

No. 798,420.

PATENTED AUG. 29, 1905.

L. JUDELSON.
HOT AIR STOVE OR HEATER.
APPLICATION FILED MAR. 3, 1904.

2 SHEETS—SHEET 1.

Fig. 1,

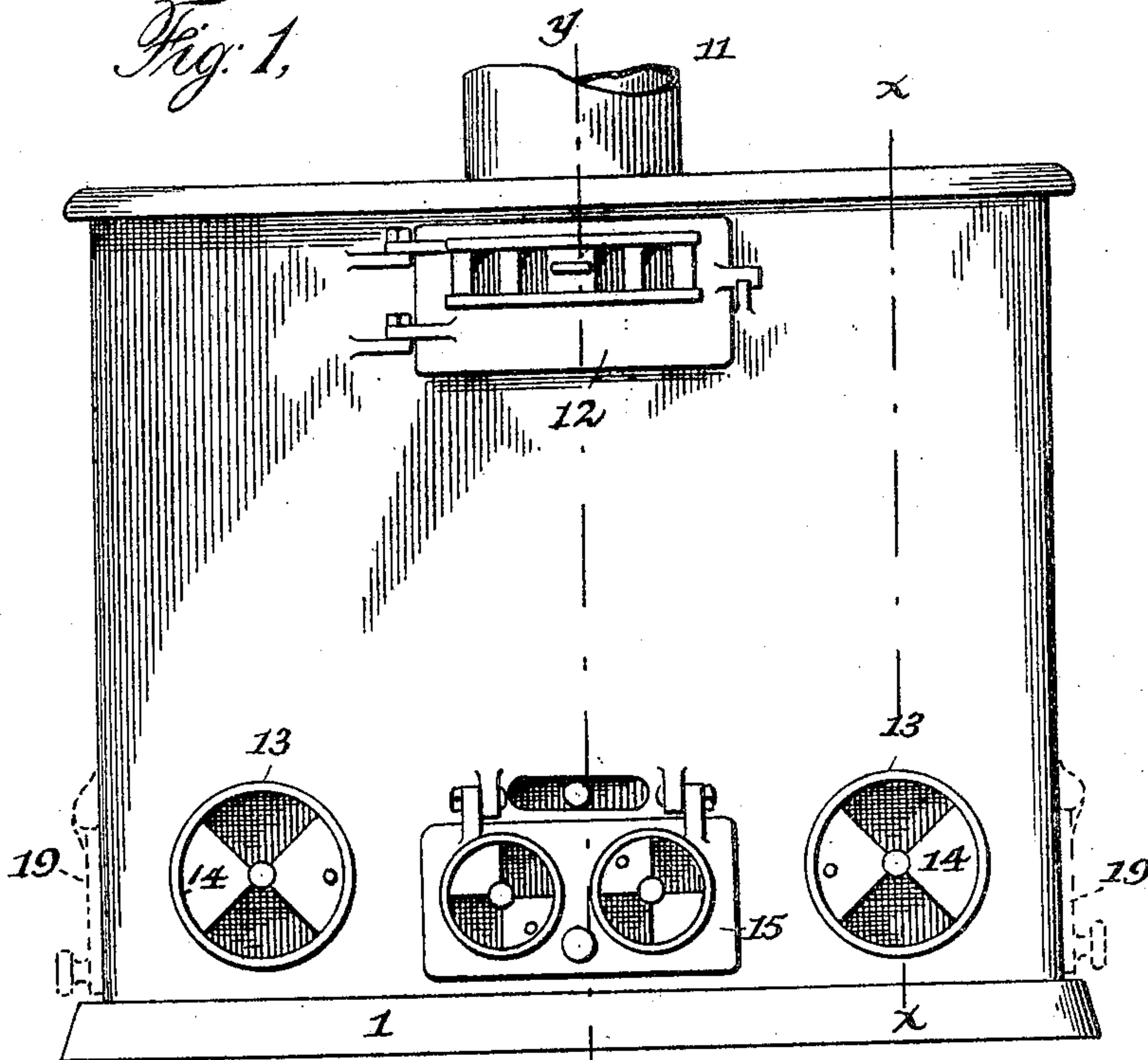
