ORNAMENTAL ATTACHMENT FOR VENT STACKS

INVENTOR.

ALFONSO J. DILETTO

ATTORNEY
ORNAMENTAL ATTACHMENT FOR VENT STACKS

Filed June 1, 1955

INVENTOR.

ALFONSO J. DILETTO

BY

FREDERICK H. ZOEB

ATTORNEY
ORNAMENTAL ATTACHMENT FOR VENT STACKS

Alfonso J. Diletto, Meadowbrook, Pa.

Application June 1, 1955, Serial No. 512,484

11 Claims. (Cl. 41—10)

This invention relates to an attachment for a vent stack or pipe of the type adapted to project out of the roof of a house or other structure, and more particularly has reference to a device so designed as to wholly or partially enclose the vent pipe so that it will not be obvious to the casual viewer.

Residential homes and other buildings, as presently constructed, are required to be equipped with vent pipes or stacks constituting a vertical extension of the soil pipe of a toilet, which extension projects upwardly within a wall of the building, and extends a substantial distance, as required by local building codes, out of the roof of the house.

Particularly in the case of modern, attractive designed residential structures, the projecting portion of the vent pipe is unsightly, and detracts appreciably from the appearance of the home. The main object of the present invention, accordingly, is to provide as an article of manufacture an attachment for the conventional vent pipe, which is so designed as to be ornamentally shaped, and when mounted upon a vent pipe will completely enclose the same, or will at least overlie the vent pipe to an extent sufficient to conceal the projecting portion thereof from the view of passersby.

Another object of importance is to form the vent pipe attachment in such a manner as to facilitate its engagement directly with the vent pipe, in a manner that will prevent relative movement between the device and the associated stack or pipe.

Another object is to provide means for connecting the attachment to the vent pipe which will be adapted for effecting the connection in minimum time and with marked facility, thus to permit the device to be attached to the vent pipe by the average householder without employing a skilled worker.

Another object of importance is to provide a device as stated which, without varying the means for connecting the same to the vent pipe, can be readily cast in any one of a plurality of ornamental shapes, such as animals, birds, weather vanes, dormers, etc.

Yet another object is to provide means of the type referred to which will be so designed as to effect a cooperation between a pitched roof from which the vent pipe projects, and the means for connecting the device to the vent pipe, the device being so formed relative to the roof pitch as to counteract any tendency that might ordinarily assert itself toward rotation of the device should the connecting means become slightly loosened.

Other objects will appear from the following description, the claims appended thereto, and from the annexed drawing, in which like reference characters designate like parts throughout the several views, and wherein:

Figure 1 is a fragmentary perspective view of a residential building having, on the vent pipe thereof, an attachment formed according to the present invention;

Figure 2 is an enlarged side elevational view of the attachment mounted on the vent pipe or stack, a portion of the device being broken away;

Figure 3 is a top plan view;

Figure 4 is a plan sectional view, still further enlarged, on line 4—4 of Figure 2;

Figure 5 is a side elevational view of a modified form of the device;

Figure 6 is a plan sectional view on line 6—6 of Figure 5;

Figure 7 is a front elevational view of a third form of the invention;

Figure 8 is a side elevational view of the form of the device shown in Figure 7;

Figure 9 is a sectional view on line 9—9 of Figure 8;

Figure 10 is a side elevational view of a fourth form of the invention mounted upon a vent stack, a portion of the stack and of the device being shown in section;

Figure 11 is an enlarged sectional view on line 11—11 of Figure 10;

Figure 12 is a view similar to Figure 10, showing a fifth form of the invention;

Figure 13 is a front elevational view of a sixth form of the device mounted upon a vent stack;

Figure 14 is an elevational view of the device shown in Figure 13, as seen from the right of Figure 13;

Figure 15 is an enlarged sectional view on line 15—15 of Figure 14;

Figure 16 is an enlarged, fragmentary, elevational view of the connecting means employed in the device of Figures 13—15, as seen from the line 16—16 of Figure 14;

Figure 17 is a view similar to Figure 15 showing a seventh form of the device; and

Figure 18 is a view similar to Figure 16, of the device shown in Figure 17.

