

July 23, 1940.

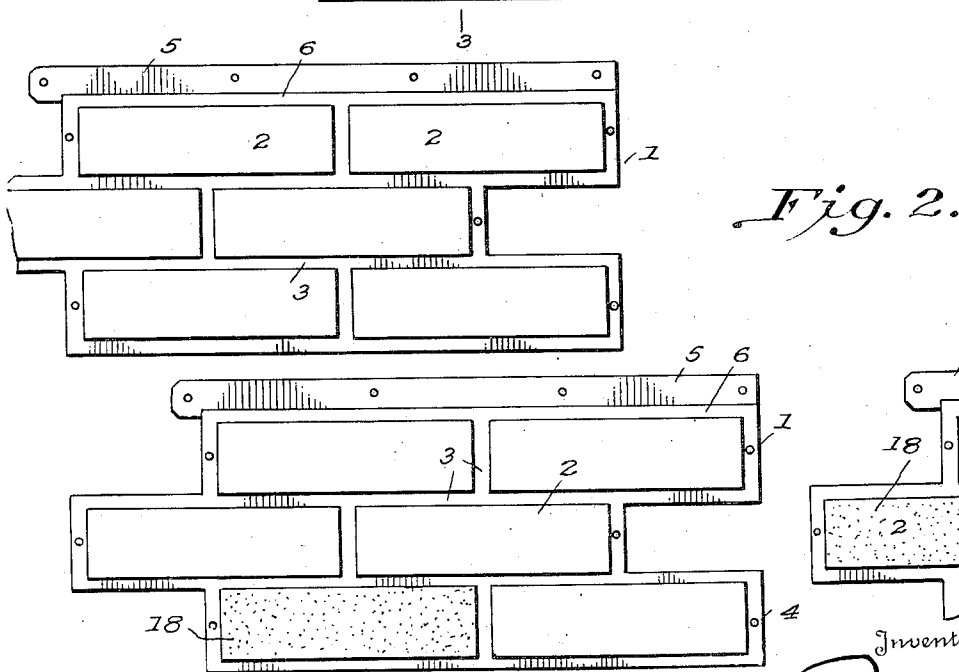
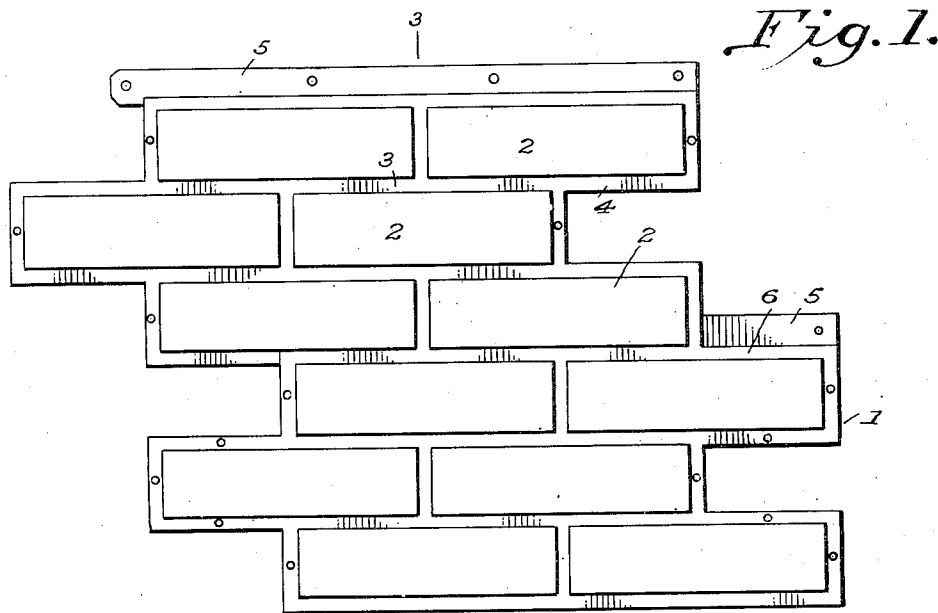
D. B. RONZONE

2,209,283

BUILDING UNIT

Filed Nov. 2, 1939

2 Sheets-Sheet 1



Inventor
David B. Ronzone,
By Leach & Radue
Attorneys.

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Fig. 3.

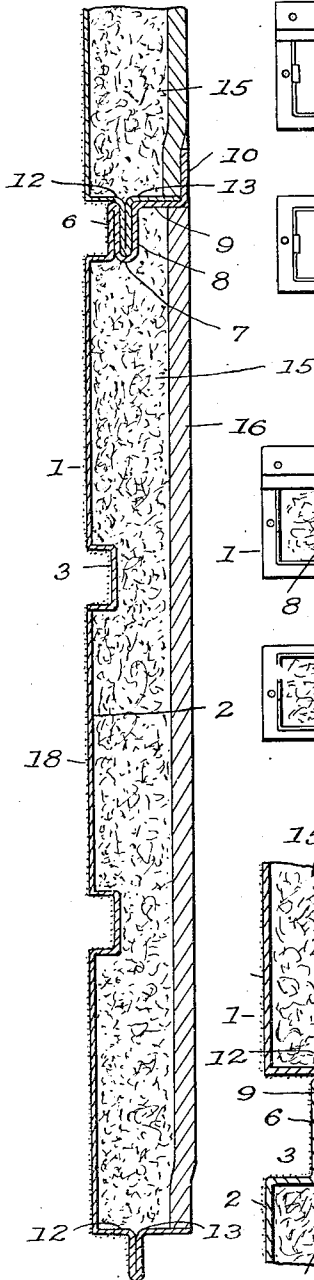


Fig. 4.

