

May 6, 1924.

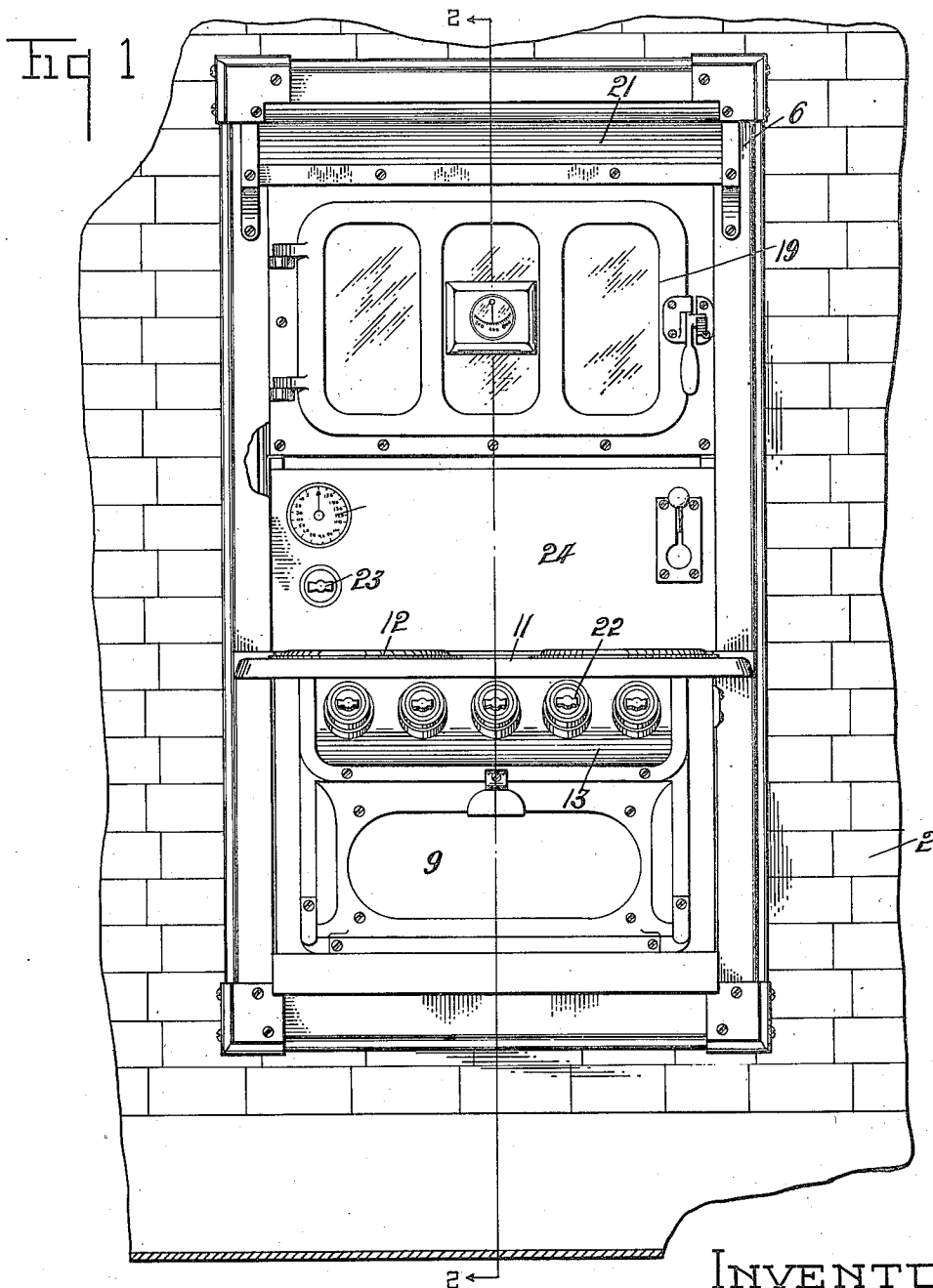
1,492,582

L. D. SMITH

COOKING APPARATUS

Filed Oct. 7, 1922

3 Sheets-Sheet 1



INVENTOR

Luther D. Smith.
By Owen Owen & Crampton
Attys.

May 6, 1924.

