

No. 608,533.

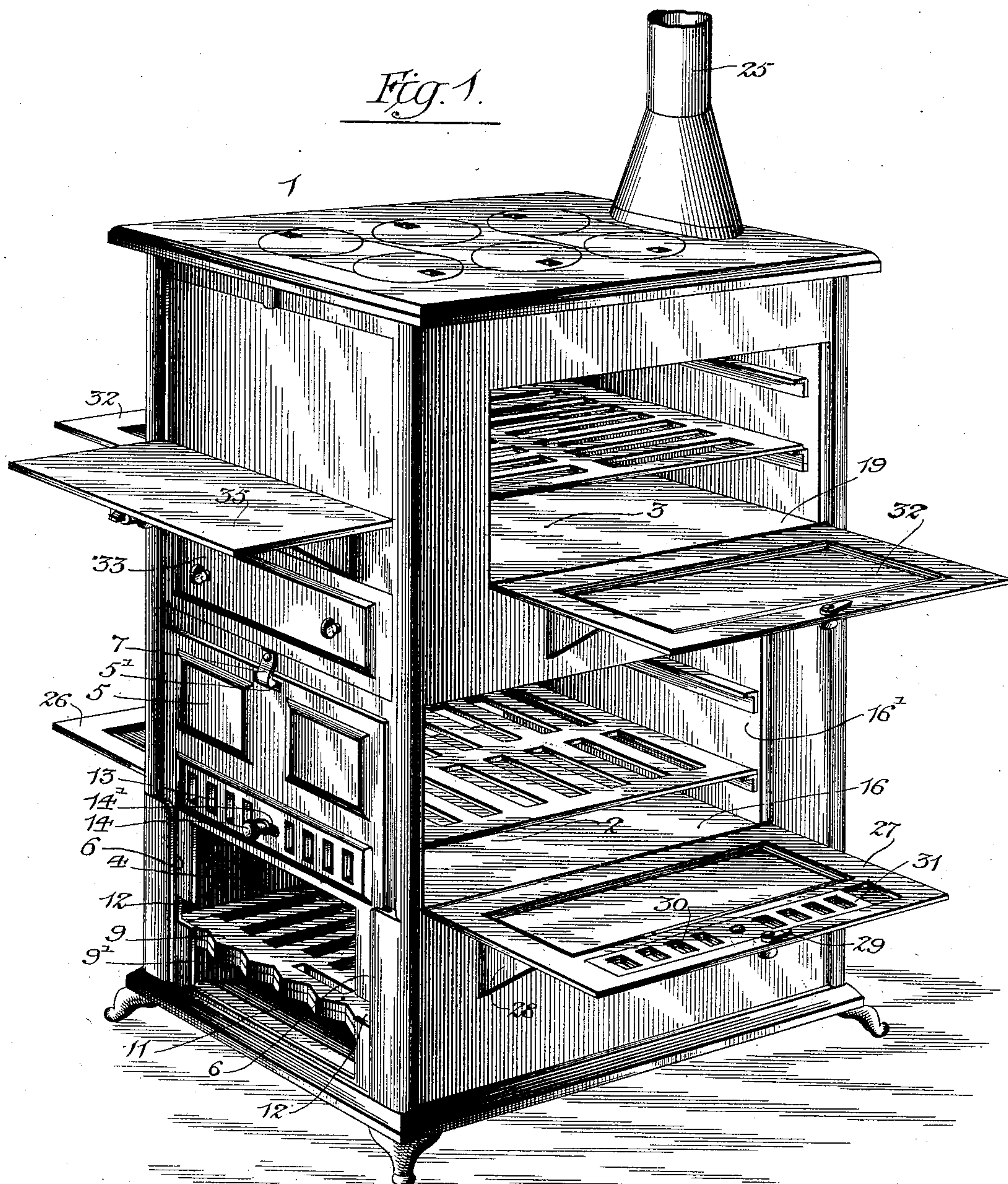
Patented Aug. 2, 1898.

J. B. TURBEVILLE.
COOK STOVE.

(Application filed July 30, 1897.)

(No Model.)

2 Sheets—Sheet 1.



Inventor:-

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Witnesses:-

Louis W. Whitehead.

