

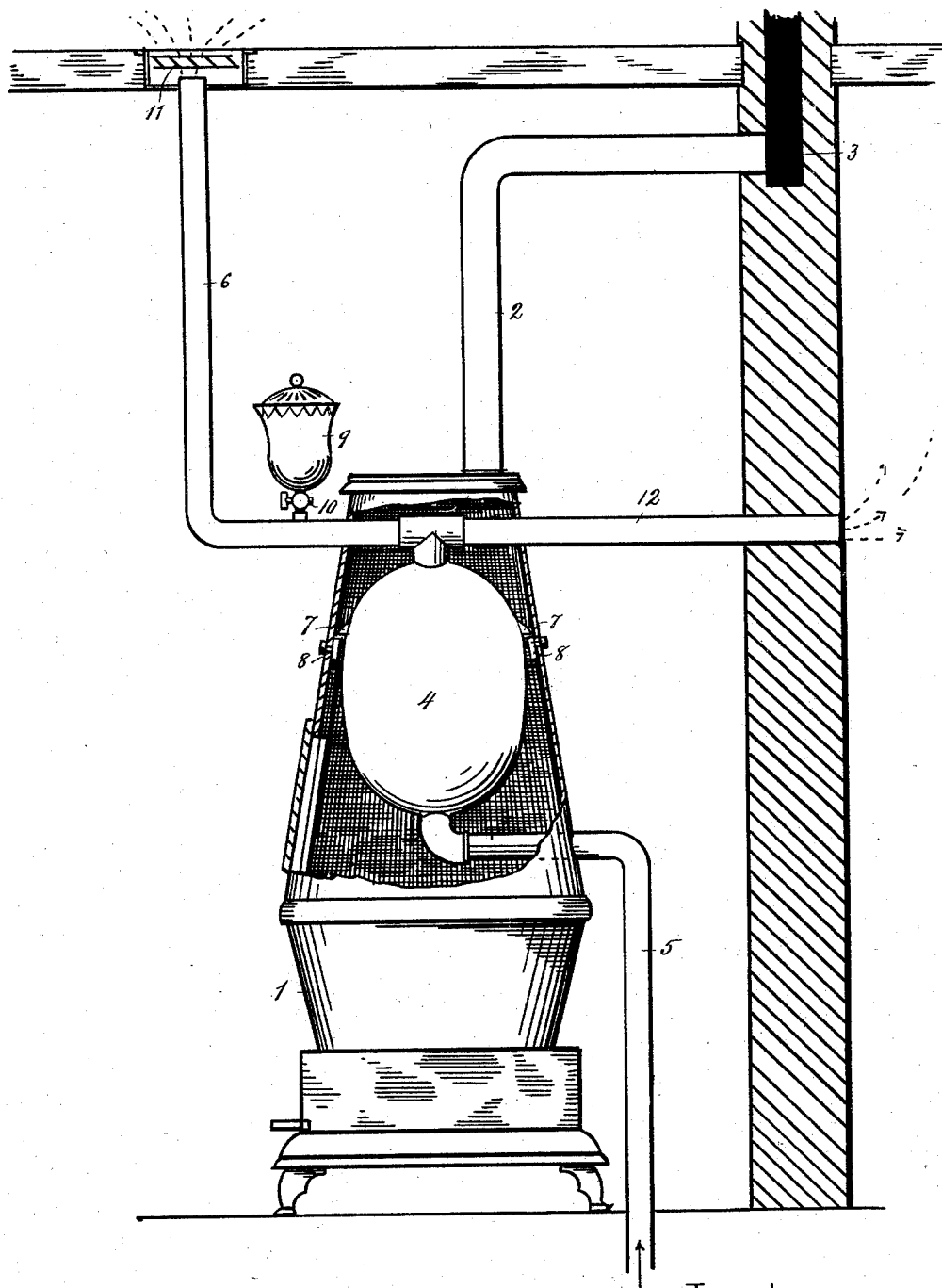
(No Model.)

A. CAYWOOD.

APPARATUS FOR HEATING AND MOISTENING AIR.

No. 505,750.

Patented Sept. 26, 1893.



