No. 776,589. PATENTED DEC. 6, 1904.

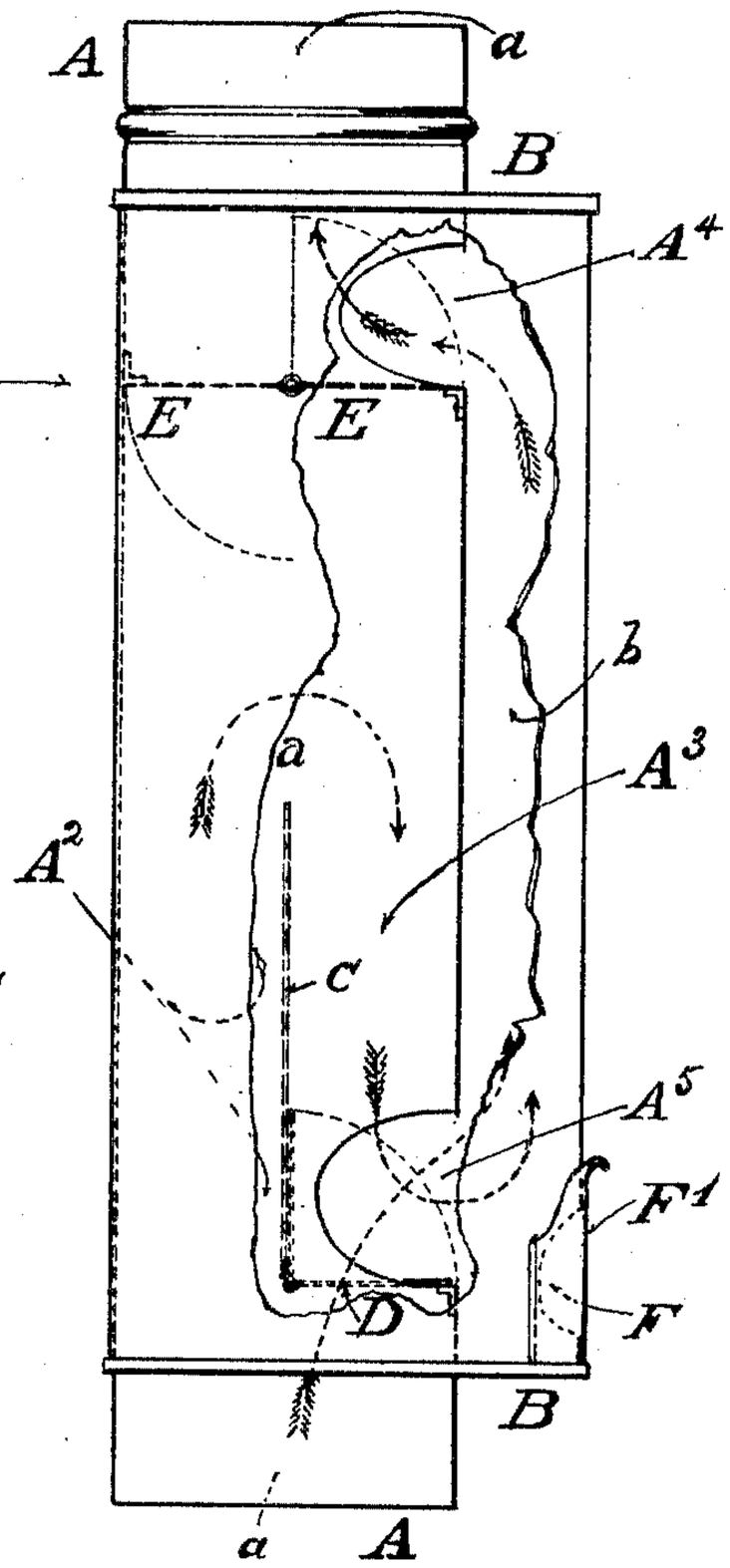
J. H. GREEN.

STOVEPIPE AND DRUM RADIATOR.

APPLICATION FILED FEB. 24, 1903.

NO MODEL.