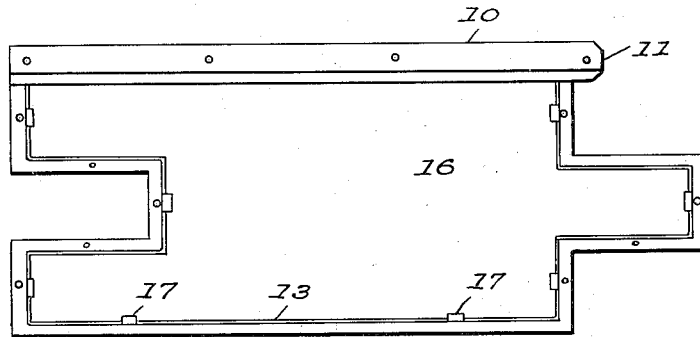


Fig. 5.

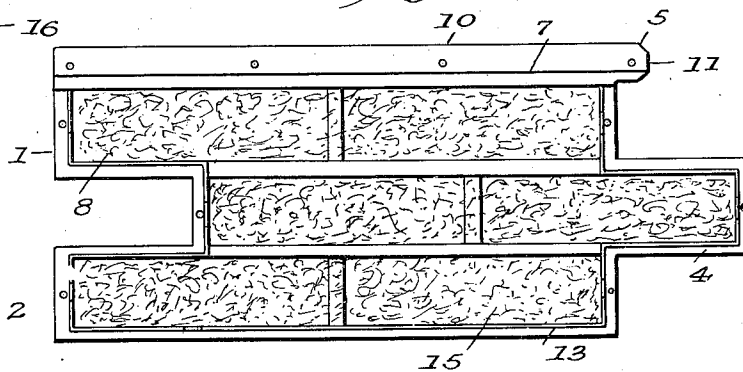


Fig. 6.

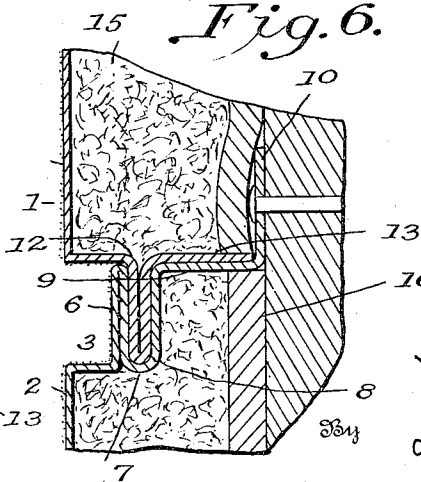
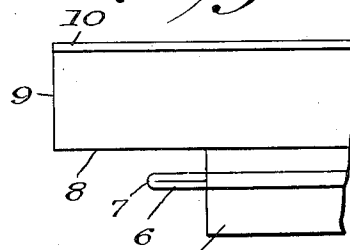


Fig. 7.



Inventor
David B. Ronzone
Leech & Radue.
Attorneys

UNITED STATES PATENT OFFICE

2,209,283

BUILDING UNIT

David B. Ronzone, Jamaica, N. Y., assignor to
Peter A. Parker, Rocky Mount, N. C.

Application November 2, 1939, Serial No. 302,601

4 Claims. (Cl. 189—86)

This invention pertains to metal siding units and, more particularly, to interfitting units by means of which the side walls of buildings may be covered with a minimum of effort and expense.

An object of the invention is to produce metal siding units for interior and exterior use which may be finished to simulate brick construction and to stamp or press out said units from suitable gauge metal in one operation. Each unit consists of a plurality of horizontal rows of spaced "bricks" with the alternate rows longitudinally offset so that the conventional staggered effect of brickwork is secured.

Another object of the invention is to so form the upper edges of the units that they will interlock and form a water tight joint one with the other.

A still further object is to fill the rear face depressions of the siding with fireproof and heat insulating material so that when the units are applied a storm, heat and fire proof building results therefrom.

In the drawings:

Fig. 1 is a plan view showing the interlocking of two units;

Fig. 2 is a plan view of a plurality of units slightly separated from one another to illustrate the manner in which they may be interfitted;

Fig. 3 is a vertical cross section taken on line 3—3 of Fig. 1;

Fig. 4 is a rear plan view of a fully finished unit;

Fig. 5 is a rear plan of a unit after it has been insulated, but before the application of the fireproof backing element;

Fig. 6 is an enlarged cross sectional detail showing the interlocking edges of two units; and

Fig. 7 is an enlarged top plan view of a siding unit showing the interlocking tongue structure.