Witnesses

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR HEATING AND MOISTENING AIR.

SPECIFICATION forming part of Letters Patent No. 505,750, dated September 26, 1893.

Application filed March 31, 1892. Serial No. 427,269. (No model.)

To all whom it may concern:

Be it known that I, ABRAM CAYWOOD, a citizen of the United States, residing at Ithaca, in the county of Darke and State of Ohio, have invented a new and useful Improvement in Apparatus for Heating and Moistening Air, which improvement is fully set forth in the following specification and accompanying drawing, in which the figure is a side elevation, partly in section, of a heating stove provided with my improved apparatus for heating and moistening air.

My invention relates to improvements in apparatus for heating and moistening air, and also for medicating the same when desired, and its object is to provide a simple, inexpensive and practical device which may be readily attached to an ordinary heating stove and whereby several apartments in a dwelling house or other building may be supplied with pure air, heated to a comfortable degree and charged with a sufficient amount of moisture, which may be regulated at will, to render it innocuous to health.

Referring to the accompanying drawing, 1 designates a heating stove of the usual form, provided with a pipe 2 which discharges the smoke into the chimney flue 3. A heating chamber 4, which may be made of cast iron or other suitable material, is suspended in the interior of the stove and provided with an induction pipe 5 and an eduction pipe 6 which are attached respectively to the bottom and top of the heating chamber.

In order to insure pure air, the inlet pipe should extend outside of the building and receive the air at a point where it would not be exposed to smoke, dust or other contaminating influence. It will be evident that ordinarily, the inlet and outlet pipes form a sufficient support for the heating chamber but if it be desired to make it more secure, at any convenient point externally it is provided with two or more integral lugs 7, which rest on supporting brackets 8, attached to the inner wall of the stove. Thus the heating chamber 4, and its induction pipe 5, are located above the coal space and do not at all interfere with the heating agent in the stove.

A water cup 9 provided with an adjustable

valve 10 is attached to the horizontal section of the outlet or hot air pipe. The air may thus be charged with any desired degree of moisture and if the apartment be occupied by an invalid, the cup may be filled with a medicated solution or a disinfectant which will thus be vaporized and distributed with good effect. The atmosphere may also be charged with a pleasant perfume in the same manner. The supply of warm air may be regulated by an adjustable register 11 in the floor of the apartment. An adjoining room may be heated by a pipe 12 extending through the partition. If only one hot air pipe be required, it should be considerably larger than the inlet pipe in order to afford free egress to the rarified air from the heating chamber. In practice, it has been discovered that the continuous current of cold air which passes into the heating chamber prevents a degree of heat which would soon result in damage and it will be found that the chamber is as durable as the shell of the stove. It will be observed that the shape and dimensions of the heating chamber may be changed and adapted to various forms of heating stoves.

I am aware that heretofore open ended pipes have been passed through the casing of a stove and its heating and coal space for the purpose of obtaining through them a supply of heated air; also that a heating chamber has been located within the stove and provided with induct and educt pipes whereby fresh air has been supplied to said chamber and heated air led off to the apartment in which the stove is located, or to other apartments.

What I claim as new is—

1. In an apparatus for heating and moistening air, the combination with an ordinary stove, of a heating chamber in the interior of the stove above the coal space, induction and eduction tubes connected therewith as herein described, and a water cup attached to the eduction pipe and provided with an adjustable valve whereby the heated air may be charged with moisture or medicated vapor, substantially as and for the purposes herein set forth.

2. The combination, with a heating stove,

of the air-heating chamber having on its exterior lugs 7, and supported on the bracket 8, attached to the inner wall of the stove in the fire chamber thereof and above the coal space
5 and having connected therewith an air-inlet pipe, and a bent or right-angled pipe also connected with said air-heating chamber and having one end adapted to connect with an upper room and its other end to connect with
10 a lower room, said bent or right angled pipe

having applied thereto a cup adapted to contain a liquid, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 21st day of March, 1892, in the presence of witnesses.

ABRAM CAYWOOD.

Witnesses:

ELLA M. TOWNSEND,
JACOB THOMAS.