

(No Model.)

H. H. KELLEY.
VAPOR OR GAS STOVE.

No. 534,161.

Patented Feb. 12, 1895.

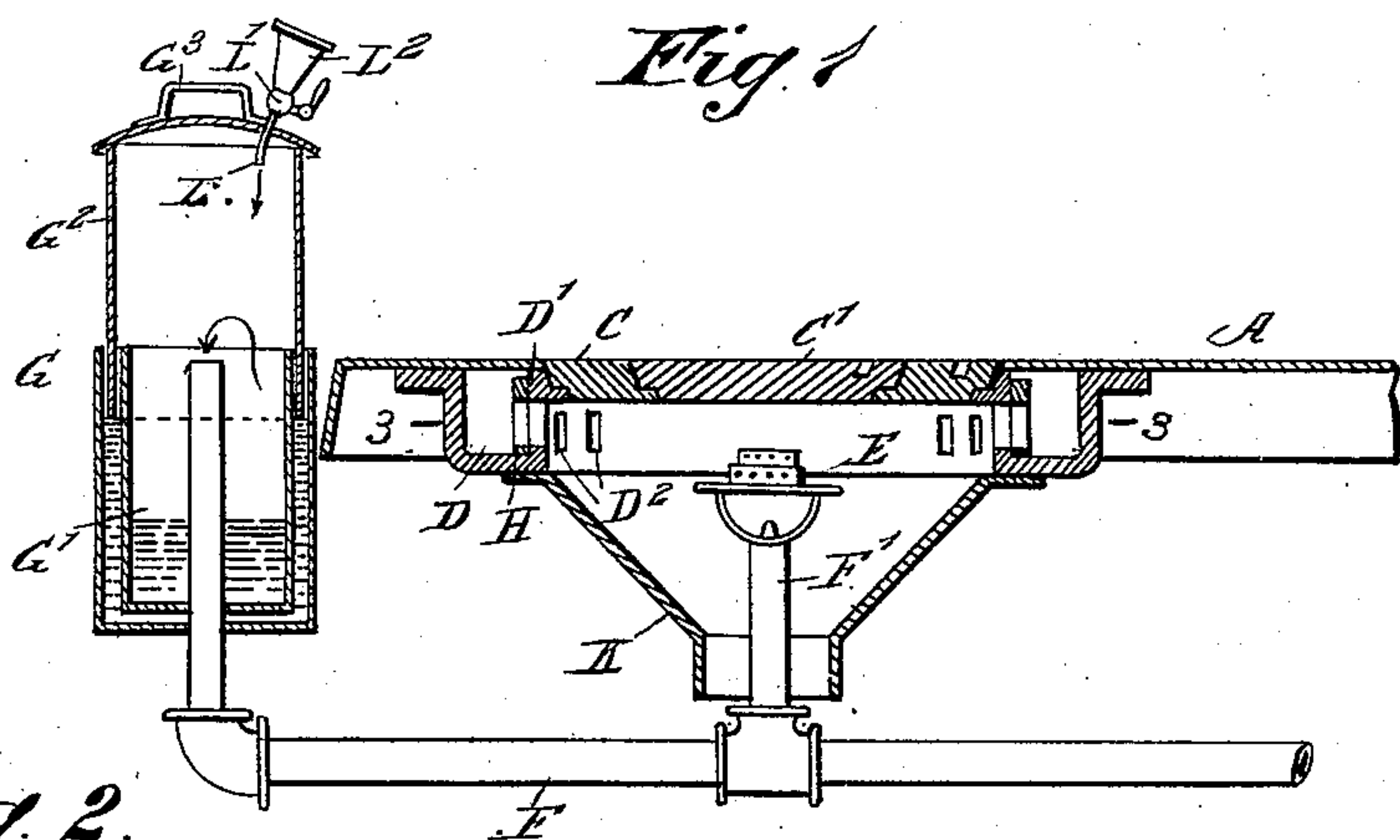


Fig. 2.

