

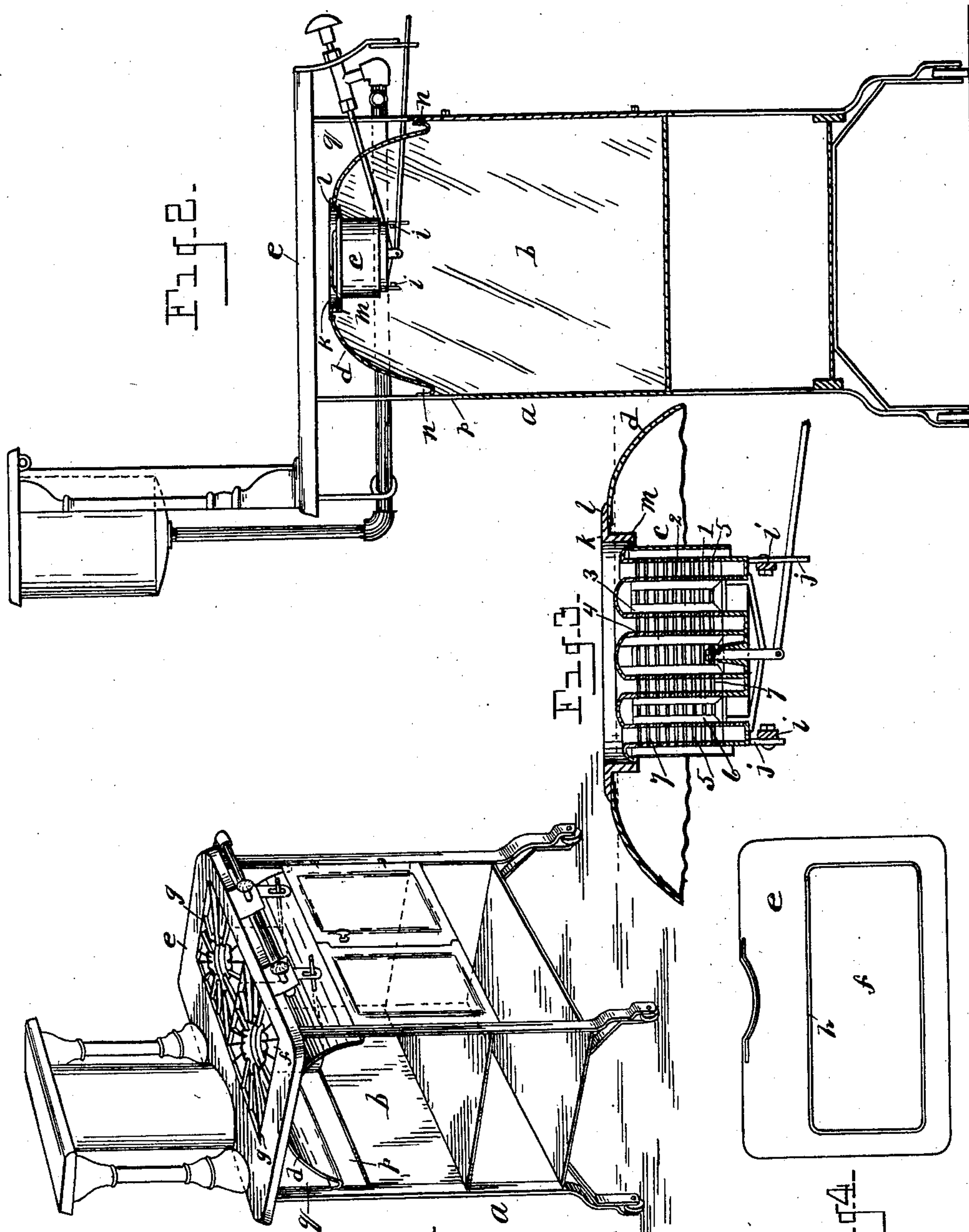
No. 682,630.

Patented Sept. 17, 1901.

**E. G. MUMMERY.**  
**HYDROCARBON VAPOR STOVE.**

(Application filed Mar. 6, 1901.)

