

C. M. GENTHNER.
 RANGE.
 APPLICATION FILED SEPT. 21, 1912.

1,059,047.

Patented Apr. 15, 1913.

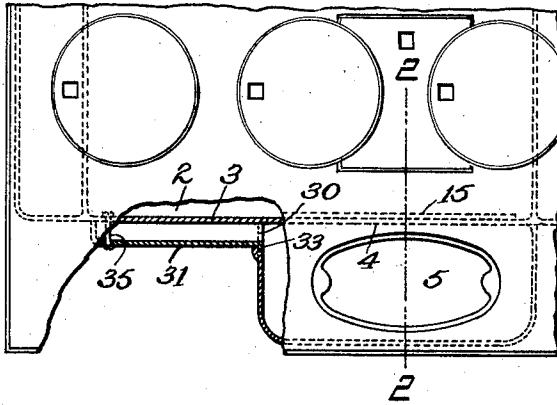


Fig. 1.

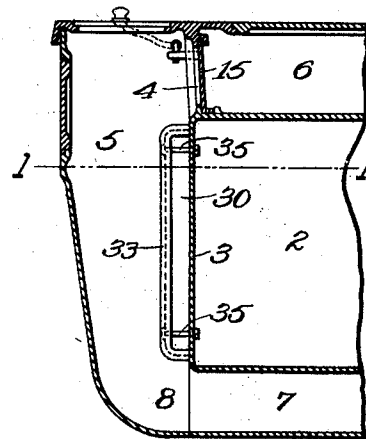


Fig. 2.

Fig. 3.

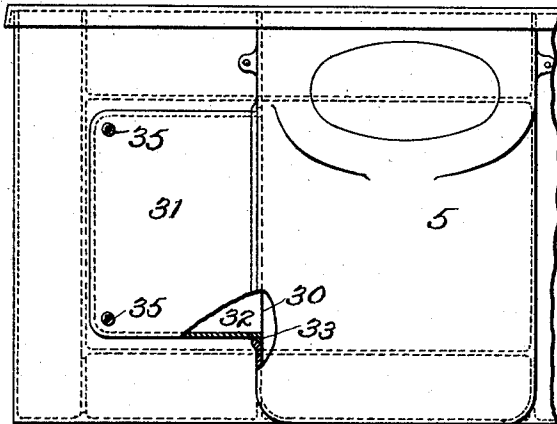
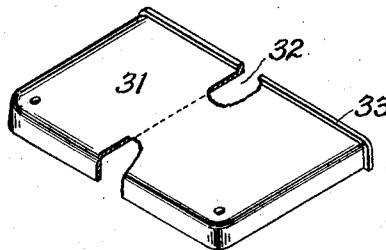


Fig. 4.



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By

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UNITED STATES PATENT OFFICE.

CHARLES M. GENTHNER, OF MIDDLETOWN, PENNSYLVANIA, ASSIGNOR TO WINCROFT STOVE WORKS, OF MIDDLETOWN, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

RANGE.

1,059,047.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Original application filed May 11, 1912, Serial No. 696,576. Divided and this application filed September 21, 1912. Serial No. 721,525.

To all whom it may concern:

Be it known that I, CHARLES M. GENTHNER, a citizen of the United States, and a resident of Middletown, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Ranges, of which the following is a specification.

This invention relates to cook stoves or ranges, and it consists particularly in the improved construction of the back flue thereof hereinafter fully described in connection with the accompanying drawing and the novel features of which are specifically pointed out in the claim.

Figure 1 is mainly a plan view of the rear portion of a range having my improvements applied thereto; parts thereof being broken away on the line 1—1 of Fig. 2, to more clearly reveal the essential features. Fig. 2 is a sectional elevation on the line 2—2 of Fig. 1. Fig. 3 is a rear view showing a portion of the back flue broken away. Fig. 4 is a separate view of the flue extension piece with parts broken away so as to show the cross-section thereof.

It is common, in cooking stoves, to employ a so-called back-flue, which is separately formed and exteriorly secured to the rear oven wall of the stove, and which is arranged in damper-controlled communication with the smoke chamber or flue surrounding the other oven walls.

The object of my present invention is to provide a back flue of improved construction comprising a conveniently secured extension thereof, whereby the products of combustion will be utilized in more effectively and uniformly heating the oven.

The stove partially illustrated in the drawing as embodying my improved construction, comprises an oven 2 having a rear wall 3 with an upward extension forming a damper-controlled partition 4 through which the products of combustion may be passed directly to the back flue 5, from the flue 6 over the oven; said top flue 6 as well as the bottom flue 7 under the oven being in com-

munication with the fire pot as usual, and said bottom flue 7 being in direct communication with the lower portion of the back flue, at 8, as usual, so that the products of combustion may be passed around the oven into the lower portion of the back flue by closing the damper 15 in the upper partition 4. The general arrangement described is well known and corresponds in particular with that indicated in my pending application Ser. No. 696,576, filed May 11th, 1912, of which the present application is a division.

To provide for conveniently and satisfactorily utilizing the products of combustion which pass through the removably secured back flue 5, in heating the otherwise exposed portion of the rear wall 3 of the oven, I provide said back flue 5 with a side opening 30, formed by a narrow elongated recess in one of the wall-contacting edges thereof; and I employ in connection therewith a separate flue-extension piece 31 formed like a shallow pan and having an open end 32 provided with an exterior flange 33 adapted to be engaged in said opening 30 of the back flue. This extension piece, as indicated, is adapted to be passed through said opening from the interior of the flue, until its flange 33 is snugly seated around the opening 30, and it is then independently secured to the oven wall 3, as by screws 35. The products of combustion are freely admitted to this shallow flue extension piece 31 so as to utilize the heat upon the oven wall covered thereby; and any dirt that may collect in it may be readily removed by loosening it from the oven wall independently of the back flue 5 with which it remains loosely engaged.

It will be readily seen that the improved construction permits of easy manufacture and assembling of the parts as well as convenient cleaning and repairs.

What I claim is:—

In combination with a stove having an oven, and a flue passing over and under said oven, a back flue arranged in communication with said oven flue and removably

secured to the rear oven wall, said back flue
being formed with a side opening, and an
independently secured flue-extension piece
adapted to be passed through said open-
5 ing from the interior of the flue and pro-
vided with a flanged end for engagement
in said opening.

In testimony whereof, I affix my signa-
ture, in the presence of two witnesses.

CHARLES M. GENTHNER.

Witnesses:

MILEY T. SHEOFFER,
I. M. KLINE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
