of these features provides an attractive external appearance to the A-frame structure, which appearance may be best appreciated from the perspective view shown in FIG. 1.

In FIGURE 4 an end sectional view taken through lines 4—4 of FIGURE 3 is shown illustrating the assembly of parts in the A-frame building. One of the two elongated base angle members 38 (FIGURES 4 and 9) is shown bolted to the stepped concrete slab 26 by means of the longitudinally spaced anchor bolts 40. The base angle member 38 includes a flat portion 48 positioned in intimate contact with the surface of the concrete slab 26 and an angular portion 50, which angular portion is bolted to a base channel 52 and to the sculptured steel wall panels 25 by means of the hidden bolts 54.

The sculptured wall panels 25 (FIGURES 4 and 7) are supported in the base channel 52 and held by the bolts 54 so as to extend from the base angle member 38 to a ridge member 58. A plurality of liner panels 60 are supported inside the A-frame and against the external sculptured steel panels 25 by a series of liner panel clips 166 (FIGURE 10) disposed between the panels along their length. Similarly, on the other side of the A-frame, sculptured external wall panels 25 are supported by a base angle member (not shown) and extend up to the ridge member 58 with the panels 25 and 60, converging from the concrete slab 26 to the ridge member. The liner panels 60 are mounted to the sculptured panels 25 to form the other side of the internal wall.

An end wall 30 closes one end of the A-frame building, which end wall may include framing and glass panes fitted within the framing. The other end of the A-frame building is closed by a similar wall (not shown). The ridge cap 28 rests on the top of the sculptured steel external panels 25. Its inclined sides 65 and 66 depend from its peak 67 and are bent upward to form the eaves 68 and 69 respectively, which eaves lie against the outside of the top ends of the sculptured panels 25. Contiguous with the eaves 68 and 69 are two inwardly turned flanges 70 and 72, which flanges rest upon the upward ends of the sculptured panels 25 and close the openings formed by the trapezoidal returns between each pair of ribs. The flanges have downwardly turned ears 74 and 76 extending within apertures formed by the inner ends of these panels and the edges of the ridge member 58 so as to form two elongated channels each of which fits around one of the tops of the two walls 22 and 24 (FIGURE 1) of the A-frame building.

The ridge member 58 includes the two side plates 78 and 80 having angular sides that converge towards each other from the bottom to the top. The side plates 78 and 80 are connected to each other by a plurality of spacers, such as angle irons 82 that are secured by welding or other conventional means to the side plates. The angular side plates 78 and 80 include bolt holes to accommodate the two rows of bolts 84 and 86 which hold the top ends of the sculptured panels 25. A plurality of parallel, spaced-apart angle irons 87 are positioned within the ridge cap 28, each angle iron having a different end on each of the flanges 70 and 72 to secure the ridge cap 28 to the building. The angle irons 87 and the angle irons 82 of the ridge member 58 lie one under the other and include two rows of bolt holes to accommodate the two parallel rows of bolts 88 and 90 which hold the angle irons 82 and 87 together and consequently hold the ridge cap 28 to the ridge member 58. Soffit panels 92 having flat bottoms 94 contiguous with inwardly turned sides 96 and 98 which terminate in down turned flanges 100 and 102 respectively, are supported on the interior wall panels 60 by the down turned flanges to form the ceiling of the A-frame building.

Structural members

The A-frame building of this invention will be better understood from a more detailed description of the individual structural members. Six of the more significant structural members: (1) the ridge member; (2) the sculptured steel panels; (3) the soffit panel; (4) the base channel; (5) the base angle member; and (6) the liner panel clip will be described in greater detail hereinafter.

The ridge members, one of which is shown in a perspective view in FIGURE 5, are made in standard lengths to be used in fabricating different length A-frame buildings. Each of these members has two steel side plates 78 and 80 forming its lateral side and extending for the length of the ridge member. The steel side plates 78 and 80 are connected together by a plurality of spaced-apart parallel angle irons 82A-82D, each of which has its diametrically opposite ends firmly attached, as by welding or the like, to different ones of the steel side plates.

