(No Model.)

T. HIPWELL.

GAS STOVE.

No. 510,136. Patented Dec. 5, 1893.

Fig. 1.

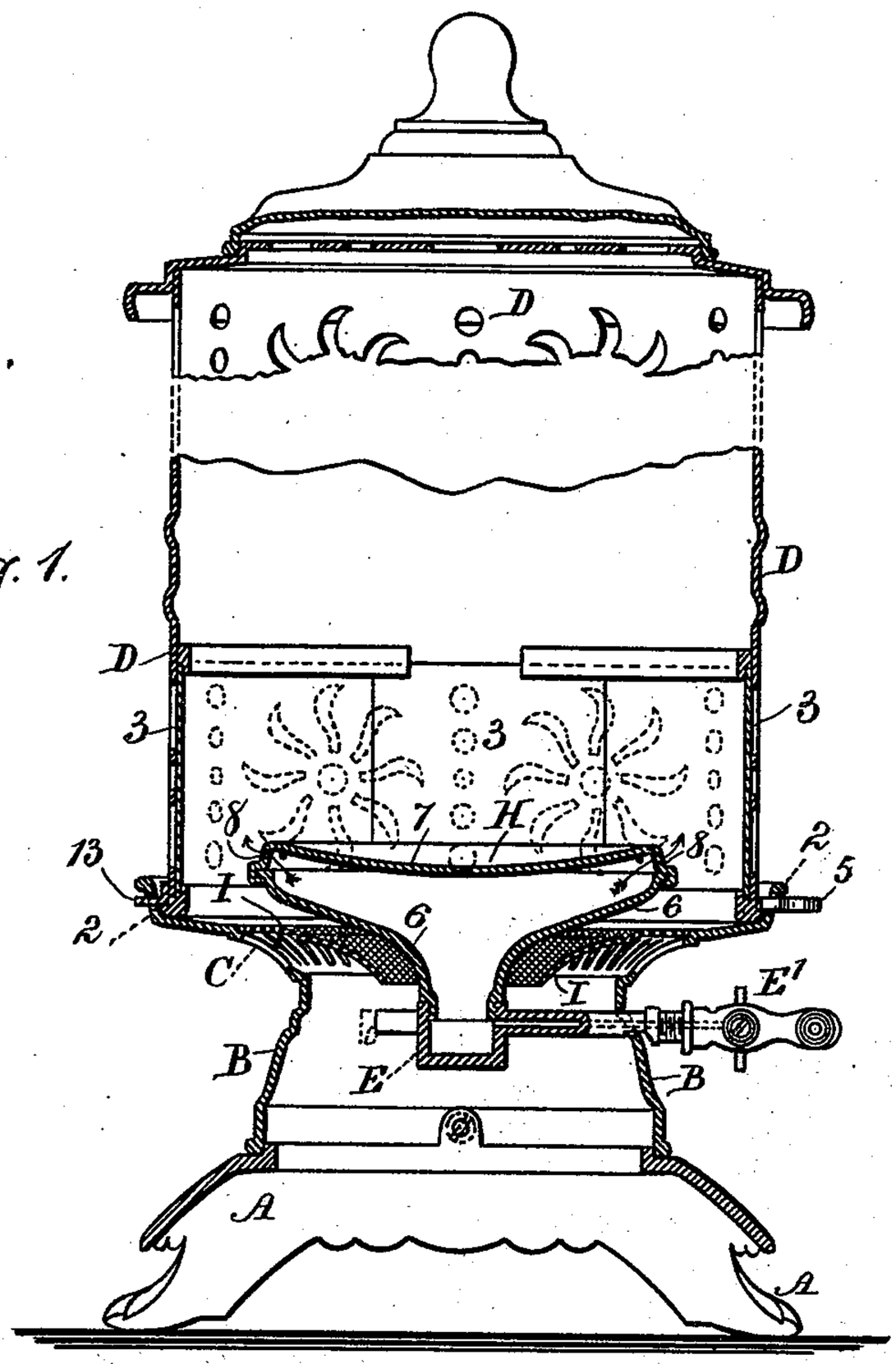
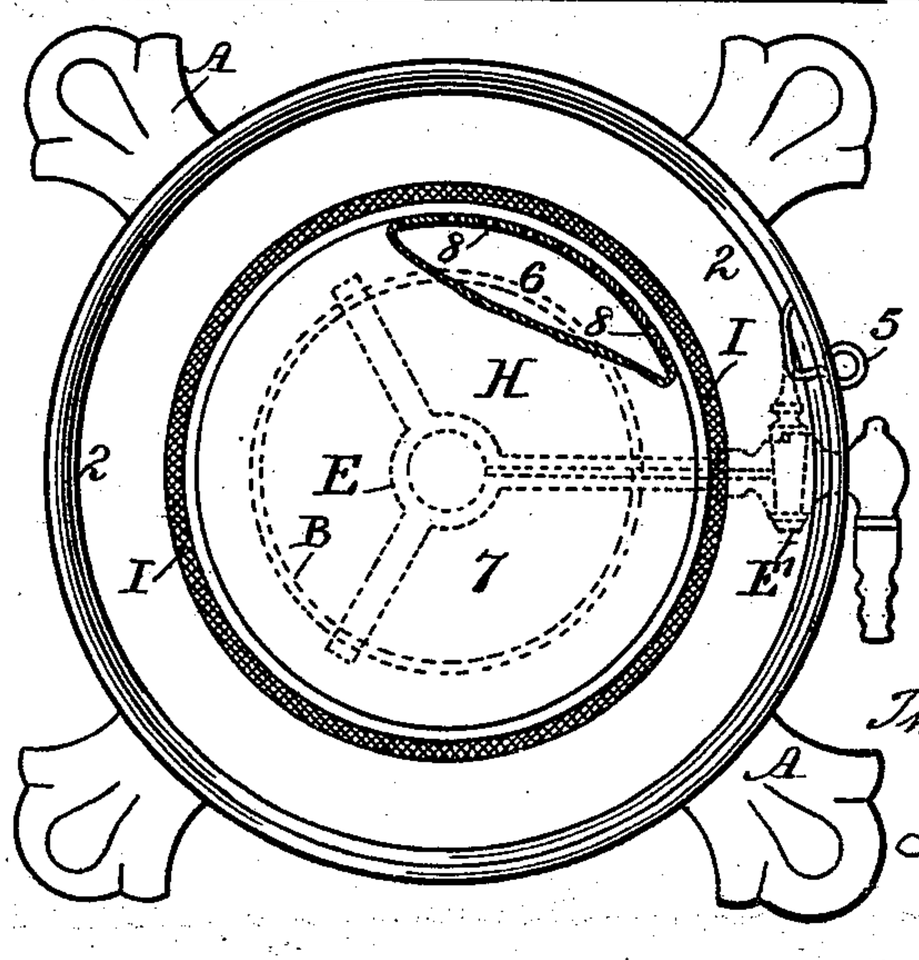


