

A. E. WHITNEY.
HOT AIR FEEDER FOR STOVES.
APPLICATION FILED NOV. 12, 1902.

NO MODEL.

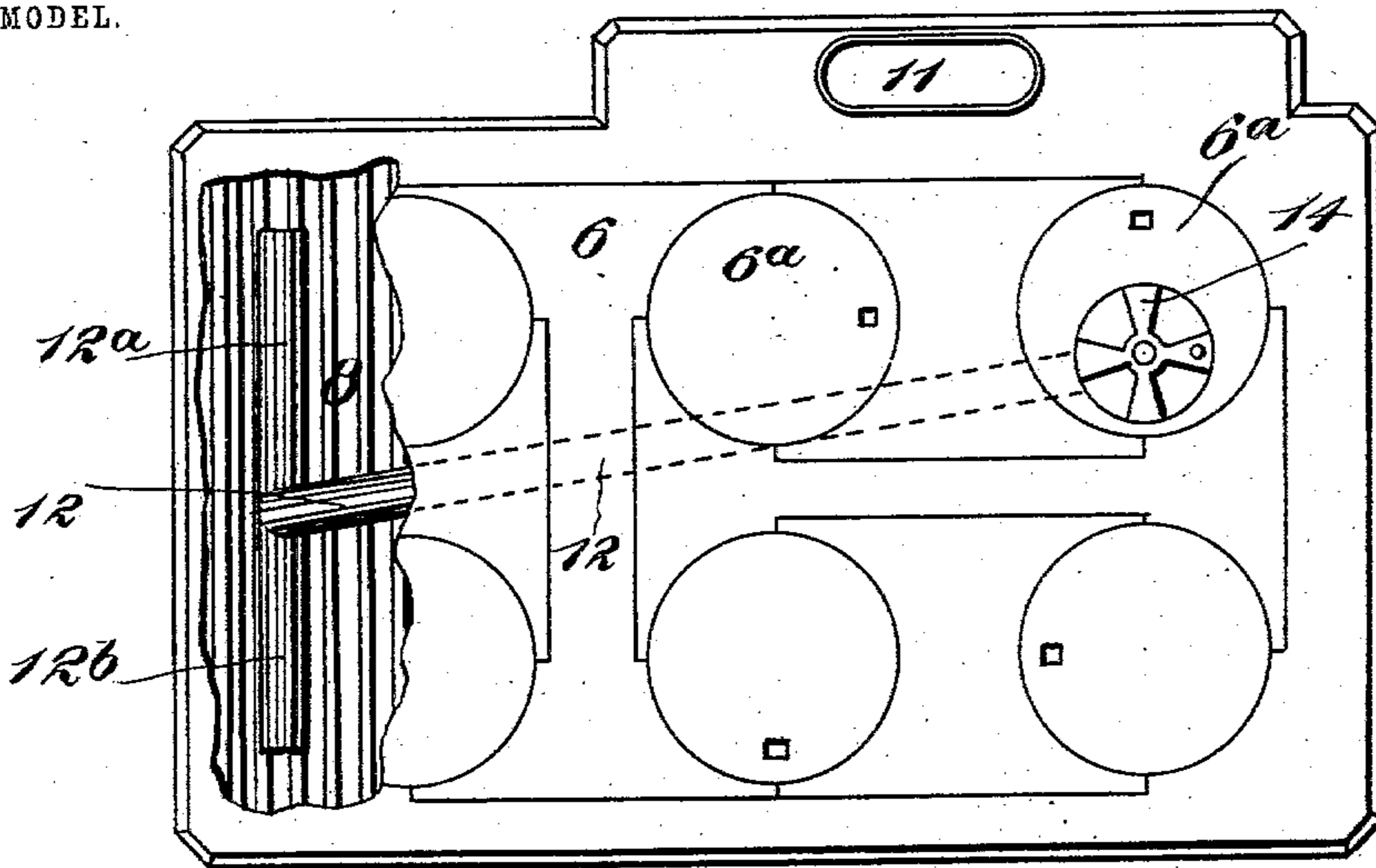


Fig. 1.