H. A. Bernhardt.

By *Fitz* Attorneys,

C. A. Snow & Co.

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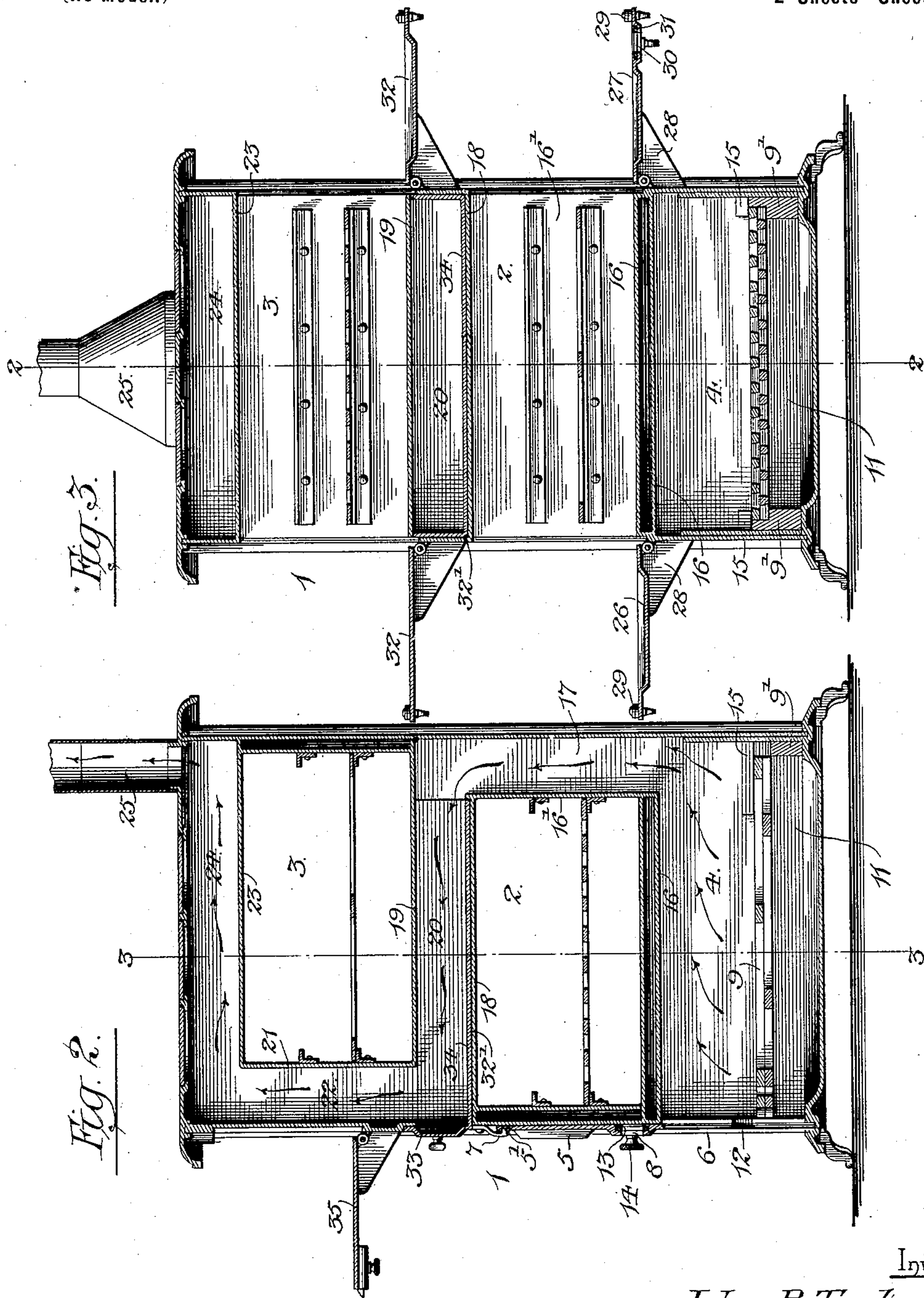
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UNITED STATES PATENT OFFICE.

JOHN B. TURBEVILLE, OF DUBLIN, TEXAS.

COOK-STOVE.

SPECIFICATION forming part of Letters Patent No. 608,533, dated August 2, 1898.

Application filed July 30, 1897. Serial No. 646,529. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. TURBEVILLE, a citizen of the United States, residing at Dublin, in the county of Erath and State of Texas, have invented a new and useful Cook-Stove, of which the following is a specification.

My invention relates to improvements in cook stoves or ranges; and the object of the invention is to provide a simple construction in which two oven-chambers are employed, arranged one above the other in the same vertical plane, and in which the draft and products of combustion are caused to circulate beneath, around one end, and above each of the oven-chambers to thoroughly heat the same.

A further object of the invention is to improve the construction of the stove with a view to regulating the temperature of the lower oven, which is exposed to the direct heat from the combustion-chamber or fire-pot of the stove.

