

March 22, 1932.

J. M. WATTS

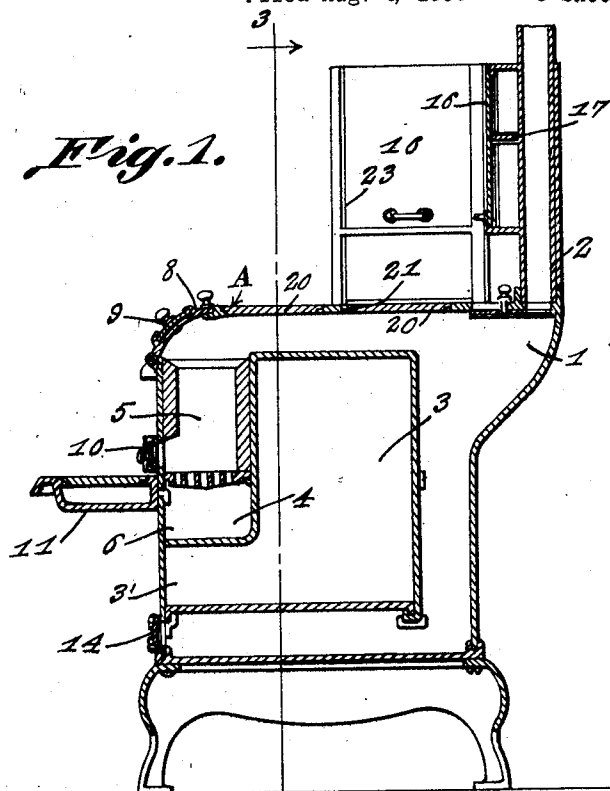
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COAL STOVE

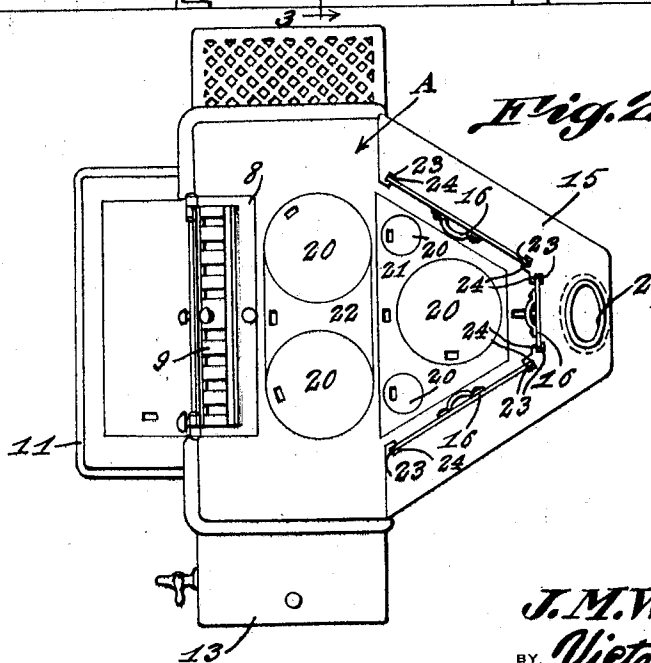
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*Fig. 1.*



*Fig. 2.*



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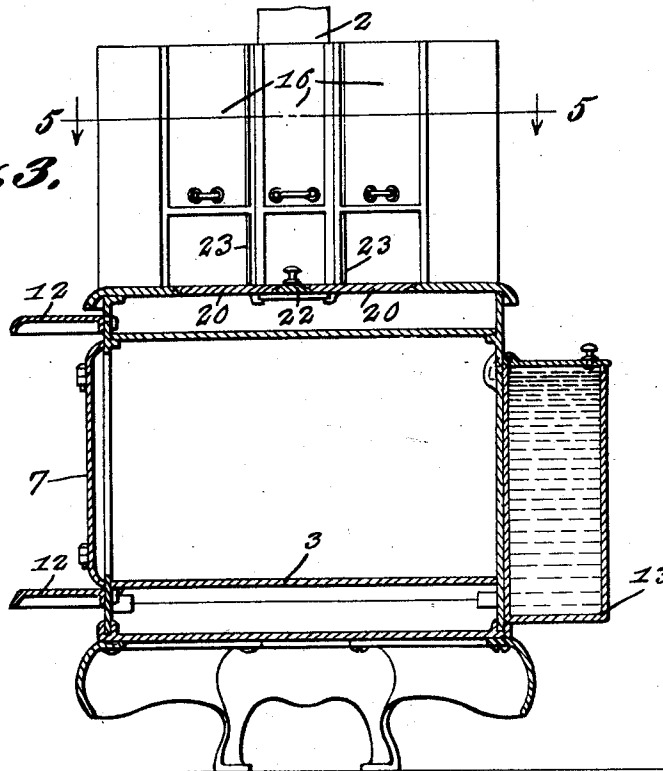
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COAL STOVE