The steel side plates 78 and 80 each have an angular side 104 and 106 respectively to which the angle irons 82 are attached. These angular sides include a plurality of longitudinally spaced apart bolt holes 108A-108D to accommodate the bolts that hold the top of the sculptured steel panels to the ridge member. The angular sides are at the same angle with respect to the vertical as the longitudinal axes of the sculptured steel panels, when mounted to form the walls of the A-frame building. This is also the same angle as the angular side of the base angle member 38 so that the sculptured steel panels are supported between the base angle member and the angular sides of the ridge member at the proper angle for the A-frame building. The top edge of each of the steel side plates 78

5

and 80 includes a different one of the outwardly turned flanges 110 and 112 which form right angles with respective ones of the angular sides 104 and 106. These flanges overlie the top of the panel liners after the A-frame building has been constructed. The bottom edge of each of the steel side-plates 78 and 80 has a straight portion 114 and 116 extending vertically downward from respective ones of the angular sides 104 and 106.

An angle iron 82D includes the bolt holes 118 and 120 in its vertically directed plate. As best shown in FIGURE 6, these bolt holes accommodate bolts 122 which hold one of the pre-cut end walls 30 to the ridge member. Several of the angle irons near the end of the span of the A-frame building have these bolt holes so as to permit the end walls to be attached at any of several locations. This provides a choice of porch sizes for the building.

Each of the angle irons 82A-82D have a pair of bolt holes 126 and 128 through their horizontal surfaces. These bolt holes accommodate the bolts 88 and 90 which cooperate with corresponding bolt holes in the angle irons 87 (FIGURES 4 and 6) to hold the angle irons 87 and 82 together. The angle irons 87 bear down upon the inward turned flanges 70 and 72 of the ridge cap 28 to hold the ridge cap to the ridge member 58.

The sculptured steel panels are best shown in the sectional view of FIGURE 7 which is taken through lines 7-7 of FIGURE 4. In this view, the end panel 25A is shown mounted adjacent to a second panel 25B which panels extend side by side from the base channel 52 of the building up to the ridge cap 28 forming a continuous outer sculptured surface having trapezoidal ribs 42 and trapezoidal returns 44. These alternating ribs and returns are formed of a corresponding two outer ribs separated by a return in each one of these sculptured surfaces of the sculptured steel panels 25.

Each of the panels 25 also includes a right-hand side member 140 having an outwardly extending flange member 142 ending in an upwardly extending edge member 144. The members 140, 142, and 144 form a longitudinally extending connecting groove on the right hand side of the panel opening toward the outside of the building. On the left-hand side of each of the panels 25 there is a side member 146 ending with an inwardly extending flange member 148 having an upwardly extending edge member 150. The members 146, 148, and 150 form a longitudinally extending connecting groove on the left-hand side of the panel opening toward the outside of the building which groove is slightly smaller than the corresponding groove on the right-hand side of the panels. By means of these connecting grooves, two adjacent panels are snapped together with the right hand groove, formed of the members 140, 142, and 144, fitting around the left hand side groove, formed of the members 146, 148 and 150. With this mechanization a continuous outer sculptured steel wall is constructed of the panels, which steel wall includes the ribs 42 spaced by the returns 44.