In the form of the invention shown in Figures 1—4 the device has been shown mounted upon a conventional residential building generally designated at 20 having a pitched roof 22, from which projects upwardly a conventional vent stack 24. Ordinarily, the vent stack is wholly unconcealed from the view of passersby, and being usually located in a relatively open area of the roof 22, is so conspicuous as to detract measurably from the appearance of the house.

In accordance with the present invention, there is provided a vent stack attachment generally designated at 26, which when applied to the vent stack, will conceal the same from the view of passersby, and will seemingly be an ornamental article placed upon the house roof.

In this connection, in the form of Figures 1—4, the article is in the shape of a pheasant, but it will be understood that the article can be of any desired exterior ornamental configuration, and may be formed as any one of various other birds, animals, etc. or alternatively, can be formed in the shape of a small false dormer, weather vane, etc.

In any event, the article can be formed of any suitable material which will offer full resistance to corrosion or other deteriorating action to which it would normally be subject by reason of its display in a location exposed fully to the elements. For example, the article can be of a selected cast metal, painted or otherwise treated for the purpose of preventing rust or other corrosive effects from taking place, and also for the purpose of adding to the attractiveness of its appearance.

The article is formed to include a hollow body 28 formed in the illustrated example in the simulation of a pheasant, having a head and tail portion, and having the body part thereof formed with a relatively large cavity the top wall of which is provided with an opening 30 registered with the upper end of the vent stack 24, which projects upwardly within the cavity but terminates below the top surface of the body, so as to be wholly concealed from the view of passersby.
The body part of the article is integrally formed with a vertically disposed, tubular base opening at its upper end into the cavity of the body and formed at its lower end with a circumferentially extending, outwardly directed, enlarged part affording a substantial supporting surface for the device, which supporting surface is in engagement with the roof 32 and is supported obliquely to the roof pitch, obliquely to the vertically extending, longitudinal center line of the vent stack.

The tubular base is formed with a bore through which the lower portion of the vent stack extends, and in the illustrated example, a weep hole 37 is provided at the lower end of the bore, to permit drainage of water that may accumulate within the device. It should be noted that the drainage outlet can be provided wherever desired, or alternatively, the device can be so mounted upon the roof as to permit water to drain fully through the device without passage through drainage outlets, that is, the base can be slightly elevated above the surface of the roof for this purpose.

As shown in Figure 4, formed in the wall of the tubular base are radial, threaded openings 38, angularly spaced 90 degrees apart about the circumference of the wall. Set screws 42 are threaded in the openings 38, and when threaded inwardly to their maximum extent, bind against the wall of the vent stack 24, thus to securely clamp the device to the vent stack.

The openings 38, and hence the set screws 40, are all disposed in a common horizontal plane, which plane is, as a result, oblique to the plane of the bottom surface of the base 32. The device, even if the set screws become loose, will not, due to the obliqueness of the plane of the base relative to the axis of the stack, tend to rotate about the vertical vent to retain the same in its proper position upon the stack.

In Figures 5 and 6, there is shown a modified construction in which the article has been generally designated 62, and is hollowly formed, purely for the purposes of illustration only, has the same exterior configuration as the device shown in Figures 1-4. In this form of the invention, the hollow body 44 is formed, as in the first form, with a top opening registered with the upper end of the vent stack 24. Further, the hollow body part of the device is integrally formed with a tubular base 46.

In this form of the invention, however, the base at its lower end is integral with an outwardly directed, planiform, circular flange having a slightly spaced, smooth walled openings, receiving lag screws 52 threadable into the sheathing of the roof. It may be noted, in this form in this form of the invention as in the other forms, no attempt has been made to illustrate any sealing compound or other devices used to prevent leakage, since these are well within the skill of those in the art, and of course, conventional leak preventive means would be employed in association with the screws 52 to prevent leakage of water through the roof.

