

(No Model.)

L. KAHN.
GAS STOVE.

No. 544,307.

Patented Aug. 13, 1895.

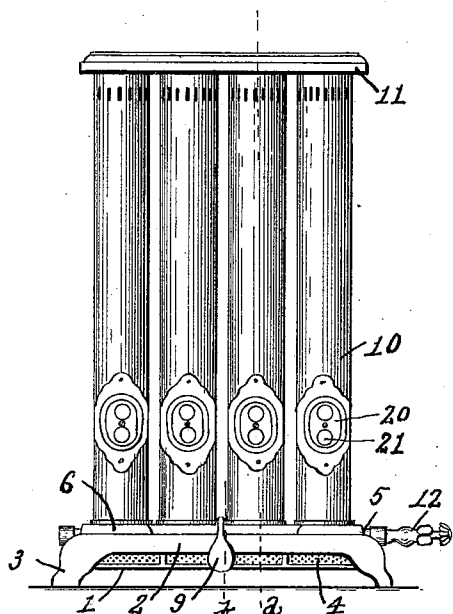


Fig. 1.

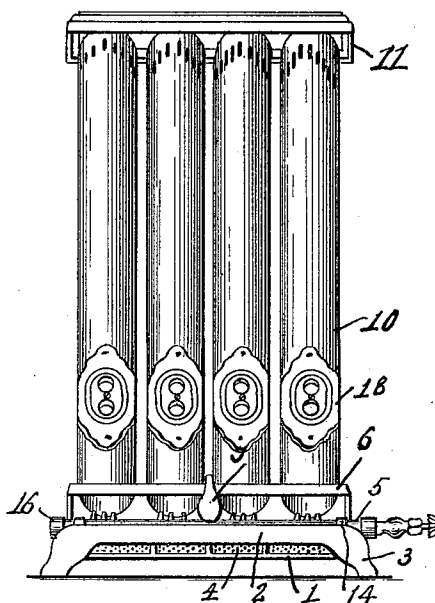


Fig. 2.

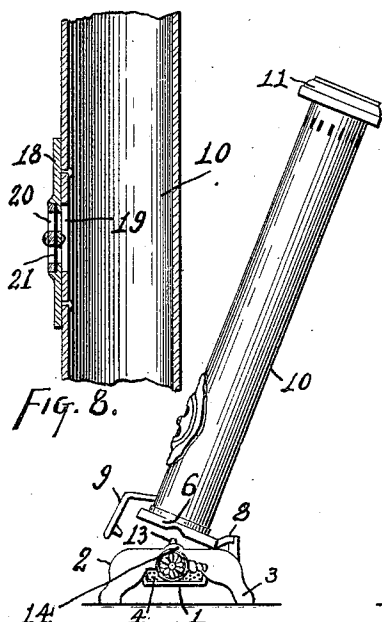


Fig. 3.

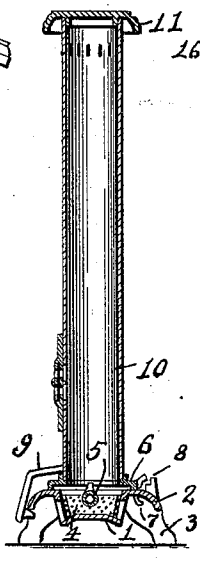


Fig. 4.

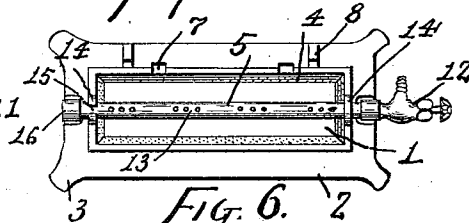


Fig. 6.

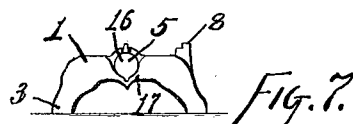


Fig. 7.

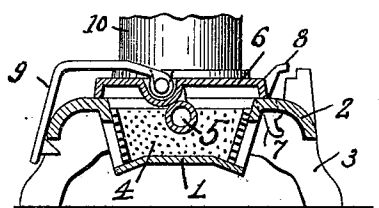


Fig. 5.

Witnesses:

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UNITED STATES PATENT OFFICE.

LAZARD KAHN, OF HAMILTON, OHIO, ASSIGNOR TO F. & L. KAHN & BROS.,
OF SAME PLACE.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 544,307, dated August 13, 1895.

Application filed October 29, 1894. Serial No. 527,130. (No model.)

To all whom it may concern:

Be it known that I, LAZARD KAHN, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Gas-Stoves, of which the following is a specification.

This invention pertains to gas-stoves intended for heating purposes, and the improvements will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a front elevation of a stove exemplifying my improvements; Fig. 2, a front elevation of the same with the upper portion tipped backward; Fig. 3, a side elevation of the stove with the upper portion tipped backward; Fig. 4, a vertical transverse section (plane of line *a*) of the stove in its upright position; Fig. 5, a vertical transverse section of the base portion of the stove (plane of line *b*) on an enlarged scale; Fig. 6, a plan of the base with the upper structure removed; Fig. 7, an end view of the base, showing left-hand end of Fig. 6; and Fig. 8, an enlarged section of a portion of one of the tubes.

