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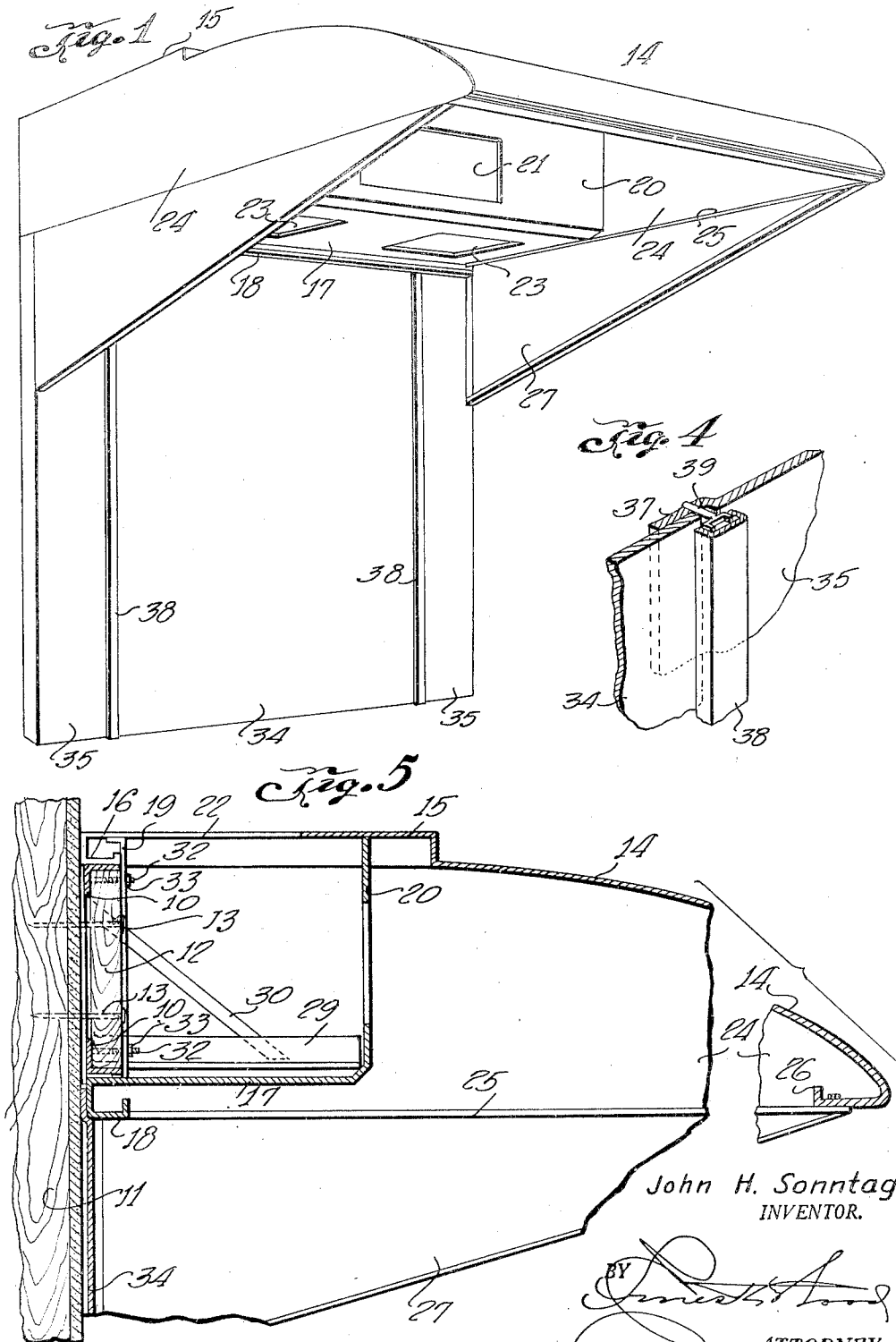
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STOVE CANOPY AND MOUNTING

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STOVE CANOPY AND MOUNTING

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7 Claims. (Cl. 98-115)

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This invention relates to ventilators of the type employed for collecting and disposing of smoke and cooking odors arising from cooking stoves and it has particular reference to improvements in such ventilators and the mounting facilities thereof.

Ventilating canopies mounted above cooking stoves and ranges for carrying off grease laden smoke and odors are quite old but as far as is known, no installation of this type possesses an initial supporting fabrication or mounting so designed and constructed that it may be located relative to wall studding and affixed thereto for greater permanence and stability and to which may be attached the elements of the ventilating canopy for proper positioning or alignment with the stove below the same. A further disadvantage has heretofore existed because of the fact that the screws, bolts or other canopy securing means have not been readily accessible and considerable effort on the part of two or more workmen is required to be exerted to hold the canopy in place while securing it to the support.

The principal object of the present invention is to provide a ventilating canopy and mounting, the latter being designed for initial securement to the studs of a wall, followed by the rear section of the canopy which is coextensive with the latter and shaped to define a housing for a suitable blower to influence smoke and fumes collecting under the canopy subsequently applied, out of the room through a convenient flue.