In Figures 7-9, another form of the invention has been illustrated, generally designated at 54. In this form, purely by way of example, the article has the exterior shape of a rooster, and is formed with a hollow cast body which, as distinguished from the previously described forms, is composed of two contacting sections 56, 58 respectively, having in their top surfaces, complementary recesses which, when the sections are joined in edge-contacting relation, cooperate to define a top opening for communicating the top of the vent stack 24 with atmosphere.

The sections 56, 58 are respectively formed with depending base sections 62, 64 each of which, as shown in Figure 9, extends through 180 degrees of a circle, so that said base sections cooperate to define a tubular base of generally circular cross section. Sections 62, 64 have their bottom edges cut away or beveled obliquely to a horizontal plane, correspondingly to the pitch of the roof 22, as shown at 66, 68, with the beveled lower ends of the base sections lying in a common plane so that when the sections are assembled, the resultant base will have its lower end cut away obliquely in the same manner as the forms of the invention previously described herein.

Formed upon the section 62, at opposite sides thereof, are outwardly extending ears 70 (Figure 9), while similar ears 72 and 74 correspondingly on the opposite sides of the sections are interengaged, to provide the tubular base, the ears 76, 72 in contact, with their openings in registration. The openings are smooth walled, to receive connecting bolts 74, on which are threaded nuts 76. The sections are thus clamped fixedly to the vent stack, the respective interlocking rounded, vertically extending recesses 78, 80 cooperating when the sections are joined to form a vertical bore in the base receiving the vent stack 24. The body of the device has its cavity formed in the manner previously described herein, the upper portion of the vent stack extending within said cavity.

A weep hole 37 is formed in section 62, in the illustrated example, at the lowermost part of the cavity of the body, to permit the drainage of water accumulating therein, but can be located at any other point desired.

In Figures 10 and 11, another form of the invention has been shown, generally designated 84. In this form of the device, the body 86 has the exterior shape of a goose, and is hollowly formed throughout, vertically extending, recessed vertically extending, 94 projecting to the upper end of the vent stack. To brace the housing within the body of the device, there are provided radially outwardly extending braces 96, 98, 100, 102 respectively, cast integrally with the housing and body.

Integrally formed upon the upper end of the housing extension 94, and angularly spaced equal distances apart about the circumference of said housing, are inwardly extending ears or tabs 100 of inverted L-shape, straddling the upper end of the vent stack and clamping engaged with the vent stack.

In this form of the invention, the device is lowered onto the vent stack, having the beveled lower end complementing the roof pitch, and when it is fully lowered into position, the ears 100 are firmly engaged over the upper end of the stack to prevent displacement of the device therefrom.

The beveled lower end of the device of course will prevent rotatable movement of the device upon the stack, thus cooperating with the ears 100 in maintaining the article in proper position.

In Figure 12, another form of the invention has been shown, wherein the article has been generally designated at 105, and is formed in the simulation of a selected bird or animal, having a hollow body 108 formed with a top opening 110. Integral with and depending from the body is a vertical, tubular base 112, and cast integrally with the body and extending vertically within the cavity thereof is a tubular vent stack housing 114. The inner diameter of housing 114 is greater than the outer diameter of the vent stack in this instance, defining an annular space between the stack and housing, into which space a leading compound 116 or the like is poured. When said compound sets, a fixed connection between the device and the stack results. As in the previous forms of the invention, any suitable means may be employed to insure against leakage when the device is in place, and the leading compound, flowing fully to the base of the stack, in fact aids in this respect, providing a seal extending fully about the outer circumference of the stack where said stack enters the roof.

