

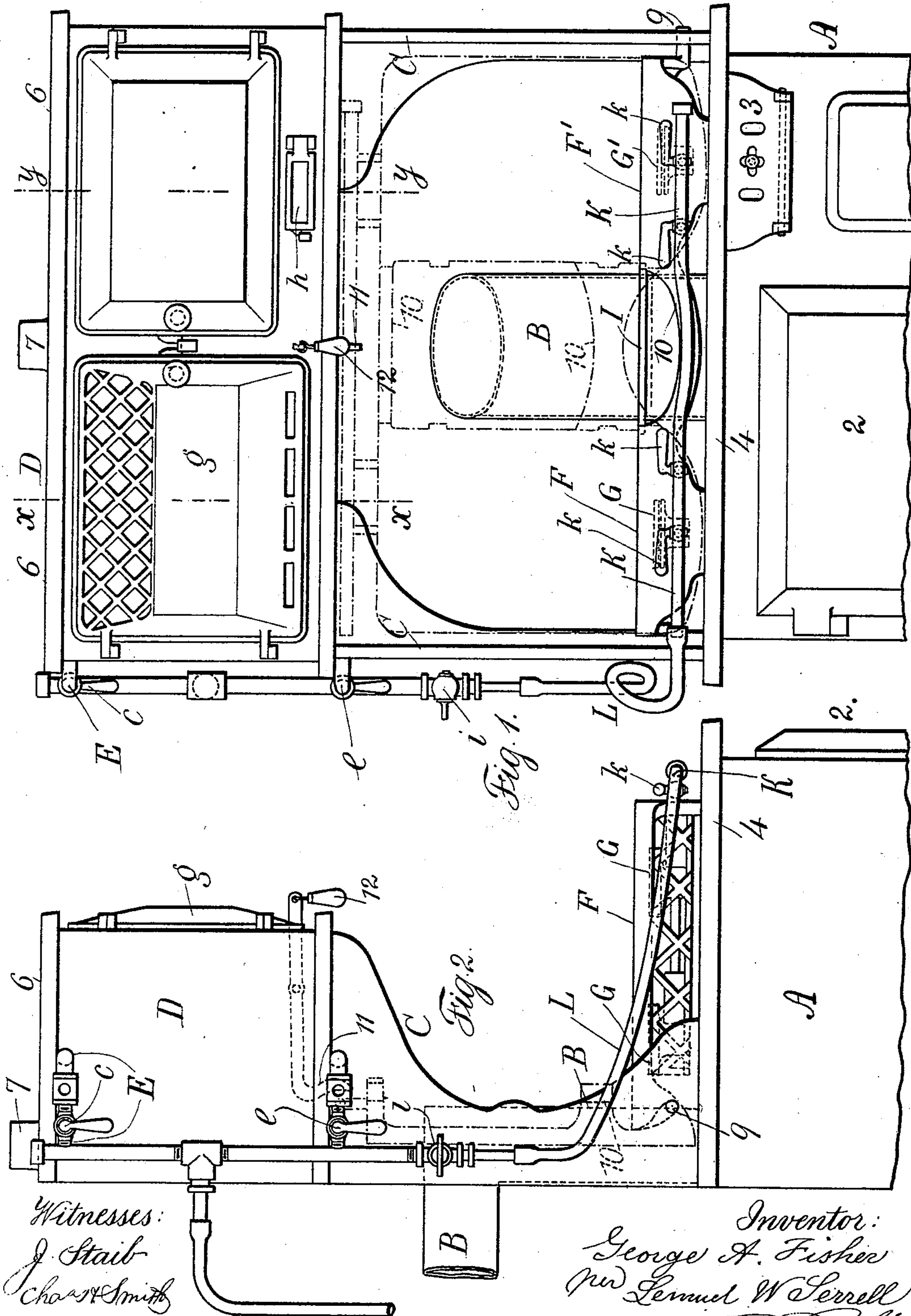
(No Model.)

2 Sheets—Sheet 1.

G. A. FISHER.
STOVE OR RANGE.

No. 538,484.

Patented Apr. 30, 1895.



Witnesses:
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Charles Smith

Inventor:
George A. Fisher
per Lemuel W. Serrell
Atty.