Liner panels 60 are mounted to respective ones of the panels 25 to form inside walls of the building. As best shown in FIGURE 7, each of these liner panels includes a one inch thick insulation layer 154 of laminated fiber glass held within a prepainted steel frame 156 which steel frame has an outer member bounded by a left-hand wall member 158, and a right-hand wall member 160. The left-hand wall member 158 includes an outwardly extending flange member 162 and the right-hand wall member includes an inwardly extending flange member 164. With this mechanization these inner liner panels are fitted together with the left-hand flange member 162 and wall member 158 fitting around the right-hand flange member 164 and wall member 160. A plurality of liner panels clips 166 between foundation and roof line aid in holding the liner panels together and to the exterior steel panels by compressing together the flange members 164 and 162 and grasping the outer surfaces of the right-hand groove of one sculptured steel panel and compress-

6

ing it against the left-hand groove of the adjacent panel. The layer of insulation 154 can be factory laminated using a suitable adhesive to bond it to the inside surface of the liner panel.

In this embodiment of the invention the steel portion of the interior panels are formed of 24 gauge zinc-coated steel flat pan in continuous lengths with no through wall fasteners so as to have an attractive appearance. The outer sculptured steel panels are also of 24 gauge zinc-coated steel, are 16 feet long and are 16 inches wide with two three inch deep ribs separated by a 1½ inch by 4 inch trapezoidal return. Although in this embodiment the sculptured panels have a trapezoidal face, they may be shaped with any other artistic design.

The interior roof of the A-frame building is formed from the soffit panels 92, one of which is shown in a perspective view in FIGURE 8. These panels include a flat bottom surface 94 having angularly inclined sides 96 and 98 with downwardly turned rims 100 and 102. A large upwardly extending end plate 168 is adapted to fit against the inwardly extending flange 170 of the ridge cap to form a seal therewith at the end of the porch as best shown in FIGURE 6. A smaller upwardly extending end 172 abuts against the end wall 124. However, the soffits that are mounted in the interior of the frame to form the roof therein, may have two of these smaller sides 172.

The end sections of the walls are closed by means of the fascias 34 and a fascia miter panel (not shown) to form a complete closure that hides all of the connecting members of the building. Each of the fascias, as best shown in FIGURE 7, is a substantially C-shaped band of metal having flat external sections of the same material as the external panels in the ridge cap. The inward ends of the arms can include bolt holes that abut the panel liner and the sculptured steel panels to permit the fascia 34 to be bolted thereto by means of the bolts 176 and 178. The open ends of the fascias are closed by a correspondingly shaped miter panel (not shown).

The base angle member 38, as best shown in FIGURE 9, includes a flat surface 48 having a plurality of longitudinally spaced bolt holes 182A and 182B to permit anchoring to the concrete base by means of anchor bolts 40. An angular steel plate 50 extends upwardly from the flat bottom plate 48 and includes a corresponding plurality of bolt holes 184A and 184B.

The base channel 52, as best shown in FIGURE 9, is adapted to be attached to the base angle member to support the sculptured steel panels 25. The base channel 52 includes an upwardly extending flange 186 having a plurality of bolt holes 188A and 188B corresponding to the bolt holes 184A, 184B in the angular plate 50 of base channel member 38. The base channel 52 also includes a flat plate 190 having a plurality of ears 192 extending longitudinally from the edge thereof. These ears 192 fit behind the rib portions at the bottom ends of the sculptured steel panels when the panels 25 are seated in base channel 52. The bolts 54, best shown in FIGURE 4, pass through the bolt holes 188A, 188B and 184A, 184B and through the concealed grooves in the sculptured steel wall panels holding the three together to support the wall panels at an angle corresponding to the slope of the walls of the A-frame.

The liner panel clips 166, best shown in FIGURE 10, are formed of cadmium coated steel sheet having a web portion 194 with a large slot 196 therein, which slot has opposite serrated edges 198 and 200 extending to the smooth bottom edge 202. An ear 204, formed integrally of the same sheet metal as the web 194, extends parallel to the web 194 on the side opposite from the slot 196, joining the web 194 at a bottom edge 206 to form a narrow slot 208 between the web 194 and the ear 204. As best shown in FIGURE 7, the panel clips are adapted to receive the interlocking channels of the sculptured steel panels within the large slot 196 compressing the members