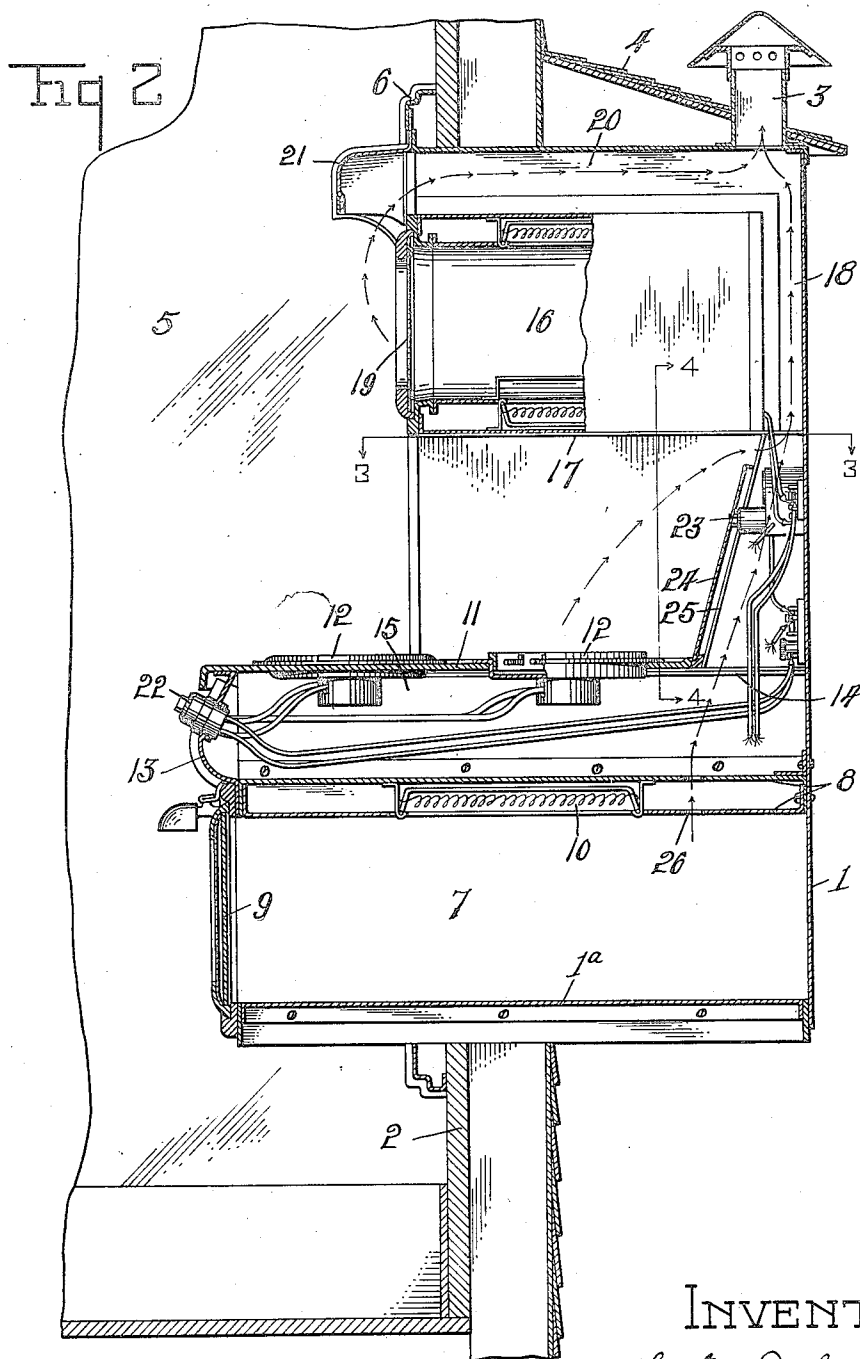
1,492,582

L. D. SMITH

COOKING APPARATUS

Filed Oct. 7, 1922

3 Sheets-Sheet 2



INVENTOR..

Luther D. Smith.

By Owen Owen & Crampton
Attys.

May 6, 1924.

