(No Model.)

G. W. CROWELL.

CARBURETING APPARATUS.

No. 251,416. Patented Dec. 27, 1881.

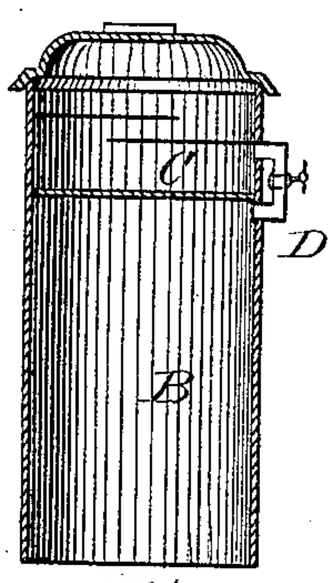

Fig. 5

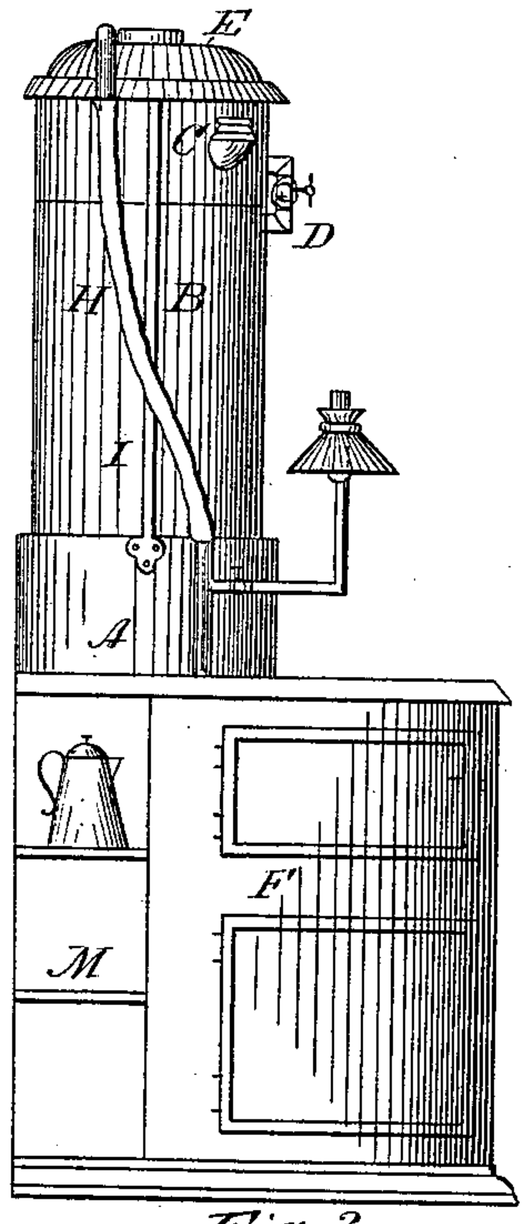

Fig. 3.

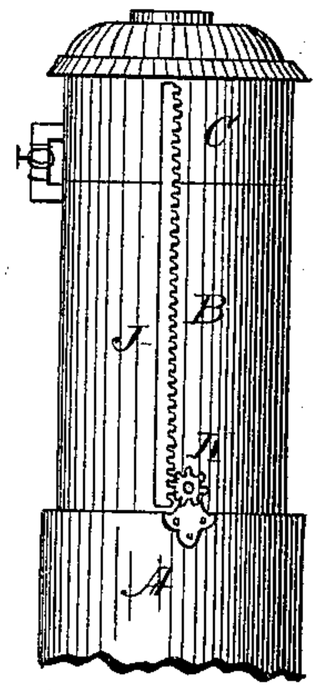

Fig 4.

