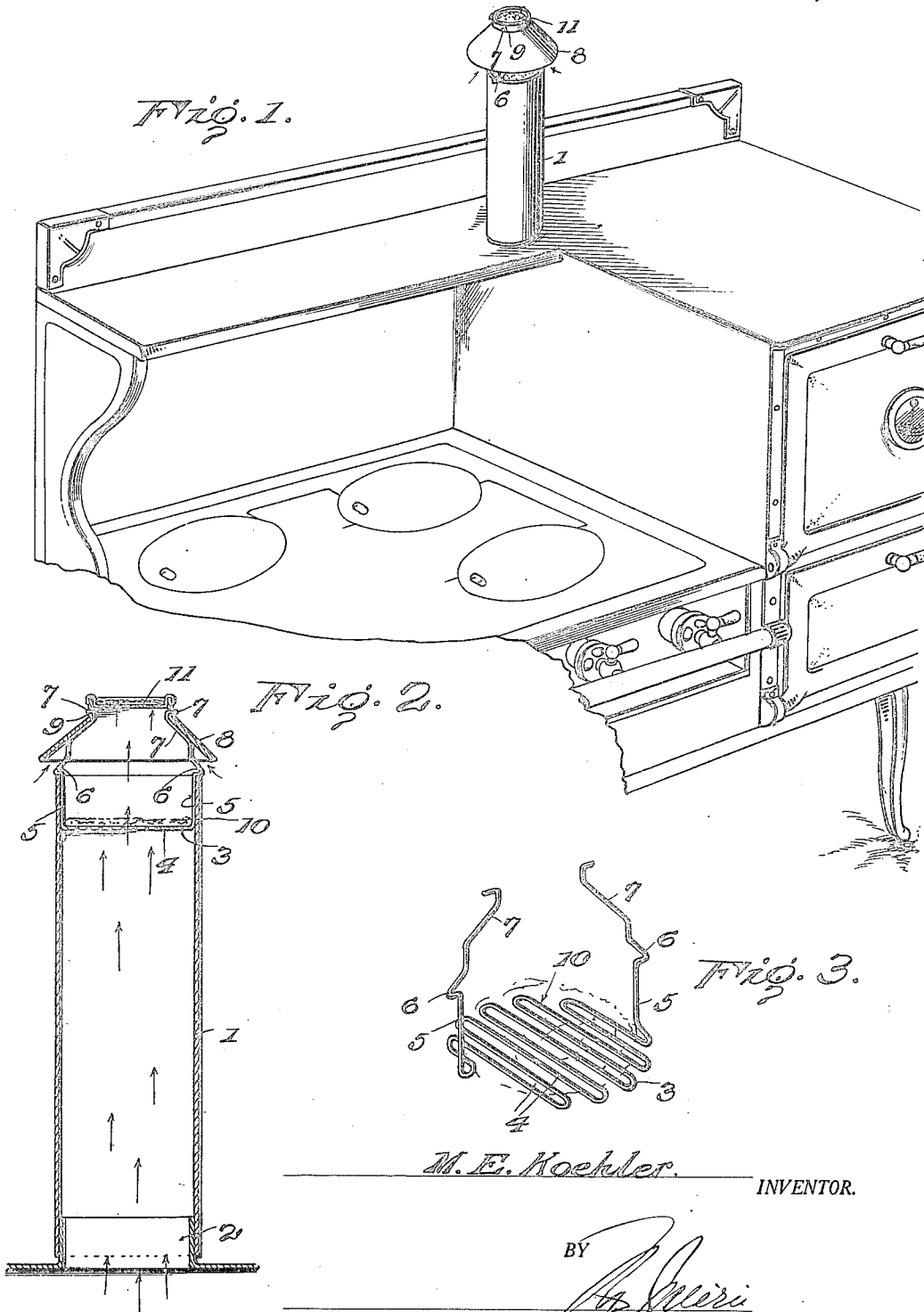


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 FILTERING FLUE FOR GAS RANGES.
 APPLICATION FILED DEC. 3, 1920.

1,377,694.

Patented May 10, 1921.



UNITED STATES PATENT OFFICE.

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FILTERING-FLUE FOR GAS-RANGES.

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Specification of Letters Patent. Patented May 10, 1921.

Application filed December 3, 1920. Serial No. 428,044.

To all whom it may concern:

Be it known that I, MAXEMILEAN E. KOEHLER, citizen of the United States of America, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Filtering-Flues for Gas-Ranges, of which the following is a specification.

This invention relates to an attachment for gas, electric, or oil ranges, in the use of which the grease and the like, that is carried up in the heated air from the articles being cooked, is filtered from the air and caught.

