

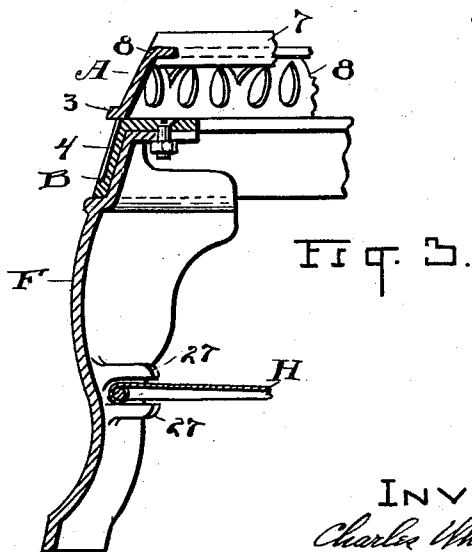
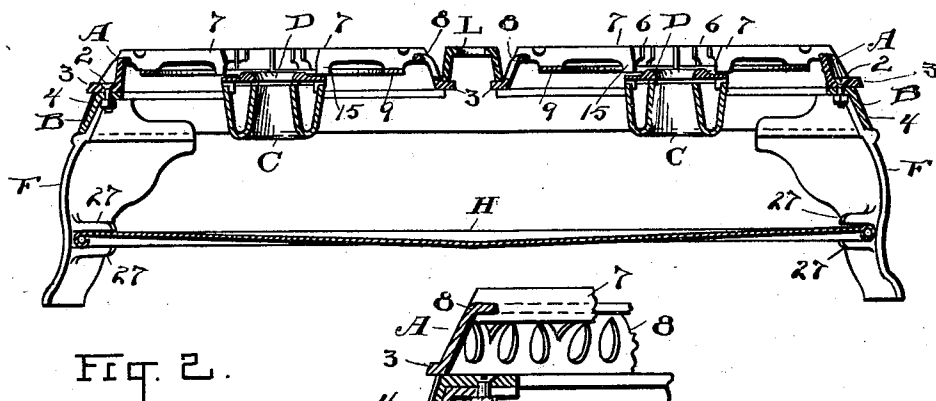
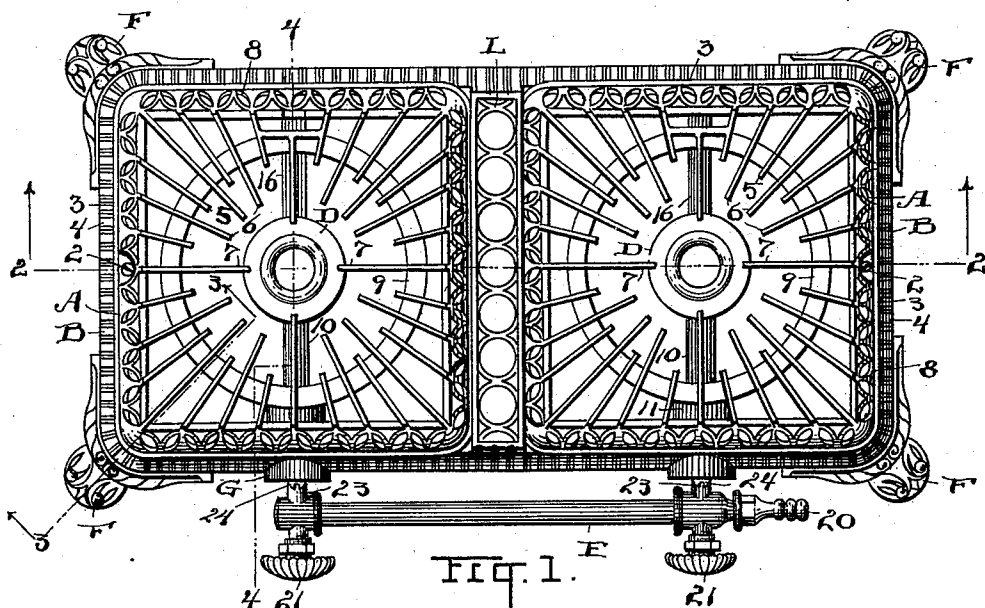
(No Model.)

3 Sheets—Sheet 1.

C. WHITTINGHAM.
GAS COOKING STOVE.

No. 544,708.