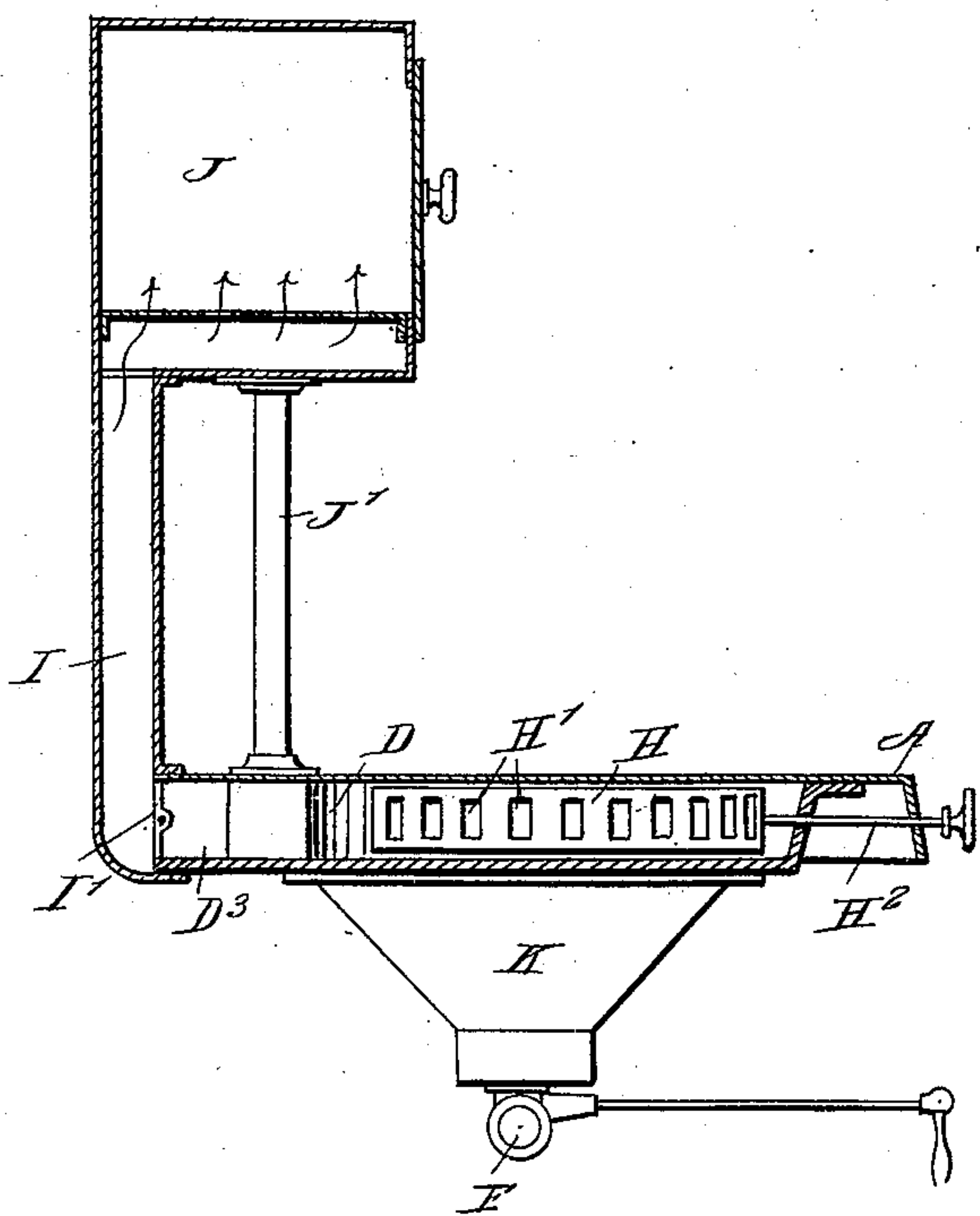


