

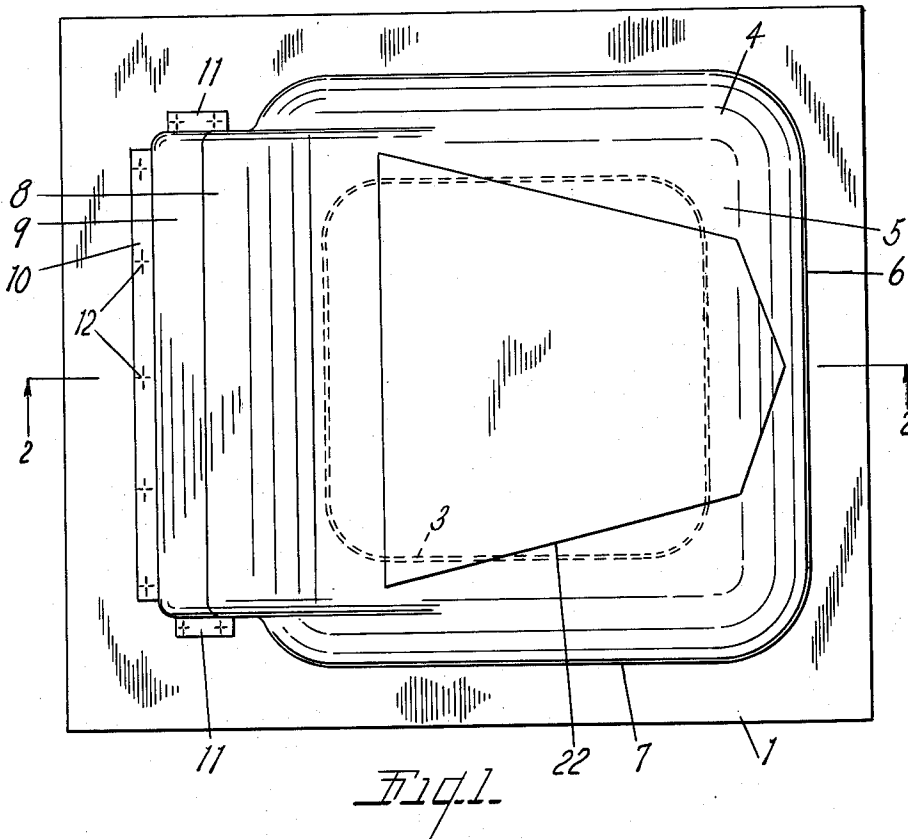
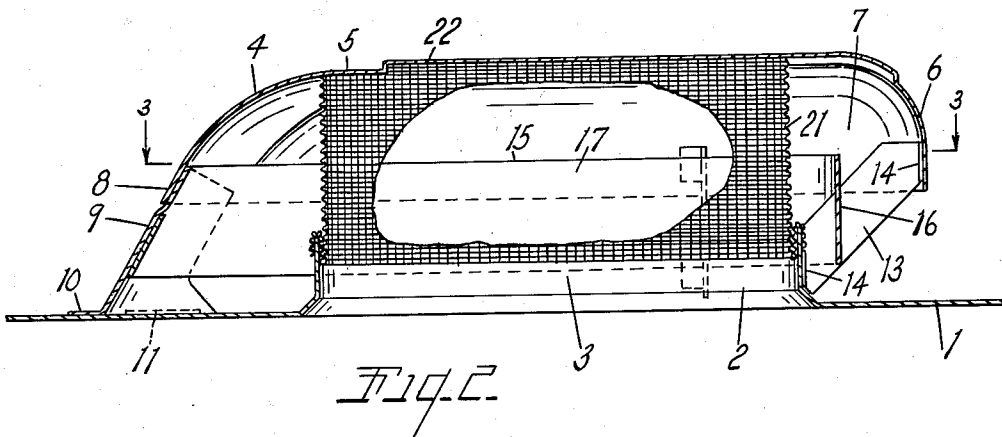
June 25, 1963