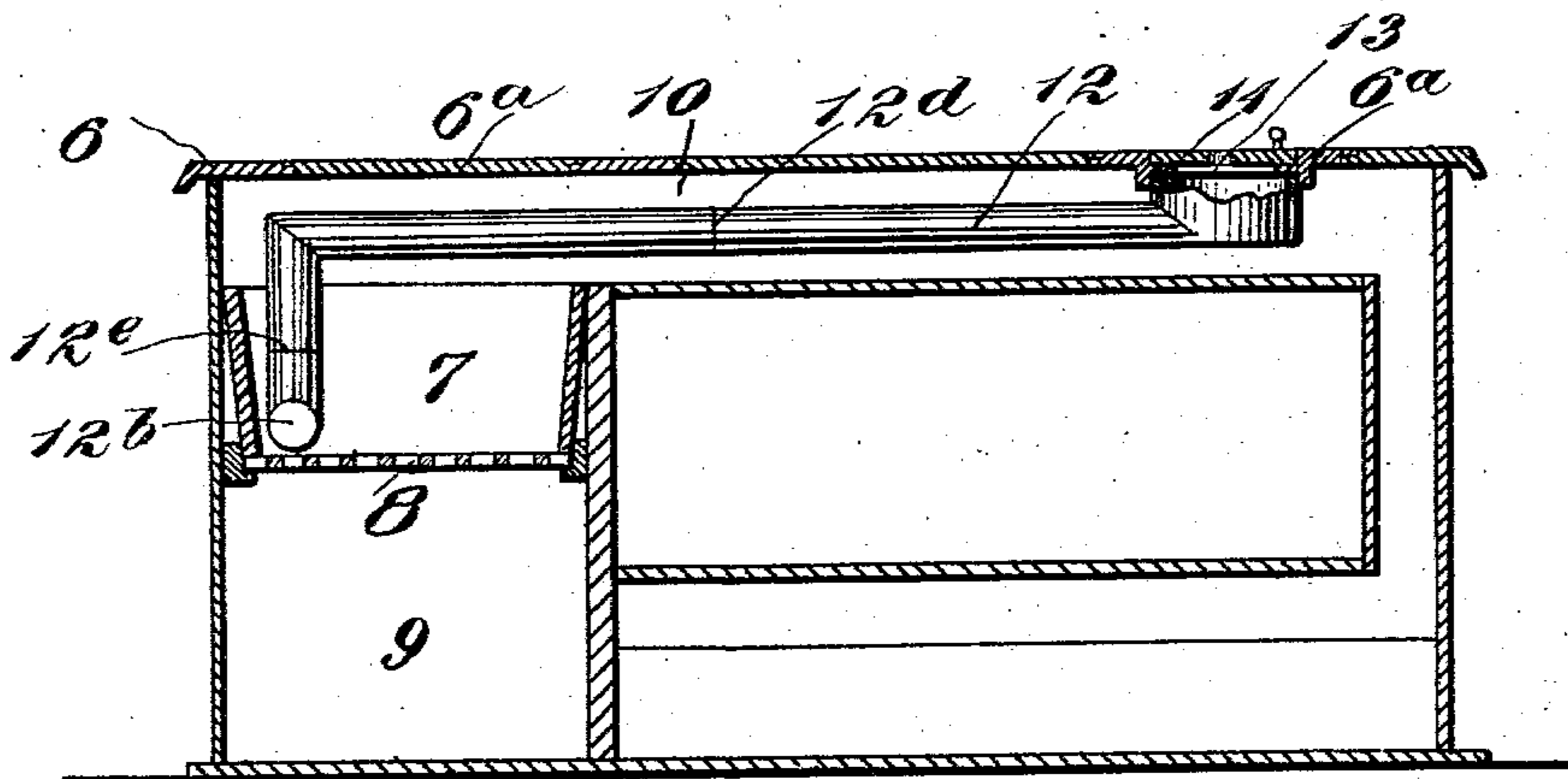


Fig. 2.