Another object of the invention is to provide a ventilating canopy in prefabricated sections in which the canopy itself as a section can be independently mounted and subsequently adjusted to align the same with the stove over which it is disposed and further to provide a canopy which can be kept clean because of the fact that all exposed areas likely to become soiled by smoke and grease may be conveniently reached from a standing position on the floor. Moreover, the canopy is devoid of inaccessible pockets and recesses in which dust and dirt may be entrapped.

With the foregoing objects in view, the invention has further reference to certain features of accomplishment which will become apparent as the description proceeds, taken in connection with the accompanying drawings wherein:

Figure 1 is a perspective view of a ventilating canopy constructed according to the invention.

Figure 2 is an "exploded" view of the canopy assembly and mounting.

Figure 3 is a fragmentary perspective view of

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certain of the canopy sections showing the relationship in assembly.

Figure 4 is a fragmentary detail view in perspective of sectional wall protector panels and finish molding, and

Figure 5 is a view of the canopy assembly and mounting in vertical section.

Continuing with a more detailed description of the drawing reference numeral 10 denotes each of a pair of parallel rails of the canopy mounting which are made of angle iron. These rails constitute the mounting for the canopy and associated elements to be later described.

It is important that the canopy be supported from the stable anchorage afforded by the studs of a wall rather than simply by the lath, wall board or other material forming the wall. Hence, when appropriate studs 11 (Fig. 5), of the wall are located, the rails 10 are properly positioned and secured by affixing wood strips 12 to the studs 11 by nails 13 so that the ends of the strips 12 will bear on the confronting flanges of the rails in the manner shown. It is obvious that even after applying the rails 10 in the manner shown and described, they can be adjusted longitudinally, if desired, to properly position the canopy in relation to a stove below the same.

The ventilating canopy consists of the main curved body 14 adapted to overlie a stove, the rear portion 15 being on a horizontal plane and provided on its rear edge with a return flange 16. Subjacent the portion 15 of the canopy 14 is a coextensive parallel portion 17 which likewise has a return flange 18 the length of its rear edge. The portions 15 and 17 of the canopy are held in fixed spaced apart relationship by metal straps 19 whose upper ends are welded or otherwise secured to the underside of the portion 15 while their lower ends are similarly anchored to the underlying portion 17 which latter is formed by bending a sheet of metal at right angles, the vertical portion of which constitutes a panel 20, perpendicular to and underlying the upper portion 15 of the canopy.

The panel 20 has an elongated opening 21 therein intermediate its ends through which air, smoke and odors are influenced by a suitable blower (not shown) housed in the chamber defined by the canopy sections 15, 17 and 20. The air, smoke and odors find escape through an opening 22 in the midsection of the canopy portion 15 with which communicates a flue, also omitted, leading to a chimney or other outlet.

Adjacent each end of the underlying canopy portion 17 is an opening 23 over which lamps are

disposed so that the light emanating therefrom may illuminate the stove through the openings 23.

At each end of the canopy 14 is an end panel 24 whose upper edge is shaped to conform to the portion 15 of the canopy 14 as well as the curved forward portion thereof and whose lower edge has an upturned flange 25 as a grease trap. Similarly, the forward edge of the canopy 14 has an upturned flange 26 to collect grease accumulating on the underside of the canopy.

Below each of the end panels 24 is a side wing 27 which has a right angle flange 28 along its upper edge which is adapted to be bolted to the flange 25 of the adjacent end panel 24. The lower edge of each side wing 27 converges to a point at its junction with the outer end of the canopy 14. The end panels 24 and side wings 27 serve to confine rising smoke and fumes under the canopy 14 so that they will be caught up in the current of air created by the exhaust blower in the enclosed portion of the canopy and carried off, as described. To provide a rigid support for the exhaust blower, the lower mounting rail 10 has affixed thereto a pair of spaced apart and forwardly projecting arms 29 secured thereto and stabilized by angular braces 30. The blower and operating motor are secured to the arms 29.

After first securing the mounting rails 10 to a wall, as previously described, the exhaust blower unit is set in position on the supporting arm 29 and secured. The canopy is then lifted into position so that the upper return flange 16 will rest on top of the upper mounting rail 10 while the lower return flange 18 will bear against the underside of the lower rail 10 as shown in Figure 5. Each of the straps 19 of the canopy has a transverse slot 31 adjacent its upper and lower end and these slots receive threaded studs 32 affixed to and protruding from the rails 10. After the straps 19 are properly located on the studs 32, nuts 33 are threaded onto the studs, access being had thereto either at the ends of the canopy or through the openings 23 in the portion 17 thereof.