R. L. LEIGH
ROOF VENTILATOR

3,094,915

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2 Sheets-Sheet 1



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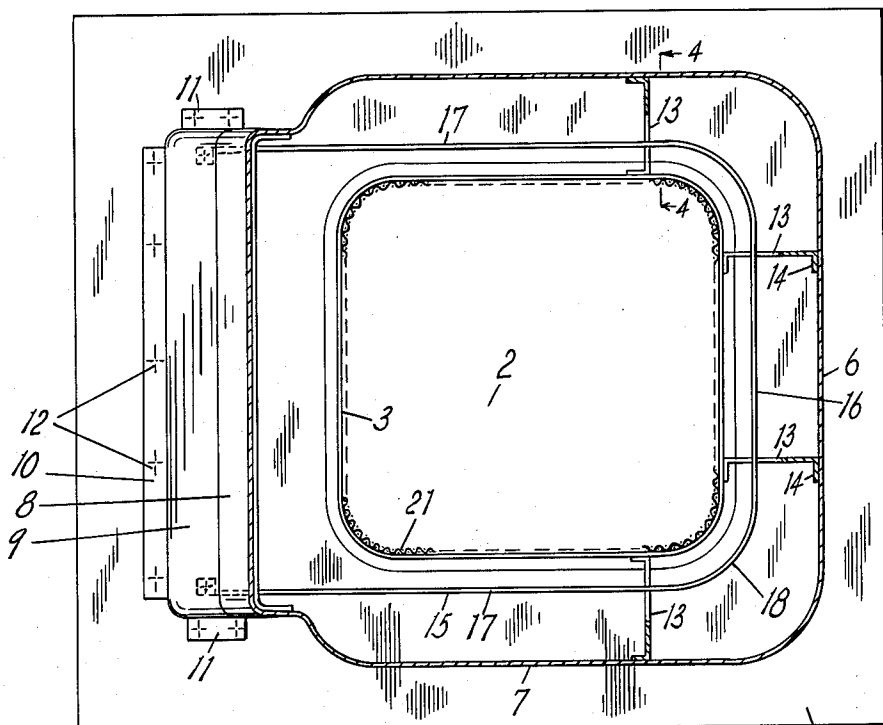


Fig. 3

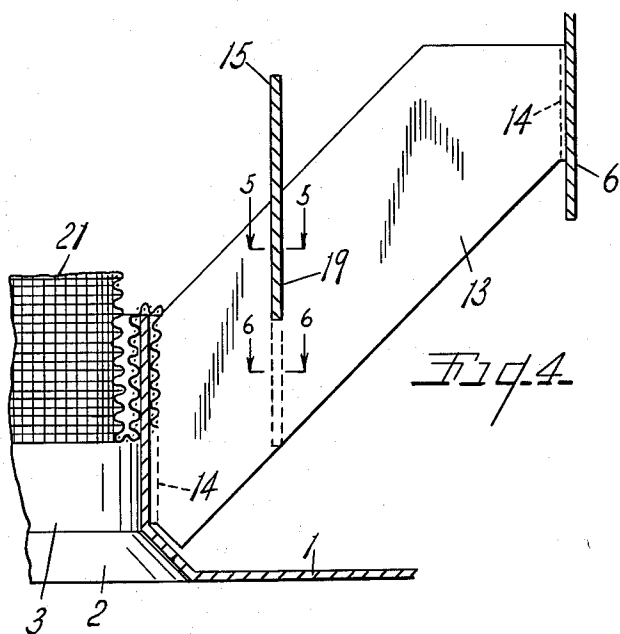


Fig. 4

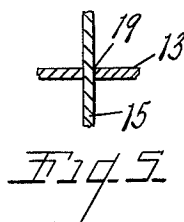


Fig. 5

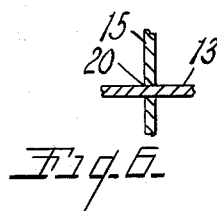


Fig. 6

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ROOF VENTILATOR

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9 Claims. (Cl. 98-42)

This invention relates to improvements in roof ventilators. The main objects of this invention are,

First, to provide a roof ventilator of large flow capacity in proportion to its overall dimensions.

