No. 731,476. PATENTED JUNE 23, 1903.

D. LIPPY.

HEATING STOVE.

APPLICATION FILED SEPT. 8, 1902.

NO MODEL.

Fig. 1

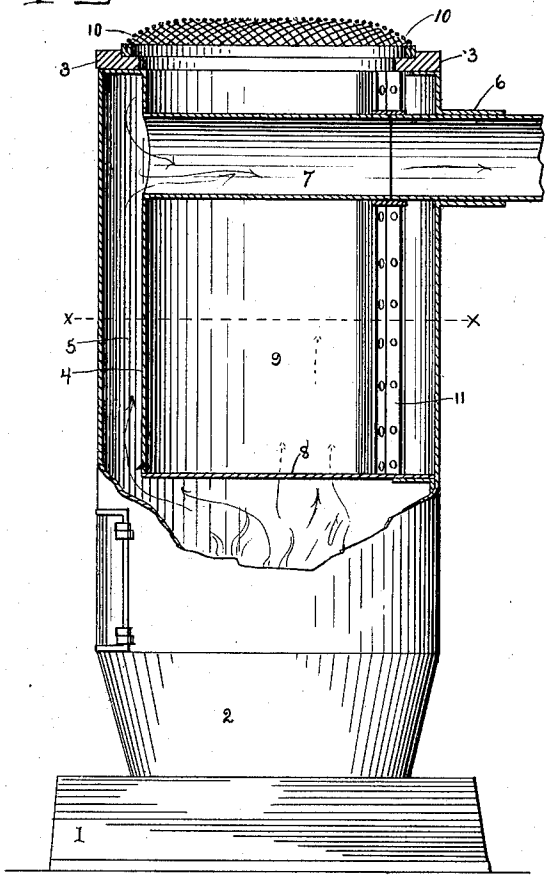
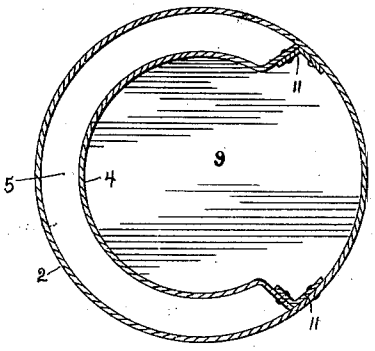


Fig. 2.



WITNESSES:

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No. 731,476. Patented June 23, 1903.

UNITED STATES PATENT OFFICE.

DAVID LIPPY, OF MANSFIELD, OHIO.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 731,476, dated June 23, 1903.

Application filed September 8, 1902. Serial No. 122,511. (No model.)

To all whom it may concern:

Be it known that I, DAVID LIPPY, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Heating-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a side elevation showing parts broken away. Fig. 2 is a transverse section on line X X, Fig. 1.

The present invention has relation to heating-stoves; and it consists in the novel arrangement hereinafter described, and particularly pointed out in the claims.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

In the accompanying drawings, 1 represents the base, which may be of any desired form, upon which is mounted in the usual manner the shell or jacket 2, which shell or jacket may be formed of a single section or piece, or it may be made in sections and the sections connected together in the usual manner. The bottom or lower portion of the shell or jacket 2 is the fire-pot portion and is provided with a grate of any desired construction. The top or upper end of the shell or jacket 2 is open and its upper end provided with a flange 3, which is in the form of a ring, and is so formed for the purpose of allowing the heat generated to pass from the stove proper unobstructed.

Within the jacket 2 is located the segmental partition 4, which is spaced from the inner portion of the shell or jacket 2 a proper distance to provide a suitable space 5, which space is located upon the opposite side or portion of the shell or jacket 2 from that to which the flue-pipe 6 is attached. The object and purpose of so locating the space is to bring the draft of the flue at the opposite side of the stove proper from that to which the flue-pipe is attached, by which arrangement the heat must travel backward and then through the horizontal pipe 7, which horizontal pipe leads to and is connected with the flue-pipe. It will be understood that by this peculiar arrangement the heat is held against direct draft, thereby producing a greater amount of heat or, in other words, retaining and utilizing to a great extent the heat generated by the combustion of fuel.

The bottom or lower end of the segmental partition is entirely closed by means of the plate 8, which plate extends from the inner side of the segmental partition 4 to the inner side of the shell or jacket 2, by which arrangement the direct draft to the flue is entirely cut off in a direct line to the draft, or, in other words, by placing the plate 8 as shown and extending the same from the inner side of the segmental partition 4 to the inner side of the shell of jacket 2 it covers the fuel-chamber entirely except the 5, and through which space all of the smoke generated, together with the gas emanating from the combustion of fuel, must necessarily pass.

It will be understood that by closing the bottom or lower end of the inner chamber 9 no gas or smoke is permitted to enter said chamber and I am enabled to provide a large radiating-surface, and the heat thus produced in the chamber 9 is free to pass out unobstructed at the upper end of said chamber, and in addition to the heat thus produced the additional heat emanating from the horizontal pipe 7, which passes through the chamber 9, is free to pass upward and out at the upper end of said chamber 9, by which arrangement said pipe performs two functions—one to remove the gas and smoke and the other to utilize the heat produced by the passage of the gas, smoke, and heat through said horizontal chamber on its way to the chimney-flue. It will be understood that by this peculiar arrangement there is no direct draft to the flue from the chamber 9 and practically all of the heat produced in said chamber is free to pass upward and out at the upper end of the shell or jacket, and that by extending the horizontal pipe 7 through said chamber I am enabled to produce a high radiation of the shell or jacket 2, owing to the fact that the heat must travel backward and then outward and finally all the gas and smoke must travel horizontally through the horizontal pipe 7.

In describing the invention I have used the term "backward" in reference to the opposite side from that to which the flue-pipe is connected, while in ordinary language the back

of the stove is considered that to which the flue-pipe is attached.

For the purpose of giving the top of the stove an ornamental appearance a gauze disk or cone 10 may be placed upon the top of the ring flange 3. This may be of any desired form or style.

If desired, the partition 4 may be riveted to the flanges 11, or said flanges may act as guides to properly hold the partition 4 in proper relative position, this feature being purely mechanical and has reference to the manufacture of the stove rather than the invention.

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

1. In a heating-stove of the class described, a shell or jacket open at its top or upper end, a segmental partition located in said jacket and spaced therefrom, a plate located in the bottom or lower end of the partition and extended from the inner side of said partition to the inner side of the jacket, and a horizontal flue extended from the partition horizontally, substantially as and for the purpose specified.

2. In a heating-stove of the class described, a shell or jacket, said shell or jacket open at its upper end, a segmental partition spaced from the jacket, a chamber inclosed by said segmental partition, said chamber closed at its bottom or lower end, and a flue-pipe provided with an intake end, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DAVID LIPPY.

Witnesses:
J. A. JEFFERS,
F. W. BOND.