In Figures 13-16, another form of the invention has been shown. In this instance, the article has been general-
ly designated at 118, and is formed in the outer shape of a climbing cat having a body 120. In this instance, instead of forming the body with a hollow cavity in which the vent stack is wholly concealed, the body is designed to merely cover the greatest part of the exposed area of the vent stack, reference here being had to the line of vision of passersby, and the body has been shaped merely to simulate that the cat is climbing the vent stack.

The body 120, in this form of the invention, is vertically elongated, and is of a width sufficient to extend about fully half the circumference of the vent stack. The inner surface of the body is formed from end to end thereof with a longitudinal recess 121 extending through substantially 180 degrees of a circle, about a radius common to that extending between the center point of the vent stack 24 and the outer surface thereof. The device can thus be laterally shifted from the left in Figure 14, directly into engagement with the vent stack, snugly embracing the same in the manner illustrated. When the body is so positioned, ears 122, projecting forwardly therefrom, will be disposed at opposite sides of the vent stack, there being two pairs of ears in the preferred embodiment, the ears of each pair being transversely aligned, and said pairs being spaced vertically of the body. The outer surfaces of the ears are as shown divergent a direction away from the body 120 and the ears 122 are formed with smooth walled openings 126 extending perpendicularly to the planes of the surfaces 124.

A connecting band 128 is formed from a single piece of material, and is formed at its opposite ends with cylindrical, threaded extensions 130. The band 128 is of a flexible, noncorrosive metal, having a flattened intermediate portion, and relatively rigid, rod-like end portions extending through the openings 126 and receiving nuts 132 turned home against the surfaces 124. When the nuts are turned home to their maximum extent, the band 128 is tensioned securely about the vent stack, and will draw the body into firm engagement with the vent stack, to securely mount the device thereupon.

In Figures 17 and 18, the device has been generally designated at 134, and is formed with a body 136 which may have the same exterior configuration as the body 120. In this form of the invention, the body at opposite sides thereof is shallowly recessed at selected locations, to define forwardly projecting ears 138, having threaded openings 140. As in the form of Figures 13–16, two pairs of ears are provided, spaced vertically of one another, with the ears of each pair being aligned transversely of the device. A flexible band 144 is formed with a longitudinal series of perforations 146, this being a conventional type of band element used for pipe straps, etc. When the device is placed upon the vent stack, screws 142 are extended through selected openings 146 of the band 144, and are threaded into the apertures 140, to securely hold the device in place upon the stack.

In all forms of the invention, of course, there is the common characteristic wherein an ornamental configured shape is mountable with maximum facility upon a conventional vent stack, in such a manner as to conceal the stack either completely, or at least to an extent sufficient to eliminate the unsightliness normally resulting from the full exposure of the stack in a conspicuous location. Further, in every instance the device is so formed as to be mountable upon the vent stack without requiring the modification, redesign, drilling, etc. of the vent stack in any way, the device still permitting location of the vent stack when desired, during the construction of the building, and further permitting the extension and location of the stack in full compliance with local building codes.

It is believed apparent that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claims.

1. A device for at least partially concealing from view a vent stack projecting upwardly through the roof of a building, comprising a cast body having the exterior configuration of an animal posed in a natural life-like position on the building, and adapted to receive at least a substantial part of the projecting portion of the stack in a position in which said body directly covers and conceals from view the major portion of at least one side of the stack; and means for mounting the body in a stack-receiving position.

2. A device as in claim 1 wherein the body is formed with a hollow cavity for receiving the upper portion of the stack and has a top opening for communicating the upper end of the stack with atmosphere, said body further including a depending, tubular base adapted to receive the lower portion of the stack of the body into engagement with the vent stack, said set screws lying in a plane normal to said vertical center line.

3. A device as in claim 2 wherein said base is formed with a lower end surface lying in a plane oblique to the vertical center line of the base, so as to lie in face to face contact with a complementarily pitched roof.

4. A device as in claim 3 wherein said means comprises a series of set screws angularly spaced about the circumference of and threadable radially, inwardly of the base into engagement with the vent stack, said set screws lying in a plane normal to said vertical center line.