Second, to provide a roof ventilator having the above advantage in which entrance of water and snow into the ventilated area is prevented.

Third, to provide a roof ventilator in which the parts are arranged so that they serve as bracing and supporting members relative to each other.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims. A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

FIG. 1 is a plan view of a roof ventilator embodying my invention, certain parts being shown conventionally.

FIG. 2 is a vertical section on a line corresponding to line 2-2 of FIG. 1 the screen being partially broken away.

FIG. 3 is a horizontal section on a line corresponding to line 3-3 of FIG. 2.

FIG. 4 is an enlarged fragmentary view in vertical section on a line corresponding to line 4-4 of FIG. 3.

FIG. 5 is a fragmentary view in section on a line corresponding to line 5-5 of FIG. 4.

FIG. 6 is a fragmentary view on a line corresponding to line 6-6 of FIG. 4.

The ventilator of my invention is primarily designed to be mounted on a slanted roof in a manner similar to that illustrated in Patent No. 2,628,551, issued to me February 17, 1953. The roof is not illustrated in the drawings and reference is made to the patent to show the ventilator in installed relation. In the embodiment illustrated, the base member 1 is generally rectangular and is formed of sheet metal stock, having a central opening 2 therein of generally rectangular shape surrounded by the inner baffle member 3, desirably an integral part of the base member being drawn upwardly therefrom. The top member, designated generally by the numeral 4, comprises the top 5, downwardly projecting front and side walls 6 and 7 respectively, and a rear wall 8 which has an extension 9 fixedly secured thereto and provided with rear and side flanges 10 and 11 which are fixedly secured to the base member, see FIGS. 1, 2 and 3, the attaching means being spot welds conventionally illustrated at 12.

It will be noted that the top walls are in substantially outwardly spaced relation to the inner baffle member 3 or wall surrounding the opening 2. The top member is further supported by the brackets or struts 13, the embodiment illustrated having two of these struts at the front end and one on each side, see FIG. 3. These struts are desirably of sheet metal stampings and have end flanges 14 which are fixedly welded to the outer side of the inner baffle member or wall 3 and to the inner side of the wall of the top member, see FIGS. 3 and 4. It will be noted that the lower edges of the front and side walls are substantially spaced from the bottom member, thus permitting a relatively free flow of air below the top walls.

The second baffle member, designated generally by the numeral 15, comprises a front portion 16 and side portions 17 formed integrally, desirably of a strip of sheet

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metal and having curved corner portions 18. The baffle member 15 is disposed in outwardly spaced relation to the baffle 3 with its lower edge projecting substantially below the plane of the upper edge of the inner baffle member 3, and its upper edge projecting substantially above the upper edge thereof and substantially above the plane of the lower edges of the walls of the top.

In the embodiment illustrated, the strut members 13 are provided with vertical slots 19 adapted to receive portions of the baffle member 15, the lower edges of the baffle member having slots 20 therein with which the struts 13 fittingly engage. With this arrangement, the baffle member 15 is effectively supported and all that is necessary to do is to slip it downwardly into the slots 19 and that is done before the top is secured to the struts 13. This arrangement of parts provides a very strong and rigid structure in proportion to the weight of stock used, which is a highly desirable feature as the ventilators are assembled as a complete unit so that all that is required for installing is to provide an opening in the roof of suitable dimensions. As stated, one of the objects of the invention is to provide a ventilator of relatively large flow capacity in proportion to its external dimensions and one which is relatively low and is inconspicuous when installed.

In the embodiment illustrated, the top is provided with an embossed portion 22 which serves to stiffen the same, but has no functional purpose other than such stiffening.