Patented Aug. 20, 1895.



ATTEST.

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G. S. Schaffer

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3 Sheets—Sheet 2.

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Fig. 4.

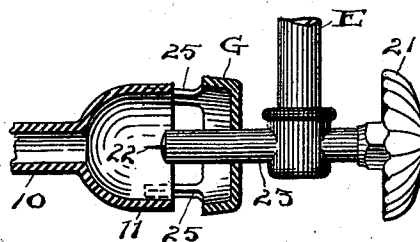
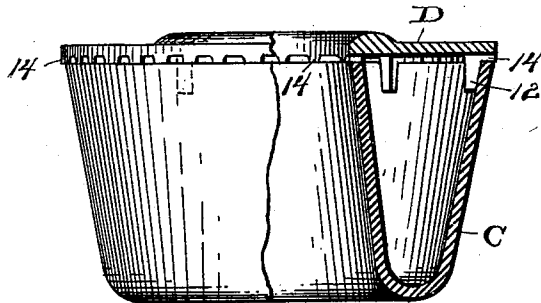
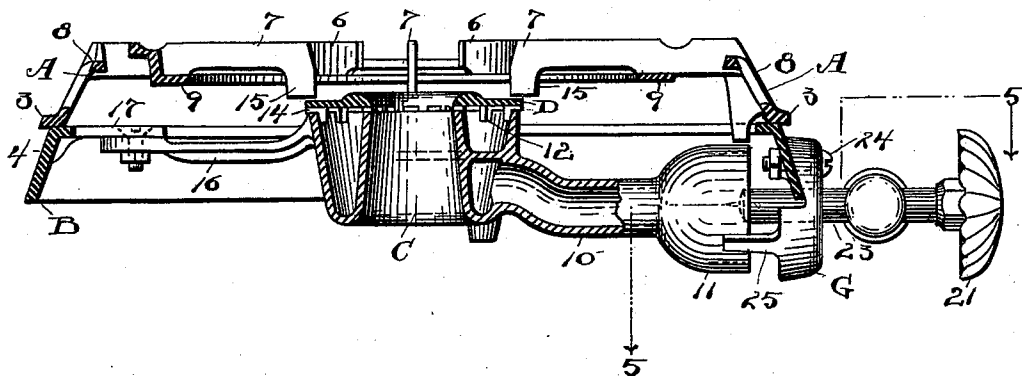


Fig. 5.

Fig. 6

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(No Model.)

3 Sheets—Sheet 3.

C. WHITTINGHAM.
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Fig. 7.

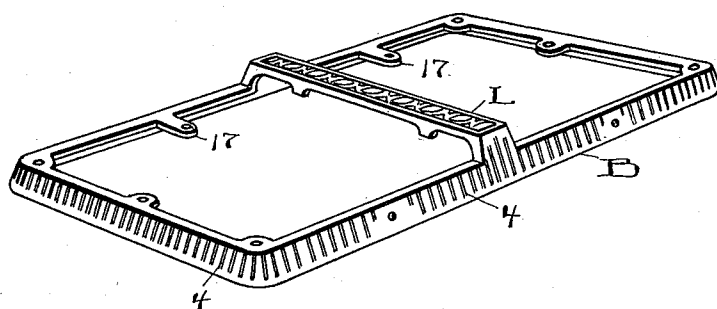


Fig. 8.

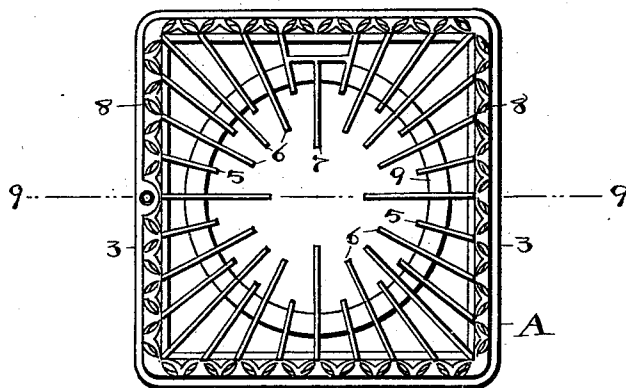
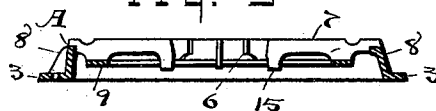


Fig. 9.