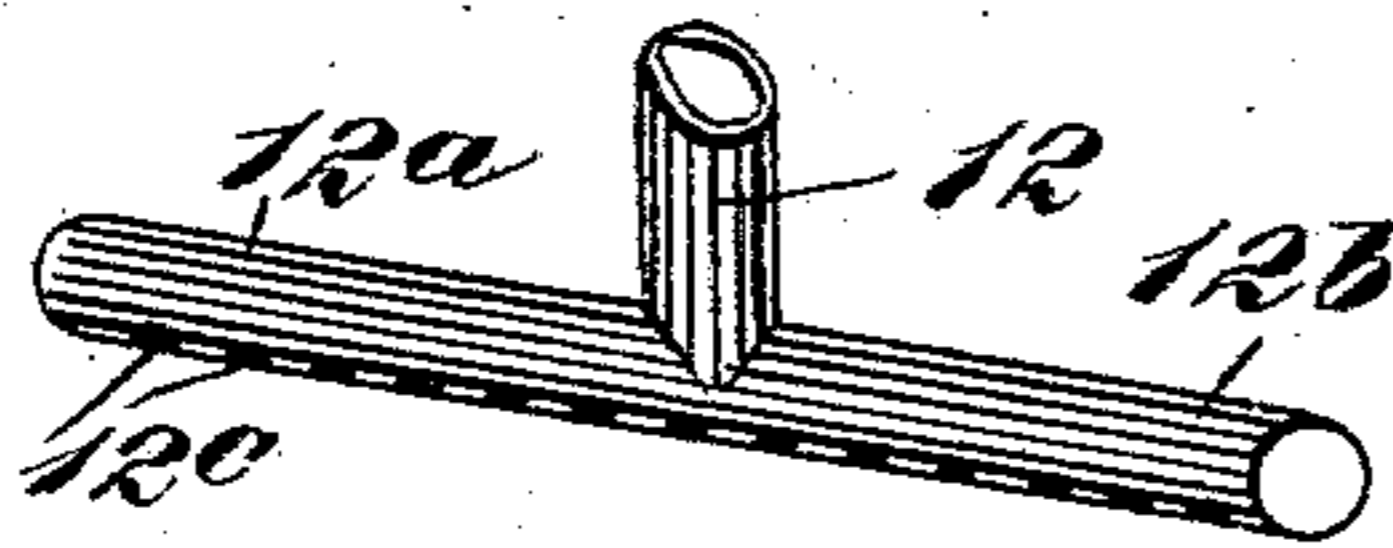


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR E. WHITNEY, OF CHICAGO, ILLINOIS.

HOT-AIR FEEDER FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 740,501, dated October 6, 1903.

Application filed November 12, 1902. Serial No. 131,007. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR E. WHITNEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hot-Air Feeders for Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in a device used in connection with a cooking stove or range for feeding heated air to the fire-pot to aid combustion of the fuel, and thereby increasing its heating power.

The object of my invention is to provide a simple and inexpensive device of this kind which may be applied to any cooking-stove of ordinary construction, and it is adjustable, so that it may be adapted to the varying dimensions of such stoves.

In the accompanying drawings, Figure 1 is a plan view of a cooking-stove, part of the top plate being removed to show my invention. Fig. 2 is a longitudinal section of the stove, my invention being shown in elevation and partly in section. Fig. 3 is a perspective view of a portion of the air-tube.

Referring specifically to the drawings, 6 indicates the top plate of a cooking-stove, having lids 6^a, as usual. The fire-pot is indicated at 7, the grate at 8, the ash-pit at 9, the flame-chamber at 10, and the smoke-flue at 11. These and the other parts of the stove are well known and may be of the usual or preferred construction, the particular construction of the stove being immaterial to my invention and not affecting the operation of the same, in which respect my invention is particularly useful—more so than similar devices requiring special stove construction.

A tube 12 extends from one of the lids through the flame-chamber 10 and down into the fire-pot 7 close to the grate 8, where two laterally-extending branches 12^a and 12^b are

formed, which are closed at their respective ends and provided with downwardly-directed discharge-openings 12^c. The tube extends obliquely across the flame-chamber, passing between the front lids in order not to interfere with the same, and communicates with an opening 13 in the lid, which opening may be opened or closed by a register 14. The lid referred to is preferably one of the rear ones in order that the tube may extend through the entire length of the flame-chamber, and thus receive the greatest amount of heat from the same. It is also removed from the walls of the flame-chamber, so that all sides of it are exposed to the flames.

In order that the tube may be accommodated to different-sized stoves, I form a telescoping joint in the same, as at 12^d and 12^e, in the horizontal and vertical portions, respectively. By this means the tube can be lengthened or shortened, as desired, to suit different lengths of stoves and different depths of fire-pots.

In operation the register is opened. The air then enters the tube and is rapidly heated therein, and in passing out through the openings 12^c it combines with the fuel in the fire-pot, and thereby greatly promotes combustion.

Having thus described my invention, what is claimed as new, and desired to be secured by Letters Patent, is—

The combination with a stove, of a lid having an opening therein, a vertically and horizontally extensible air-feeding tube extending from said opening through the flue-chamber removed from the walls thereof, into the fire-pot, and having laterally-extending branches parallel to the grate and in close proximity thereto, provided with downwardly-directed discharge-openings, and a register to open and close the opening in the lid, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR E. WHITNEY.

Witnesses:

NELLIE FELTSKOG,
H. G. BATCHELOR.