

No. 743,412.

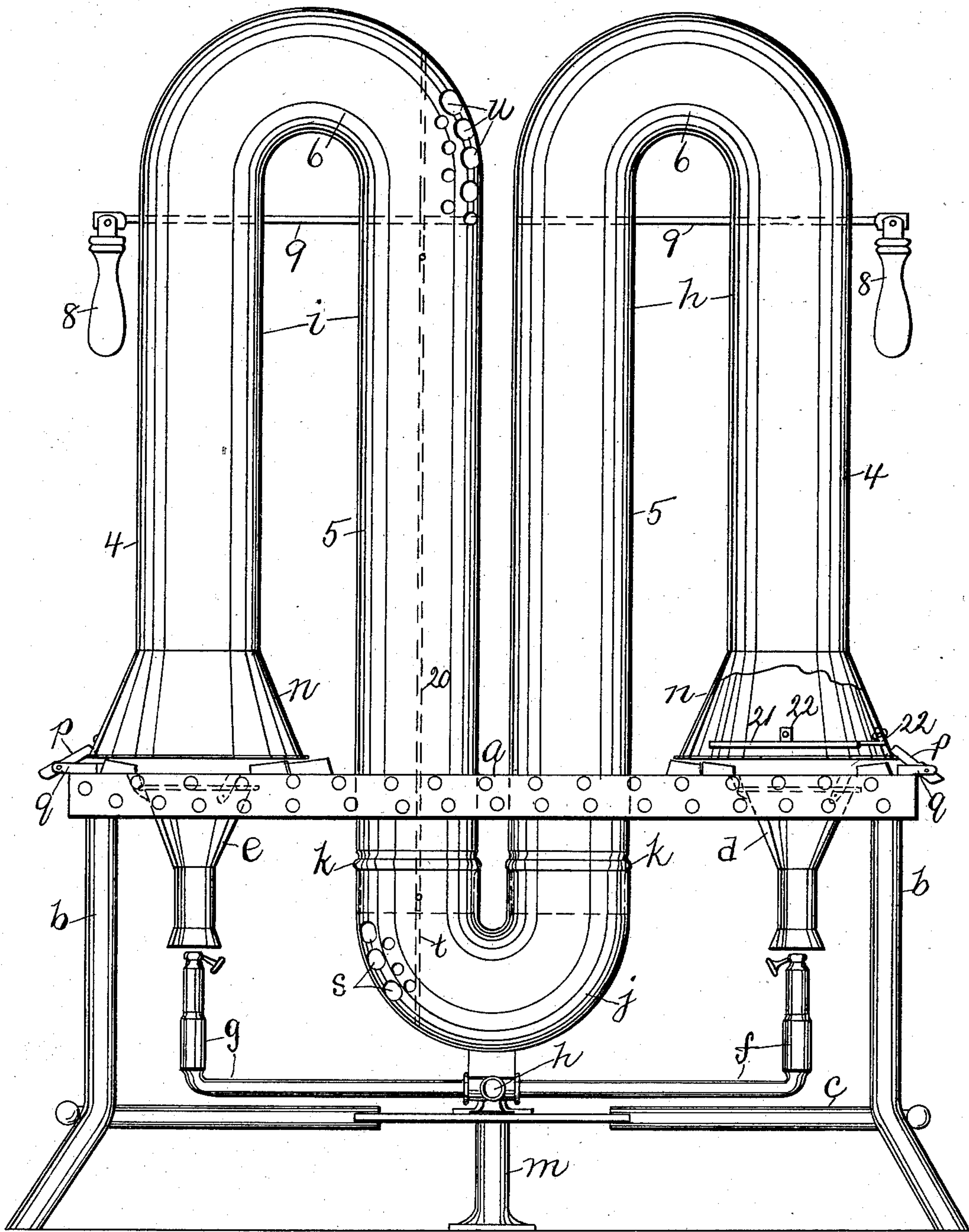
PATENTED NOV. 10, 1903.

J. R. ALLAN.
COMBINED GAS STOVE AND HEATER.

APPLICATION FILED JAN. 12, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses.

C. H. Sammett

J. Murphy

Fig. 1.

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2 SHEETS—SHEET 2.

