

C. G. HOCKETT

VENTILATING SYSTEM INCLUDING LOUVER SHEET MEMBERS

2 Sheets-Sheet 1

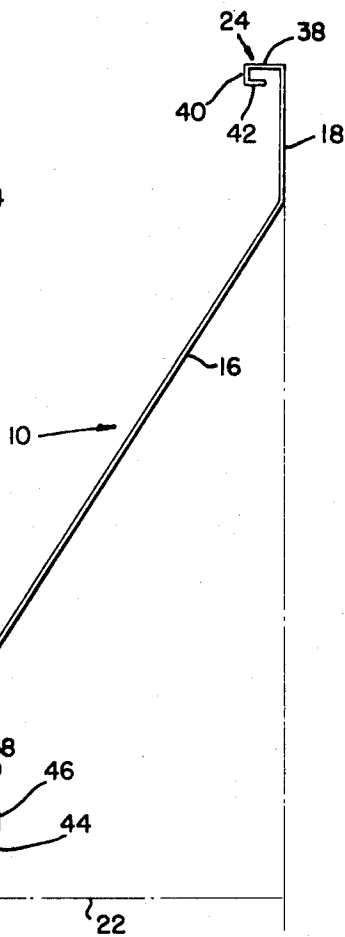


FIG.-2

INVENTOR.
CORWIN G. HOCKETT
BY *Glenn, Palmer*
Matthews
HIS ATTORNEYS

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C. G. HOCKETT

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VENTILATING SYSTEM INCLUDING LOUVER SHEET MEMBERS

Filed Sept. 16, 1963

2 Sheets-Sheet 2

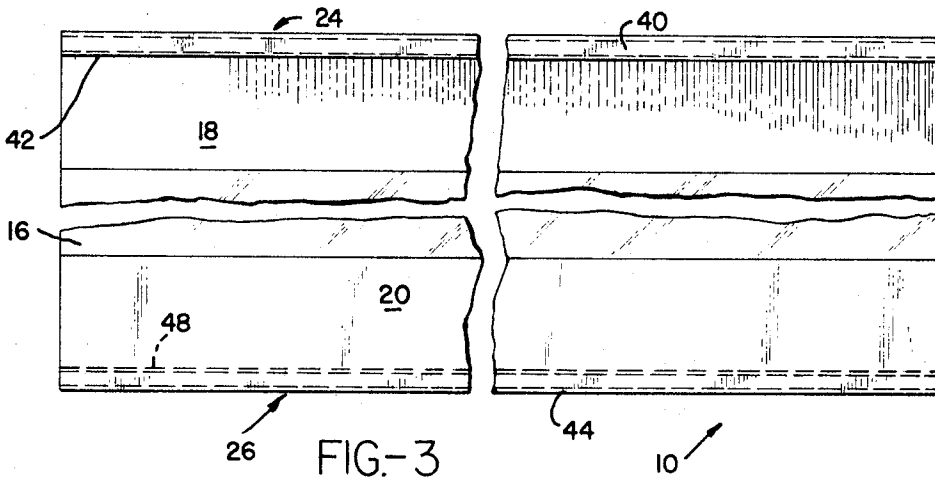


FIG-4

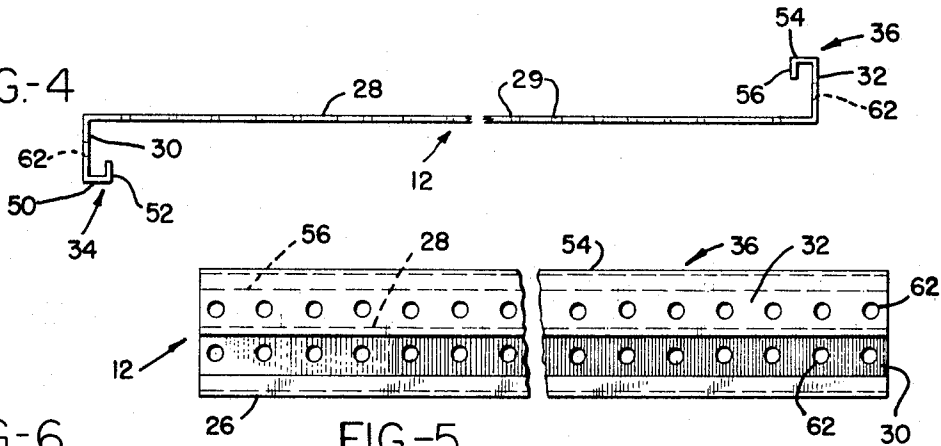
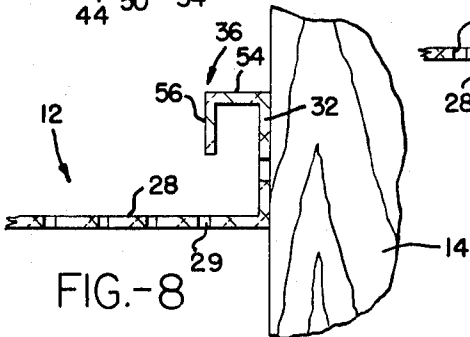
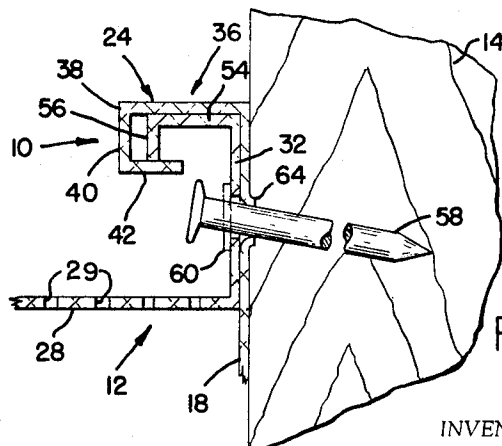
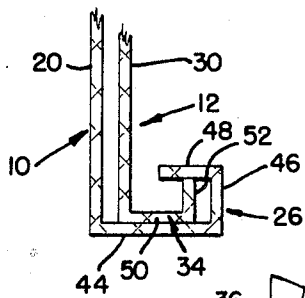


FIG-6



INVENTOR.

CORWIN G. HOCKETT

BY

Glenn Palmer
Matthews
HIS ATTORNEYS

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3,267,834

VENTILATING SYSTEM INCLUDING LOUVER
SHEET MEMBERSCorwin G. Hockett, Henrico County, Va., assignor to
Reynolds Metals Company, Richmond, Va., a corpora-
tion of DelawareFiled Sept. 16, 1963, Ser. No. 308,934
5 Claims. (Cl. 98—121)

This invention relates to a ventilating system which may be used on gable ends and the like.

The ventilating system or combination includes one or more similar louver sheet members and one or more ventilator sheet members which may be efficiently secured together at any desired place, such as at the gable end of a building and the like, to provide an efficient and attractive louver construction.

The louver sheet members and the ventilator sheet members may be made in standard or special lengths, and other dimensions, so they may be assembled and secured to the framing construction of the building by simple fastening operations which produce a firm, durable and attractive louver construction.

Other features and advantages are apparent from this description, the appended claimed subject matter and/or the accompanying drawings, in which:

FIGURE 1 is a diagrammatic perspective view of a ventilating combination embodying this invention.

FIGURE 2 is an end view of a louver sheet member of said combination.

FIGURE 3 is a side view of FIGURE 2 with parts broken away.

FIGURE 4 is an end view of a ventilator sheet member of said combination, on an enlarged scale.

FIGURE 5 is a side view of FIGURE 4 with parts broken away.