In the drawings, 1 indicates the base of the stove, having the form of a long skeleton pan with open top and closed bottom and large openings in its sides and ends; 2, an outwardly and downwardly projecting flange at the top of this base structure; 3, feet formed at the corners of this flange and supporting the pan-like structure 1 some distance above the floor; 4, perforated metal lining the sides and ends of the pan structure 1; 5, a burner-pipe disposed centrally and lengthwise of the pan structure at its top, and provided along its length with a series of upwardly-projecting burner-nipples; 6, a tube-base resting upon and closing the top of the pan structure; 7, hinges uniting the rear edge of this tube-base with the rear upper portion of the pan structure, these hinges being formed by lugs cast upon the tube-base and projecting down through mortises cast in rear flange 2, the tube-base being therefore capable of opening upwardly at its front; 8, a stop to limit the opening motion of the tube-base upon its hinges; 9, a gravity-latch pivoted to the tube-base and extending forward and downward and hooking under the front of flange 2, so as

to prevent the opening of the tube-base; 10, a series of metallic tubes rising from openings in the tube-base; 11, a top piece uniting and closing the tops of the tubes, and rigidly united to the tubes, the tube-base, the tubes, and the top piece being united into one rigid structure hinged to the base of the stove; 12, the gas-supply cock upon one end of burner-pipe 5; 13, the burner-nipples projecting up from burner-pipe 5 above the level of the top of the base structure; 14, upwardly-projecting portions of the base-piece over the eyes at the ends thereof which support the burner-pipe 5, the burner-pipe being passed endwise through these eyes, and the parts 14 projecting upwardly above the surface of the base, so as to be engaged by notches in the ends of the tube-base 6 when the tubes are vertical; 15, an upwardly-open notch or gap in one of the eyes 14 of a width exceeding the thickness of burner-nipples 13; 16, a cap upon one end of the burner-pipe, closing that end of the burner-pipe, this cap having a non-circular exterior engaging a non-circular seat in the base structure, as seen in Fig. 7; 17, the non-circular seat just referred to, the construction being such that in assembling the parts before cock 12 is applied the burner-pipe may be pushed endwise into the eyes from the left, and when cock 12 is applied the burner-pipe is held endwise, and non-circular cap 16 prevents its rotary displacement; 18, escutcheon-plates riveted to the faces of the tubes and having mica openings; 19, openings in the tubes registering with these mica openings in the escutcheons; 20, plates screwed against the outside of the escutcheon-plates and having corresponding mica openings; and 21 mica sheets clamped between the escutcheon-plates and plates 20, the micas being thus supported outwardly a distance from the bore of the tubes, and being renewable without the necessity for access to the interior of the tubes.

Latch 9 has trunnions cast at each side of its inner end, these trunnions lying in upwardly-open notches in the tube-base, the latch being disposed between two of the tubes. When the tubes are in place upon the tube-base the lower ends of the two tubes in question close the tops of the notches referred to and prevent the displacement of the latch-

pivots. When the tubes stand vertically the latch is engaged at its forward end, and the tube structure is held squarely and firmly upon the base structure. By pulling the forward end of the latch outwardly it is disengaged from the flange of the base, and then the tube structure may be tipped backward as far as stop 8 will permit. By tipping the tube structure forward again to its vertical position the latch will be automatically re-engaged.

The burner-pipe presents a burner under the open lower end of each tube, the tube structure completely covering the burner structure when the tubes stand vertically. Under these conditions the heat from the gas-flames and the hot products of combustion rise in the tubes and escape at openings provided at their tops, the stove heating by radiation from its surfaces and by the escape of hot products from the top openings of the tubes, the air for ignition going to the burners through the perforated metal 4, which it may reach from all sides of the stove, a free space being formed between the floor and the bottom of the pan structure.

Stop 8 is so disposed that when the tube structure is tipped back to its limit of motion the center of gravity of the entire structure is still well within the leg-base of the stove. The tubes may confidently be thrown back without fear of the overturning of the structure. When the tubes are tipped back, the burner-flames are exposed to view at the front opening of the stove, but they are still underneath the tubes. Under these conditions the tubes will be heated, as before described, but radiated heat and also cheerfulness will be

gotten from the exposed gas-flames. The tipping back of the flue structure also permits of the easy lighting of the burners, and permits of the ready inspection of the burners if they are turned very low and there is a suspicion of their having become extinguished. Again, when the flue structure is tipped back and the gas turned on for lighting, that gas which escapes before lighting takes place will escape into the tubes, and if the lighting is done with fair promptness will become later burned therein, thus avoiding the escape of unburned gas into the room in the act of lighting the stove.

I claim as my invention—

1. In a gas stove, the combination, substantially as set forth, of a base structure having eyes for a burner pipe and having one of said eyes gapped in its upper portion, a burner pipe provided with upwardly projecting nipples and engaging said eyes, a cock upon one end and a cap upon the other end of said burner pipe, and abutting inwardly against said base structure and a tube-structure secured to the base over said burner pipe.

2. In a gas stove, the combination, substantially as set forth, of a base structure having eyes for a burner pipe and a noncircular seat, a burner pipe supported in said eyes, a non-circular cap on said pipe engaging said seat, a cock upon the other end of the burner pipe, and a tube structure secured to said base above said burner pipe.

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Witnesses:

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