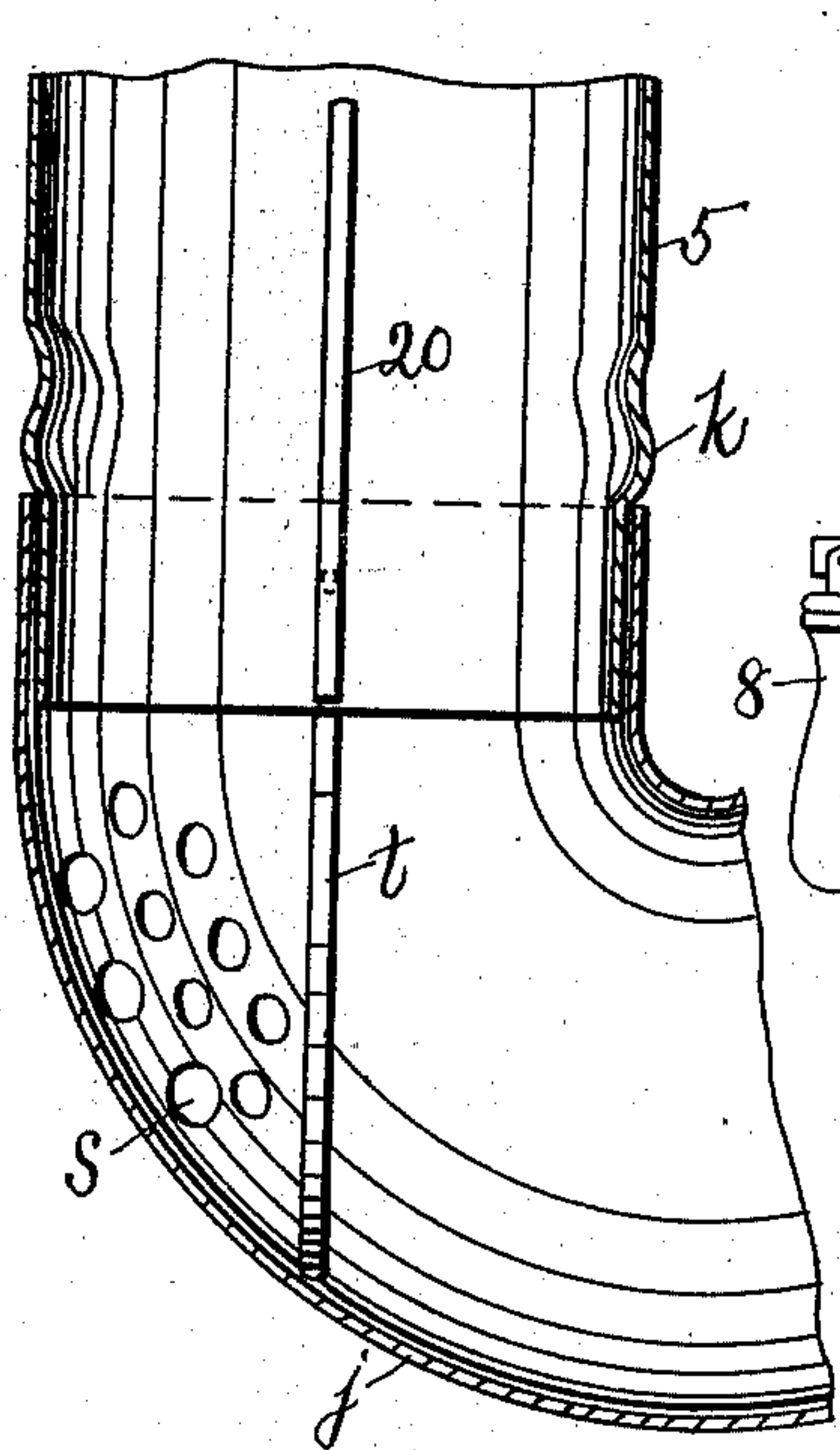


Fig. 3.