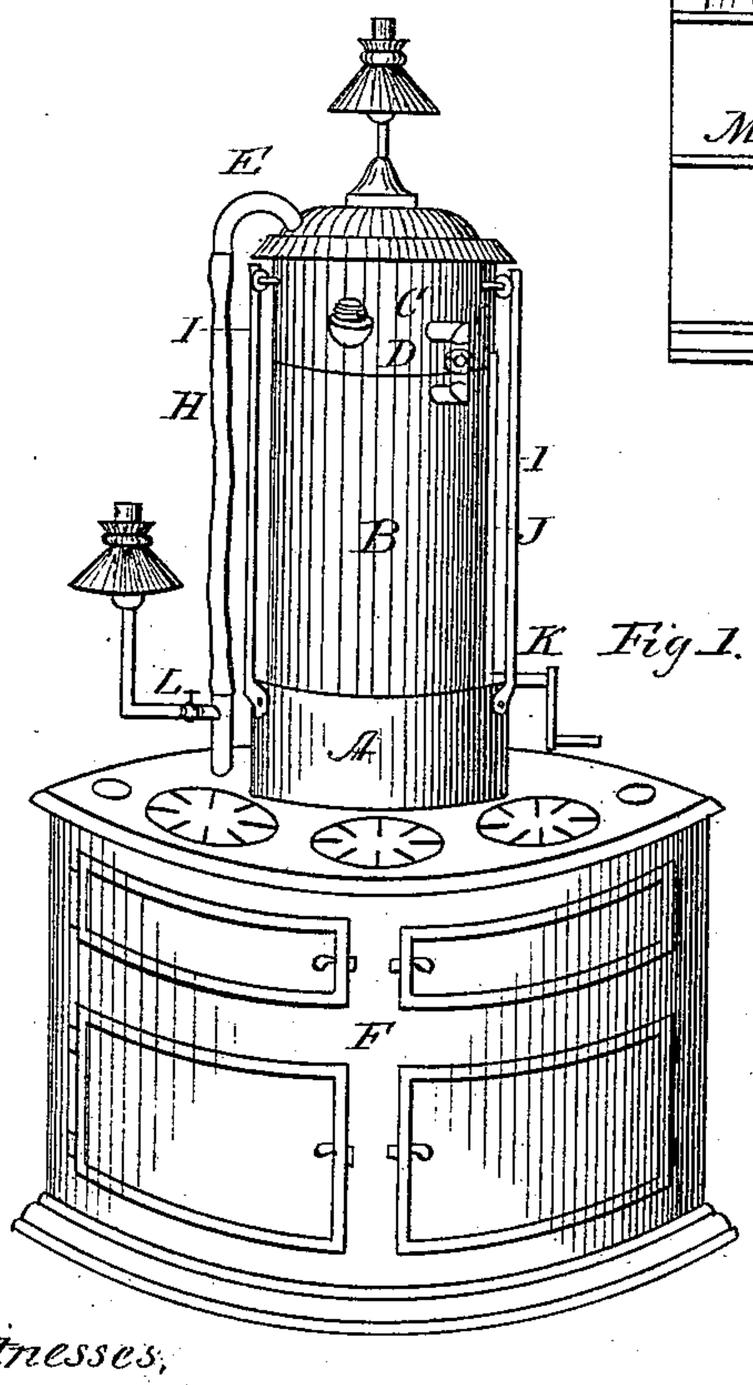

Fig 1.

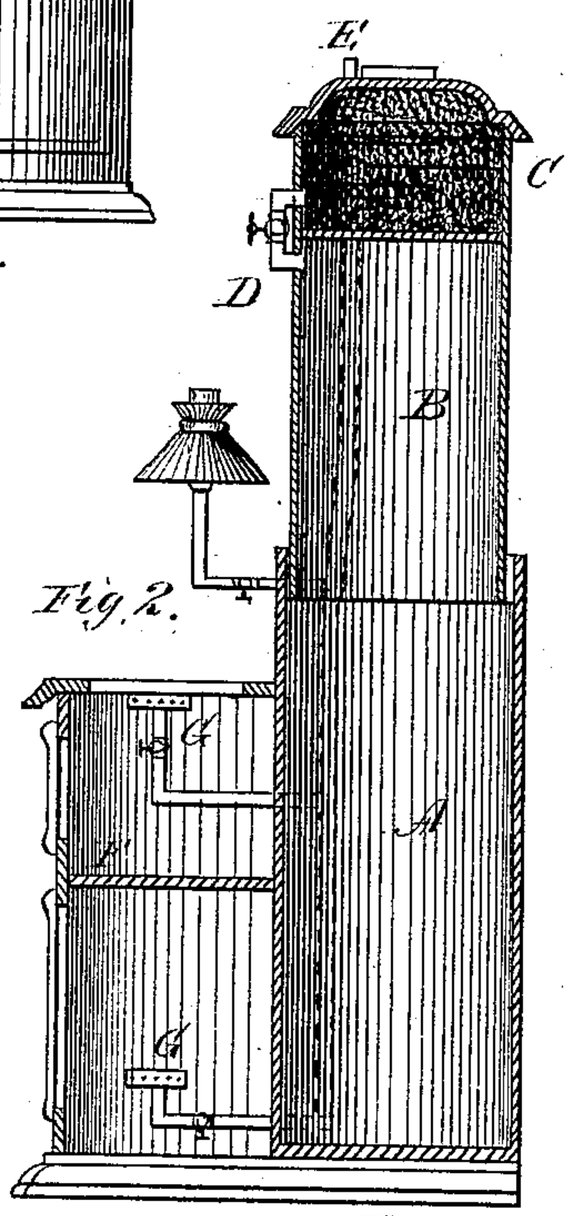

Fig. 2.

