

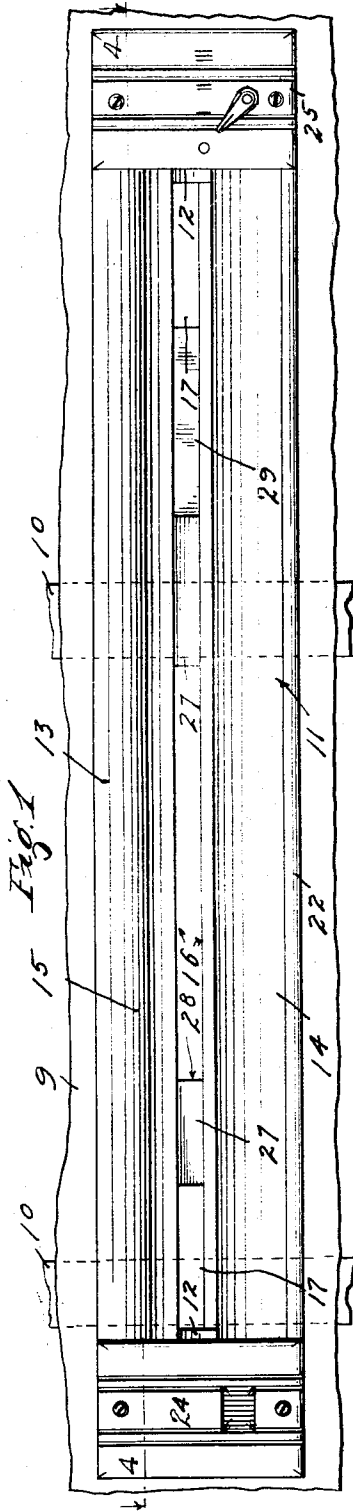
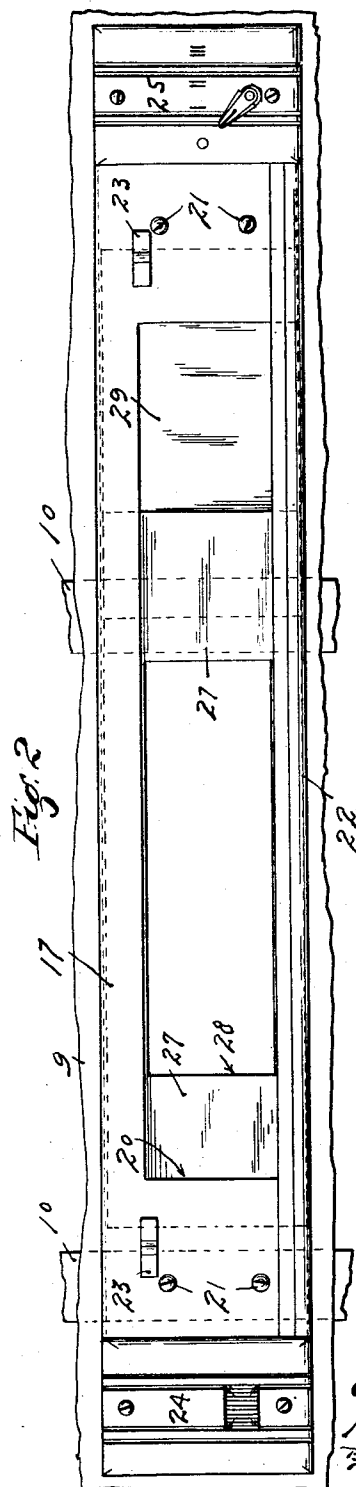
May 22, 1951