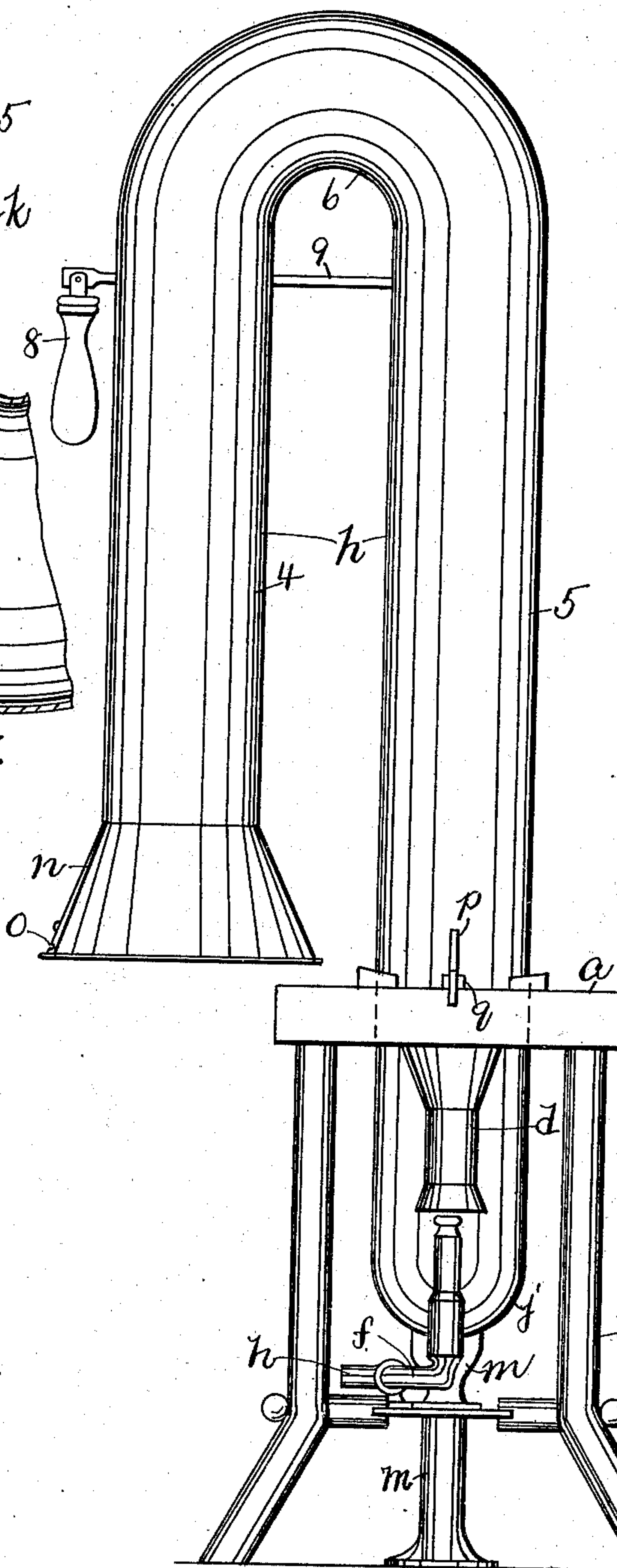


Fig. 2.

Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN R. ALLAN, OF BOSTON, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO ALBERT C. FOWLER, OF HAVERHILL, MASSACHUSETTS, PATRICK CONNERS, OF AMESBURY, MASSACHUSETTS, AND MARY E. DUCKER, OF BOSTON, MASSACHUSETTS, COPARTNERS AS CONNERS, DUCKER AND FOWLER, OF BOSTON, MASSACHUSETTS.

COMBINED GAS STOVE AND HEATER.

SPECIFICATION forming part of Letters Patent No. 743,412, dated November 10, 1903.

Application filed January 12, 1903. Serial No. 138,654. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. ALLAN, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in a Combined Gas Stove and Heater, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to a combination gas stove and heater, and has for its object to provide a simple and efficient apparatus for the purpose specified and one with which the heat may be distributed near the floor of the room or at an elevation when so desired. For this purpose a gas-stove provided with preferably two burners of any suitable construction is provided with heat-conducting pipes rotatably or pivotally mounted and provided with inlet-mouths adapted to register with the gas-burners to receive the heat from the same and having outlets through which the heat may be discharged at or near the floor or at an elevation. The pivotally-mounted heat-conducting pipes are adapted to be turned, so as to uncover the burners and permit the same to be used for cooking purposes. These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is a front elevation of a gas stove and heater embodying this invention; Fig. 2, a side elevation of the stove and heater shown in Fig. 1 looking toward the left and showing one of the heat-conducting pipes turned to uncover its cooperating burner, and Fig. 3 a sectional detail to be referred to.

Referring to the drawings, the stove herein shown comprises a framework consisting of a top *a*, supported upon suitable legs *b*, suitably connected by tie bands or rods *c*. The top *a* is provided near its opposite ends with suitable openings, with which cooperate burners *d e*, which may be of any desired construction. The gas-burners *d e* are supplied with gas by pipes *f g*, branching from a main supply-pipe *h*, which in practice is connected

with the supply of gas. The burners *d e* have cooperating with them vertically-arranged heat-conducting pipes *h i*, each comprising two vertical legs 4 5, connected at their upper ends by the curved portions or bends 6. The vertical legs 5 of the pipes *h i* are extended through the top *a* of the stove and are joined by a bent or curved pipe *j*, into which the lower end of each vertical leg 5 is extended and is adapted to turn therein. The vertical leg 5 of each conducting-pipe is provided, as shown, with a bead *k* near its lower end, which rests upon the end or edge of the curved pipe *j*, upon which the vertical leg 5 may turn as a pivot. The heat-conducting pipes may be supported in any suitable manner, and in the present instance the connecting-section *j* is secured to and supported by a standard or post *m*.