Fig. 2.



Witnesses
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THOMAS HIPWELL, OF LONG ISLAND CITY, ASSIGNOR TO THE MANHATTAN BRASS COMPANY, OF NEW YORK, N. Y.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 510,136, dated December 5, 1893.

Application filed September 4, 1893. Serial No. 484,698. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HIPWELL, of Long Island City, Astoria, in the county of Queens and State of New York, have invented an Improvement in Gas-Stoves, of which the following is a specification.

This stove is especially adapted to the heating of apartments, the object being to provide a large extent of metallic heating surface for giving heat to the atmosphere of the room, and at the same time preventing the objectionable odors arising from partially consumed hydro-carbon vapors. In instances where gas has been made use of for heating purposes, there is considerable risk of the lower part of the stove becoming too highly heated, and also of imperfect combustion of the gas jets. My present improvement is intended to obviate these difficulties and consists of the combination of devices herein described and claimed.

In the drawings, Figure 1, is a vertical section of my improved gas stove, and Fig. 2, is a plan view with the heating drum removed and with a portion of the gas burner in section.

The base is formed of a casting A, having legs adapted to rest upon the floor and the center portion of the base is open and receives upon it the sheet metal case B, from which the flaring air distributer C, rises and extends outwardly and terminates as a holder 2 for the heating drum D, which drum is preferably of sheet metal with suitable openings that are of an ornamental character and mica is introduced at 3, within the drum and to close the openings at the lower part of the drum so as to prevent air passing in at this part of the drum and to cause the said drum to act as a chimney for the gas burner. The drum is removable from the holder 2, and by preference it is provided with lugs 13 for passing through mortises at one side of the holder and with an indentation or depression at the other side of the holder adapted to receive a spring latch 5. The socket E, is supported by arms that project out from it and pass into mortises in the sheet metal of the base below the air distributer, and one of these arms is tubular, and the gas pipe and cock E′ are connected to the end of this tubular arm outside the sheet metal case B, and usually provision is made for connecting with the gas pipe outside the cock a flexible pipe for the supply of gas, and this socket E, is screw threaded on its inner surface to receive the bottom of the sheet metal burner H, which burner is hollow, and the lower part 6, is conoidal and the upper part 7, forms a reflector. In the nearly vertical edge of the burner there are holes at 8, through which the gas issues and forms nearly horizontal jets, and I provide an equalizing plate I, preferably of perforated sheet metal, and resting at its edge upon the air distributer near the outer ends of the openings in said air distributer, and the inner part of the equalizing plate has a hole through which the lower end of the burner passes as it is screwed into the socket E. It will now be apparent that when the gas is turned on and the jets ignited, the flames extend out nearly horizontally and are closely adjacent to the interior of the heating drum, and the atmosphere as it passes upwardly to the flame is directed outwardly by the conical under surface of the sheet metal burner H, and the volume of air is ample for a perfect combustion of the gas, and the heated products of combustion pass up closely adjacent to the interior surface of the heating drum, and in addition to this, the upper surface 7 of the sheet metal burner becomes a reflector for throwing the heat rays from the flames from one side of the burner across to the interior surface of the heating drum at the other side of the burner, thus directing the heat rays and causing them to concentrate upon the sheet metal of the heating drum, and insuring the transmission of heat from the burner to the heating drum and to the atmosphere surrounding said heating drum; and in addition to this the heated products of combustion pass up through the drum and escape through the perforations in the upper part of such drum, and the gas jets admitted into the sheet metal burner become heated by contact with the under side of the reflector 7, and the distance between the holes 8, and the socket E, is sufficient to prevent much heat being conducted down by the coni-

cal portion 6, of the burner to said socket E. Hence the lower part of the stove is kept at a lower temperature, and the risk of injury to a floor or carpet, either by conducted or reflected heat, is entirely prevented.

I claim as my invention—

1. A burner for a gas stove composed of sheet metal with a conoidal lower portion 6, and an upper reflecting portion 7, there being holes for the jets around the burner and in the nearly vertical edge thereof, so that the jets of flame pass out nearly horizontally, substantially as set forth.

2. A burner for a gas stove composed of sheet metal, with a conoidal lower portion 6, and an upper reflecting portion 7, there being holes for the jets around the burner and in the nearly vertical edge thereof, so that the jets of flame pass out nearly horizontally, in combination with the socket E, into which the burner is screwed and the gas pipe formed by one of the arms of the socket, a base supporting the arms, sockets and burner, an air distributer, a heating drum resting upon the upper edge of the air distributer, and connected therewith, such air distributer and drum being of sheet metal having openings therein, substantially as set forth.

3. A burner for a gas stove composed of sheet metal, with a conoidal lower portion 6, and an upper reflecting portion 7, there being holes for the jets around the burner and in the nearly vertical edge thereof, so that the jets of flame pass out nearly horizontally, in combination with the socket E, into which the burner is screwed and the gas pipe formed by one of the arms of the socket, a base supporting the arms, sockets and burner, an air distributer, a heating drum resting upon the upper edge of the air distributer, and connected therewith, such air distributer and drum being of sheet metal having openings therein, and the perforated equalizing plate above the air distributer and extending to the base of the burner, substantially as set forth.

Signed by me this 25th day of August, 1893.

THOMAS HIPWELL.

Witnesses:
CHAS. V. DWYER,
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