To the accomplishment of these ends my invention consists in the novel construction and arrangement of parts, which will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of a cooking-stove constructed in accordance with my invention. Fig. 2 is a vertical sectional elevation taken fore and aft through the stove on the plane indicated by the dotted line 2 2 of Fig. 3. Fig. 3 is a vertical transverse sectional elevation on the plane indicated by the dotted line 3 3 of Fig. 2.

Like numerals of reference denote corresponding parts in all the figures of the drawings, referring to which—

1 designates the stove in its entirety, which is constructed in a novel and peculiar way in accordance with my invention to provide the two oven-chambers 2 and 3, which are both contained within the stove structure and are arranged one above the other in the same vertical plane.

Below the lower oven 2 is situated the combustion-chamber or fire-pot 4, the open front of which is designed to be closed by a door 5,

arranged to slide vertically in suitable guides or ways 6 on the front of the stove. This vertically-slidable door 5 is adapted to be raised to expose the whole of the opening to the combustion-chamber 4, and when in its raised position the door is engaged by a suitable catch 7, preferably a spring-catch, attached to the front of the stove and lying in the path of the door 5 to take under a lip or flange 5' thereon, so as to engage with the door in a manner to hold it securely in its raised position. This door 5 of the combustion-chamber is provided with a series of draft-openings 8, by which the air necessary to support combustion may be admitted to the chamber 4 below the horizontal plane of the grate 9 within said combustion-chamber. This grate 9 consists of two slotted or perforated sections arranged to rest one on top of the other, and said grate rests upon horizontal flanges or ways 9', provided at the sides of the combustion-chamber above the bottom thereof. The flanges 9' consist of horizontal bars recessed at their upper edges to receive the grate-sections and arranged upon the bottom of the stove and forming the side walls of the ash-pit 11. The grate is thus sustained within the combustion-chamber to form the ash-pit 11 below the grate, and the length of the grate is slightly less than the length of the combustion-chamber or the distance between the front and rear walls of the stove, so that one grate-section may be adjusted longitudinally to a limited extent on the other grate-section to vary the area of the openings or slots in the grate, and thus in a measure control the draft through the combustion-chamber and the stove.

The front wall of the stove, at a suitable distance above the flanges or ways 9', is notched, as at 12, to permit the grate when slightly raised above the flanges 9' to pass through said notches and be withdrawn from the combustion-chamber. These notches 12 thus provide convenient means for the insertion or removal of the grate, and the grate can thus be made practically the full width of the combustion-chamber, whereby a large grate-surface is obtained.

The vertically-slidable door 5 to the combustion-chamber is recessed on its rear side to accommodate a perforated slide 13, which

is fitted snugly to the door 5, in the recessed part thereof, to slide horizontally across the door. This slide is provided with openings adapted to be moved into alinement with the
 5 air-openings 8 in the door, or said slide may be adjusted to reduce the area of said openings, and thus vary the air admitted through the door to the combustion-chamber. The slide is adjusted by a knob 14, which is at-
 10 tached thereto and which plays in a slot 14', formed in the door 5.

At the rear part of the combustion-chamber 4, on a plane above the flanges or ways 9', is provided the stop-flanges 15, which are ar-
 15 ranged parallel to the flanges 9' and serve to hold the grate in proper position on the flanges 9', as is obvious.

The horizontal partition 16 forms the top of the combustion-chamber 4 and the bottom of
 20 the lower oven-chamber 2, and this partition extends from the front plate or wall of the stove to a suitable distance toward the rear plate or wall of the stove, thus leaving a space between said partition and the rear
 25 wall or plate of the stove. The front wall or plate of the stove forms the front end of the lower oven-chamber; but the rear end of the oven-chamber 2 is closed by means of a wall 16, which is arranged parallel to the rear plate
 30 or wall of the stove to form therewith the vertical rear flue 17, which opens into the rear extremity of the combustion-chamber. The top 18 of the lower oven-chamber 2 extends from its rear wall 16 to the front plate or wall
 35 of the stove, and this top wall 18 of the lower oven-chamber 2 is arranged parallel to, but a suitable distance below, the bottom 19 of the upper oven-chamber 3 to provide between said top and bottom 18 19, respectively, a
 40 horizontal flue 20, which opens at its rear end into the vertical rear flue 17. This bottom 19 of the upper oven-chamber 3 extends from the front end wall 21 of the upper oven-chamber 3 to the rear wall of the stove, and said
 45 front end wall 21 of the oven-chamber 3 is arranged parallel to and a short distance within the front plate or wall of the stove proper to form between said front plate or wall of the stove and the wall 21 of the oven-
 50 chamber a vertical front flue 22, which opens at its lower end into and communicates with the horizontal flue 20.

