

May 29, 1928.

T. R. N. GERDES

1,671,524

VENTILATING HOOD FOR RANGES, ETC

Filed Jan. 8, 1926

2 Sheets-Sheet 1

Fig. 1.

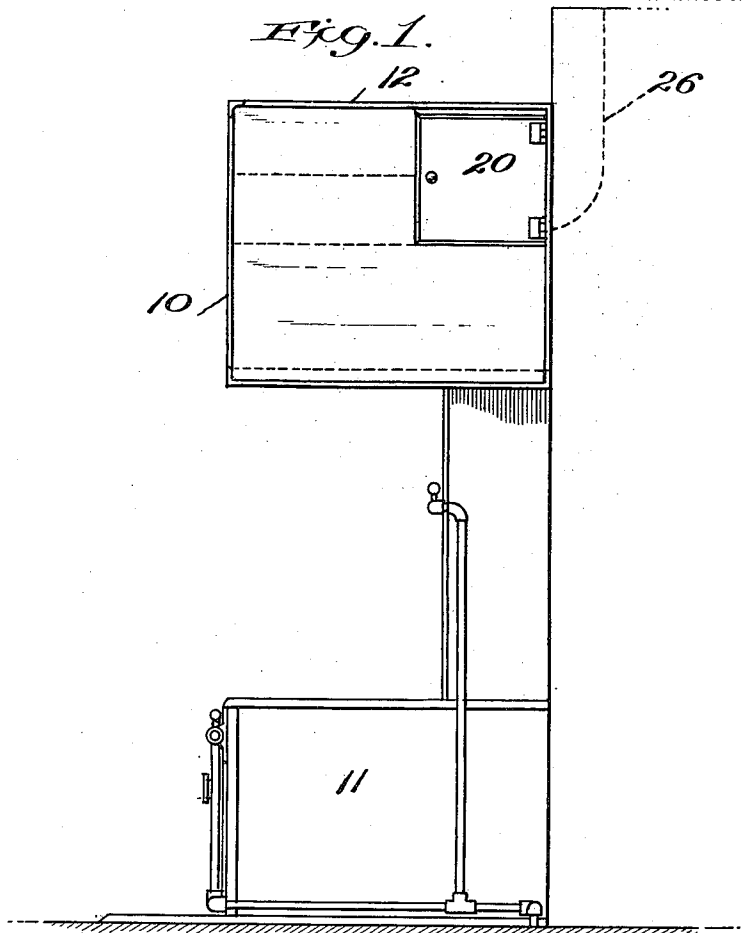
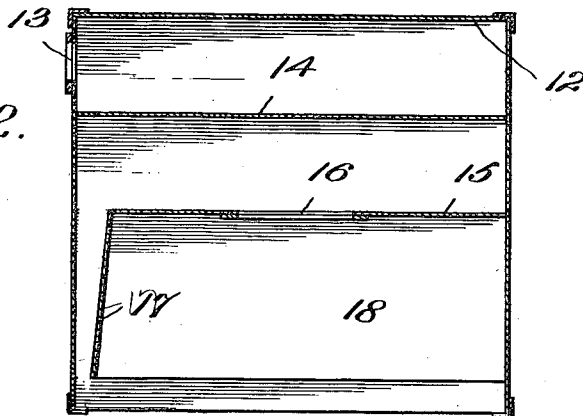


Fig. 2.



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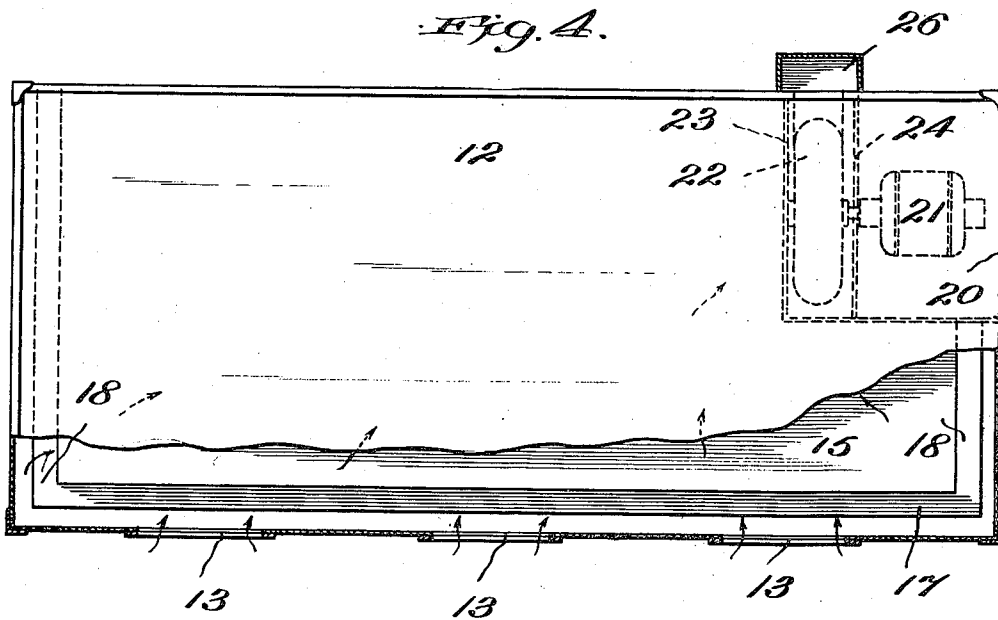
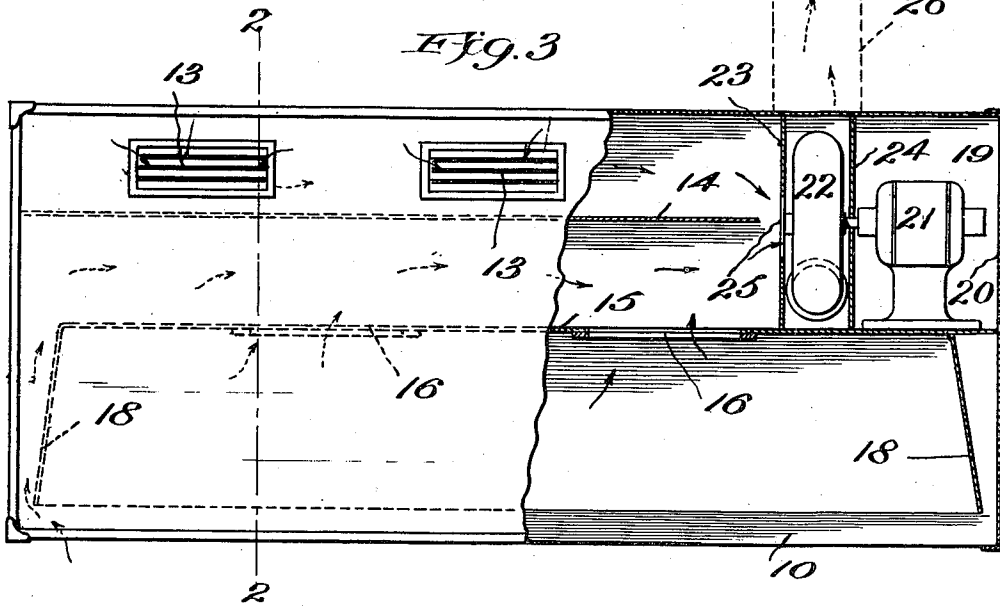
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VENTILATING HOOD FOR RANGES, ETC