(No Model.)



WITNESSES.

*O. B. Baenziger.*

*W. Hickey.*

INVENTOR.

*Edwin G. Mummery*  
*By Maxwell S. Wright*

*His* Attorney.



# UNITED STATES PATENT OFFICE.

EDWIN G. MUMMERY, OF DETROIT, MICHIGAN.

## HYDROCARBON-VAPOR STOVE.

SPECIFICATION forming part of Letters Patent No. 682,630, dated September 17, 1901.

Application filed March 6, 1901. Serial No. 50,003. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN G. MUMMERY, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Hydrocarbon-Vapor Stoves; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object certain new and useful improvements in hydrocarbon-vapor stoves, and has special reference to the provision of such a stove with a warming-closet.

I carry out my invention as more fully hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective showing one end or side of the stove removed to show the interior of the warming-closet. Fig. 2 is a view in vertical cross-section showing parts in elevation. Fig. 3 is a detail view showing the burner and adjacent portions of the top of the warming-closet in vertical section. Fig. 4 is a plan view of the top plate of the stove, the grates being removed.

One of the purposes of my present invention is to locate a burner wholly within the warming-closet, the closet and burner being so arranged as to confine the heat radiating laterally and downwardly from the burner wholly within the closet.

Another object of my present invention is to more thoroughly protect the burner from air-drafts, and thereby to secure a steady and more effective operation of the burner.

Another feature of my present invention consists of the special construction of the top of the closet, as also the top of the stove, whereby any matter boiling over or falling through the grates above the burner, as in cooking, for example, will be prevented from entering the warming-closet and may very readily be removed, the whole top of the warming-closet being readily accessible and so shaped as to prevent any such matter interfering with the operation of the burner,

and whereby the top of the warming-closet may readily be cleansed.

In the drawings, *a* represents a stove of this description, which may be of any desired construction, except as hereinafter specially described. The stove is formed with a warming-closet, (indicated at *b*,) in which is located a burner *c*. The burner may be of any suitable construction. I prefer, however, and have shown in the accompanying drawings, a burner constructed in correspondence with a certain invention embodied in an application now pending in the United States Patent Office, Serial No. 30,898, filed September 24, 1900, and which will need no further description herein.

The top of the closet is indicated at *d*, the same being made of curved form, arching upward, as shown, and being provided with an opening or openings for one or more burners *c*, located beneath said openings, and whereby the heat and flame passing upward from the burner may pass therethrough.

The top of the stove is indicated at *e*, the same being constructed, preferably, with an elongated opening, (indicated at *f*,) in which may be located grates, (indicated at *g g*.) I have shown in Figs. 1 and 4 the top plate *e* constructed for a stove having two burners; but I do not limit myself to any particular number of burners to be employed in connection therewith. The shape of the opening *f* of the top plate *e* of the stove would of course be changed where only one burner was provided. The grate or grates *g g* are constructed simply to rest upon the top plate, as upon a flange *h* of the top plate, so that said grates may readily be removed when desired. The burner may be supported in place within the warming-closet in any suitable manner, as upon supporting-bars *i i*, which supporting-bars may be attached to the frame of the stove in any desired manner and also to the burner in any suitable manner. The burner may for this purpose be provided with downwardly-extending lugs *j j*. In the opening or openings in the top of the warming-closet is located a collar *k* for each of the burners, said collar being preferably provided with a lateral flange (indicated at *l*) resting upon the adjacent position of the top of the closet.



The collar is preferably constructed also with a downwardly-projecting flange *m*, projecting downward about the outside of the upper portion of the burner, said collar closing the  
 5 corresponding opening in the top of the warming-closet, about the upper end of the burner, to prevent the passage of air through the opening in the top of the closet, about the upper end of the burner. The flange *l* of  
 10 the collar rests by the gravity of the collar upon the adjacent portion of the top of the closet, and it is obvious may be moved to correspond with the required location of the burner to effect the closing of the said opening.  
 15 By shifting the collar *k* to correspond with the location of the burner the closing of the opening in the top of the closet may readily be effected.