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INTAKE VENTILATING HOOD

2,553,866

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2 Sheets-Sheet 1



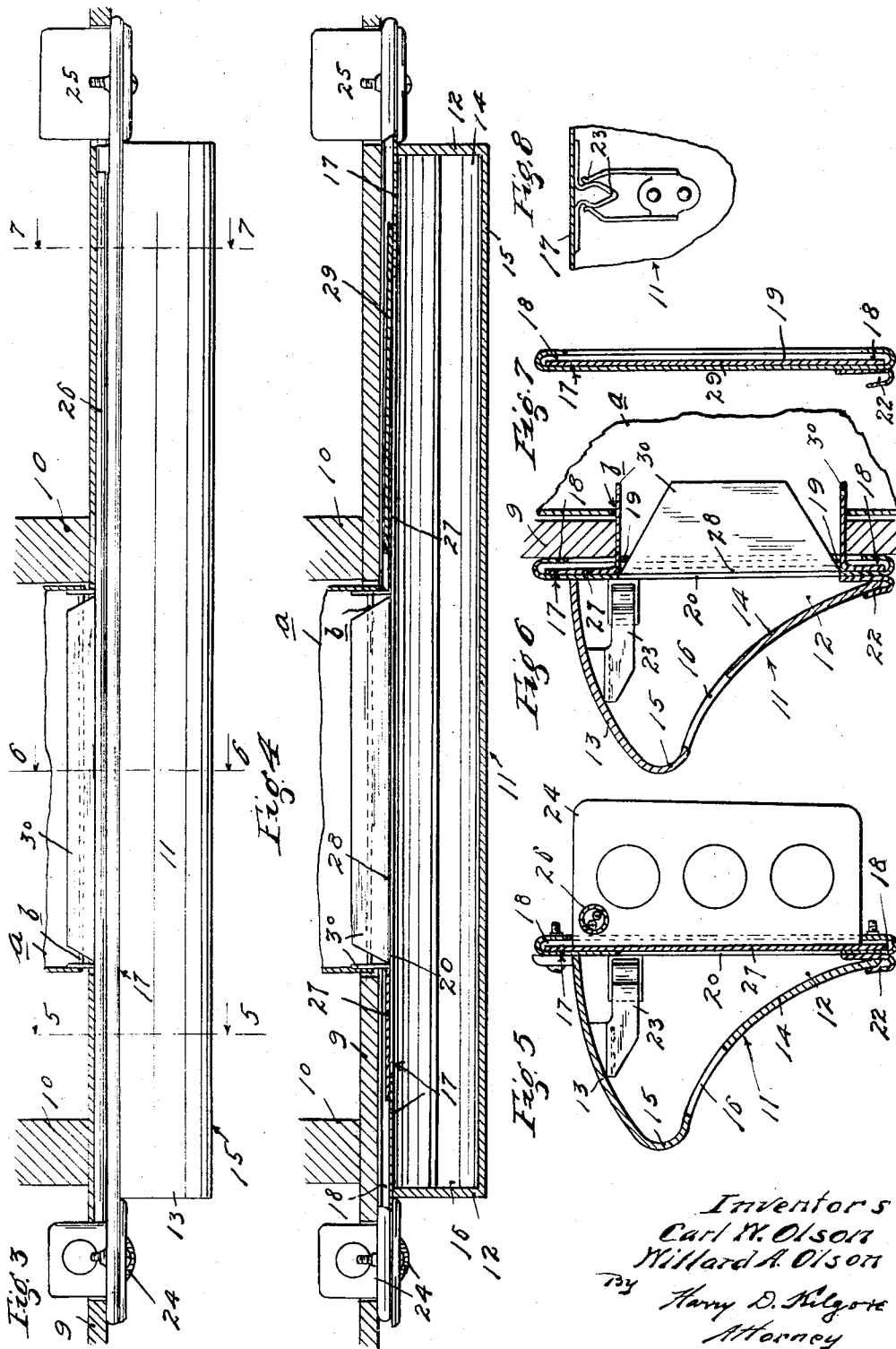
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INTAKE VENTILATING HOOD

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Our invention relates to improvements in intake hoods intended for general use in connection with ventilators, and especially well adapted for use in connection with room ventilators and particularly kitchen ventilators.

