

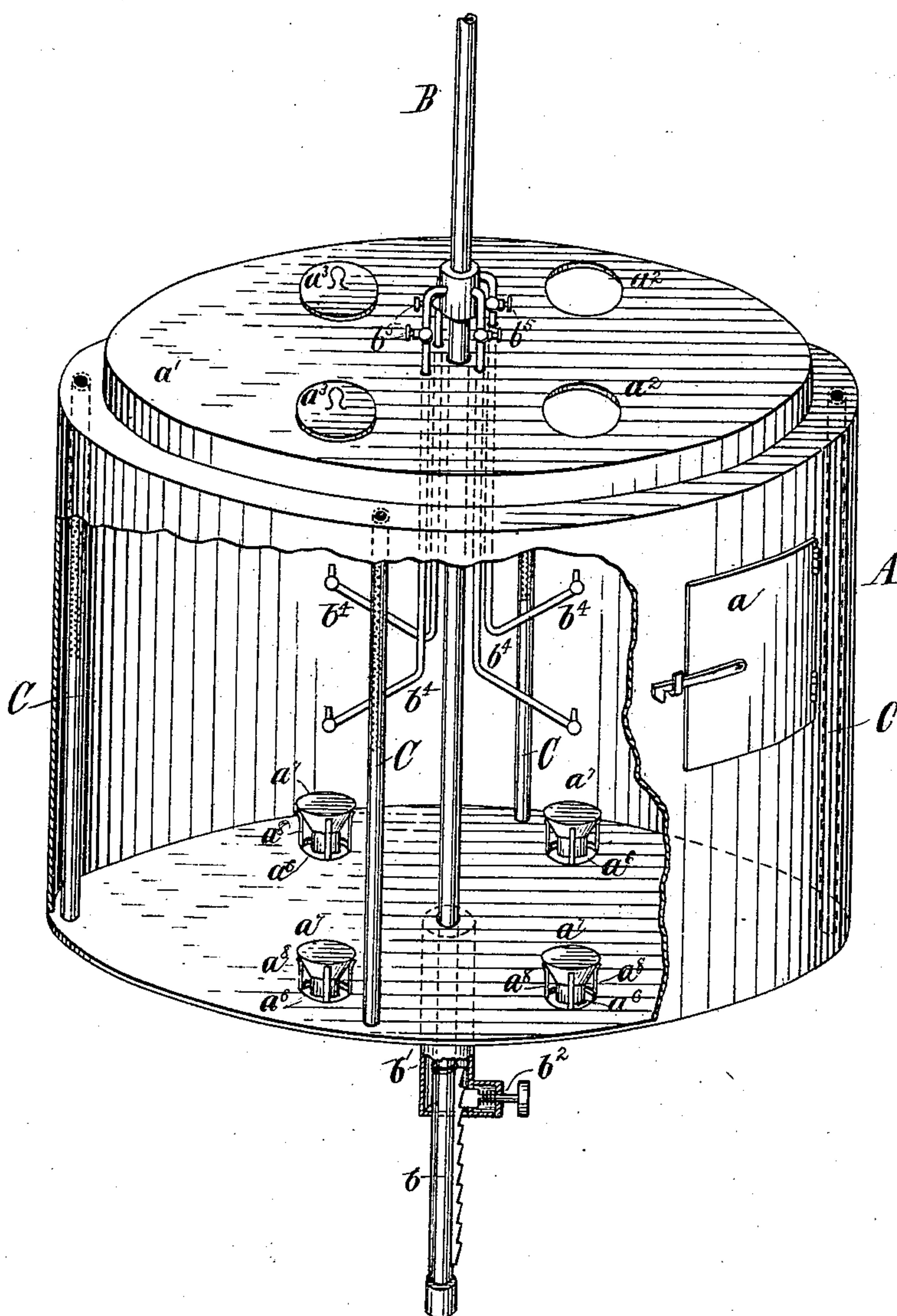
(No Model.)

G. H. GREGORY.

GAS STOVE.

No. 355,393.

Patented Jan. 4, 1887.



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE H. GREGORY, OF BROOKLYN, NEW YORK.

## GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 355,393, dated January 4, 1887.

Application filed February 23, 1886. Serial No. 192,965. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. GREGORY, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Gas Stoves, of which the following is a specification.

My improvement relates to stoves or heaters in which gas is burned to produce the heat.

I will describe in detail a gas-stove embodying my improvement, and then point out the novel features in the claims.