1,492,582

L. D. SMITH

COOKING APPARATUS

Filed Oct. 7, 1922

3 Sheets-Sheet 3

Fig 3

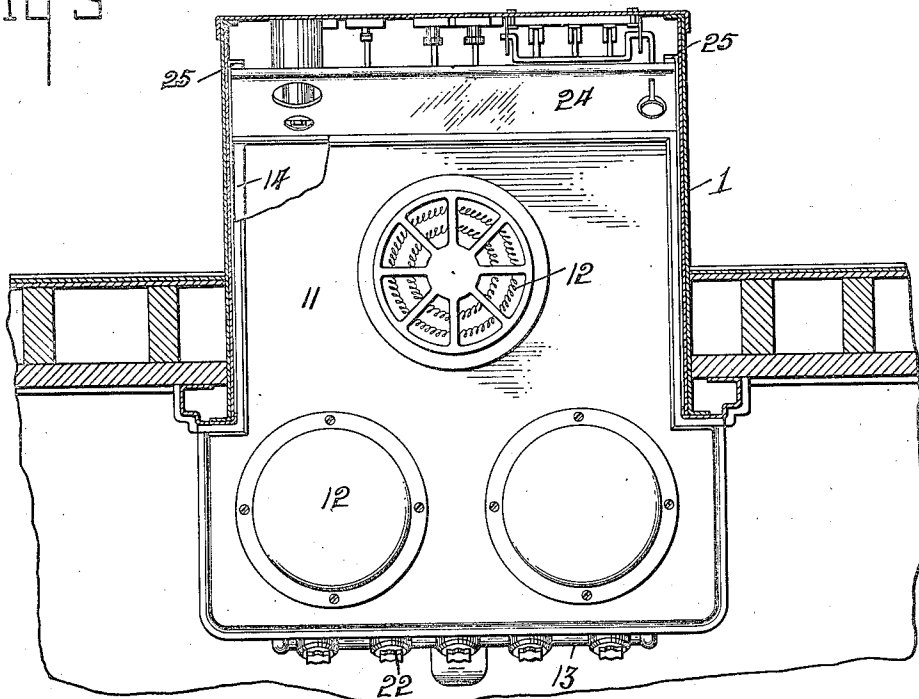
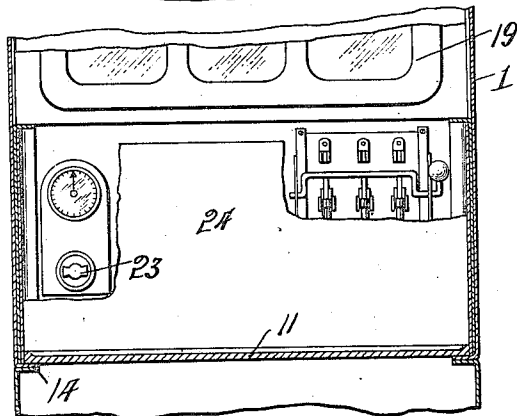


Fig 4



INVENTOR.

Luther D. Smith,
By Owen Owen & Crampton
Attys.

UNITED STATES PATENT OFFICE.

LUTHER D. SMITH, OF TOLEDO, OHIO.

COOKING APPARATUS.

Application filed October 7, 1922. Serial No. 593,036.

To all whom it may concern:

Be it known that I, LUTHER D. SMITH, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have made an Invention Appertaining to a Cooking Apparatus; and I do hereby 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, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to ranges for cooking purposes, and particularly to those of the electric type.

An object of the invention is to save a large part of the space customarily required in a room for the mounting of a range by installing the range in a casing provided therefor within a wall opening; and further objects are the provision of a novel arrangement of parts whereby such installation is practical, and the utilizing of the enclosing casing and a flue leading therefrom as a means for collecting the fumes from the different parts of the range and directing them to the exterior of the building.

The invention is fully described in the following specification, and while, in its broader aspect, it is capable of embodiment in numerous forms, a preferred embodiment thereof is illustrated in the accompanying drawings, in which,

Figure 1 is a front elevation of a range set into a wall and embodying the invention. Fig. 2 is a central vertical section thereof on the line 2—2 in Fig. 1. Fig. 3 is a horizontal cross-section on the line 3—3 in Fig. 2, and Fig. 4 is a fragmentary vertical section on the line 4—4 in Fig. 2.

Referring to the drawings, 1 designates a casing which is set into or through an opening provided in a wall 2 of a room and has a flue 3 at its top which opens at its outer end exteriorly of the building. In the present instance, the casing 1 is projected entirely through an outer wall of a building and has its projected portion covered by a protecting canopy 4 through which the flue 3 extends. The casing is closed except at its front side, which is opened to the room 5 and the edge of the casing at such side is provided with the surrounding facing flange

6 that laps the marginal edge of the wall opening.

