

R. MUNRO.

GAS STOVE.

APPLICATION FILED JUNE 23, 1909.

1,056,757.

Patented Mar. 18, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

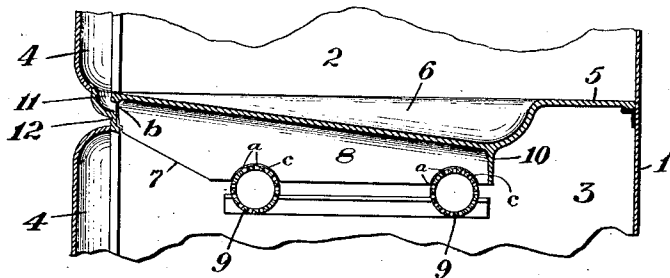


Fig. 2.

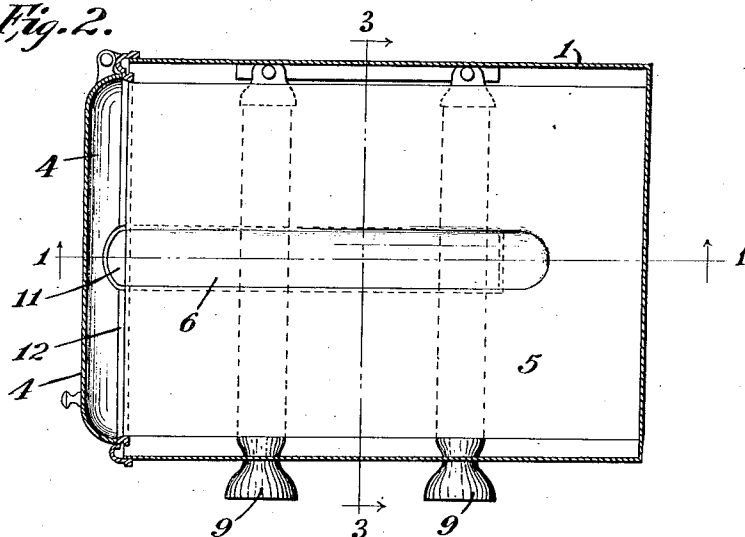
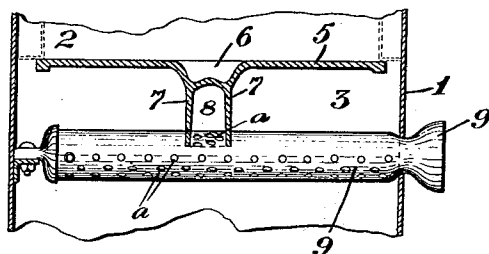


Fig. 3.



Witnesses;
Cyrilus C. Cricks
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2 SHEETS-SHEET 2.

Fig. 4.

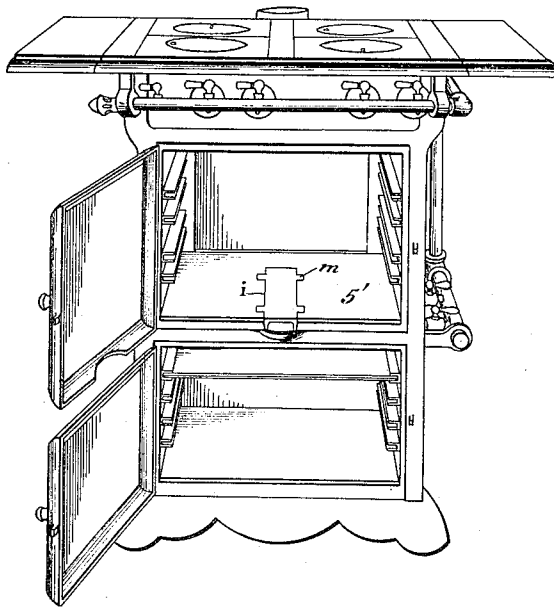


Fig. 5.