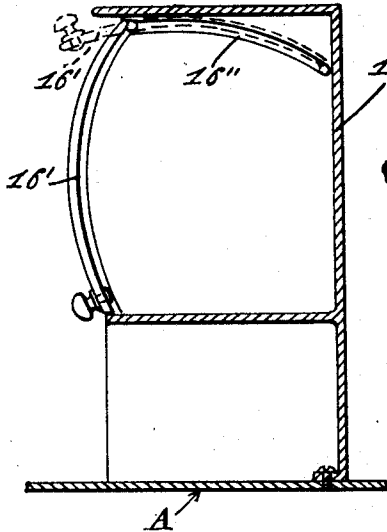
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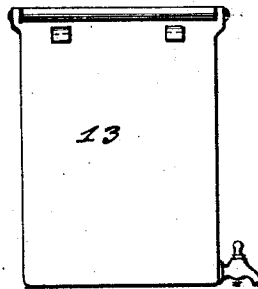
*Fig. 3.*



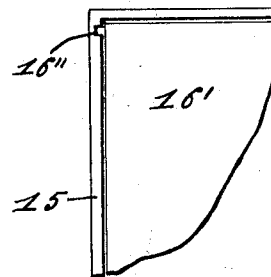
*Fig. 8.*



*Fig. 4.*



*Fig. 9.*



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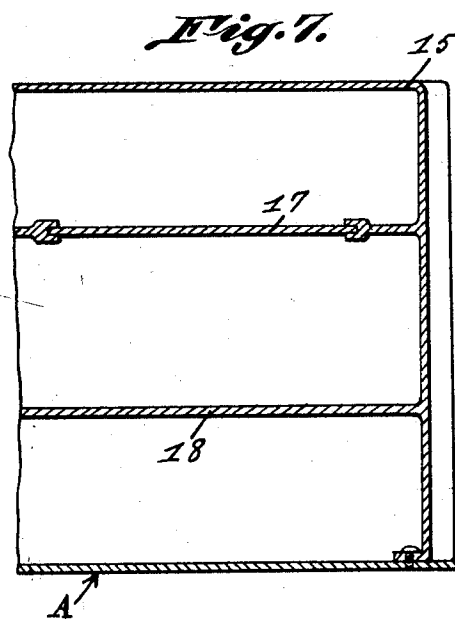
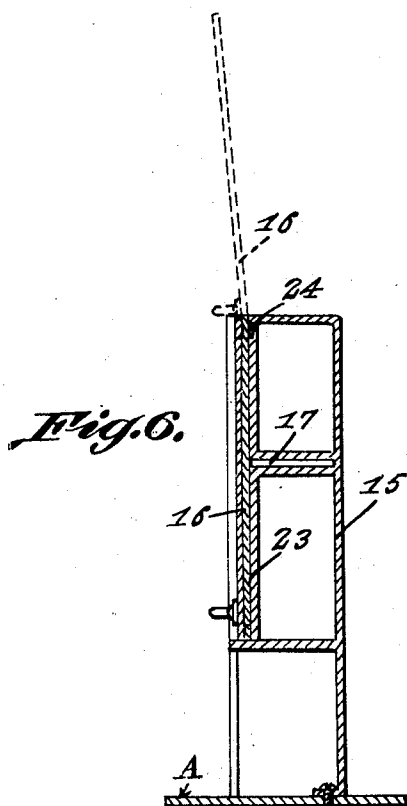
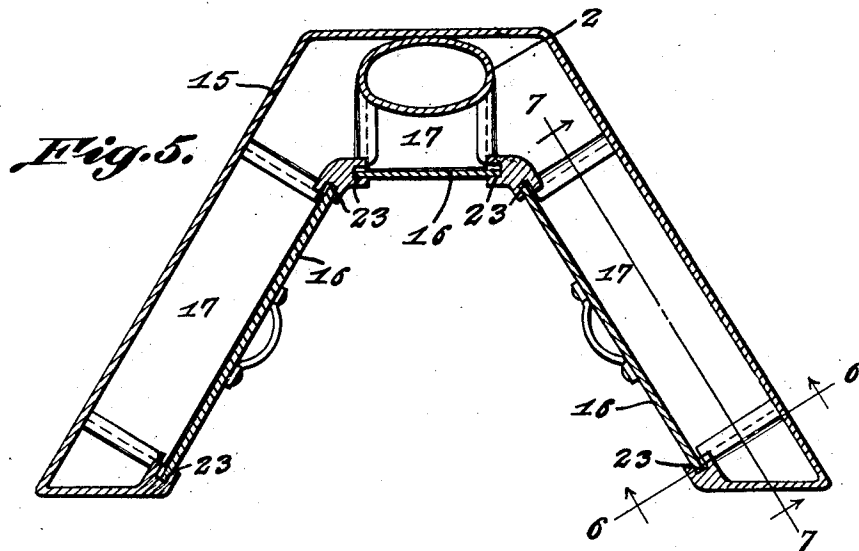
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COAL STOVE

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3 Sheets-Sheet 3



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## UNITED STATES PATENT OFFICE

JOHN M. WATTS, OF KANSAS CITY, KANSAS

COAL STOVE.