It is well known that the exhaust pipe in a kitchen ventilating system is installed in a wall between two of the studs and the most efficient place for the intake hood for the system, which is in communication with the exhaust pipe, is on the wall directly above a cooking range and aligned therewith. This alignment of an intake hood with a range also adds to the symmetry of the arrangement and the general appearance of the room. From a practical viewpoint, this arrangement of an intake hood relative to a range is highly important for the reason that hot, rising, grease-laden vapor from food cooking on the range is drawn, by suction, into the hood before it spreads in the room, cools and congeals on the ceiling and walls. The positive positioning of an exhaust pipe by the studs and the alignment of the intake hood with the range generally brings the two in offset relation, so that the outlet opening in the hood does not register with the intake opening in the exhaust pipe.

The principal object of this invention is to provide an intake hood having adjustable means, whereby its outlet opening may be shifted to bring the same into registration with the intake opening in an exhaust pipe.

A further object of this invention is to provide an intake hood that can be disassembled to facilitate installation, adjustment and cleansing from time to time.

Other objects of this invention will be apparent from the following description, reference being had to the drawings.

To the above end, generally stated, the invention consists of the novel devices and combination of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a front elevational view of the intake hood mounted on a fragment of a wall;

Fig. 2 is a view corresponding to Fig. 1, with the exception that the hood proper has been removed from its mount;

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Fig. 3 is a top plan view of the intake hood as shown in Fig. 1;

Fig. 4 is a view partly in top plan and partly in horizontal section taken on the line 4—4 of Fig. 1;

Figs. 5, 6, and 7 are sectional views taken, respectively, on the lines 5—5, 6—6 and 7—7 of Fig. 3, on an enlarged scale; and

Fig. 8 is a bottom plan view of one of the catches and a fragment of the back plate to which it is attached.

The numeral 9 indicates a fragment of one of the walls of a room including two of the studs 10. Within the wall 9, between the studs 10, is a rectangular exhaust pipe *a* having an inlet opening *b*.

The intake hood 11 is a long narrow cast metal shell having an open back and closed ends 12. In cross-section, the top member 13 of the hood 11 is curved outwardly and downwardly, or in other words, it is convex, and the front member 14 of the intake hood 11 is curved inwardly and downwardly, or in other words, it is concave. The lower longitudinal edge of the front member 14 is substantially in the same vertical plane as the rear longitudinal edge of the top member 13. An intermediate member 15 of the hood 11 connects the top member 13 and the front member 14 and is substantially half-cylindrical in cross-section. In the front of the hood 11 is an intake opening 16 that extends the full length of said hood between its end members 12.

The intake hood 11 has a back plate 17 on which it is demountably attached. The marginal edge portion of the back plate 17 is outwardly folded upon itself to form upper and lower channels 18 and end channels 19. Formed in the back plate 17 is a rectangular opening 20, the length of which is considerably more than the distance between two of the studs 10. The back plate 17 is secured to the wall 9 by screws 21. The outer surfaces of the channels 18 and 19 are continuous, bear against the wall 9 and form a tight joint therewith.

On the front of the back plate 17, at the bottom thereof, is a channel 22 into which the lower edge portion of the front hood member 14 loosely rests and affords a support for the hood 11. A pair of separable spring clips 23 detachably connects the hood 11, above its intake opening 16, to the back plate 17. The rear longitudinal

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edges of the top member 13 and the end members 12 about the face of the back plate 17 below the upper edge thereof and form a tight joint therewith.

The end portions of the back plate 17 extend outwardly of the ends of the intake hood 11 and on one of said end portions is mounted a pilot light assembly 24. On the other end portion of the back plate 17 is mounted a switch assembly 25. A pipe 26, that affords a conduit of electric wire, extends along the back plate 17 at the top thereof and is in communication with the two assemblies 24 and 25.

A main slide 27 is mounted in the channels 18 and has a rectangular opening 28. This slide 27 is materially shorter than the opening 20 and its opening 28 is in registration with said opening 20. A secondary slide 29 is mounted in the channels 18 for adjustment into overlapping relation with either end portion of the main slide 27, forms an extension of said main slide 27 and affords a closure for the opening 20 not covered by the main slide 27. On the back of the main slide 27 is a rectangular flange 30 that fits into the opening b in the pipe a.