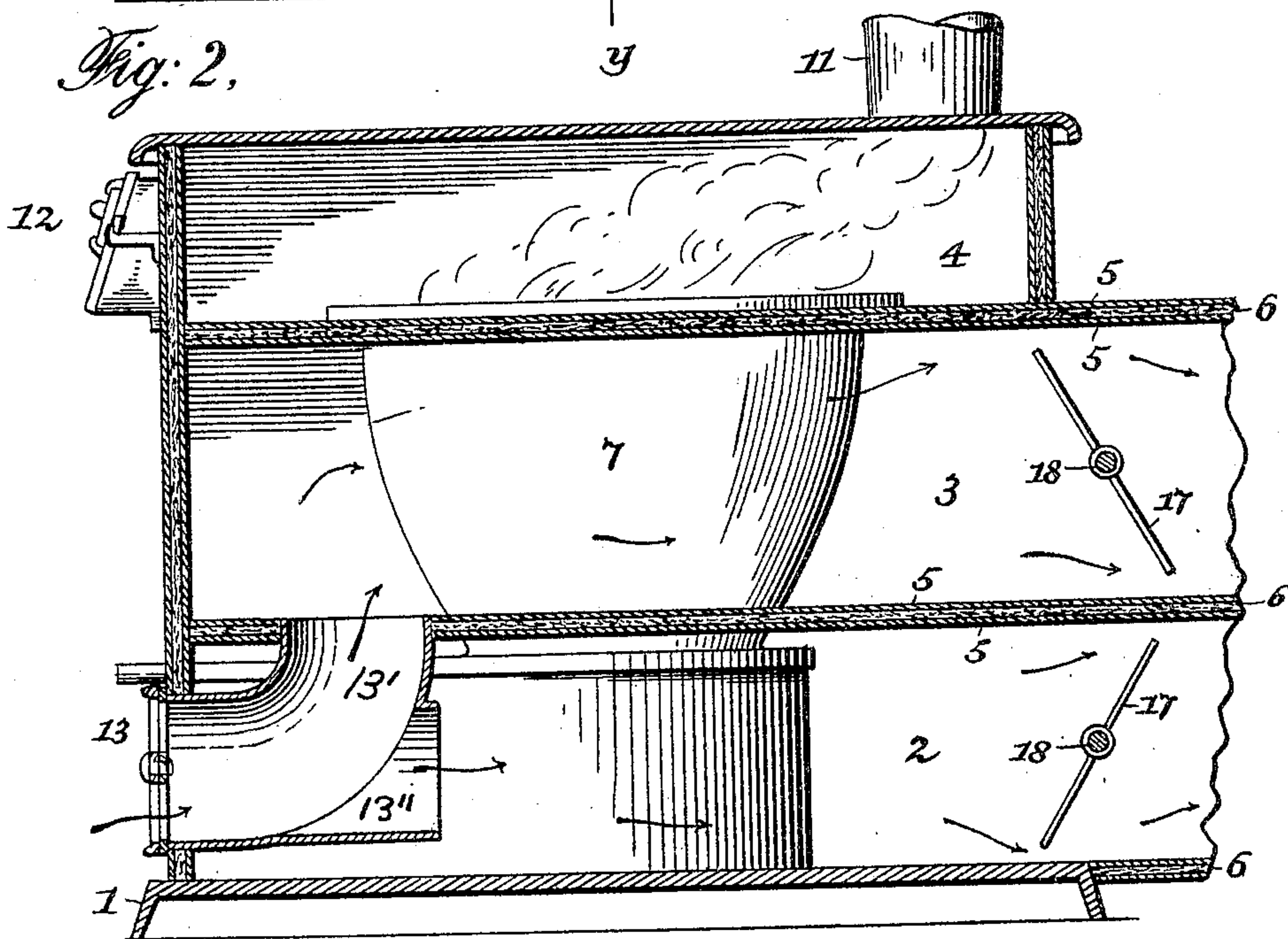


Fig. 2,



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LOUIS JUDELSON, OF NEW YORK, N. Y.