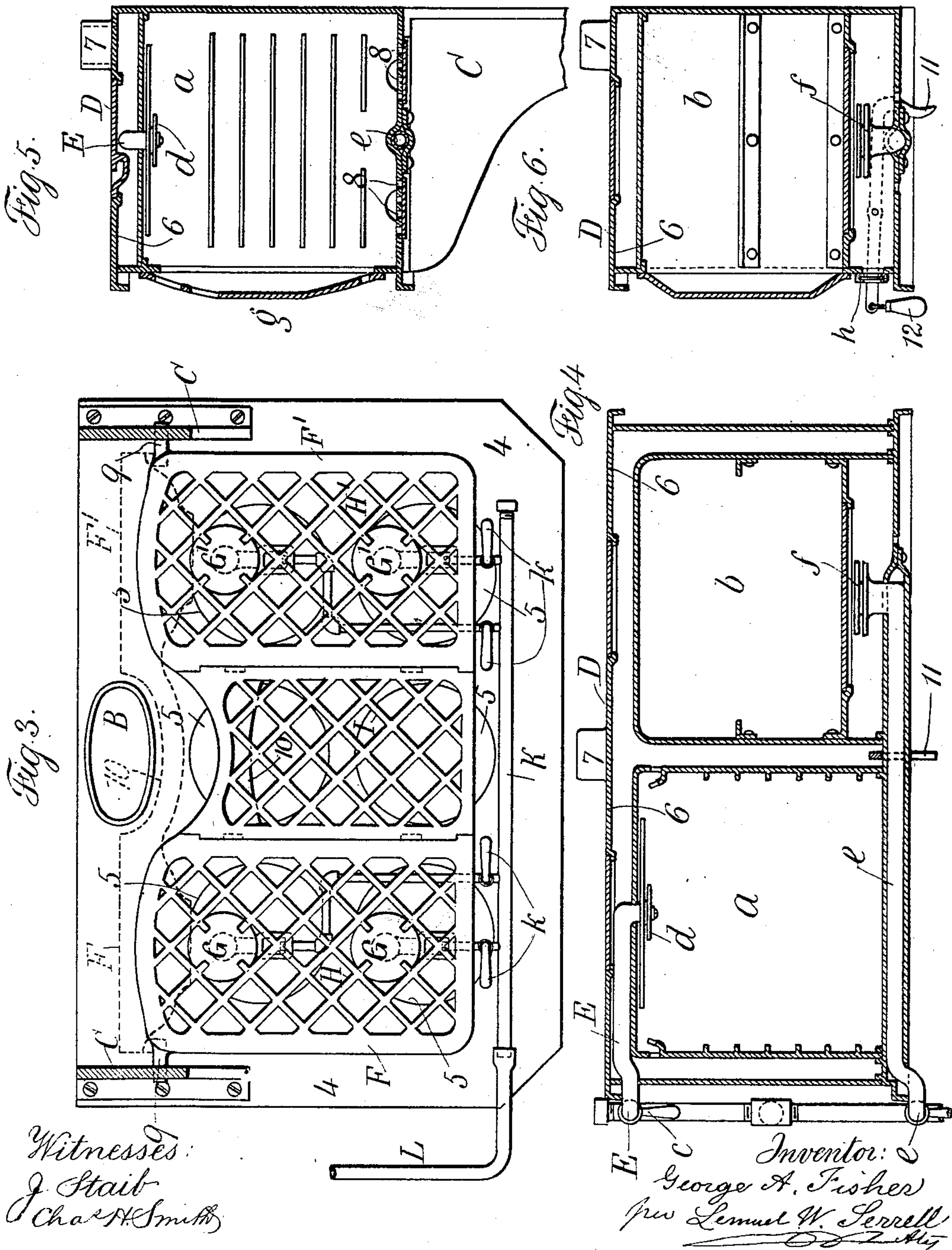
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UNITED STATES PATENT OFFICE.

GEORGE A. FISHER, OF NEW YORK, N. Y., ASSIGNOR TO ABENDROTH BROTHERS, OF SAME PLACE.

STOVE OR RANGE.

SPECIFICATION forming part of Letters Patent No. 538,484, dated April 30, 1895.

Application filed December 18, 1893. Serial No. 493,940. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. FISHER, a citizen of the United States, residing in the city, county, and State of New York, have invented an Improvement in Stoves or Ranges, of which the following is a specification.