5. A device as in claim 3 wherein said means comprises a flange projecting outwardly from the base in the plane of said lower end surface of the base, said flange having openings angularly spaced about the marginal part thereof, and fastening elements extending through said openings for engaging in said roof.

6. A device as in claim 3 wherein said body comprises interfitting body sections each of which has a depending, transversely curved extension cooperating with the extension of the other section to form said tubular base, said means comprising contacting, outwardly projecting ears on the respective depending extensions of the sections and bolts extending through the ears for clampingly engaging said extensions about the vent stack.

7. A device as in claim 3 wherein said body includes a tubular, stack-receiving housing projecting upwardly within the cavity thereof and constituting an upward extension of the tubular base, said means comprising ears projecting radially, inwardly from the housing at locations angularly spaced about the circumference of the housing, said ears being adapted to engage over the upper end of said stack.

8. A device as in claim 3 wherein said body includes a tubular housing adapted to extend about the stack and projecting upwardly within the cavity of the body as a vertical extension of the tubular base of the body, said housing having an inner diameter substantially greater than the outer diameter of the associated stack, so as to define an annular space therebetween, said means comprising a settable compound adapted to be poured in a fluid state in said space to sealably bond the stack to the housing.

9. A device as in claim 1 wherein said body is vertically elongated so as to extend longitudinally of the stack in contact therewith, the body having a stack-contacting front surface of the body transversely bowed inwardly and forming in the body a longitudinal recess transversely curved through substantially 180 degrees of a circle so as to receive the adjacent portion of the stack, the wall of the recess being rigidly constituted over its full area, said recess extending through the major portion of the length of the body, the exterior surface of the body being bowed transversely in a direction corresponding
to that of the stack-contacting surface, said means comprising connecting bands connected between opposite sides of the body and extending in engagement with the portion of the vent stack diametrically opposite that engaged in said recess of the body, said band extending through the remaining portion of said circle and being of longitudinally flexible formation to conform to the cross-sectional shape of the portion of the stack contacted thereby and to draw said body into engagement with the stack, said exterior surface of the body at opposite sides thereof having indentations defining recesses in the exterior surface receiving the ends of the band, said band-receiving recesses opening laterally outwardly of the body and forwardly in a direction away from said one side of the stack, the band-receiving recesses being closed at the rear thereof so as to substantially conceal the bands within the body when said body is engaged against the stack and is viewed from the rear.

10. A device as in claim 9 wherein the body, at opposite sides thereof, has ears formed with apertures, the bands including threaded extensions disposed through said apertures, said means further including nuts threaded on the extensions of the bands against the ears to tension the band about the vent stack.

11. A device as in claim 9 wherein the body, at opposite sides thereof, has ears formed with apertures, said connecting bands being each formed with a longitudinal series of perforations, selected ones of which are registrable with the apertures of the ears of the body, said means further including fastening elements extending through the selected perforations of each band and threadedly engaged in said apertures of the ears.

References Cited in the file of this patent

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Patent No.</th>
<th>Inventor</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,355,655</td>
<td>Munson</td>
<td>Jan. 4, 1887</td>
</tr>
<tr>
<td>1,268,488</td>
<td>Pullen</td>
<td>June 4, 1918</td>
</tr>
<tr>
<td>1,611,745</td>
<td>Harris</td>
<td>Dec. 21, 1926</td>
</tr>
<tr>
<td>1,659,252</td>
<td>Faith</td>
<td>Feb. 14, 1928</td>
</tr>
<tr>
<td>1,698,039</td>
<td>Wharam</td>
<td>Jan. 8, 1929</td>
</tr>
<tr>
<td>1,699,889</td>
<td>Harlow et al.</td>
<td>Jan. 22, 1929</td>
</tr>
</tbody>
</table>

OTHER REFERENCES

Pep Boys Catalog, copyright May 1954, page 11.