HOT-AIR STOVE OR HEATER.

No. 798,420.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed March 3, 1904. Serial No. 196,308.

To all whom it may concern:

Be it known that I, LOUIS JUDELSON, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Hot-Air Stoves or Heaters, of which the following is a specification.

My invention relates to a hot-air stove or heater, and while specially designed to be used in combination with laundry-driers is also applicable for general heating purposes.

It is my object to construct a stove of this character in which I avoid using pipes or drums for the transmission of heat, the heat from my stove passing directly into the drier or other apartment, thereby obviating the detrimental effect of smoke and soot escaping from pipe and drum joints.

The further objects of my invention are to construct the improved stove so as to prevent the waste of heat and also to place the drafts and doors at either the front, rear, or sides of the stove.

In the accompanying drawings, in which like reference characters refer to like parts throughout the several views, Figure 1 is a front elevational view of the stove. Fig. 2 is a sectional view on line *x x* of Fig. 1. Fig. 3 is a longitudinal sectional view on line *y y* of Fig. 1; and Fig. 4 is a front view, partly in section, of the stove.

In the drawings, 1 represents the base upon which the chambers 2, 3, and 4 are mounted. The partitions and walls of these chambers consist of double sheets of metal 5, between

which asbestos packing 6 is interposed. 7 is a fire-box, preferably bowl-shaped and supplied at its lower part with a grate 8, which may be rotated by means of an arm 9 and hand-lever 10.

11 is the chimney or smoke-stack through which the smoke from the fire-box 7 passes.

12 is the coal-door at the front of the stove.

13 represents the air-admission ports or drafts supplied in the usual manner with sectional covers 14. These ports communicate with the chamber 3 through a curved pipe 13' and with the chamber 2 through an extension 13'' of the said pipe.

15 is a hinged door which may be raised to permit of the removal of an ash-box of any suitable description, which is placed in a chamber X, formed by the casing 16. This chamber has no communication with chamber

2 and is of substantially the same width as the width of the fire-box 7. The door 15 is supplied with openings and sectional covers similar to the air-admission ports.

In the chambers 2 and 3 are dampers 17, pivoted at 18. These dampers are supplied for the purpose of regulating the amount of hot air passing from the stove.

19 indicates in dotted lines the various places at which the ash-openings and drafts may be situated.

The operation of the stove is as follows: Assuming the fire in the fire-box to have been built, the air for combustion will flow from the openings in door 15, through chamber X, and through the grate, and the products of combustion from the fire-box 7 will pass through the chamber 4 to the stack 11. The drafts 13 being opened, air will pass there-through to the chambers 2 and 3 and contacting with the casing 6 and the fire-box 7 will take heat therefrom, and this hot air will be driven out of the open-rear part of the stove to the driers by the incoming air.

In using stoves of this kind heretofore it had been the practice to lead the hot air and smoke combined by a series of pipes or drums from the fire-box through the compartment to be heated. The great disadvantage in this construction lies in the fact that the pipes or drums were made up of several sections, and it invariably followed that some smoke or soot would escape from imperfections at the section-joints, thus soiling the clothes in the drier.

Owing to the asbestos-packed walls, the heat generated will remain in the middle chamber 3 until it passes out to be used, and no waste of hot air will occur.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An air-heater composed of a number of chambers placed one above the other the upper chamber being out of communication with the other chambers, a fire-box in the lower chambers and being in communication with the upper one, means for connecting the bottom of said fire-box with the exterior of the heater, means for connecting the lower chambers with the exterior of the heater and a stack connected with the top chamber.

2. An air-heater composed of a number of chambers placed one above the other, a cham-

ber X in the lowermost chamber, means for
putting said chambers into communication
with the outside air, a fire-box connecting the
chamber X with the upper chamber, a stack
5 connected with the upper chamber, means for
introducing cold air to the lower chambers
and a passage for the hot air.

In witness whereof I have hereunto set my
hand in presence of two witnesses.

LOUIS JUDELSON.

Witnesses:

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OTTO MUNK.