Witnesses;

F. H. Cadwell

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Inventor;

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By Geo. W. Tibbitts Atty.

UNITED STATES PATENT OFFICE.

GEORGE W. CROWELL, OF CLEVELAND, OHIO, ASSIGNOR OF TWO-THIRDS TO ANDREW J. MARVIN AND GEORGE W. TIBBITTS, OF SAME PLACE.

CARBURETING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 251,416, dated December 27, 1881.

Application filed June 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. CROWELL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Carbureting Apparatus, of which the following is a specification.

The nature and objects of this invention will fully appear from the subjoined description, when considered in connection with the accompanying drawings, in which—

Figure 1 is a perspective view. Fig. 2 is a vertical section. Fig. 3 is a side elevation. Fig. 4 is a detached view, showing method of elevating the air-chamber for inflating it. Fig. 5 is a vertical section of the air-chamber and air-carburetor.

A is a cylinder or tank for holding water.

B is an inverted cylinder playing inside of cylinder A, and constitutes an air-chamber.

C is an air-carburetor, consisting of a chamber attached to or made in the top of said cylinder B, containing broken and partially-pulverized charcoal and a quantity of gasoline or naphtha.

The air-chamber B is connected to the carbureting-chamber C by a pipe, D.

E is an outlet-pipe in the top of the carburetor, from which the carbureted air is conveyed to burners. The carburetor has a side neck with a cap for supplying the carburetor with gasoline whenever it needs replenishing.

F is a stove or range, the top having holes for cooking-vessels, beneath which are situated burners G G, arranged in connection with the aforesaid carburetor. The stove or range is provided with an oven in the lower portion, and is supplied with burners for heating the same.

The pipe for the burners is connected with the carburetor by a rubber hose, H, which slacks down as the air-chamber descends, and extends when the said chamber is raised for inflation.

Guide-rods I I are attached to the tank A, for supporting the chamber in its movements while running up and down.

On one side of the chamber B is placed a rack, J, operated by a crank and pinion, K, for the purpose of raising said chamber when it has run down, for the purpose of reinflation, a check-valve or three-way cock being arranged in the pipe D for that purpose.

A branch pipe, L, may be attached to the pipe leading to the burners G, for the purpose of illumination, by providing it with a burner adapted to the purpose. A similar burner may be attached to the top of the carburetor for a similar purpose.

At the rear of the range there may be provided shelves M, for holding cooking utensils when not in use.

The operation of this apparatus is as follows: The carburetor being supplied with a requisite amount of gasoline and the air-chamber elevated, the communication between said chambers is opened, when the air in the chamber B will find its way into the carburetor by the force of gravity of the said chambers settling down into the water of chamber A. The carbureted air is by this force carried to the burners, and is there consumed. When the chamber B has run clear down it may be elevated again by means of the rack, crank, and pinion, and thereby keeping the burners supplied with carbureted air as long as may be required.

A similar device may be employed for lighting purposes only by dispensing with the cooking-range and its burners and leading the carbreted air to suitable illuminating lamps disposed about a room or building.

The device may be similarly employed for heating rooms by either attaching a heating-drum in place of the cooking-range or leading the carbureted air through pipes to suitable heating-drums or gas-logs.

This apparatus is therefore practical for all the uses of cooking, lighting, or heating.

The apparatus may be constructed in a variety of forms, either round, square, or oval, and inclosed in neat and tasteful casing, and ornamented as taste may desire.

Having described my invention, I claim as follows:

The water-tank A, provided with the crank and pinion K and the guide-rods I, in combination with the air-chamber B, provided with rack J, and the carburetor C, located in the upper part thereof, the connecting-pipe D, and eduction gas-pipe E, leading to the burners G, all constructed and operating as described.

G. W. CROWELL.

Witnesses:
E. W. LAIRD,
A. J. MARVIN.