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UNITED STATES PATENT OFFICE.

CHARLES WHITTINGHAM, OF CLEVELAND, OHIO, ASSIGNOR TO THE CLEVELAND FOUNDRY COMPANY, OF SAME PLACE.

GAS COOKING-STOVE.

SPECIFICATION forming part of Letters Patent No. 544,708, dated August 20, 1895.

Application filed July 16, 1894. Serial No. 517,636. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WHITTINGHAM, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Gas Cooking-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to gas cooking-stoves; and the invention consists in a cooking-stove constructed as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of my improved stove. Fig. 2 is a longitudinal sectional elevation on line 2 2, Fig. 1. Fig. 3 is a vertical sectional elevation of one corner of the stove and taken on a line corresponding substantially to 3 3, Fig. 1. Fig. 4 is a vertical sectional elevation, considerably enlarged, of the stove taken on a line corresponding substantially to 4 4, Fig. 1, the legs of the stove being omitted in this view. Fig. 5 is an enlarged elevation of one of the burners, a part thereof at the right being sectioned vertically to disclose the burner-cap and the lugs thereon to hold the same in position. Fig. 6 is a horizontal plan view on a line corresponding to 5 5, Fig. 4. Fig. 7 is a perspective view of the grate-supporting frame alone, and Fig. 8 is a plan view of one of the grate-frames adapted to be removably seated therein. Fig. 9 is a cross-section of the grate-frame.

Heretofore in this style of gas-stove it has been the practice to cast the parts in a single piece, but I have found that this is not desirable for a variety of reasons and therefore have produced the present construction, which, besides enabling me to pack and ship the parts to more advantage than formerly, enables me also to produce an ornamental border and cross-panel which adds greatly to the finish and popularity of the stoves. To these ends, B constitutes the main frame of the stove, arranged horizontally and having the legs attached thereto at its front. This frame is also provided with a central raised

cross-panel L, which, when the grate-frame A is placed in position, is on a plane substantially even with the tops of the grate-bars. As thus constructed, the frame is nickel-plated and built into the structure as an ornamental part as well as the chief structural part.

The grate-frame A (shown in Fig. 8) is constructed to rest upon the frame B, and in this instance the stove is constructed to use two of these grate-frames, and there may be three or more, according to the size of the stove. This frame has an ordinary border 8 and a series of converging grate-bars 5, 6, and 7, all having an even top surface, substantially flush with the surface of the panel L when the parts are in working position, as seen in Fig. 2. The frames A and B are bolted together by means of bolts or screws, and the frame A has an edge, with flange 3 at its bottom, which overlaps the edge, of the lower frame B, thus affording an exposed edge which can be polished and finished to correspond to the finished ornamental surface of frame B, although it is not intended that this edge 3 shall be nickel-plated.

Heretofore in this style of stove the grate-bars started from a point nearer the center of the stove, and the space between said bars, and what is now indicated as an open space behind the ring 9, was closed. This was exceedingly objectionable, because dirt and the like was liable to accumulate thereon and to become offensive and annoying, and at the same time was difficult to remove. With my construction as here shown, and having the grate-bars 5, 6, and 7 all starting alike from the border 8, and having the space between said bars from end to end open, so that no accumulation can occur, the objection to the old construction is avoided, and the further advantage accrues of having a large flat or even surface extending back away from the burner upon which vessels can be placed and still remain on the stove. Both of the burners are constructed alike in all the particulars hereinbefore mentioned, and if three or four burners were used the same construction would obtain. The number of burners is not regarded as material to the case.