Application filed August 4, 1930. Serial No. 472,779.

This invention relates to a cook stove, the general object of the invention being to provide a stove which can be made of small size and which has a small fire box so that the consumption of fuel is small and to provide the stove with a warming chamber which is of substantially V shape and through a part of which the smoke pipe passes so that the chamber is warmed by the products of combustion passing through the smoke pipe as well as by the heat from the stove.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a vertical sectional view through the stove, the section being taken at approximately the center of the stove.

Figure 2 is a top plan view.

Figure 3 is a section on line 3—3 of Figure 1.

Figure 4 is a view looking toward the inner face of the water tank.

Figure 5 is a section on line 5—5 of Figure 3.

Figure 6 is a section on line 6—6 of Figure 5.

Figure 7 is a section on line 7—7 of Figure 5.

Figure 8 is a sectional view through a modified form of warming chamber.

Figure 9 is a detail view of part of Figure 8.

As shown in these drawings, the stove A is formed with a rear extension 1 at its upper part which is of substantially V shape in plan and the smoke pipe 2 is in communication with the rear portion of this extension, said smoke pipe extending upwardly from the top of the extension.

The oven 3 extends from one side of the stove to the other, with its rear wall spaced

from the rear wall of the stove and its bottom spaced from the bottom of the stove. The oven extends to the front of the stove, except at the central portion of the oven, which has a recess 4 at the center thereof, said recess terminating short of the bottom of the oven so that the lower central part of the oven also extends to the front of the stove, as shown at 3' in Figure 1. The space 4 formed between the upper part of the oven and the front of the stove receives the fire box 5 and the lower part of said space forms the ash pit 6. The top of the oven is spaced from the top of the stove so that the products of combustion can pass from the fire box across the top of the oven into the rear extension 1 and then pass through the pipe 2. Of course, some of the heat will contact the rear and bottom walls of the oven so that the oven is intensely heated by portions of its front part enclosing the fire box and the products of combustion passing over the top of the oven and the heat contacting the bottom and rear walls of the oven. Access is had to the oven through the door 7 arranged at one side of the oven. Fuel can be placed in the fire box through an opening in the front upper part of the stove which is closed by a door 8 having a damper 9 therein and a door 10 provides access to the lower part of the fire box. A detachable shelf 11 is placed under the door 10 and detachable shelves 12 are placed on the side of the stove, one above and one below the door 7. A tank 13 is detachably connected to the side of the stove opposite the door 7 and a door 14 in the front of the stove provides access to the space under the oven so that said space can be cleaned.

A substantially V shaped warming compartment 15 is seated on the extension 1 of the stove and the pipe 2 passes through the rear part of this compartment. Sliding doors 16 are placed in the front of the compartment so that access can be gained to the side and middle portions of the compartment by opening these doors. Removable shelves 17 are placed in the compartment to support articles placed in the compartment and the bottom 18 of the lower chamber, formed by

the sides and central portion of the compartment, is spaced from the top of the stove so that articles can be placed on the stove under the compartment. The damper 19 for the  
5 pipe 2 is manipulated through the space under the central chamber. The top of the plate is provided with the usual lids 20, some of which are in the extension 1 and those in the extension are carried by a removable  
10 plate 21. The usual removable bridge piece 22 is placed between the lids and the front part of the stove.

Each door 16 operates in vertical guideways 23 formed in the compartment 15 and  
15 notches 24 are formed in the walls at the upper ends of the guideways so that the door can be tilted when in its fully open position to cause its lower end to rest in the notches, as shown in dotted lines in Figure 6, to hold  
20 the door in open position.

Figures 8 and 9 show a modification of the warming chamber in which each door 16' thereof is moved upwardly and inwardly into the compartment instead of being moved vertically. The edges of the door operate in  
25 the guideways 16'' in the compartment, at the top thereof.

It is thought from the foregoing description that the advantages and novel features of  
30 the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the  
35 scope of the appended claim.

What I claim is:

A stove of the class described having an extension at the upper part of its rear portion, a substantially V shaped warming chamber seated on the extension, a smoke pipe for  
40 the stove which passes through the central part of the warming chamber, an oven in the stove, a fire box in the stove, said oven having a recess at the central portion of its front  
45 part in which the fire box is placed and said oven being spaced from the top and bottom of the stove and from the rear thereof and a door for the oven arranged at one side of the stove.

50 In testimony whereof I affix my signature.  
JOHN M. WATTS.

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