While it is believed to be unnecessary to  
 20 go into a particular description of the particular burner shown and described, the same is provided with foraminous walls 1 2 3 4, said walls being preferably formed of cast metal, kerfed, as at 5. The walls being thus  
 25 made of heavy cast metal, it is obvious that when heated a considerable amount of heat will be radiated laterally and downwardly into the warming-closet, while the flame and heat rising through the burner and above the  
 30 top of the closet will act upon a utensil upon one of the grates *g*. The top *d* of the closet is preferably formed with troughs *n*, extending lengthwise of the stove and the entire length thereof, the arc-shaped portion of said  
 35 top causing any liquid or other matterspilling or boiling over from a utensil upon a stove to be directed downward to the sides of the top *d* and into said troughs, from which such foreign matter may readily be removed. The  
 40 closet may be constructed in any suitable manner to admit a supply of oxygen or air thereinto to support combustion in the burner. To this end, as shown, the back of the closet may be formed with an opening (in-  
 45 dicated at *p*) for the admission of air into the closet. The closet is placed a little below the top of the stove, leaving an open chamber *q* between the top of the closet and the top *e* of the stove. This chamber *q* being  
 50 open, air will readily be admitted thereinto to assist combustion taking place above the closet. It will be perceived that the burner is constructed with air-chambers 6, open at the base thereof, and with combustion-cham-  
 55 bers 7, permitting a supply of air to pass upward through the burner.

What I claim as my invention is—

1. The combination with a hydrocarbon-vapor stove provided with a top, of an open  
 60 chamber immediately beneath said top, a warming-closet located beneath said open chamber, and a burner within said warming-closet, said burner and the top of said closet constructed to confine the heat passing laterally and downwardly through the burner  
 65 within the closet, and permitting the heat passing upward through the burner to be di-

rected into said open chamber, said closet constructed to permit the inlet of a supply of air to assist in supporting combustion. 70

2. The combination with a hydrocarbon-vapor stove formed with a top, of an open chamber immediately below said top, a warming-closet below said open chamber having an opening in the top thereof, and a burner lo-  
 75 cated in said closet beneath the opening in the top thereof, said burner and the top of said closet constructed to close said opening about the outside of the upper end of the burner, and to restrict the heat passing later-  
 80 ally and downwardly through the base of the burner and confine it within the warming-closet.

3. The combination with a hydrocarbon-vapor stove formed with a top, of an open  
 85 chamber immediately below said top, a warming-closet below said open chamber having an opening in the top thereof, and a burner located in said closet beneath the opening in the top thereof, said burner and the top of  
 90 said closet constructed to close said opening about the outside of the upper end of the burner and to restrict the heat passing laterally and downwardly through the base of the burner and confine it within the warming-  
 95 closet, the top of the warming-closet being elevated at the longitudinal center thereof.

4. The combination with a hydrocarbon-vapor stove formed with a top, of an open  
 100 chamber immediately below said top, a warming-closet below said open chamber having an opening in the top thereof, and a burner located in said closet beneath the opening in the top thereof, said burner and the top of  
 105 said closet constructed to close said opening about the outside of the upper end of the burner and to restrict the heat passing laterally and downwardly through the base of the burner and confine it within the warming-  
 110 closet, the top of the warming-closet being elevated at the longitudinal center thereof, the longitudinal edges of the top of the warming-closet being trough-shaped.

5. The combination with a hydrocarbon-burner provided with a top, of an open cham-  
 115 ber immediately below said top, a warming-closet having an opening in the top thereof located beneath said open chamber, a burner within said warming-closet beneath the opening in the top thereof, and a collar located be-  
 120 tween the outside of the top of the burner and the adjacent edge of the opening in the top of the closet to close said opening about the outside of the burner at the upper end thereof, the base of the burner communicat-  
 125 ing with the interior of the closet, and the top of the burner communicating with the open chamber thereabove.

In testimony whereof I sign this specification in the presence of two witnesses.

EDWIN G. MUMMERY.

Witnesses:

N. S. WRIGHT,  
 M. HICKEY.