It is apparent that by virtue of the elongated slots 31 in the straps 19, the canopy may be adjusted longitudinally before the nuts 33 are tightened finally and prior to installing the end panels and side wings. A considerable saving in time and labor is effected by this provision but chiefly through the provision for the successive installation of the mounting rails, exhaust unit, canopy proper, the end sections and finally the wall panel 34 and side panels 35. As a result, one workman may install the ventilating canopy in the time formerly requiring the efforts of two or more workmen.

The end panels 24 as well as the side wings 27 each have flanges 36 along their vertical rear edges. The flanges of the panels 24 lie under the ends of the mounting rails 10 to conceal them and present a pleasing finish while the flanges of the side wings 27 extend under the side edges of the side panels 35 at their upper ends.

The inner longitudinal edges 37 of the side panels 35 are each inset to underlie the contiguous side edges of the central wall panel 34 so that all of the panels will lie flush. This is true also of the upper ends of all of the panels 34 and 35 where they extend under the lower return flange 18 of the underlying canopy section 17, as shown, in Figure 5.

Finish molding strips 38 are provided for concealing the joints between the wall panels 34 and 35 and these strips are attached in the conventional manner as by clips 39.

By virtue of the fact that the exhaust unit housing extends the full width of the canopy 14, no inaccessible recesses or cavities are formed to collect dirt difficult to remove. All exposed surfaces on which grease and other foreign matter may collect can be readily reached by one to clean the same while standing on the floor, hence to keep the canopy in a clean and sanitary condition will require but a minimum of time and effort.

Manifestly, the construction as shown and described is capable of some modification and such modification as may be construed to fall within the scope and meaning of the appended claims is also considered to be within the spirit and intent of the invention.

What is claimed is:

1. A ventilator canopy and mounting including vertically spaced parallel mounting rails, spaced apart cleats securing said rails to the studs of a wall for longitudinal adjustment, an exhaust blower support on the lowest of said rails, a canopy having an upper rear section provided with a return flange bearing on the uppermost of said rails, a portion underlying said rear section having a return flange bearing against the lowest of said rails, a panel disposed under and perpendicular to said canopy, defining with said underlying portion a blower compartment co-extensive with said canopy, said panel having an opening through which smoke and fumes are influenced by a blower in said compartment, a pair of spaced apart and threaded studs carried by each of said mounting rails, straps affixed at their upper and lower ends to said upper rear canopy section and said underlying portion respectively and having slots receiving said studs to secure said canopy to said mounting rails, end panels closing the ends of said canopy, wall panels below said mounting rails and means on said canopy and end panels for entrapping grease.

2. A ventilating canopy and mounting including a pair of mounting rails, each having a pair of threaded studs protruding therefrom, means for attaching said rails to a wall for longitudinal adjustment, a support carried by the lowest of said rails for an exhaust blower, a blower chamber below and coextensive with said canopy having an opening through which air is influenced by a blower in said compartment from below said canopy, spaced apart straps affixed to the rear of said canopy having slots receiving said threaded studs to secure said canopy to said mounting rails, end panels closing the ends of said canopy, wall panels below said canopy and means on the outer edge of said canopy and on said end panels for entrapping grease collecting thereon.

3. A ventilating canopy and mounting, the latter comprising a pair of rails, each having threaded studs protruding therefrom, a blower support carried by the lowest of said rails, a curved canopy section, an underlying portion defining a blower compartment whose length equals the width of said canopy and having an opening through which grease laden air is influenced from under said canopy section by a blower in said compartment, slotted means affixed at the rear of said canopy section and compartment for receiving said threaded studs to secure said canopy section to said rails, end panels closing the ends of said canopy, wall panels below said canopy and means on said canopy and panels for collecting grease.

4. A kitchen ventilator including a canopy section having a blower compartment thereunder whose length is equal to the width of said canopy

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section and having an opening through which grease laden air is drawn by a blower in said compartment, a mounting comprising a pair of vertically spaced parallel rails adapted to be mounted on a wall for longitudinal adjustment, threaded studs affixed to and protruding from said rails, straps affixed to the rear of said canopy section having slots receiving said studs to secure said canopy section to said rails, means carried independently by the lowest of said rails to support a blower in said compartment, end panels closing the ends of said canopy section, horizontally spaced and juxtapositioned wall panels and means on said end panels and said canopy section for entrapping grease.

5. A kitchen ventilator comprising a canopy section having removable end sections and side wings, a blower compartment attached to the underside of said canopy section and coextensive with the width thereof, said compartment having light openings in its underside and an air discharge opening in its front panel, a mounting for said canopy section comprising a pair of vertically spaced rails, a blower mounting on the lowest of said rails for supporting a blower in said compartment and means carried jointly by said canopy section and said rails for supporting said

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canopy section for limited longitudinal adjustment.

6. A kitchen ventilator as set forth in claim 5, further defined in that the rails are secured for longitudinal adjustment on a wall by horizontally spaced cleats affixed to the wall whose upper and lower ends bear against the upper and lower rails respectively.

7. A kitchen ventilator as set forth in claim 5, further defined in that the blower compartment is open throughout its length at the rear thereof to receive and conceal the mounting rails.

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