June 3, 1947. W. C. BOWMAN 2,421,407

BUTTON LOCKED DOWN SIDING

Filed Oct. 25, 1944

FIG. 1

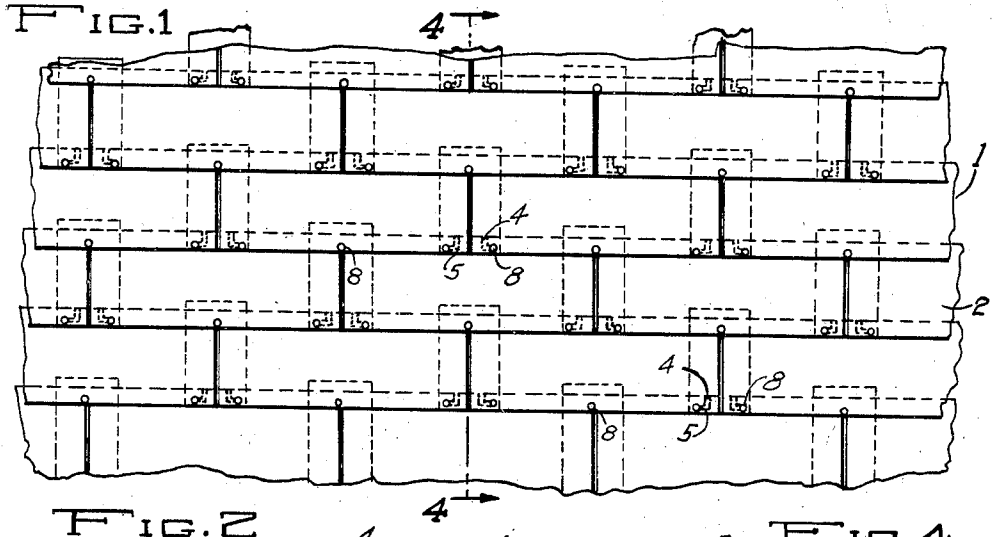


FIG. 2

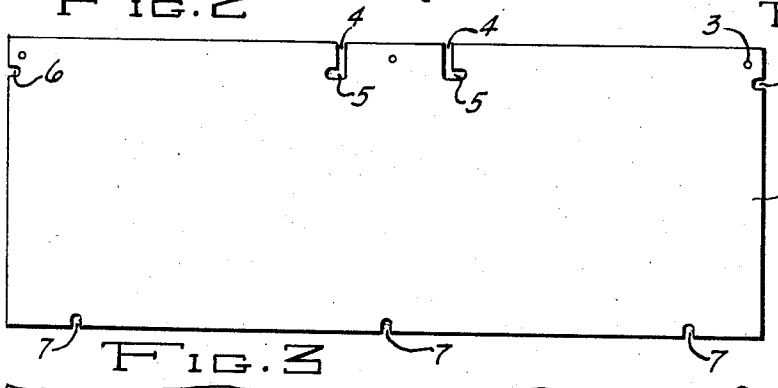


FIG. 3

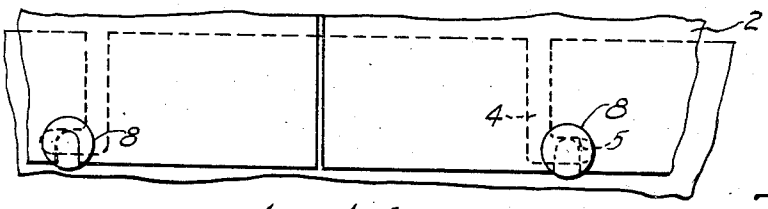


FIG. 4

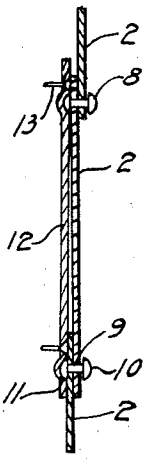
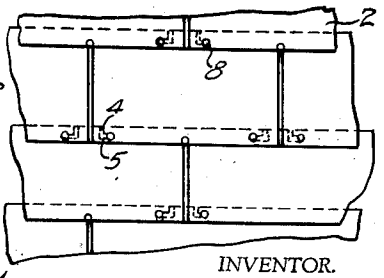


FIG. 5



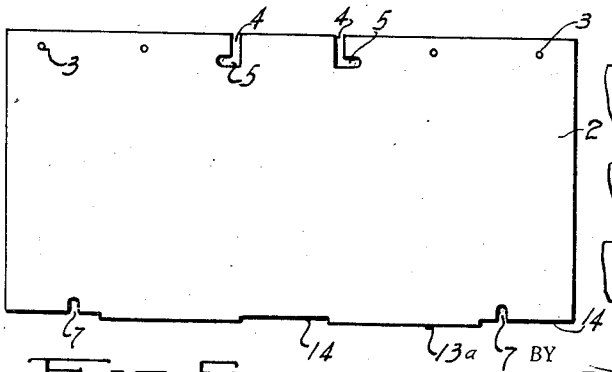


FIG. 6

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BUTTON LOCKED DOWN SIDING

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Application October 25, 1944, Serial No. 560,256

5 Claims. (Cl. 108—7)

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This invention relates to a novel and improved weather surfacing covering and particularly to weather surfacing elements in the form of individual shingles or strips for siding which are adapted to be readily laid in overlapping courses without face nailing and provide for expansion and contraction. The weather exposed edges are locked down to prevent lifting or rattling but the elements are permitted to move relatively to facilitate laying and to allow for contraction and expansion after they are laid.