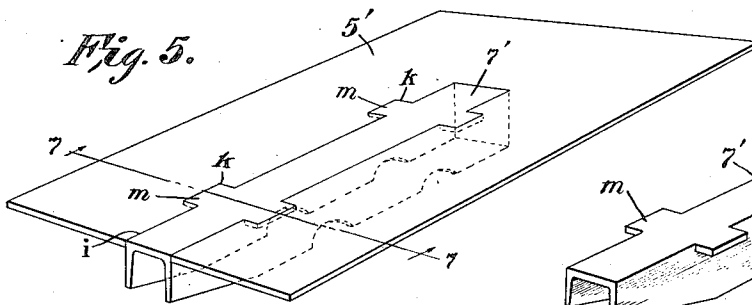


Fig. 6.

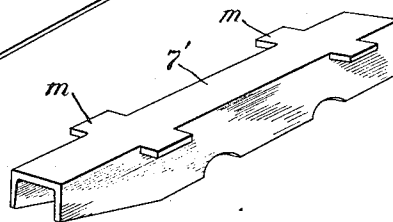
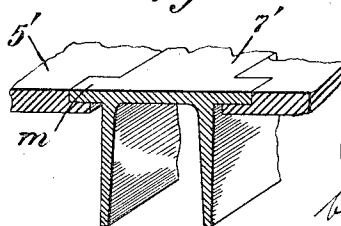


Fig. 7.



Witnesses;
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UNITED STATES PATENT OFFICE.

ROBERT MUNRO, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO CENTURY STOVE & MANUFACTURING COMPANY, OF JOHNSTOWN, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

GAS-STOVE.

1,056,757.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed June 23, 1909. Serial No. 503,815.

To all whom it may concern:

Be it known that I, ROBERT MUNRO, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Gas-Stoves, of which improvement the following is a specification.

My invention relates to improvements in stoves and ranges and in means for igniting the burners thereof.

The object of my invention is to produce a construction of stove or range in which the bottom, and the means to ignite the burners (comprising a conduit or channel) are integral or are directly connected. I accomplish this object by means of the device illustrated in the accompanying drawings, forming part hereof, in which—

Figure 1 is a section on line 1—1 of Fig. 2. Fig. 2 is a transverse section of a stove or range showing the bottom thereof in plan view. Fig. 3 is a section on line 3—3 of Fig. 2. Fig. 4 is a front elevation of a range, open, showing a modified form of igniting conduit. Fig. 5 is a perspective view of the bottom of the oven, showing the modified form of igniter. Fig. 6 is a perspective view of the modified form of igniter. Fig. 7 is a section on line 7—7 of Fig. 5.

Referring to said drawings, 1 designates a fragmentary portion of a range or stove of the usual construction except as hereinafter set forth. The said range is provided with, or comprises an oven 2 and a broiler 3 and the front thereof is adapted to be closed by the door or doors 4—4. The said oven and broiler are separated by means of the horizontally disposed wall 5 which constitutes the bottom of the oven and the top of the broiler. Said bottom 5 has formed therein a trough or depression 6 which extends from the front of the range toward and terminates near the rear wall thereof as shown in the drawings, the lower side or the bottom thereof at each side thereof is provided with downwardly projecting wings or walls 7—7 which inclose an open space or channel 8 which constitutes a conduit or channel to conduct or convey gas mixture emitted from the perforations *a—a* of the burners 9—9 or from a portion of them to the forward end of said channel, whereby the gas mixture escaping through the contracted portion *b* of said channel may be

ignited, thereby causing the ignition of all the gas mixture escaping from the numerous perforations *a—a* in said burners. The said downwardly projecting wings or walls 7—7 at points immediately above the burners are provided with semi-circularly shaped recesses *c—c* into which the upper portion of the burner or burners project, and the rear end of said channel 8 is closed by the wall 10. The depression 6 does not perform any particular function other than to enable the ready production of the device in the molding operation. Without the depression 6 it would be somewhat difficult to produce the downwardly projecting ribs by the ordinary molding processes. The contracted portion *b* of the channel 8 communicates with the pocket 11 formed in the plate 12 secured to the front of the range between the oven and the broiler doors. The said burners are supplied with combustible gases in the usual manner, and the gas and air are mixed in the usual manner and with the usual mixer.