The units 1 are generally rectangular in shape and from a practical standpoint they are preferably made up to represent two horizontally spaced bricks in three horizontal courses with the center course staggered in relation to the first and third course. The middle or alternate row of "bricks" consequently present unbroken surfaces overlapping the vertical edges of the "bricks" in the upper and lower rows. From a continuous roll of skelp or sheet metal, the individual units 1 are pressed out in such a manner that the outwardly projecting brick-like areas 2 are vertically and horizontally spaced by margins 3 simulating "mortar lines" in the form of depressions surrounding the individual

"bricks." These spaces or margins 3 extend around the outer edges of the units, as indicated by the numeral 4, so that when laid up the extending areas of successive units 4 will overlap one another.

The upper or top edge of each unit, indicated by the numeral 5, is composed of an offset up-standing margin 6 bent back upon itself at 7 and again bent back at 8 in spaced relation to portion 6. The upper end of the portion 8 is turned at right angles at 9 and the extreme end 10 is bent to lie in spaced parallel relation to the front surface of the unit. Thus the top edge of the unit forms a complete locking means for both longitudinally and vertically successively fitted units. As shown, nail holes are provided in the locking strip 5 and also in the margins 4. As shown in Fig. 6, the lower margins 4 of the succeeding units lie between the walls 6 and 8 with the wall 10 extending upwardly beyond and of greater length than the folded walls 6—8. As shown, the right-hand edge of the top locking wall is cut-off flush with the margin 4, while the left-hand edge is extended at 11 to overlap the flush edge of the succeeding unit when assembled on a dwelling.

The outer edges or margins 4 of the upper units are offset and cooperate with successive units. As illustrated in Fig. 6, the margin is folded or bent back upon itself at 12 with the free end 13 of the margin turned at a 90° angle which contacts with surface 9 on the lower units.

After the base metal portion of the units has been stamped out, including the top locking edge 5 and marginal areas 4, the undersides of the depressions 2 created by the pressing operation are filled with a heat insulating material 15, such as mineral wool, mica or the like. The rock wool or other material is extended to completely fill the back of the unit up to the top of the edge 13 and in practice this is approximately one inch in depth. To insure that the heat insulating material will adhere to the insides of the depression and in the slightly depressed areas 3, it is preferable to spray or coat the entire inside of the unit with asphalt. A rear fire resistant sheet 16 made of asbestos or the like is thereupon placed over the back of the unit and completely covers and retains the insulation 15 in place. The backing sheet is readily held in place by contact with the asphalt on the rear of the margins or may be retained by inwardly bent ears 17 struck out of the material of edging 13.

In applying units of the character described, it is only necessary to line up a lower horizontal

series thereof and after nailing the lower line in place the other units are readily placed in position and will always be properly aligned.

As shown in Fig. 2, the middle staggered or offset course of depressions interfits with the middle course or adjacent units, while the locking members 5 and tongues 11 interengage to support and line up the units. Nail openings are preferably formed, as illustrated in Fig. 2, and as succeeding units are interfitted, they are nailed through margins 6, 7, 4 and 5.

The exterior surfaces of the units are adapted for any desired treatment, but this is preferably done by spraying or dipping the units to cause asphalt or other adhesive material to adhere on the exterior faces of the depressions 2 and thereafter applying brick granules or the like 18 to give a finish which is difficult to discern from brick construction, and by a simple stripping device, the vertical and horizontal division lines or depressions 3 may be colored to simulate mortar.

What I claim is:

1. A building unit comprising a sheet metal plate having a plurality of horizontally pressed out portions extending over the plane thereof and laterally extending flanges formed on the top and bottom edges of said unit, the said flange portions lying in substantially the same plane as the unpressed portions of the plate, the flange portion on the upper edge of said plate forming

one side of a channel member positioned thereon, and the flange portion on the lower edge of the plate forming a cooperating member for engagement with the channel member of an adjacent unit.

2. A building unit as set forth in claim 1, wherein the rear edge of the said channel member is upturned and extends beyond the top edge of the unit to form a nailing strip.

3. A building unit as set forth in claim 1, wherein the top, bottom and side edges of the plate are bent inwardly at right angles to the plane of the sheet to form a box-like structure, the interiors of the said pressed out portions being filled with mineral wool and a fireproof backing sheet extending substantially throughout the area of the rear of the unit.

4. A building unit comprising a sheet metal plate embossed to simulate bricks with mortar joints therebetween, the unit being surrounded on its periphery by a flange lying substantially in the plane of the mortar joints, the flange on the upper edge of said unit having a continuation thereof bent downwardly and then upwardly to form a groove, the flange on the bottom of said unit being bent upon itself to form a tongue and a rim extending at right angles to the flange from the top of said groove and the bottom of said tongue.

DAVID B. RONZONE.