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

THEODORE R. N. GERDES, OF NEW YORK, N. Y.

VENTILATING HOOD FOR RANGES, ETC.

Application filed January 8, 1926. Serial No. 80,095.

The present invention relates to an improved apparatus for gathering and disposing of the fumes and odor laden air found in kitchens and particularly over the range or stove used in cooking. Hoods have been commonly used in kitchens placed directly over the range, and have been intended to carry away the fumes arising during the operation of cooking. These, however, are only partly successful, both because some of the directly rising vapors and fumes fail to enter the hood and because such odors as spread laterally find their way through the kitchen and neighboring apartments and are not disposed of. The present invention has been found to remedy these difficulties, making it possible to remove all odors and fumes that may tend to spread through the kitchen and neighboring apartments.

The invention is illustrated in a preferred embodiment by way of example in the accompanying drawings, wherein Figure 1 is a view in end elevation of a range with my improved hood over the same, Figure 2 is a view in vertical section on the line 2-2 of Figure 3, Figure 3 is a view of the improved hood in front elevation with a part of the outer casing removed, and Figure 4 is a plan view of the same with a portion of the top removed.

My improvement comprises an outer rectangular box-like outer casing or shell 10, closed at the ends and front and back, and supported over the range 11. It is preferred to place this directly against the kitchen ceiling, but it may have a lower position, in which case a top enclosing wall will be provided as shown at 12.

The front wall is provided with a number of openings 13, preferably provided with shutters, which open into the space over a horizontal partition 14 within the casing 10. This partition extends from the left hand wall of the casing 10, in Figure 3, partly along the same, and all the way from front to back of said casing, as shown in Figure 2.

Some distance beneath the partition 14 is placed a hood proper having a top wall 15 extending from the right hand wall in Figure 3 almost to the left hand wall, and having exit openings 16. This top extends from the back (shown at the right in Figure 2) nearly to the front of the outer casing 10, and from this top plate, at ends and front there depend the flaring walls 17 and

18 to a level a little above the open bottom of the casing 10.

At the right hand end of the casing 10, and preferably at the back, is a separate enclosure 19 having a door 20, wherein stands the motor 21, which drives the centrifugal blower 22. This blower is preferably located within a separate enclosure between the walls 23 and 24, the former of which has an inlet opening 25, so placed that it extends vertically above and below the edge of the partition 14, as shown in Figure 3. This blower is arranged to discharge into an exit flue 26, which may be led away in any convenient direction.

It is to be understood that, while I have described the motor 21 located at the right hand end of the main casing, and the other parts correspondingly placed, the reverse arrangement is, of course, within the invention.

The operation of the device, indicated by the arrows suggesting the direction of air currents, is as follows:

The fumes arising from the range 11 find their way naturally into the hood 15, 17, 18, and are drawn thence through the openings 16 into the fan 22, being driven out through the flue 26. Some of these fumes inevitably tend to escape from the edges of the hood, as has been commonly experienced hitherto. These escaping fumes, in my improvement, are caught by the fan suction operating in the passages between the edges of the hood and the main casing as shown in Figure 3, and are drawn into the fan 22, as shown in that figure.

At the same time any fumes or odors that may temporarily escape laterally into the kitchen are drawn through the openings 13, and travel over the partition 14, being also driven out by the fan.

The invention may be embodied in a variety of modified forms, and I do not limit myself to the details herein shown and described.

What I claim is:—

1. Means for the purpose described comprising an outer casing supported over a kitchen range, a hood proper within said casing and spaced therefrom, having an exit opening, a discharge flue, and a motor-blower above said hood adapted to blow air into said flue, said outer casing having openings above the hood for admitting air from the front of the outer casing to the blower.

2. Means for the purpose described comprising an outer casing supported over a kitchen range, a hood proper within said casing, spaced therefrom, having an exit opening, a horizontal partition dividing said space into two passages, a discharge flue, and a motor-blower, adapted to blow air into said flue; said outer casing having openings in its front above said partition.

In testimony whereof I have hereto affixed my signature on this 6th day of January 1926.

THEODORE R. N. GERDES.