It is obvious that the downwardly projecting wings which constitute the gas igniting channel or conduit, instead of being integral with the bottom of the oven may be made separately therefrom as shown in Figs. 4 to 7 inclusive. In said Figs. 4 to 7 is shown a range, in all respects similar to that illustrated in Figs. 1, 2 and 3. The bottom 5' having an opening *i* extending from the front to near the rear thereof in the sides of which recesses *k—k* are formed to receive the lugs *m—m* projecting laterally from the upper sides of the channel 7' for the purpose of supporting the said channel or conduit as shown. The said channel is supported upon the edges of the opening longitudinally made in the bottom so that the conduit may be readily removed from the bottom, and in the event of breakage, the conduit could be supplied without necessitating the removal of the entire bottom as would be the case if breakage occurred when the conduit is integral with the bottom.

The advantage of the construction herein described over the prior constructions in the art for similar purposes is that the bottom and the conduit are made integral or are capable of being directly assembled and that the construction in no wise interferes with complete radiation of heat, and on the

contrary produces uniformity in the heat radiated from the burners to the bottom of the oven. It has also the advantage of great simplicity in construction.

5 Having described my invention what I claim and desire to secure by Letters Patent is—

1. An igniting device for gas ranges including an oven bottom, having formed on
10 its under side downwardly projecting ribs, the said ribs cooperating with each other and the bottom of the oven to provide a channel which leads to one side of the oven bottom, and a burner arranged under the
15 oven bottom so that a portion of the gas emitted from the same will enter the channel and be deflected thereby to one side of the oven bottom, where it can be readily ignited.

20 2. An igniting device for gas ranges, including an oven bottom having a depression which extends inwardly from one edge thereof and gradually becomes deeper as it recedes from the edge, the said bottom being
25 provided with downwardly projecting ribs extending along opposite sides of the bottom of the depression and the said ribs cooperating with each other and the bottom of the depression to provide a channel which
30 leads to one side of the oven bottom and has an upwardly and outwardly inclined top, and a burner arranged under the oven bottom so that a portion of the gas emitted from the same will enter the channel and be
35 deflected thereby to one side of the oven bottom where it can be readily ignited.

3. An igniting device for gas ranges, including an oven bottom provided with downwardly projecting ribs which cooperate
40 with each other to provide a channel leading to one side of the oven, a side wall for the oven formed with a pocket which establishes communication between the end

of the channel and the interior of the oven, and a burner arranged under the oven bottom so that a portion of the gases emitted therefrom will enter the channel and traverse the same to the mouth of the pocket where they can be readily ignited. 45

4. An igniting device for gas ranges, including an oven having a door and formed with a bottom provided with downwardly projecting ribs which cooperate with each other to provide a channel which leads to the front of the oven, a contracted neck
55 leading from the forward end of the channel to the interior of the oven at a point adjacent the oven door so that access can be readily had to the channel when the oven door is open, and a burner arranged under
60 the oven bottom so that a portion of the gases emitted therefrom will enter the channel and traverse the said channel and neck to the front of the oven where they can be readily ignited. 65

5. The combination of a stove comprising an oven and broiler, and a plate constituting the bottom of the oven and the top of the broiler, provided upon the under side thereof with downwardly projecting ribs which
70 have a substantially spaced and parallel relation and cooperate with each other to provide a channel which leads to one side of the oven bottom, and a burner arranged under the oven bottom so that a portion of
75 the gas emitted from the same will enter the channel and be directed thereby to one side of the oven bottom, where it can be readily ignited.

In testimony whereof I have hereunto
80 signed my name in the presence of two subscribing witnesses.

ROBERT MUNRO.

In the presence of—

CLARENCE A. WILLIAMS,
JOHN H. RONEY.