The screen 21 is mounted on the inner baffle member 3 in surrounding relation thereto and projects upwardly with its upper edge in contact with the top. This prevents entrance of insects, leaves and the like through the ventilator.

One of the accomplished objects of this invention is that the ventilator has large capacity in proportion to its dimensions and that it does not project conspicuously from the roof. Commercial structures embodying the applicant's invention are only six inches (6") in height.

I have illustrated and described my invention in a highly practical embodiment thereof. I have not attempted to illustrate or describe possible modifications in the design and the like, as it is believed that this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired.

Having thus described the invention, what is claimed as new and desired to secure by Letters Patent is:

1. A roof ventilator comprising a base member having a substantially rectangular vent opening therein, a first baffle member of substantial height integral with and projecting upwardly from said base member in surrounding relation to said opening therein, a hood comprising a top disposed in substantially vertical spaced relation to said first baffle member and having downwardly projecting front, rear and side walls spaced outwardly relative to said first baffle member, the rear wall of said top member extending downwardly and being fixedly secured to said base member, a plurality of laterally spaced struts mounted on said first baffle member to project outwardly and upwardly therefrom with their outer ends fixedly secured to the inner sides of said hood front and side walls, said struts having upwardly opening slots therein spaced outwardly from said first baffle member, and a second baffle member of U-shape supportingly engaged in said slots in said struts and having strut receiving slots extending from its lower edge fittingly receiving portions of said struts, the said second baffle member being substantially spaced from said hood top and walls with its upper edge projecting above the plane of the lower edges of said walls and its lower edge projecting below the plane of the top of said first baffle member.

2. A roof ventilator comprising a base member having

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a substantially rectangular vent opening therein, a first baffle member of substantial height integral with and projecting upwardly from said base member in surrounding relation to said opening therein, a hood comprising a top disposed in substantially vertically spaced relation to said first baffle member and having downwardly projecting front and side walls spaced outwardly relative to said first baffle member, a plurality of laterally spaced struts mounted on said first baffle member to project outwardly and upwardly therefrom with their outer ends fixedly secured to the inner sides of said hood front and side walls, said struts having upwardly opening slots therein spaced outwardly from said first baffle member, and a second baffle member of U-shape supportingly engaged in said slots in said struts and having strut receiving slots extending from its lower edge fittingly receiving portions of said struts, the said second baffle member being substantially spaced from said hood top and walls with its upper edge projecting above the plane of the lower edges of said walls and its lower edge projecting below the plane of the top of said first baffle member.

3. A roof ventilator comprising a base member having a substantially rectangular vent opening therein, a first baffle member of substantial height integral with and projecting upwardly from said base member in surrounding relation to said opening therein, a hood comprising a top disposed in substantially vertically spaced relation to said first baffle member and having downwardly projecting front, rear and side walls spaced outwardly relative to said first baffle member, the rear wall of said top member extending downwardly and being fixedly secured to said base member, a plurality of laterally spaced struts mounted on said first baffle member to project outwardly therefrom with their outer ends fixedly secured to said hood, said struts having upwardly opening slots therein spaced outwardly from said first baffle member, and a second baffle member including front and side portions supportingly engaged in said slots in said struts and having strut receiving slots extending from its lower edge receiving portions of said struts, the said second baffle member being substantially spaced from said hood top and walls with its upper edge projecting above the plane of the lower edges of said walls and its lower edge projecting below the plane of the top of said first baffle member.

4. A roof ventilator comprising a base member having a substantially rectangular vent opening therein, a first baffle member of substantial height integral with and projecting upwardly from said base member in surrounding relation to said opening therein, a hood comprising a top disposed in substantially vertically spaced relation to said first baffle member and having downwardly projecting front and side walls spaced outwardly relative to said first baffle member, a plurality of laterally spaced struts mounted on said first baffle member to project outwardly therefrom with their outer ends fixedly secured to said hood, said struts having upwardly opening slots therein spaced outwardly from said first baffle member, and a second baffle member including front and side portions supportingly engaged in said slots in said struts and having strut receiving slots extending from its lower edge receiving portions of said struts, the said second baffle member being substantially spaced from said hood top and walls with its upper edge projecting above the plane of the lower edges of said walls and its lower edge projecting below the plane of the top of said first baffle member.