Many of the houses that are built, especially in cities, are adapted to a family upon each flat or floor, and in the changes that occur of tenants some prefer to cook by gas and others by coal, and in addition to this, a range or stove adapted to the use of a family is often too small for the cooking necessary on special occasions where the number to be cooked for is increased.

The object of the present invention is to provide a cooking range or stove that is adapted to either coal or gas and in which the capacity for cooking can be increased by the use of both coal and gas at the same time. With this object in view the lower part of the cook stove or range is adapted to burning ordinary fuel such as coal or wood, and in an elevated position over this cook stove is a gas cooking stove having ovens that are adapted to baking, broiling or roasting, and between the lower cook stove and the gas stove a movable gas heating appliance is provided which when in use is turned down and rests directly upon the cook stove and can be used for boiling any articles or for cooking by frying or otherwise, and when not in use this device is turned up against the wall behind the cook stove and below the gas stove and occupies the spaces at the sides of the smoke flue from the cook stove, and when the gas is not made use of the ovens of the gas stove are adapted to the warming of plates or viands by the heat that rises from the cook stove, so that by these appliances the capacity of the ordinary cook stove is increased by providing warming ovens above the cook stove, which warming ovens can be used for cooking purposes by the gas burners that are provided in the same, and gas can be used for the purposes of cooking without the necessity of using the cook stove with ordinary fuel, or all the cooking devices can be simultaneously employed without the one interfering with the other.

In the drawings, Figure 1 is an elevation, and Fig. 2 a side view, of the improvement.

Fig. 3 shows the gas broiling or heating apparatus turned down on top of the cook-stove, the gas-stove being removed. Fig. 4 is a longitudinal and vertical section of the gas-stove. Fig. 5 is a cross-section at the line *xx*, and Fig. 6 is a cross-section at the line *yy*, Fig. 1.

A represents an ordinary cook-stove or range in which the oven door is shown at 2 and the fuel door at 3, and the top 4 of the stove is provided with the usual openings for the lids 5, so that this cooking stove or range A can be of any desired character, and it is usually advantageous to only provide one oven in such cook stove, and the gases and products of combustion pass away by the flue pipe B.

At each side and resting upon the top of the cook stove I have represented brackets C which may be of any desired character for the purpose of receiving and supporting the gas stove D which is provided with two ovens *a* and *b*, there being flues partially around and over the ovens, and the top 6 of the gas stove can be provided with openings and covers so that a teapot or cooking utensil can be placed upon the top 6 of the stove or at either of the openings in the same, and at 7 there is an escape flue for the products of combustion from the gas in the stove D.

The gas pipe E is provided with a cock *c* for regulating the flow of gas to a burner *d* in the upper part of the oven *a*, and there is a pipe and cock *e* to a burner *f* below the oven *b*. These burners are of ordinary character, and the oven *b* is adapted to the purposes of baking and is usually of sheet iron, the heat being below the same and passing through flues at the sides and over the top of the oven, the gases escaping by the pipe 7 so as to heat the oven without the products of combustion passing into the same, but the burner *d* is within the oven *a* and at the top thereof, so as to be adapted to broiling or roasting by the heat radiated downwardly upon the material in such oven, and the products of combustion pass through openings at the outer edges of the top of the oven and enter the flue that is above such oven and escape by the pipe 7.

I find it advantageous to make the door *g* of the oven *a* with openwork at the upper part

so as to admit air to insure a perfect combustion of the gas from the burner *d*, and in the bottom of this oven *a* I usually provide holes or openings at 8 preferably with a register plate for closing such holes whenever desired; and it will be apparent that by this construction the oven *a* is adapted to baking, broiling or roasting and that the temperature of the oven can be partially regulated by admitting air at the holes 8, and when gas is not made use of the holes 8 admit the heated air that rises from the top of the cooking stove A to pass into the oven *a* for heating or warming plates or viands that may be placed in such oven *a*.

In order to light the gas at the burner *f* a small door *h* is provided below the oven *b* and this is in the form of a frame with mica in it, so that the flame can be observed without opening the door *h*, and when gas is not made use of, by opening this door *h* a current of heated air will pass from over the cook stove A through the lower flue and below the oven *b* and pass up around the same and escape by the pipe 7 so that both ovens *a* and *b* can be used for warming purposes even when the gas is not employed.