150 and 144 against each other and towards the members 146 and 140 so as to hold them firmly together and to support the panel clips on the sculptured steel panels. In this position the slot 208 extends parallel to the outer surface of the walls 22 or 24 (FIGURE 1) of the A-frame building in the interior thereof. At the four ends of the two side walls the flange members 164 of the liner panels are inserted within the slot 208 and held thereby. The other flange members 162 and 164 of other panels in the A-frame building fit within the slots 208 of successive liner panel clips to be held against one another within the interior of the walls of the A-frame building. It will be noted that these clips are not visible from either outside of the A-frame building or the interior of the A-frame building so as to preserve its attractive appearance. Moreover, they are quite easily attached.

Erection of the A-frame building

The A-frame building is prepared as a prefabricated kit to be assembled as explained hereinafter. First, a foundation is laid. While the foundation can be formed of any desired material or be of any design, it is generally constructed of concrete. A concrete slab serves as the foundation for the building and also as the floor. Anchor bolts are driven into the foundation and pass through the holes 182 of the base angle members 38 to hold these members along two parallel paths to form the outer periphery of the building.

The ridge member 58 is erected by connecting some of the sculptured steel side panels 25 to it and lifting it on these panels. The panels are then mounted to the base angle member together with the base channel 52 by means of bolts passing through the holes 184 and 188 and through the bottom of the panels. The sculptured steel panels rest in the groove formed by the orthogonal sides 186 and 190 of the base channel 52.

All of the sculptured steel panels are snapped together to form the continuous walls 22 and 24. The ridge cap is also snapped in place on top of the A-frame building. It is held there by angle irons resting against its inner edges and forcing it against the ends of the sculptured steel panels, which angle irons are bolted to the angle irons 82 of the ridge member 58, the bolts passing through the bolt holes 126 and 128 therein.

The sculptured steel side panels are bolted to the holes 108 in the side plates of the ridge member 58. The liner panels are mounted to the sculptured steel panels by means of the liner panel clips 166. The soffit panels 92 are supported on top of the liner panels by means of the downwardly turned edges 100 and 102 to form the ceiling of the A-frame building. The pre-cut end walls 124 are erected and bolted in place to an angle iron 82 near the end of the building so as to hold them to the ridge member.

The doors are pre-cut and may be inserted by attached hinges. The glass is easily positioned into the end walls so as to complete the closure. Of course, other features may be added to this A-frame building such as are common in other types of buildings but will not be described here since they are not part of the invention.

It can be seen that this building is simply erected and is economical. It is completely self-framing and self-supporting having a clear span throughout its length. No columns or girders are necessary, resulting in lower cost and ease of erection.

While a specific embodiment has been described herein, it is obvious that many modifications and variations in the invention may be made in the light of the above teachings. It is therefore to be understood that, within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A clear span, self-framing building comprising:
 - a first plurality of side members;
 - a second plurality of side members;
 - a third plurality of side members;

end walls; and
 a top member;
 said first plurality of said side members being positioned adjacent to each other on one side of said top member to form an outer wall of said building;
 said second plurality of side members being positioned adjacent to each other on the opposite side of said top member to form another outer wall of said building;
 said third plurality of side members being fitted adjacent to one another to form interior walls of said building and being adapted to be supported by said first and second pluralities of side members;
 said end walls being shaped to fit between diametrically opposite ones of said first and second pluralities of side members;
 means for fastening one end of said side members to a foundation;
 means for fastening the other end of said side members to said top member so as to support said top member; and
 means for fastening said end walls to said top member.

2. A building according to claim 1 wherein:
 - said top member is a single ridge member having two side plates connected to each other by a plurality of parallel spacer members,
 - said side plates each have an angular side with the angular sides of said two side plates being inclined together at the top, and
 - said first and second plurality of side members are supported against said angular sides,
 - and further wherein said means for fastening said first and second plurality of side members to said foundation includes two angular plates,
 - said first and second plurality of side members are fastened between said foundation angular plates and the angular sides of said ridge member to form the sides of an A-frame building,
 - a ridge cap is positioned above said top member and held to said spacer members to form the top of said A-frame building,
 - said building further including end wall frames fastened to the spacer members.