During installation of the improved intake hood 11, the back plate 17 is positioned on the wall 9 and before it is secured thereto by the screws 21, the main slide 27 is endwise adjusted in the channels 18 to bring the opening 28 therein into registration with the opening b in the pipe a and the back plate 17 is moved inwardly to project the flange 30 through the opening b and thereby hold the main slide 27 where adjusted and forms a joint with the pipe a. Next, the secondary slide 29 is endwise adjusted in the channels 18 to position the same as a closure for the opening 20 not covered by the main slide 27. In this position of the secondary slide 29, it overlaps the back plate 17 and the adjacent end portion of the main slide 27.

Finally, the hood 11 is mounted on the back plate 17 by placing its lower longitudinal edge portion in the channel 22, the said hood is pressed toward the back plate 17 to connect the separable fasteners 23.

The drawings illustrate a commercial form of the invention, but it will be understood that the same is capable of certain modifications as to details of construction, arrangement and combination of parts within the scope of the invention herein disclosed.

What we claim is:

1. An intake hood having an open back, a back mounting plate for the hood having upper and lower ways and an elongated horizontal outlet opening, between the ways means for attaching the back mounting plate relative to a fixed exhaust duct, means detachably securing the hood to the back plate, and a slide mounted on the back mounting plate for endwise movement longitudinally of the outlet opening, said slide covering the outlet opening and having a sleeve in registration therewith for communication with the exhaust duct, the outlet opening being materially longer than the width of the sleeve, said slide being movable relative to the back mounting plate to adjust its sleeve longitudinally of the outlet opening and align the sleeve with the exhaust duct.

2. The structure defined in claim 1 in which the slide is shorter than the opening in the back mount plate, said structure further including a second slide forming an extension of the first noted slide, said two slides forming a complete

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closure for the sleeve on the back mount plate except for the opening in the first noted slide.

3. The structure defined in claim 1 in which the slide is shorter than the opening in the back mount plate, said structure further including a second slide that is shiftable to form an extension of the first noted slide at either end thereof, said two slides forming a complete closure for the opening in the back mount plate except for the sleeve in the first noted slide.

4. An intake hood having an open back, a back mount plate for the hood, means detachably securing the hood to the back plate, said back mount plate having a pair of opposing channels and an elongated outlet opening between said channels, and a slide mounted in the channels, covering the opening in the back mount plate and having a sleeve that is in transverse registration with the opening in the back mount plate and communicates with an exhaust duct, the opening in the back mount plate being materially longer than the width of the sleeve on the slide, said slide being movable in the channels to bring its sleeve into different positions relative to the opening in the back mount plate and the duct and a second slide mounted in the channels and forming an extension of the first noted slide, said two slides forming a complete closure for the opening in the back mount plate except for the sleeve in the first noted slide.

5. An intake hood having an open back, a back mount plate for the hood and having an outlet opening, and means for securing the hood to the back mount plate, said hood including a top member and a front member forming a continuation of said top member, each of said members being concavo-convex, the convex side of the top member and the concave side of the front member being outermost, said hood further including end members, the inner longitudinal edge of the top member and the lower longitudinal edge of the front member abutting the back mount plate, said front member having an intake opening adjacent the top member.

6. An intake hood having an open back, a back plate for the hood and having an outlet opening, said hood comprising a top member and a front member, each of which is concavo-convex, the convex side of the top member and the concave side of the front member being outermost, the inner longitudinal edge of the top member and the lower longitudinal edge of the front member abutting the back plate, said front member having an intake opening adjacent the top member, said back plate having means for supporting the hood at the lower longitudinal edge portion of its front member, and an internal snap fastener attaching the hood to the back member.

7. An intake hood having an open back, a back plate for the hood and having an outlet opening, said hood comprising a top member and a front member, each of which is concavo-convex, the convex side of the top member and the concave side of the front member being outermost, the inner longitudinal edge of the top member and the lower longitudinal edge of the front member abutting the back plate, said front member having an intake opening adjacent the top member, said back plate having a channel in which the lower longitudinal edge portion of the front member rests, and an in-

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ternal snap fastener attaching the hood to the back member.

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