5. A roof ventilator comprising a base member having a vent opening therein, a first baffle member projecting upwardly from said base member in surrounding relation to said opening therein, a hood comprising a top disposed in substantially vertically spaced relation to said first baffle member and having downwardly projecting side walls spaced outwardly relative to said first baffle member, said top member having a wall portion extending downwardly and fixedly secured to said base member, lateral-

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ly spaced struts supportedly mounted on said first baffle member with their outer ends secured to said hood walls, said struts having upwardly opening slots therein spaced outwardly from said first baffle member, and a second baffle member including front and side portions supportingly engaged in said slots in said struts and having strut receiving slots extending from lower edges receiving portions of said struts, the said second baffle member being substantially spaced from said hood top and wall with its upper edge projecting above the plane of the lower edges of said top walls and its lower edge projecting below the plane of the top of said first baffle member.

6. A roof ventilator comprising a base member having a vent opening therein, a first baffle member projecting upwardly from said base member in surrounding relation to said opening therein, a hood comprising a top disposed in substantially vertically spaced relation to said first baffle member and having downwardly projecting side walls spaced outwardly relative to said first baffle member, said top member having a wall portion extending downwardly and fixedly secured to said base member, laterally spaced struts supportedly mounted on said first baffle member with their outer ends secured to said hood walls, said struts having upwardly opening slots therein spaced outwardly from said first baffle member, and a second baffle member including front and side portions supportingly engaged in said struts, the said second baffle member being substantially spaced from said hood top and wall with its upper edge projecting above the plane of the lower edges of said top walls and its lower edge projecting below the plane of the top of said first baffle member.

7. A roof ventilator comprising a base member having a vent opening therein, a first baffle member constituting a wall around said opening, a hood, the top of which is disposed in vertically spaced relation to the top of said first baffle member and which has downward projecting walls spaced outwardly relative to said first baffle member, struts supportingly connected to said base member, and a second baffle member including front and side portions supportedly mounted on said struts with its lower edge projecting below the plane of the top of said first baffle member and in upwardly spaced relation to said base member to permit the flow of air therebetween and its upper edge spaced from the top but projecting above the plane of the lower edges of the walls of said hood member and spaced inwardly relative thereto with its upper edge spaced downwardly from the top of said hood to permit the flow of air therebetween.

8. A roof ventilator comprising a base member having a vent opening therein, a first baffle member supportedly mounted on said base member and projecting upwardly from said base member in surrounding relation to said opening therein and constituting a wall around said opening, a hood, the top of which is disposed in vertically spaced relation to the top of said first baffle member and which has downward projecting walls spaced outwardly relative to said first baffle member, and a second baffle member including front and side portions disposed with its lower edge spaced outwardly from and projecting below the plane of the top of said first baffle member and in upwardly spaced relation to said base member to permit the flow of air therebetween and its upper edge spaced from the top but projecting above the plane of the lower edge of the walls of said hood member and spaced inwardly relative thereto with its upper edge spaced downwardly from the top of said hood to permit the flow of air therebetween.

9. A roof ventilator comprising a base member having a vent opening therein, a first baffle member projecting upwardly from said base member in surrounding relation to said opening, a hood, the top of which is disposed in vertically spaced relation to the top of said first baffle member and which has downward projecting walls spaced outwardly relative to said first baffle member, and a second baffle member disposed with its lower edge spaced

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outwardly from and projecting below the plane of the top of said first baffle member and in upwardly spaced relation to said base member to permit the flow of air therebetween and its upper edge spaced from the top but projecting above the plane of the lower edge of the walls of said hood member and spaced inwardly relative thereto with its upper edge spaced downwardly from the top of said hood to permit the flow of air therebetween.

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