FIGURE 6 is a typical outer joint of said combination.

FIGURE 7 is a typical intermediate inner joint of said combination.

FIGURE 8 is a typical starting inner attachment joint of said combination.

Certain words indicating direction, relative position, and the like, are used herein for convenience and brevity of description. However, it is to be understood that such description applies only to the drawings, and that in actual use the parts so described may have entirely different direction, relative position, etc. Examples of such words are "upper," "lower," "vertical," "horizontal," etc.

The word "outward" is used herein, at times, to describe a position outward or away from the building. The word "inward" is often used herein to imply the converse meaning.

A ventilating combination according to this invention may include one or more louver sheet members 10 and one or more ventilator sheet members 12 which may be assembled and secured to any framing construction 14, vertical or otherwise, of a building, or the like.

The louver and ventilating sheets 10 and 12 may be formed or extruded from any suitable material, such as any suitable aluminum alloy and the like, and can be attractively coated and/or colored as desired. They may be made with symmetrical edge constructions and of standard or special lengths, and other dimensions, so they may be quickly and efficiently assembled on the building and the like.

The louver sheet member 10 may have an upwardly and inwardly slanting central louver portion 16 with an inner vertical upper edge louver extension 18 to be se-

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cured to the vertical framing construction 14 in a manner to be described. The sheet member 10 may also have an outer vertical lower edge louver extension 20, which has a main horizontal louver offset with respect to the upper edge louver extension 18, as indicated by the dotted dimension line 22 in FIGURE 2.

The upper edge louver extension 18 may have a horizontally outward upper louver hook 24 of less horizontal extent than the offset 22. The lower edge louver extension 20 may have a horizontally inward lower louver hook 26 of less horizontal extent than said offset 22.