Fig. 3

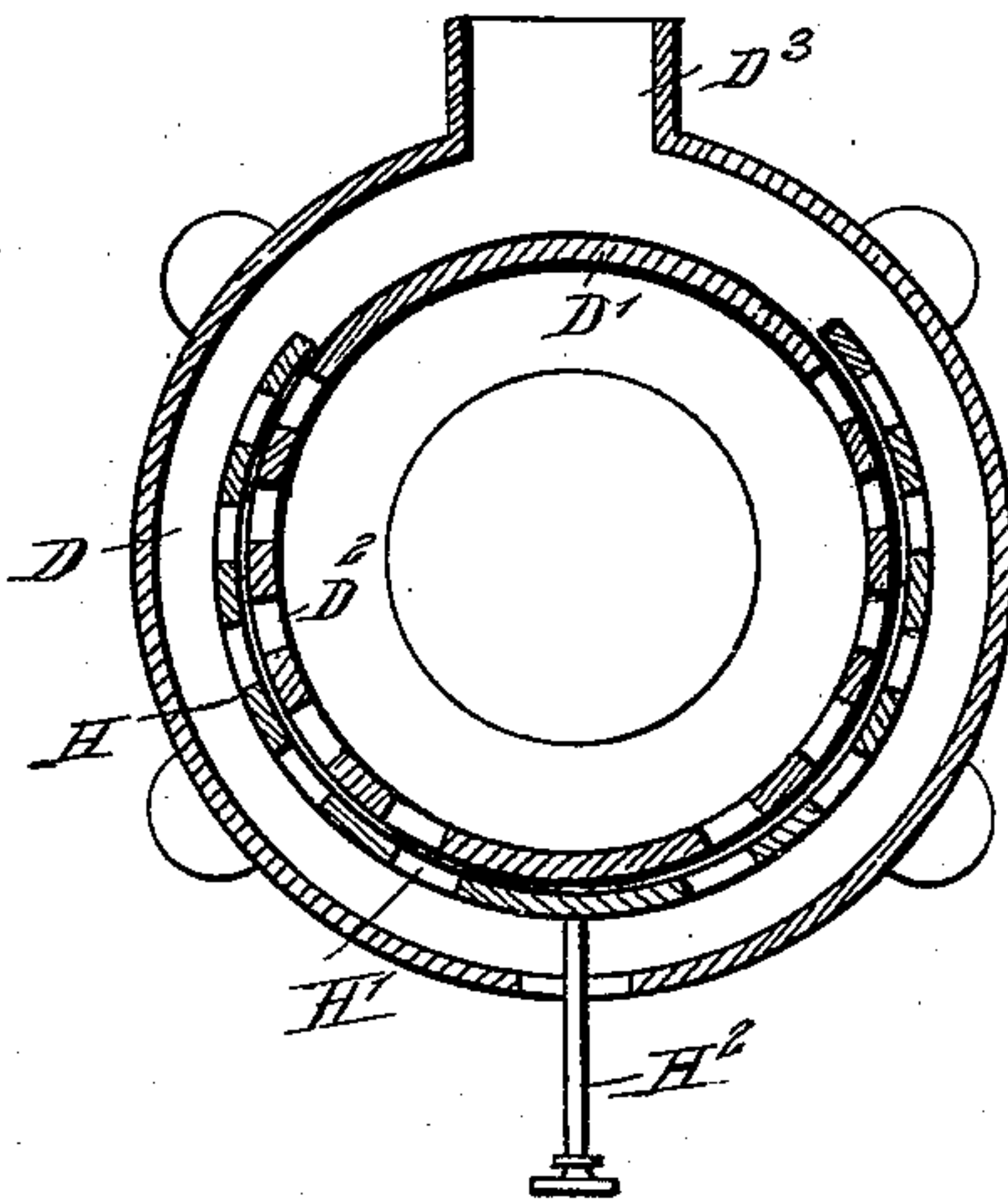