The swinging frames F F' are made of metal and openwork. They are pivoted at 9 to the brackets or supports C and they are connected one to the other by the bars 10, so that when the frame of openwork is swung down, the bottom thereof will rest upon the top 4 of the cook stove A and when turned up, the frames F F' will be adjacent to or rest against the wall at the back of the cook stove and occupy the spaces at the sides of the flue pipe B, and the bars 10 connecting the frames F F' together will come in front of such flue pipe B and they also will either rest upon or be near the surface of the top 4 of the cook stove A when the frames F F' are swung down and rest upon such cook stove, and within the frames F F' there are gas burners G G' which are constructed in the well known manner so as to be adapted to cooking purposes, and over these gas burners there are openwork supporting plates H H' that are adapted to the reception of pots, pans or cooking utensils that may be supported by such plates over the gas burners, and as a convenience for supporting cooking utensils, a movable openwork plate I is received between the openwork frames F and F' and is preferably upon the same level as the supporting plates H H' so as to form an openwork top to the gas cooking apparatus, the gas burners G and G' being below such openwork top, and when the frames F and F' with their gas burners G G' and supporting plates H H' are to be turned up at the respective sides of the flue pipe B, the plate I is to be removed so as not to come into contact with the flue pipe B as the parts are being turned up into position when out of use.

It is advantageous to extend the gas pipe K along in front of the gas cooking devices and to connect the same at one end to a cock

by a flexible tube L, and this gas pipe K has branches to the burners G G'; and it is advantageous to provide a cock for each burner, as shown at *k*, and this gas pipe K serves as a handle in moving the respective openwork frames F F' from one position to the other, and the gas pipe also strengthens the parts of the gas cooking device, and when turned up out of the way a latch 11 provided in the gas stove D at the bottom thereof and near the back, is adapted to catch the pipe K and hold the parts up in position, and to this latch 11 is connected a rod or extension to the front of the gas stove and provided with a handle 12 at the outer end, so that the latch 11 can be raised and disconnected from the pipe K whenever the gas cooking device is to be turned down into position on the top of the cook stove A.

I claim as my invention—

1. The combination with a stove and its pipe, of a gas cooking device in two parts having openwork frames and burners and an intervening space wider than the pipe, pivots on which the gas cooking device can be swung, and depressed connections between one part and the other and gas pipe connections, whereby the gas cooking device can be swung up vertically and at opposite sides of the escape flue or turned down horizontally and rest on the top of the stove for use, substantially as set forth.

2. The combination with a stove and its pipe, of a gas cooking device in two parts having openwork frames and burners and an intervening space wider than the pipe, pivots on which the gas cooking device can be swung, and depressed connections between one part and the other and gas pipe connections, whereby the gas cooking device can be swung up vertically and at opposite sides of the escape flue or turned down horizontally and rest on the top of the stove for use, and a removable plate between and setting flush with the top surfaces of the two part gas cooking device when turned down for use, substantially as set forth.

3. The combination with a cook stove, of ovens and a surrounding case and supports for the same in an elevated position over the cook stove, and gas burners for heating such ovens, there being openings in the surrounding case for the admission of the hot air rising from above the stove to warm the ovens, substantially as set forth.

4. The combination in a gas stove, of two ovens upon the same level or nearly so, a case inclosing the flues around the ovens, gas pipes and a burner within and at the top part of one oven to adapt the same to broiling, and a burner in the flue below the bottom of the other oven to adapt the same to baking, and an escape pipe at the top of the case so that both ovens can be simultaneously used or the burner of one oven serves additionally to keep the other oven warm, substantially as set forth.

5. The combination with an oven having a

surrounding case and openings from the oven into the flue between the oven and case, of a burner for gas in the upper part of the oven, a door with opening for the admission of air, 5 and an opening and register in the bottom of the oven, substantially as specified.

6. The combination in a cooking apparatus, of a cook stove for coal, stationary ovens elevated above the cook stove and burners for 10 heating the same by gas flames, and openings that allow heated air to pass in below the ovens to adapt them to warming purposes, and an intermediate gas stove and pivots upon

which the same can be swung up vertically beneath the elevated ovens and out of the way 15 or swung down horizontally on top of the cook stove for use separately or at the same time as such cook stove and the elevated ovens, substantially as specified.

Signed by me this 13th day of December, 20 1893.

GEORGE A. FISHER.

Witnesses:

GEO. T. PINCKNEY,
A. M. OLIVER.