The top plate of the stove is arranged parallel to, but a suitable distance above, the
 55 top 23 of the upper oven-chamber 3 to form a flue 24, which opens into the vertical front flue 22, and this flue leads to a suitable uptake of pipe 25, which is connected to a chimney or other suitable place of discharge for
 60 the smoke and products of combustion.

From the foregoing description, taken in connection with the drawings, it will be observed that I have arranged the several walls of the ovens in alternate relation to provide
 65 flues which conduct the smoke and products of combustion in a circuitous course from the

combustion-chamber to the smoke-exit pipe 25. The flues are continuous with each other, and they are arranged in a zigzag course to conduct the products of combustion around
 70 one end and across the top of the lower oven-chamber and across one end and on both sides of the upper oven-chamber. The lower oven-chamber being situated directly over the combustion-chamber, it is exposed to the direct
 75 radiation of heat therefrom, and the described arrangement of flues provide for the proper application of heat to the bottom and top as well as to one end of each oven-chamber. This construction and arrangement of
 80 parts enable me to use two oven-chambers within a single stove structure and to apply the heat uniformly and advantageously thereto to maintain proper temperatures in said oven-chamber for baking or cooking pur-
 85 poses.

The oven-chambers are open on both sides of the stove, and I have provided suitable doors for closing said chambers and for per-
 90 mitting access thereto from either side of the stove. The lower oven-chamber 2 has hinged doors 26 27, arranged to fold (open or close) in vertical planes. When open, the oven-doors rest on suitable brackets or shelves 28, suitably attached to the side walls of the
 95 stove, and each door is further provided with a suitable catch (indicated at 29) for holding the door in its closed position. These doors are arranged to open downwardly, so as to be substantially flush with the bottom of the
 100 oven-chamber to serve the purposes of shelves on which the pans may rest in introducing or withdrawing them to or from the oven-chamber. The doors to the lower oven-chamber are provided with vent-openings 30, with
 105 which coact the slides 31, fitted in suitable recesses on the inner faces of the doors. The slides are perforated and provided with suitable knobs by which the slides may be adjusted to vary the area of the openings 30 in
 110 the doors to permit of the escape, more or less, of the heat from the oven-chamber. The upper oven-chamber 3 is likewise provided with hinged doors 32, provided with suitable catches, and these doors may also be
 115 perforated and provided with slides, which may be adjusted to control the temperature of the oven-chamber 3.

The top plate of the stove is cast in a single piece with suitable openings to receive the
 120 removable covers, any desired number of which may be provided.

At the front wall or plate of the stove opposite to the flue 20 is provided a cleaning-opening 32. The opening is normally closed
 125 by a cover 33, suitably fitted or attached to the front plate or wall of the stove, and to this cover is attached a removable soot tray or pan 34, which occupies the flue 20 and in which the soot, dust, &c., may lodge. By
 130 removing the pan the accumulations of soot, &c., may easily be emptied.

Above the door or cover 33 is hinged a shelf 35, on which pans or other objects may be placed for warming purposes, &c.

From the foregoing description, taken in connection with the drawings, it will be observed that I have provided a stove in which the parts are arranged in a simple manner to secure back-and-forth circuitous circulation of the products of combustion to heat two oven-chambers on the top, bottom, and one end thereof. The various parts are easily accessible for cleaning and repairs, and the draft, as well as the heat in the open chambers, may easily be regulated and controlled.

It is evident that changes in the form and proportion of parts may be made without departing from the spirit or sacrificing the advantages of my invention.

The grate of the stove, constructed in sliding sections, may be used to good advantage in burning either wood or coal. By sliding the upper section in one direction the grate may be used for burning coal; but if the grate is adjusted in the other direction it is well adapted for burning wood.

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

A stove, comprising a body having a com-

bustion-chamber with an opening at one side thereof, and provided at opposite sides of the opening with vertical flanges having horizontal notches, the horizontal bars 9' arranged within the stove upon the bottom thereof and having their upper edges recessed at their inner sides and located in a plane below the notches, said bars 9' forming opposite walls of an ash-pit and located at opposite sides of the combustion-chamber, and the upper and lower grate-sections adapted to be introduced into the body of the stove through the said notches and having their side edges arranged within the recesses of the bars 9' and provided with slots or openings, the front end of the lower section abutting against the vertical flanges and held against longitudinal movement, and the front end of the upper section terminating short of the flanges, whereby the said upper section is adapted to be reciprocated, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN B. TURBEVILLE.

Witnesses:

F. S. BRADING,
E. A. POWELL.