Referring to the burner-chamber and cap, (shown more clearly in Figs. 4 and 5) it will be seen that the burner-chamber C is annular and open through its center and has a short mixing-tube 10, with a cup-shaped head 11, as hereinafter described. This chamber is covered by a separate and independent cap D, which has spurs or projections 12 on its inside at intervals, extending down into the chamber C, about the inner edge thereof. About the edge of this cap there are a series of lugs or short ribs 14, on its bottom, which rest upon the edge of the chamber C, thus affording openings between the cap and the chamber around the edges thereof, both at the outside and the inside of the said chamber, for the escape of the gas. Now, I have found that it is advantageous, in a burner of this kind, to have a free cap, which can be turned or rotated upon the chamber C, so as to keep the passages for the gas clear from obstructions, which are liable to accumulate in the space between the said parts. In order to keep the passages clear, it simply is necessary to turn or rotate the cap on the chamber by hand, more or less, as occasion may require, and that removes all obstruction that may gather there; but it is also important that the cap D should be confined upon the chamber at the same time that it is free to be rotated, and to this end the four several grate-bars 7 are made long enough to extend over the edge of the cap and have downward projections 15 at their inner ends, which prevent the lifting off of the cap, especially in view of the teeth 12 on the inside, which are of such length that it cannot be raised far enough to be removed when the grate-bars 7 are placed and constructed as shown in Fig. 4. The burner-chamber C is supported chiefly by means of an arm 16, integral therewith and bolted to a projection 17 on the frame B.

Referring to Fig. 1, E represents the gas-supply pipe, which is connected with the stove as a part thereof, and the end 20 of the pipe is constructed to attach a hose or tube to convey the gas from the stationary source of supply in the room. Each burner is provided with a needle-point valve, having a handle 21, the valve-point being shown at 22, Fig. 6, at the inner end of the end casting 23, and the valve-stem extends through this tubular or pipe-shaped casting. The supply-tube E is threaded into these end pieces or pipes. The tube E, the short pipes 23, and the valve mechanism connected therewith are supported upon the frame of the burner, through the rosettes G. These rosettes are secured by bolts 24 or their equivalent to the frame, as clearly seen in Fig. 4, and have projections 25 at their bottom, which pass beneath the cup-shaped extremity of the mixing-tube 10 and support said tube and the burner with which it is integral at that side. Sometimes it is desirable to connect the gas at the oppo-

site end from that which is shown in Fig. 1, owing to the place of connection in the room, and in that case the tube E should be reversed, so as to bring the end 20 opposite where it now is. To do this the rosettes G are detached from the burner-frame by releasing the bolts 24, and then the connected tubes and short pipes and rosettes are changed about, end for end. This being done, the rosettes are given a half-turn to adapt them to the reverse position on the burner, and are again fastened, as before.

The plate H is intended to receive all drippings and droppings from the stove and has the width of the stove, and in order that it may be supported without the use of screws or bolts or other like means I have formed a pair of lugs or projections 27 on the inside of each of the legs F, and these lugs or projections have just enough space between them to accommodate the plate H and its rolled edge. The parts are put in position by first attaching three of the legs to the stove-frame, then inserting the plate H between the lugs on said three legs, and then attaching the fourth leg with its lugs engaged in said plate.

It will be noticed that there remains an open space between the grate-bars of the two burners, as seen in Fig. 2, and this space is filled by a transverse piece L, having the width of the top of the stove and its top flat surface flush with the top of the grate-bars 5, thereby practically forming a continuation of said bars so far as the surface of the stove is concerned. This provides an even and continuous surface over the entire stove and from burner to burner, and a space between the burners which has sufficient width to accommodate vessels without being exposed to the flame of either burner.

These stoves are purposely made light and cheap, so as to bring them within reach of the common people who cannot afford to buy high-priced burners, and they serve practically all the purposes of the most expensive stoves, so far as cooking is concerned, and can be placed on a table or other place, as may be found convenient.

Having thus described my invention, what I claim is—

1. In a stove substantially as described, the combination of the frame having a raised cross bar rigid therewith, and grate frames situated on each side of said cross bar and lying substantially flush therewith, as and for the purpose set forth.

2. In the construction of a gas stove as described, a plurality of burners, a gas supply tube and short valved pipes at the end of said tube and having valves therein, the rosettes threaded on said pipes and the burner frame to which the rosettes are secured, whereby the said tube and pipes may be reversed together and are held in place, substantially as set forth.

3. In a gas cooking stove, a burner chamber, a cap on said chamber free to be rotated thereon and having ribs on its under side resting on the edge of said chamber and
5 spurs on its inside to confine the cap in place laterally, and grate bars overlapping the edge of said cap, thereby serving to confine the cap on the burner, substantially as set forth.
Witness my hand to the foregoing specification.

CHARLES WHITTINGHAM.

Witnesses:

H. T. FISHER,
GEORGIE SCHAEFFER.