Through the use of the invention, the otherwise sure deposit of such grease and the like on the wall and surrounding objects, is entirely prevented, and a more sanitary and cleanly condition insured.

The invention is readily applicable to all types of cooking ranges using gas or electricity, and generally stated, comprises a short flue to receive the rising grease laden air and to direct same to and through a filtering medium, removably held in the stock for convenient renewal. A hood may, if desired, be supported above the flue, and an additional filtering layer arranged in the hood. The main filtering layer is removably supported in the flue in a simple convenient manner, permitting the ready renewal of such material when saturated.

In the drawings:—

Figure 1 is a perspective view illustrating the application of the invention.

Fig. 2 is a vertical section through the attachment.

Fig. 3 is a perspective of the wire support for the filtering material and hood.

The improved attachment comprises a short length of pipe 1, hereinafter termed a flue, which is designed to be connected over the usual outlet flange 2 of the stove proper. This flue, which is of an appropriate length, is designed to direct the grease-laden air upwardly in a confined area. A filter support is arranged in the top of the flue, such support preferably comprising a single length of wire 3, formed into parallel strands 4, of such relative lengths as to approximate the shape and diameter of the flue. The filter bed thus provided is open, and the wire lengths beyond the same are projected upwardly, as at 5, and formed at appropriate heights with offsets 6 to engage over the upper edge of the flue.

Above the offsets 6, the wire lengths are formed to provide arms 7 shaped to fit within and support a conical hood 8. The ends of the arms 7 enter holes 9 in the hood to thus removably support the hood above the free end of the flue.

A layer of filtering material of suitable thickness, as 10 is placed loosely on the bed 4, such material as mineral wool asbestos, hair, or the like proving efficient. If desired, and as preferred, a screen section 11 may be removably supported in the outlet end of the hood 8, and such section 11 provided with a comparatively thin layer of filtering material.

The assemblage of the parts of the device is obvious, and all grease and the like will be filtered from the air rising through the flue. The deposit of this grease on walls and the like is thus prevented. If steam jets from articles being cooked, such steam is dissipated or condensed by cool air entering between the upper end of flue and hood.

The wire support for the filtering material may be readily removed when necessary to supply fresh filtering material and this is equally true of the upper filter screen. All parts are readily separable when desired, and may be quickly put in proper position when desired for use.

What is claimed as new, is:—

1. An attachment for gas, electric or oil cooking ranges, comprising a flue to receive the air rising from the articles being cooked, a filter bed formed of wire removably supported within said flue, and a hood removably supported by said filter bed above the flue.

2. An attachment for gas, electric or oil cooking ranges, comprising a flue to receive the air rising from the articles being cooked, a hood arranged above the flue, a wire member engaging the flue and supporting the hood, and a filter bed within the flue formed by such wire member.

3. An attachment for cooking ranges including a flue to receive the air rising from the articles being cooked, a filter bed constructed of parallel strands of wire having upstanding arms, said arms being adapted to engage the upper edge of the flue to support the parallel strands of wire transverse the flue near the upper end thereof, whereby to support a filtering medium adjacent the upper end of the flue in a position for con-

venient removal, said arms being extended above the upper edge of the flue to form additional supporting members.

4. An attachment for cooking ranges including a flue to receive the air rising from the articles being cooked, a filter bed constructed of parallel strands of wire having upstanding arms, said arms being adapted to engage the upper edge of the flue to support the parallel strands of wire transverse the flue near the upper end thereof, whereby to support a filtering medium adjacent the upper end of the flue in a position for convenient removal, said arms projecting above the flue and a hood removably supported by said arms above the flue.

5. An attachment for gas, electric, or oil cooking ranges, comprising a flue to receive the air arising from the articles being cooked, a frame formed of wire removably supported within said flue, a hood removably supported by said frame, the bottom of the hood spaced from the top edges of

the flue and extending beyond the plane of the sides of the flue, and a filtering bed supported at or near the top of the hood directly in alinement with the flue.

6. An attachment for cooking ranges including a flue to receive the air arising from the articles being cooked, a frame constructed of strands of wire at the bottom to engage the inner walls of the flue, and having upstanding arms which project beyond the top edge of the flue, and having a portion adapted to engage said upper edge of the flue to support the frame, a hood supported at the upper ends of the arms having its lower edge spaced from the top edge of the flue, said lower edge extending beyond the vertical plane of the side-walls of the flue, and a filtering bed at or near the upper end of the hood, and disposed in alinement with the center of the flue.

In testimony whereof I affix my signature.

MAXEMILEAN E. KOEHLER.