A warming oven 7 is provided in the lower portion of the casing 1 by inserting a horizontal partition 8 in the casing and the front portion of this partition, as well as the bottom member 1^a of the casing, are preferably extended a short distance in advance of the casing, as shown. The front of the oven 7 is closed by a door 9. An electric heater 10 is provided in the partition 8 to facilitate heating the oven 7 when desired. A range top 11 having any desired number of electrical heaters 12 therein suitable for the size of the range, is mounted over the partition 8 in spaced relation thereto, being supported at its front by a face plate 13 and at its sides by flanges 14 projecting inward from the respective sides of the casing. The range top extends out into the room the same distance as the oven 7, and the sides of the space between the partition 8 and range top 11 in advance of the casing are closed by side members 15, which extend back into the casing.

The usual range oven 16 is mounted in the upper portion of the casing 1 in vertically spaced relation to the top plate 11 of the range and rests at its side edges on flanges 17 projecting inwardly from the respective sides of the casing. The oven terminates at its rear in spaced relation to the rear wall of the casing to provide a vertical flue 18 therebetween and has its front side terminating substantially flush with the casing front and provided with the door 19. The oven is also spaced from the top of the casing to form the top flue 20, the front end of which opens into the hood 21, which is secured to the front side of the casing top over the door 19 so that any fumes passing from the oven upon the opening of a door will rise into the hood 21 and thus pass to the outlet flue 3 with which it communicates. The flue 18 also communicates at its upper end with the flue 3 and at its lower end with the space between the range top and oven so that fumes from articles cooking on the range top will pass rearwardly in the casing and thence upward through the rear flue 18. The oven 16 may be easily removed from the casing to facilitate replacement or repair.

The electrical switch and terminal boards for the wiring for the different hot plates

or electrical heaters of the range, are mounted in easily accessible position on the rear wall of the casing 1 at its inner side between the flanges 14 and top oven 16 and the wires lead therefrom to the different heaters and to the control switches therefor, which latter are mounted in convenient position. In the present instance, the switches 22 for the heaters 12 are mounted in the plate 13 and the switch 23 for the oven heaters is disposed within the rear portion of the casing below the bottom of the oven.

The top plate 11 of the range terminates at its rear end in spaced relation to the rear wall of the casing and a protecting member 24 extends up from the rear end of the top plate 11 preferably on a rearward incline in spaced relation to the bottom of the oven 16, being supported at its lower edge by the flanges 14 and held in its inclined position by side flanges 25 on the casing. The plate 24 is intended to protect and cover the wiring at the rear of the casing and to serve as a baffle wall for directing the fumes rising from over the range top 11 into the lower portion of the flue 18 into which they are permitted to pass over the top of the baffle plate. The plate 24 is loosely disposed within the casing so that it may be easily removed to facilitate inspection or repair of the wiring. The top partition 8 of the oven 7 is provided with a vent opening 26 therethrough in communication with the space above which in turn communicates at its rear end with the flue 18 through the passageway formed in the rear of the casing between the baffle plate 24 and rear casing wall, thus permitting any fumes rising from the oven 7 to pass up to the flue 18. It will be understood that heat insulating strips of asbestos or other suitable material are provided within the casing 1 around the ovens 7 and 16.

It is evident that I have provided a range which includes a casing member of box-like form having top, bottom, sides and back and being open at its front, said casing having a range unit mounted in its lower portion and an oven unit mounted in its upper portion in vertically spaced relation to the range unit, said oven unit cooperating with the casing to form flues leading both from the upper front portion of the casing and from the space above the range unit. The casing member also, in the case of an electric range, encloses the electrical control parts such for instance as the wiring in the fuse box switch and other parts. The casing and different units or parts mounted therein forms a compact unitary range construction which, where space is an item, may be set into a wall opening or chamber and have its exit flue opening to the exterior of the room in which the range is located thereby admirably adapting it for use in small

rooms and apartments. A range of this character prevents dirt from collecting back of the same and can be easily swept or cleaned underneath, thereby lending itself to sanitary condition.

