

C. M. GENTHNER.
RANGE.

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1,054,193.

Patented Feb. 25, 1913.

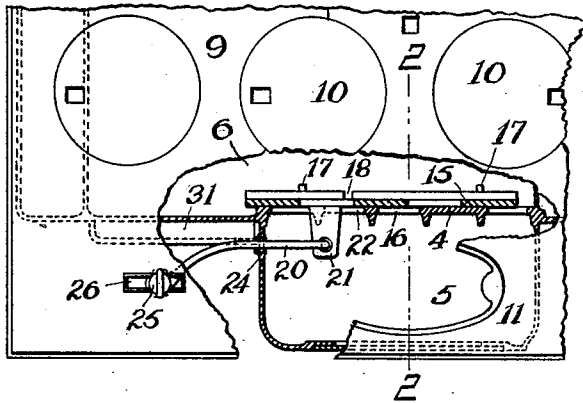


Fig. 1.

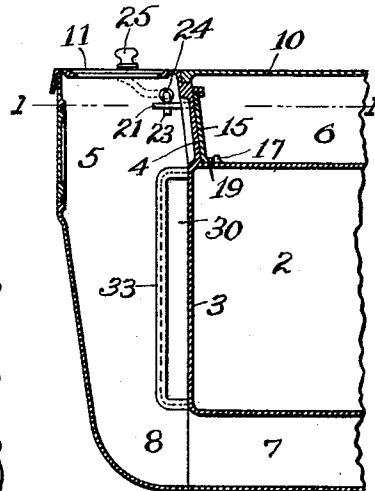


Fig. 2.

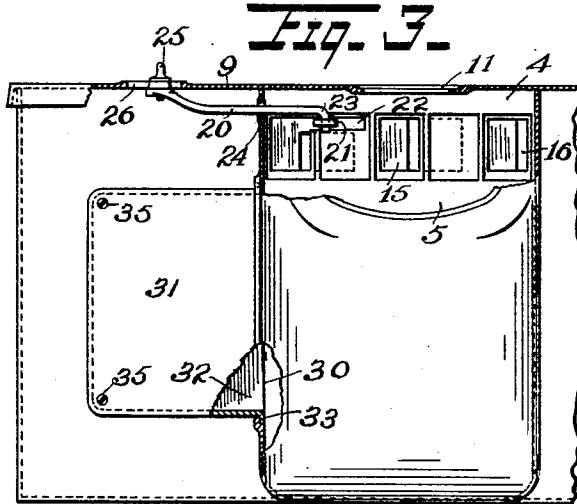


Fig. 3.

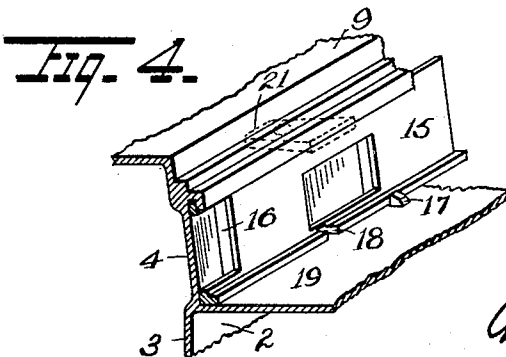


Fig. 4.

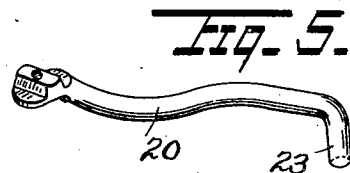


Fig. 5.

Charles M. Genthner Inventor

Witnesses

R. M. Genthner
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By

[Signature]

Attorney

UNITED STATES PATENT OFFICE.

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

RANGE.

1,054,193.

Specification of Letters Patent.

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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 more particularly to an improved flue and damper construction for controlling and utilizing the products of combustion.

The invention is fully described in connection with the accompanying drawings illustrating a preferred embodiment of the same, and the novel features are specifically pointed out in the claims.

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. Figs. 4 and 5 are detail views.

The range indicated may be of ordinary general construction; comprising 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 (Fig. 2), being in communication 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 by closing the damper-controlled partition 4. The top plate 9 is provided with the usual lid openings 10 and overhanging apertured extension 11 above the back flue 5.

The damper 15 for controlling the flow of the products of combustion through the openings 16, 16 in the partition 4, is of the ordinary sliding type; but my improved construction shown provides for assembling and operating the same in a novel and advantageous manner. The damper 15 is carried by and slides upon the plate 19 at the base of the partition 4; and it is readily placed in position upon said ledge, or removed therefrom, through a lid opening 10

of the top plate. It is normally held in proper sliding relation to the partition by fixed retaining lugs 17; which can be readily brought into register with a corresponding clearance groove 18 of the damper, or adapted to entirely clear the latter when the operating rod 20 therefor is detached, as hereinafter described. The damper 15 is formed with an operating lug 21 which projects into the back flue 5 through the partition 4, and which slides in a slot 22 of the latter as shown.

The operating rod 20 is of very simple construction, and is adapted to be attached to or detached from the damper so as to permit of assembling or disassembling the parts in a very simple manner. It is formed as indicated, with a hooked inner end 23 which is insertible through a corresponding opening 24 in the side wall of the back flue 5, and which is adapted to be lowered or raised into or out of operative engagement with the apertured damper lug 21, by rocking the rod in the support formed by the wall opening 24. In operating the damper the rod 20 is reciprocated to and fro through this wall opening 24, by means of a suitable handle or damper knob 25, which is removably secured to the opposite or outer end of the rod and is engaged in a guide slot 26 provided in the top plate 9 of the stove; said knob or handle serving, when thus attached to the rod, to securely hold its hooked inner end 23 in normal engagement with the damper lug 21, but when detached permitting the rod to be rocked upon the supporting wall of the back flue so as to entirely disengage said damper lug and free the parts for separate removal as may be desired.

What I claim is:—

1. In a stove having a plate provided with a guide slot, a back flue provided with a damper-rod wall-aperture and a damper partition, a damper slidable upon one face of said partition and having an apertured lug projected through the latter, an operating rod having a hooked end insertible through said wall aperture and adapted to be rocked into or out of engagement with said apertured lug, and a damper knob slidable in said slot and removably secured to one end of said rod.

2. In a stove having a plate provided with a guide slot, a back flue provided with a

damper-rod wall-aperture and a damper partition, a damper slidable upon one face of said partition and having an apertured lug projected through the latter, an operating rod having a hooked end insertible through said wall-aperture and adapted to be rocked into or out of engagement with said apertured lug, and a damper knob slidable in said slot and removably secured to one end of said rod; said partition and damper being provided respectively with a retaining lug and a corresponding clearance groove adapted to be thrown into register only when said damper knob is removed.

3. In a stove, a back flue provided with a damper-rod wall-aperture, a damper partition through which the smoke is passed to

said flue, a top plate provided with a damper knob slot, a damper slidable upon the inner face of said partition and provided with an outwardly projected lug, a damper operating rod inserted through said wall aperture and having a hooked inner end adapted to be rocked into or out of engagement with said lug, and a slot-engaging damper-knob removably secured to the outer end of said rod.

In testimony whereof, I affix my signature, in the presence of two witnesses.

CHARLES M. GENTHNER.

Witnesses:

HARRY E. FORCE,
JAMES A. ROBINSON.

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