The locking or fastening device is adapted for siding of different construction and design, but is particularly adapted for sidings which are not nailed directly to the under structure along their bottom edges but are nevertheless locked down and secured against curling and lifting. The elements are nailed to the under-structure with a minimum number of nails, and are secured in overlapping relation by means connecting the elements together but not to the understructure.

The present invention is particularly suitable for rigid siding elements, such as formed from cement-asbestos and like material.

For a better understanding of the invention, reference may be made to the accompanying drawings, in which:

Fig. 1 is a plan view of a section of a siding covering comprising surfacing elements embodying the invention;

Fig. 2 is a plan view of an individual siding element;

Fig. 3 is an enlarged view of a lapped portion of two overlapping courses;

Fig. 4 is a section taken on line 4—4 of Fig. 1; and

Figs. 5 and 6 are modified forms of siding elements embodying the invention.

Referring specifically to the drawings, in which like numerals are used to designate like parts, numeral 1 designates a building wall, or any understructure, which is to be covered with the siding elements 2.

The siding elements are commonly made from cement-asbestos and into rectangular strips about 12 inches wide and 24, 27 or 32 inches long, but may of course be made of any material and of any size. Ordinarily these elements are laid end to end in rows which are overlapped at the top and bottom edges and nailed in place to the wall being covered. Nails are driven through the elements at spaced intervals along their upper margins, and then along the lower margin to penetrate therethrough and also through the upper margin of the underlying row. The present invention aims to eliminate this face nailing along the bottom edge and to substitute therefor a fastening means securing the lapped edges against lifting or curling but not fastening them to the wall. Moreover the fastening means, while securing the lapped rows together against lifting or curling, does not prevent relative movement therebetween.

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Any number of nailing apertures 3 are provided along the top margin of the element, and at predetermined places elongated slots 4 are provided extending in from the top edge. The base of the slot is preferably enlarged such as by an elongated extension 5 and disposed at an angle to the slot portion 4. Two of these slotted portions are preferably provided intermediately the ends of the element and are suitably spaced in order that each may be supplied with a fastening means hereinafter referred to for engaging the two ends of the elements which are laid adjacent in a row upon the element in an underlying row.

Aligned with the extension slot portions 5 are slots 6 which are preferably provided on each end of a surfacing element to also receive a fastening means. Inasmuch as these are formed in the ends of the elements no extending slots, such as 5, extending in from the top edge are necessary.

The bottom edges of the surfacing elements are also provided with slots 7, these being spaced apart so that they will register with the extension slots 5 and the end slots 6 in the upper margin of the elements when they are laid in courses with the joints of the abutting elements in one course breaking with the joints of abutting elements in an adjacent course.

After a first course of elements is laid in end to end relation, fastening means 8 are inserted in the slots 4, 5 and 6 provided along the upper margin. Then the elements in the overlapping row are dropped down with the slots 7 in the bottom edge also receiving a fastening means 8. Because of the extension slot 5 the fastening means can properly space themselves to register with the slots 7. The spacing of slots 7 is such that they will be aligned with the extension slots 5 and preferably out of alignment with slots 4.

The fastening means comprises a shank portion 9 between two head portions 10 and 11. The fastening means may be made of any suitable material such as metal, molded plastics, glass and the like.

The joints between adjacent abutting ends of the surfacing elements may be sealed by a strip 12 of any suitable material. This may be metal,

asphalt roofing strips or the like nailed in place by nails 13.

The modification in Figs. 5 and 6 is substantially the same as that above described, the only difference being that the lower edge is irregular to provide projections 13a alternating with recesses 14 to give a decorative appearance.

An advantage of the present invention is that fewer nails are required for nailing the elements to the substructure to be covered, and relative movement between the elements is permitted, thereby lessening a shearing strain upon the nails.

Having thus described the invention in detail in connection with siding element of different design, I claim:

1. A weather surfacing element comprising a rectangular body having a slot near each end and inner slots intermediately the ends of the element and extending in from the top edge with extension slots angularly disposed and also having slots disposed along the bottom margin and inwardly from the bottom edge, said slots in the bottom margin being arranged to be out of registration with the inner slots but in registration with the extension slots and those slots which are near the ends of similarly constructed overlying elements.

2. A weather surfacing covering comprising overlapping rows of surfacing elements, each comprising a body having a row of slots disposed at predetermined intervals along the upper margin, extension slots angularly disposed to some of the slots, and another row of slots disposed along the lower margin, the extension slots in the upper margin being in registration with the slots in the lower margin of overlying elements, and fastening means fitted into the registering slots and secured by overlying elements bridging those slots which are provided with extension slots.

3. A weather surfacing covering comprising overlapping rows of surfacing elements, each comprising a body having a row of angular slots disposed at predetermined intervals along the upper margin and extending inwardly from the upper edge, and another row of slots disposed along the lower margin, portions of the angular slots being in registration with the slots in the lower margin of overlying elements, and fastening means fitted into the registering slots and secured by overlying elements bridging the open ends of the angularly disposed slots.

4. A weather surfacing element comprising a body having a slot, intermediately of opposite ends, extending therein from the top edge and an enlarged recess provided at the base of the slot, and a slot extending into the body from the bottom edge of the element arranged to register with the enlarged recess of a similarly constructed underlying element to receive a fastening means in the registering slots and securing the elements together when laid in overlapping courses.

5. A weather surfacing element comprising a body having a slot extending therein from opposite ends adjacent to the upper edge, a pair of spaced-apart slots extending into the body from the top edge intermediately of the slotted ends, and slots extending into the body from the bottom edge and disposed to register with the end and top edge slots of elements of a similar construction when laid in overlapping rows for receiving fastening means.

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The following references are of record in the file of this patent:

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