The ventilator sheet member 12 may have a central apertured horizontal main ventilator portion 28 having apertures 29. The member 12 may also have an outer vertical downward edge extension 30 and an inner vertical upward edge ventilator extension 32 to be secured to the framing construction 14.

The apertures 29 may be sufficiently large to provide the desired ventilation into and out of the building. However, such apertures 29 may also be small enough to prevent entrance of bugs, insects, etc. For example, such apertures may be holes .093 inch in diameter and may be spaced .188 inch on centers.

The downward extension 30 may have an inward ventilator hook 34 of a dimension to be engaged in the lower hook 26, as shown in FIGURE 6.

The upward ventilator extension 32 may have an outward ventilator hook 36 which may be of a dimension to be engaged with an upper louver hook 24 of another similar ventilating combination below the outward ventilator hook 36, as shown in FIGURE 7.

The upper edge louver extension 18 and upper louver hook 24 may be symmetrical with the lower louver extension 20 and the lower louver hook 26. The downward edge ventilator extension 30 and the inward ventilator hook 34 may be symmetrical with the upward edge ventilator extension 32 and the outward ventilator hook 36.

The outward upper louver hook 24 may have an outward horizontal extension 38, a downward vertical extension 40 and an inward horizontal extension 42. The inward lower louver hook 26 may have an inward horizontal extension 44, an upward vertical extension 46 and an outward horizontal extension 48.

The inward ventilator hook 34 may have an inward horizontal extension 50 and an upward vertical extension 52. The outward ventilator hook 36 may have an outward horizontal extension 54 and a downward vertical extension 56.

The constructions of the louver sheet members 10 and the ventilator sheet members 12 are such that a first combination of a louver sheet member 10 and ventilator sheet member 12, such as shown in the intermediate part of FIGURE 1, may be combined and engaged with a second and lower similar combination of a louver member 10 and ventilator member 12 (only partially shown) immediately below such intermediate combination as partially shown in the lower part of FIGURE 1 and/or with a second and upper combination of a louver member 10 and ventilator member 12, as shown in the upper part of FIGURE 1.

Any number of combinations may be combined and engaged together and with the framing construction 14 as indicated diagrammatically in FIGURE 1.

These combinations may be easily and efficiently installed where desired, such as by being attached to the typical framing construction 14, which may include vertical support side members at the sides of the louver construction and/or intermediate vertical support members.

These combinations may be erected in the following manner.

The lowermost horizontal ventilator sheet member 12 of FIGURE 8 may have its upward edge extension 32 secured directly to the framing construction 14 by means of a suitable number of fasteners which may be the same as fasteners 58 of FIGURE 7, with or without washers 60, FIGURE 7. The fasteners 58 may be aluminum alloy nails or screws which may be inserted through any of the preformed perforations 62 of extension 32 and may be driven into the framing construction 14.

This first lowermost horizontal ventilator sheet member 12, as shown in FIGURE 8 may be the first member to be readily fastened directly to the framing construction 14 independently of any upper edge lower extension and without interference from any upper louver member 10, since no such upper louver member has yet been attached. The upward edge extension 32, FIGURE 8, may have nails or screws easily hammered or driven into the framing construction 14. At that time there is no upper louver member 10 to interfere with the hammering or driving of the nails or screws. Also, the downward edge extension 30 of the ventilator member 12 does not interfere with such hammering or screw driving operation, since the extension 30 is downwardly directed and does not extend above the horizontal main portion 28 of the ventilator 12. Therefore, this first ventilator member 12 of FIGURE 8 is quickly, easily and efficiently secured to the frame construction 14.

After the first and lowermost ventilating sheet 12 has been directly connected to the framing construction 14, a louver sheet member 10 may have its outer lower edge extension 20 connected to the outer downward edge extension 30 of such lowermost ventilating sheet 12, in the same manner as is shown in FIGURES 1 and 6. The hooks 26 and 34 may be interlocked as shown in FIGURE 6. Then the upper edge louver extension 18 of such louver sheet member 10 may be the next member to be secured to the framing construction 14 with or without engaging and interlocking an upward edge extension 32 of the lower ventilating member 12 shown in FIGURE 1. If a second ventilating member is used, then the attachment may be as shown in FIGURES 1 and 7, wherein the fasteners 58 pass through the preformed openings in the upward edge extension 32 and through punctures 64 pierced by the fasteners 58, or by a suitable tool, so the fasteners 58 can pass into the framing construction 14. The nail or screw 58 of FIGURE 7 is quickly, easily and efficiently hammered or driven into the frame construction 14 without interference from any upper louver member 10. At that time there is no upper louver member installed to interfere with such hammering or driving operation. Again, as previously described in connection with the installation in FIGURE 8, the hammering or screw driving operation can be performed without interference from any upper louver 10. If desired a second upper combination of members 10 and 12 may be added above the first or intermediate combination of members 10 and 12, as shown in FIGURE 1. Any number of additional combinations of members 10 and 12 may be superimposed on the combinations of members 10 and 12 shown in FIGURE 1.