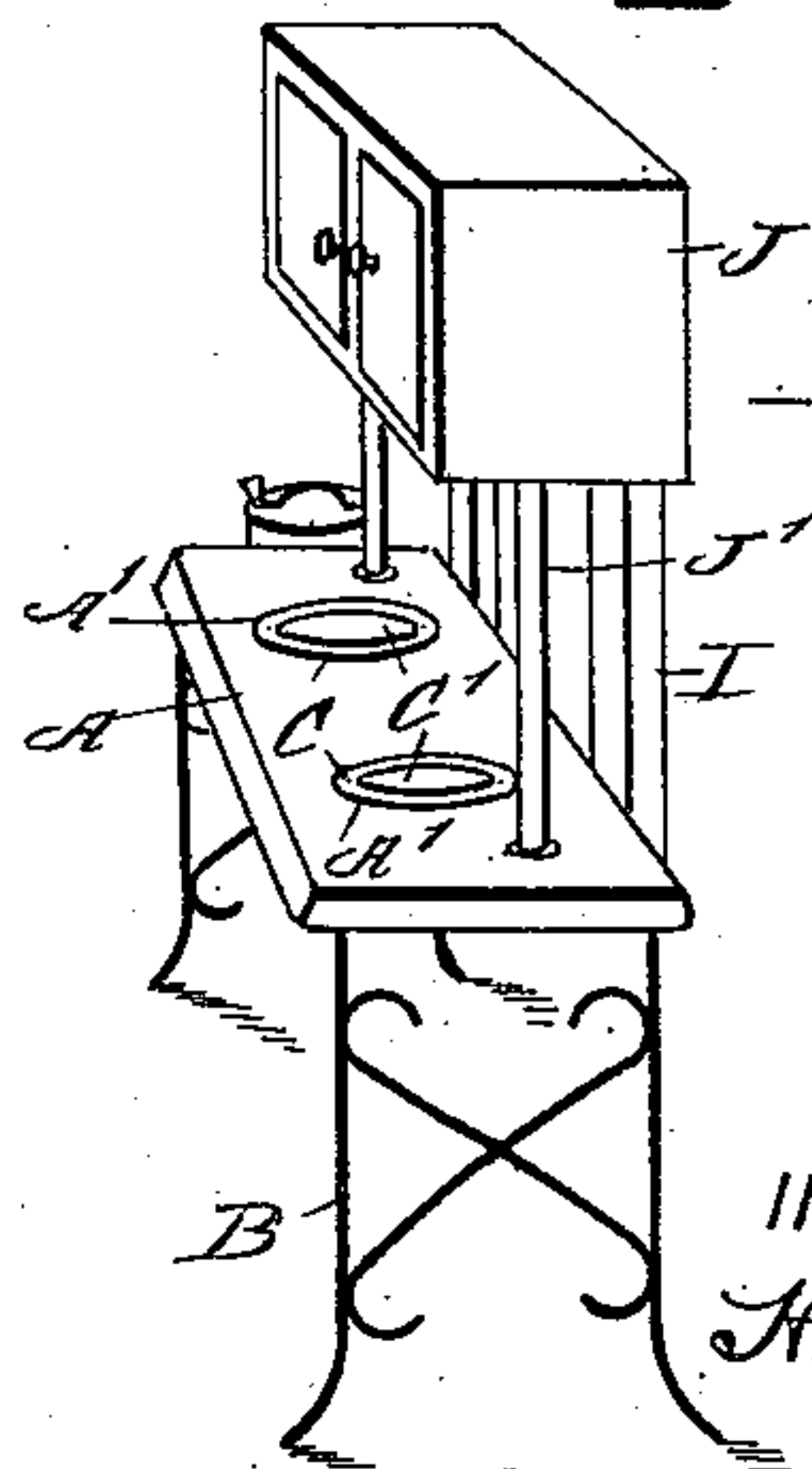