I wish it understood that my invention is not limited to any specific construction, arrangement or form of the parts, as it is capable of numerous modifications and changes without departing from the spirit of the claims.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is,—

1. In combination, a casing having top, bottom, sides and back and open at its front, a range unit mounted in the lower portion of the casing, an oven unit mounted in the upper portion of the casing in vertically spaced relation to the range unit and cooperating with the casing to form an exit flue leading upward from the space between the two units.

2. A cooking apparatus having in combination, a casing having top, bottom sides and back and open at its front, a range unit mounted in the lower portion of the casing, and an oven mounted in the upper portion of the casing and cooperating therewith to form flues leading both from the upper front portion of the oven unit and from the space between the range and oven unit to an exit point.

3. A cooking apparatus having in combination, a casing with top, bottom, sides and back and an open front, an electric range unit mounted in the lower portion of the casing, an upper unit mounted in the upper portion of the casing in vertically spaced relation to the range units and cooperating with the casing to form an exit flue from the space between the two units, and means between the two units cooperating with the casing to form a chamber for receiving different control parts of the apparatus.

4. In a cooking apparatus, the combination of a casing adapted to be set into a wall opening and having top, bottom, sides and back and an open front, a range unit mounted in the lower portion of the casing and projecting forwardly from the same, an oven unit mounted in the upper portion of the casing in vertically spaced relation to the range unit, and cooperating with the casing to form flues leading over the oven unit in advance thereof and leading upwardly from the space between the two units to a point of exit from the casing, and means disposed within the space between the two units and cooperating with the casing to form a chamber for receiving different control parts for the apparatus.

5. In a cooking apparatus, the combination of a casing adapted to be set into a

5 wall opening and having top, bottom, sides,
back and an open front, a range unit detachably mounted in the lower portion of
the casing, an oven unit detachably mounted
10 in the upper portion of the casing in vertically spaced relation to the range unit and
cooperating with the casing to form a flue leading from the space between the two
units and control means for the range and
oven mounted in accessible position within
the casing.

6. The combination with a room wall having an opening therein, of a casing set into
the opening with its front side open to the
15 room and having an outlet flue at its top portion leading to the outer side of the wall,
a range top set into the lower portion of the casing, an oven set into the casing above
the range top in spaced relation thereto and
20 in spaced relation at its rear and top sides to the casing to provide flues therebetween
in communication with the outlet flue, the space between the range top and oven being
in communication with the rear flue, and
25 a hood at the front end of the top flue overhanging the front side of the oven to
direct fumes into the top flue from the oven when the oven door is open.

7. The combination with a room wall having an opening therein, of a casing set into
the opening and open at its front side to the
30 room and having an outlet flue at its top portion, a range top and an oven mounted in
the casing in vertically spaced relation, the oven cooperating with the casing to form a
flue which leads from the space between the
35 range top and oven to the outlet flue, and a baffle plate removably mounted in the rear
portion of the casing in spaced relation to its rear wall and between the range top
and oven to protect parts at the rear thereof
40 and to assist in directing fumes into the lower end of the rear flue.

8. The combination with a room wall hav-

ing an opening therein, of a casing mounted 45
in the opening and having its front side open to the room and provided at its
top with an outlet flue, an oven set into the upper portion of the casing in spaced
relation to its rear and top sides to form 50
respective rear and top flues therebetween in communication with the outlet flue,
means forming a bottom oven and a range top plate in the lower portion of the casing
in vertically spaced relation to the top 55
oven, the lower oven and the space between the top plate and upper oven being in communication
with the lower end of the rear flue, electrical heaters for the ovens and top
plate, wiring parts for the heaters disposed 60
within the casing at the rear of the space between the top plate and top oven, and a protecting
plate for the wiring parts removably disposed in advance thereof between
the top plate and top oven. 65

9. The combination with a room wall, having an opening therein, of a casing set into
the opening and having its front side open to the room and provided with a top exit
flue leading to a point exteriorly of the 70
room, lower and upper sets of side flanges in the casing, a range top plate mounted on
the lower set of flanges, an oven mounted on the upper set of flanges in spaced relation
to the rear and top sides of the casing 75
to form flues therebetween in communication with the outlet flue, the rear flue being
in communication with the space between the top plate and oven, and the top flue communicating
at its front with the interior of 80
the oven when the oven door is open, and a baffle plate mounted on the lower set of
flanges at the rear of the top plate and extending upward and rearward to near the
bottom of the oven. 85

In testimony whereof I have hereunto
signed my name to this specification.

LUTHER D. SMITH.