The legs 4 of the pipes *h i* may and preferably will be provided with flaring mouths *n*, each of which may be provided with a notch or opening *o*, (see Fig. 2,) which is adapted to be engaged by a locking device or lever *p*, pivoted to lugs or ears *q*, extended from the top *a* of the stove and which serves to lock the movable pipes in what may be termed their "operative" position—namely, with their mouths over the burners, as represented in Fig. 1. Within each flaring mouth *n* is and may be located a baffle plate or disk 21, (see Fig. 1,) which is supported by lugs or arms 22, attached to the walls of the said mouth.

The connecting pipe-section *j* is provided with one or more ports or openings *s*, arranged on one side of a partition-wall *t*, which cooperates with an extension or like wall 20, secured within the vertical leg 5 of the pipe *i*, which ports form outlets for the heat from the burner *e* and discharge the said heat into the room near the floor therein. The vertical leg 5 of the pipe *i* is provided on the opposite side of the partition-wall 20 with openings *u*, which constitute outlets for the heat from the burner *d* and discharge the said heat into the room at an elevation above the stove.

The rotatable or pivotally-mounted pipes

h i may be provided with suitable means for turning the same, herein shown as handles 8, attached to rods 9, extended through and suitably fastened to the said pipes.

5 The operation of the combined stove and heater may be briefly described as follows: As shown in Fig. 1, the parts are in the position they occupy when it is desired to heat the room. In this case the heat from the
10 burner *d* passes up into the leg 4 of the pipe *h*, thence down through the leg 5, through the pipe-section *j*, and up through the leg 5 of the pipe *i* on one side of the partition-wall 20, and out into the room through the ports or open-
15 ings *u*. The heat from the burner *e* passes up through the leg 4 of the pipe *i*, down through the leg 5 of said pipe into the pipe-section *j* on the other side of the partition-walls 20 *t*, and then passes through the ports *s* into the
20 room below the stove and near the floor, thereby warming the room near the floor. When it is desired to use the burners *d e* for cooking purposes, the pipes *h i* may be turned into a position substantially at right angles to that
25 shown in Fig. 1 and into the position represented in Fig. 2, and when the pipes are in this position free access is afforded to the burners *d e*, and the apparatus can then be used after the manner of an ordinary gas-
30 stove. It will also be observed that one burner may be used for cooking purposes while the other is being used for heating purposes. The pipes *h i* act to radiate heat into the room and are heated quite hot by the heat conducted
35 from the plate or disk 21 by the lugs or arms.

I claim—

1. In a combined gas heater and stove, the combination with a framework provided with
40 gas-burners, of heating-pipes rotatably mounted in said framework and each provided with substantially vertical legs connected at their upper ends, one of said legs having an inlet-mouth adapted to register with one of
45 said burners, and the other of said legs having a heat-outlet port, substantially as described.

2. In a combined gas heater and stove, the combination with a framework provided with gas-burners, heating-pipes comprising vertical legs 4 adapted to register with said burn- 50 ers, and vertical legs 5 extended below the top of the framework and rotatably mounted, said heating-pipes having heat-outlets, substantially as described.

3. In a combined gas heater and stove, the 55 combination with a framework provided with gas-burners, heating-pipes comprising vertical legs 4 adapted to register with said burners, and vertical legs 5 extended below the top of the framework, a pipe-section *j* con- 60 necting the legs 5 and provided with a heat-outlet opening *s*, a partition-wall in the leg 5 of one of said pipes, and an outlet-opening *u* in said leg, substantially as described.

4. In a combined gas heater and stove, the 65 combination with a framework provided with gas-burners, of heating-pipes rotatably mounted on said framework and each provided with substantially vertical legs con- 70 nected at their upper ends, one of said legs having an inlet-mouth adapted to register with one of said burners, and the other of said legs having a heat-outlet port, and means to lock said pipes in their operative position with their inlet-mouths in line with said gas-burn- 75 ers, substantially as described.

5. The combination with a gas-stove provided with a gas-burner, of a heat-conducting pipe comprising a vertical leg 4 having its lower end adapted to register with said gas- 80 burner, and provided with a second vertical leg 5 rotatably supported to permit the gas-burner to be uncovered, substantially as described.

In testimony whereof I have signed my 85 name to this specification in the presence of two subscribing witnesses.

JOHN R. ALLAN.

Witnesses:

JAS. H. CHURCHILL,
J. MURPHY.