Fig. 4



WITNESSES:

W. H. Apple
Rev. G. H. Foster

INVENTOR

H. H. Kelley

BY

Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HARRY H. KELLEY, OF ELYRIA, OHIO.

VAPOR OR GAS STOVE.

SPECIFICATION forming part of Letters Patent No. 534,161, dated February 12, 1895.

Application filed September 29, 1894. Serial No. 524,423. (No model.)

To all whom it may concern:

Be it known that I, HARRY H. KELLEY, of Elyria, in the county of Lorain and State of Ohio, have invented a new and Improved Vapor or Gas Stove, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved vapor or gas stove, which is comparatively simple and durable in construction and arranged to utilize the heat from the burner to the fullest advantage, for cooking purposes and for heating a warming oven.

The invention consists principally of an annular heating chamber, arranged under the stove top and surrounding the burner, the said chamber being provided at its inner wall with inlet openings for the heat.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement. Fig. 2 is a transverse section of the same. Fig. 3 is an inverted sectional plan view of the same, on the line 3—3 of Fig. 1; and Fig. 4 is a reduced perspective view of the improvement.

The improved gas or vapor stove is provided with a stove top A, mounted on suitable legs B and formed with one or more openings A', adapted to be closed by a ring C supporting a lid C', as is plainly illustrated in Fig. 1. The stove lid rings C are supported on a flange formed on the inner wall D' of the hollow ring D, bolted or otherwise secured to the under side of the stove top A, and forming a conducting chamber or flue the said inner wall D' thereof being provided with air inlet openings D², to permit heat emanating from the burner E to pass from the heating chamber through the openings D² into the conducting chamber formed between the walls of ring D.

The burner E, extends centrally under the lids C' in the center of the ring chamber D, and the said burner is held on the upper end of a branch pipe F' connected with the gas supply pipe F, extending into the gas tank G containing a gas supply. The openings D² in

the inner wall of the ring chamber D are adapted to be opened and closed by a band or damper H, fitted in the said chamber around part of the wall D', as plainly indicated in Fig. 3, the said band H being provided with apertures H', adapted to register with the openings D².

From the forward or middle portion of the band H, extends outwardly a handle H², which passes through a slot in the outer wall of the ring chamber, so as to be under the control of the operator, for turning the band H to open or close the openings D², as desired. The ring chamber D is formed at its rear end with an outlet D³ opening into a vertically disposed flue I discharging into the bottom of a warming oven J, of any approved construction, and supported on pillars or posts J' set on the stove top A. See Figs. 2 and 4. A valve I' controls the passage of the heat from the outlet D³ to the pipe I.

On the under side of the ring chamber D is secured the base end of an inverted funnel K, through the apex of which passes the branch pipe F', the said funnel serving to prevent a downward movement of the heat and also permitting the entrance of air at its apex to the burner to insure combustion, the heated air passing through the openings D² into the hollow ring D and from the latter to the oven J in case the valve I' is open.

It will be seen that by the arrangement described, the heat from the burner E heats the lid C' and its ring C, and part of the heat permeates the hollow ring D, so as to heat that part of the stove top directly surrounding the rings C. At the same time the heat from the hollow ring can be passed into the oven J, to heat the article placed therein.

The gas supply tank G is provided with a body part G' having double walls, and the space between the walls is filled with water, as indicated in Fig. 1. A cap G² fits between the walls to form with the water a perfect seal for the tank. On the top of the cap G² is held a handle G³, adapted to be taken hold of by the operator for removing the said cap or for pressing the latter downward, as desired. In the top of the cap G² is secured a filling nozzle L, provided at its outer end with a valve L' and with a funnel L² for conveniently filling the tank with the oil, gaso-

line or other liquid fuel. The pipe F extends into the body G', to nearly the top thereof, so that the gas generated in the tank, readily passes into the pipe F, without danger of the oil overflowing into the said pipe and passing to the burner.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

10 1. In a vapor burner the combination of the burner and its supply-pipe and a ring arranged around the burner and provided with a closed bottom and double walls the inner wall being provided with openings adapted
15 for the passage of the hot gases from the burner into said ring, substantially as set forth.

2. In a vapor burner the combination of the burner and its supply pipe and an open topped
20 hollow ring having an outlet and being arranged around the burner and provided with a closed bottom and double walls the inner wall having openings adapted for the passage of the hot gases from the burner into said
25 ring, and a stove top secured over the open top of said ring, substantially as set forth.

3. In a vapor burner, the combination of a burner and its supply pipe, a ring arranged

around the burner and provided with a closed bottom and double walls, the inner wall being
30 provided with openings adapted for the passage of the hot gases from the burner into said ring, a band or damper curved and perforated to correspond to the curvature and perforations of the inner wall of the ring and
35 arranged in the ring, and means for adjusting said band or damper, substantially as set forth.

4. In a vapor burner, the combination of a burner and its supply pipe, an open topped
40 hollow ring having an outlet and being arranged about the burner and provided with a closed bottom and double walls, the inner wall having openings adapted for the passage of the hot gases from the burner into the
45 said ring and being provided with an annular seat formed interiorly in its upper part, a lid adapted to be seated on said seat, and a stove top secured over the open top of the said ring, and having a central opening of a di-
50 ameter equal to that of the lid, substantially as set forth.

HARRY H. KELLEY.

Witnesses:

CHARLES J. CREHORE,
W. A. SHERWOOD.