3. A building according to claim 1 further including a soffit adapted to be supported by and depend from said third plurality of side members to form a ceiling for said building.

4. A building according to claim 1 in which said top member is a single ridge member having two side plates connected to each other by a spacer, said side plates each having an angular side, with said angular sides of said two side plates being spaced apart but inclined together at the top, said first and second plurality of side members being supported against said angular sides.

5. A building according to claim 1 in which said means for fastening said side members to said foundation include two angular plates, said first and second plurality of side members being adapted to be fastened to said angular plates.

6. A building according to claim 5 in which said side members are bolted between said angular plates and said angular sides to form the sides of an A-frame building.

7. A building according to claim 6 further including a ridge cap positioned above said top member to form the top of said A-frame building.

8. In combination with a self-framing building, a ridge therefor comprising:

- a ridge member;
- a roof member abutting said ridge member;
- said ridge member comprising:
 - a first elongated side plate;
 - a second elongated side plate;
 - a plurality of spacers;
- each of said plurality of spacers having a first end

rigidly attached to said first side plate and a second end rigidly attached to said second side plate;
 said plurality of spacers being longitudinally aligned and parallel with each other;
 each of said side plates including an angular side having a top edge and a bottom edge;
 said angular sides being spaced apart but inclined toward each other at their top edge;
 said top edges of said angular sides being integrally connected to outwardly extending flanges longitudinally extending the length of said ridge member and being orthogonal to said angular sides;
 each of said angular sides including a plurality of bolt holes whereby structural members of said building may be fastened thereto; and
 said side plates and spacers defining at least one access opening through said ridge member for securing other elements thereto.

9. In combination with a self-framing building, a ridge member in accordance with claim 8 in which said spacers each include a plurality of bolt holes, whereby the roof of said building may be fastened thereto supporting it with respect to said structural side members.

10. In a self-framing building, a ridge member in accordance with claim 9 in which said spacers are angle irons.

11. A ridge for an A-frame building comprising:
 a ridge member;
 a roof member abutting said ridge member;
 said ridge member comprising:
 a first side plate having a top edge and a bottom edge;
 a second side plate having a top edge and a bottom edge;
 each of said first and second side plates including a first flat portion having a plurality of bolt holes longitudinally extending thereon;
 a spacer connected at one end to said first side plate and at the other end to said second side plate rigidly

connecting said first flat portions so that they form an angle with respect to each other having said top edges closer together than said bottom edges; and
 said side plates and spacer defining an access opening through ridge member for securing other elements thereto.

12. A ridge member according to claim 11 further including outwardly extending flanges, contiguous with said top edges, whereby said ridge member may rest upon side members of said A-frame building.

13. A ridge member according to claim 11 further comprising a plurality of other spacers, each being parallel to said first-mentioned spacer and being mounted to said side plates.

14. A ridge member according to claim 13 in which said spacers have a plurality of bolt holes therein, whereby end portions of said A-frame building and a ridge cap for said A-frame building may be fastened thereto.

15. A ridge member according to claim 11 comprising steel.

References Cited

UNITED STATES PATENTS

1,048,062	12/1912	Fromhold	52—730
1,825,195	9/1931	McAvoy	52—275 X
2,352,807	7/1944	Sheldon	52—262
2,142,060	12/1938	Miner	52—22 X
3,193,973	7/1965	Lee	52—90 X
3,203,145	8/1965	Raynes	52—22 X

FOREIGN PATENTS

522,619 1940 Great Britain.

JOHN E. MURTAGH, Primary Examiner

U.S. Cl. X.R.

52—90, 265, 278, 281, 295, 463, 508, 542