The accompanying drawing is a perspective view of a gas-stove embodying my improvement, a certain portion thereof being broken away to disclose parts which would otherwise be concealed.

A designates a cylindrical drum, which will advantageously be made of sheet metal. This drum is provided with a door, *a*, through which access may be had to the interior of the drum. Its bottom will preferably be flat; but it is advantageous to provide the top with a circular raised portion, *a'*, somewhat inward of the side wall of the drum. The top may, however, have a flush surface. In the top are apertures *a*<sup>2</sup>. As shown, there are four of such apertures. They afford means whereby the heat within the drum may come directly in contact with a kettle or other cooking utensil placed upon the top of the drum. When such apertures are not in use for this purpose, they may be closed by suitably-formed caps or covers *a*<sup>3</sup>.

The drum A is supported upon a vertically-extending gas-pipe, B, which passes centrally through the drum. Such gas-pipe may extend directly from a ceiling, as shown, or it may be curved and extend from a side wall. The drum is intended to be vertically adjustable upon the gas-pipe and secured in any desired position thereon. I have shown in the drawing a convenient means for accomplishing this adjustment, consisting of a sleeve, *b*, surrounding the gas-pipe near the lower end of the latter, and provided with a series of ratchet-teeth extending in the direction of the length thereof. Secured to the under side of the drum is a collar, *b'*, which surrounds the gas-pipe and the said sleeve *b*. A spring-latch, *b*<sup>2</sup>, is mounted in said collar, and is adapted to be engaged with and disengaged from the ratchet-teeth on the sleeve *b*, as will be readily seen. By this means the drum may be adjusted vertically on

the supporting gas-pipe. Any other suitable means for adjusting and securing it may, however, be employed.

The gas-pipe has connected to it above the drum by suitable couplings several branch pipes, *b*<sup>4</sup>. I have shown four such pipes. After leaving the pipe B the branch pipes extend downwardly into the interior of the drum in close proximity to the pipe B, and approximately parallel therewith for a distance. Near their lower ends they are bent at approximate right angles to such downwardly-extending portions, and their ends are provided with upwardly-extending burners, which may be of any suitable construction. Preferably, one of these burners will be arranged beneath each of the apertures *a*<sup>2</sup> in the top of the drum. The branch pipes *b*<sup>4</sup> are each provided with a stop-cock, *b*<sup>5</sup>, outside the drum, whereby gas may be turned on or off from each of the branch pipes separately.

By adjusting the drum vertically into different positions relatively to the gas-jets, the latter may be brought nearer to or farther from the top of the drum or a kettle or other cooking utensil supported thereon, as may be desired.

The products of combustion are preferably carried off through tubes C. These tubes, of which there may be any desired number, extend between the top and bottom of the drum, and, as shown, are open at both ends. The lower end may, however, be closed. They are arranged, as shown, near the wall of the drum, and their upper ends are outside of and below the raised portion *a'* of the top of the drum.

The pipes C are perforated. Preferably such perforations will be confined to their upper portions. The products of combustion pass through such perforations and escape at the upper ends of the pipes.

Air is admitted to the drum, as shown, through apertures *a*<sup>6</sup> in the bottom thereof. I prefer to arrange deflectors *a*<sup>7</sup> above such apertures, which will deflect the entering air in such manner that the flames from the burners will not be subjected directly to a column of cold air. The deflectors *a*<sup>7</sup> may be secured in position upon the drum by means of spring-fingers *a*<sup>8</sup> thereon engaging with the portions of the drum surrounding the apertures.

It will be seen that by my improvement the

branch pipes *b*<sup>4</sup> become highly heated, and consequently the gas passing through them. Combustion is therefore much more perfect than it would otherwise be.

5 This gas-stove may advantageously be used for heating apartments as well as for cooking.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a gas-stove, the combination of a drum,  
10 a gas-pipe upon which said drum is supported, branch pipes provided with burners extending from said gas-pipe to the interior of the drum, and mechanism, substantially such as  
15 into different positions vertically relative to the burners, substantially as specified.

2. In a gas-stove, the combination, with a drum, of gas-pipes provided with burners arranged therein, and perforated tubes, as C, for carrying off the products of combustion, substantially as specified. 20

3. In a gas-stove, the combination, with a gas-pipe, of a drum vertically adjustable thereon, branch pipes extending from said gas-pipe into the interior of the drum, and stop-cocks 25 in each of said branch pipes outside the drum, substantially as specified.

GEORGE H. GREGORY.

Witnesses:

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