If desired, the hook 24 of the uppermost louver member 10 may be allowed to remain for attachment of outer wall siding members, not shown, or such hook 24 may be sheared off, so the remaining part of the upward extension 18 can be flashed under suitable framing or siding of the building construction.

The sheets 10 and 12 may be of any suitable material, such as of any suitable aluminum alloy which may be coated or colored in any desired manner. The sheets may be, for example, .020 inch thick.

The sheet 10 may be 5.77 inches in vertical extent, and may have a main offset 20 of 2½ inches. The vertical extensions 18 and 20 may be 1 inch. The horizontal ex-

tensions 38 and 44 may be ¼ inch. The upward and downward vertical extensions 40 and 46 may be ½ inch and the horizontal extensions 42 and 48 may be ½ inch.

The sheet 12 may be of a length to fit into the upper hook 24 and the lower hook 26. The downward and upward edge extensions 30 and 32 may be ¾ inch. The horizontal extensions 50 and 54 may be .156 inch. The vertical extensions 52 and 56 may be .078 inch.

It is thus to be seen that a new, efficient and useful ventilating system has been provided, which can be prefabricated and/or tailored for installation and use at any desired location.

While the form of the invention now preferred has been disclosed as required by statute, other forms may be used, all coming within the scope of the claimed subject matter which follows.

What is claimed is:

1. A ventilating combination comprising: a louver sheet member having a main upward and inwardly slanting central louver portion with an inner vertical upper edge louver extension to be secured to a vertical framing construction and with an outer vertical lower edge louver extension with a main horizontal louver offset with respect to said upper edge louver extension, said upper edge louver extension having a horizontally outward upper louver hook of less horizontal extent than said main horizontal louver offset, and said lower edge louver extension having a horizontally inward lower louver hook of less horizontal extent than said main horizontal offset; and a ventilator sheet member having a central apertured horizontal main ventilator portion with an outer vertical downward edge ventilator extension and with an inner vertical upward edge ventilator extension to be secured to said framing construction, said downward edge ventilator extension having an inward ventilator hook to be engaged in said lower louver hook, and said upward edge ventilator extension having an outward ventilator hook and with said upward edge ventilator extension to be secured to said vertical framing construction before said upper edge louver extension is secured to said framing construction.

2. A combination according to claim 1, and with said outward upper louver hook having an outward horizontal extension, a downward vertical extension and an inward horizontal extension and with said inward lower louver hook having an inward horizontal extension, an upward vertical extension and an outward horizontal extension and with said inward ventilator hook having an inward horizontal extension and an upward vertical extension and with said outward ventilator hook having an outward horizontal extension and a downward vertical extension and in which various ones of said extensions are engaged to each other to join said louver sheet member and said ventilator sheet member together.

3. A louver sheet member having a main upward and inwardly slanting central louver portion with an inner vertical upper edge louver extension to be secured to a vertical framing construction and with an outer vertical lower edge louver extension with a main horizontal louver offset with respect to said upper edge louver extension, said upper edge louver extension having a horizontally outward upper louver hook of less horizontal extent than said main horizontal louver offset, and said lower edge louver extension having a horizontally inward lower louver hook of less horizontal extent than said main horizontal offset and with said outward upper louver hook having an outward horizontal extension, a downward vertical extension and an inward horizontal extension.

4. A louver sheet member according to claim 3 with said inward lower louver hook having an inward horizontal extension, an upward vertical extension and an outward horizontal extension.

5. A ventilator sheet member having a central horizontal apertured main ventilator portion with an outer vertical downward edge ventilator extension and with an inner vertical upward edge ventilator extension to be se-

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cured to a vertical framing construction, said downward edge ventilator extension having an inward ventilator hook, and said upward edge ventilator extension having an outward ventilator hook said downward edge ventilator extension and said inward ventilator hook being symmetrical with said upward edge ventilator extension and said outward ventilator hook, with said inward ventilator hook having an inward horizontal extension and an upward vertical extension, and with said outward ventilator hook having an outward horizontal extension and a downward vertical extension.

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MEYER PERLIN, *Primary Examiner.*JOHN F. O'CONNOR, *Examiner.*WILLIAM F. O'DEA, *Assistant Examiner.*