FIG. 1



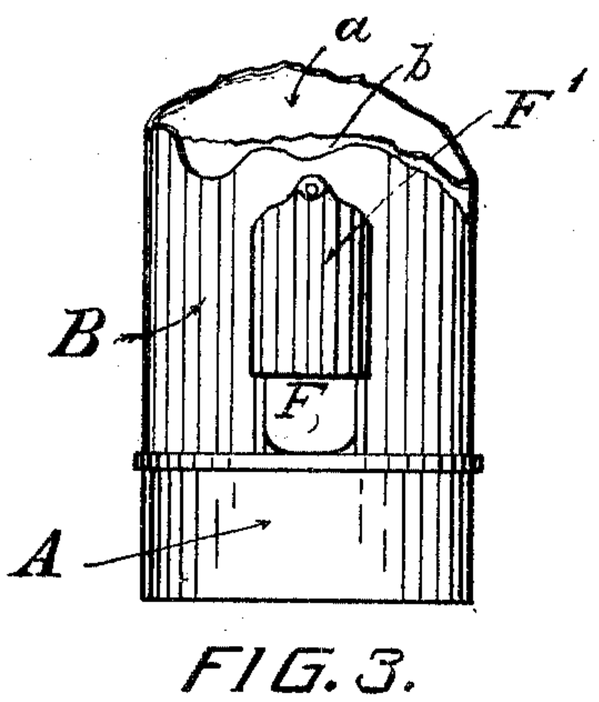
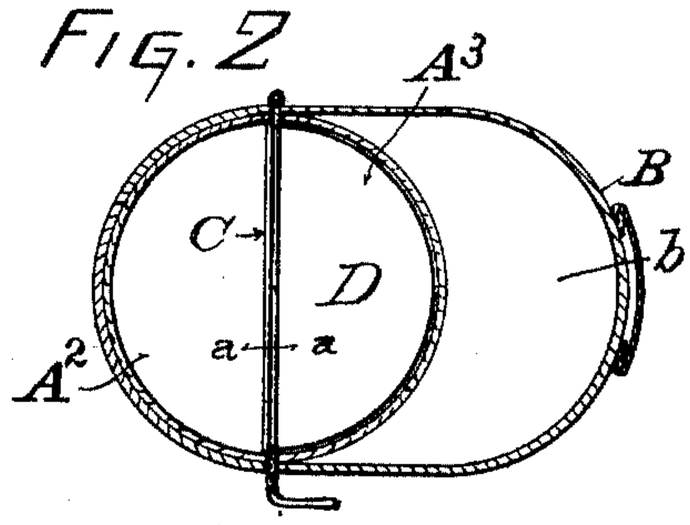


FIG. 3.

FIG. 2



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No. 776,589. Patented December 6, 1904.

UNITED STATES PATENT OFFICE.

JORDAN H. GREEN, OF JACKSON, MICHIGAN.

STOVEPIPE AND DRUM RADIATOR.

SPECIFICATION forming part of Letters Patent No. 776,589, dated December 6, 1904.

Application filed February 24, 1903. Serial No. 144,907. (No model.)

To all whom it may concern:

Be it known that I, JORDAN H. GREEN, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented a new and useful Improvement in Stovepipe and Drum Radiators, of which the following is a specification.

My invention relates to stovepipes and drums; and the object of my invention is to furnish means for graduating the heat-radiating capacity of the pipe and drum. This object I accomplish by means of the device illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of my device, partially broken away to show construction of parts. Fig. 2 is a plan view, and Fig. 3 is a rear view, of the lower portion.

Similar letters refers to similar parts in the several views.

A A represent a length of ordinary stovepipe, to which I attach a drum B B. The drum B B partially surrounds the pipe, and for more conveniently facilitating process of construction its shell extends entirely around the pipe, as shown in Fig. 2, having enough of the ends of the pipe projecting beyond the ends of the drum for the joints of the pipe. The pipe is provided with openings A^4 A^5 and a vertical partition C, extending from side to side of the pipe, dividing the pipe-flue *a a* through a portion of its length into two flues A^2 A^3. The drum is closed by a bottom and top, thus forming a tight chamber *b*, surrounding about half of the pipe, as shown especially in Fig. 2. Communication between this chamber *b* and the pipe-flue *a a* is by the openings A^4 A^5, and the draft and heating capacity of the chambers are regulated by the dampers D and E. The damper D is semicircular, covering half of the pipe-flue, and is hinged close to the bottom of the partition C, so as to open or close communication between the flues *a* and A^3 from below and between *a* and *b*. The damper E is circular and when closed partitions the entire pipe-flue. A hand-hole is provided at the bottom end of the drum with a cover, as shown in Fig. 3, for the removal of soot.

The operation of my device is as follows: To obtain the greatest radiation, close both dampers D and E, and the smoke entering the flue *a* is diverted and passes successively up through the flue A^2, over the top of the partition C, down through the flue A^3, out through the opening A^5, up through the drum-chamber *b*, then through the opening A^4, back into the pipe, and up out through the pipe's flue *a*. To get the least radiation, close the bottom damper D and open the top one, E, and the smoke travels up through the flue A^2, heating the least radiating-surface. To obtain a medium heat, open the bottom damper D and close the top damper E, and the smoke will pass up into the drum-chamber *b*, through A^5, thence back into the pipe, through the opening A^4, converting the flues A^2 and A^3 into merely conduction-chambers.

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

The combination of a stove-pipe and a drum the chamber of which partially surrounds the pipe, the latter having a longitudinal partition and two dampers, and having also passages into said drum-chamber, whereby the course of the products may be directly through the pipe, directly through the drum, or tortuously in the pipe and directly through the drum.

JORDAN H. GREEN.

In presence of—
FRANK DWELLE,
R. SWEET.