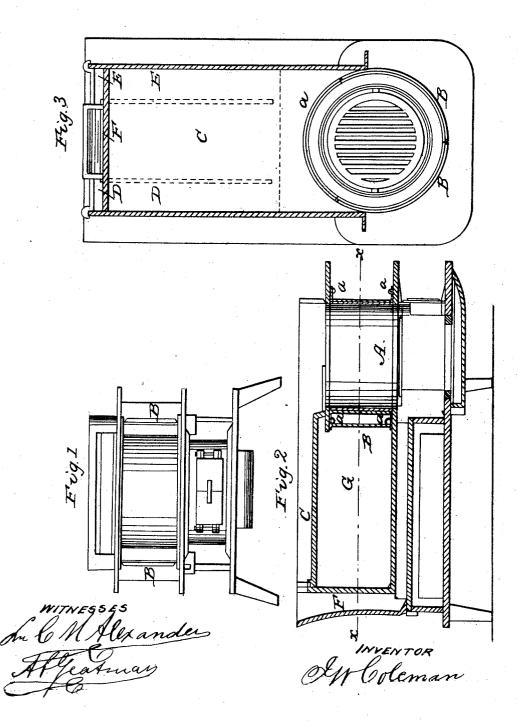
J. W. COLEMAN.

Stove.

No. 27,111.

Patented Feb. 14, 1860.



UNITED STATES PATENT OFFICE.

JOHN W. COLEMAN, OF MEDWAY, MASSACHUSETTS.

STOVE.

Specification of Letters Patent No. 27,111, dated February 14, 1860.

To all whom it may concern:

Be it known that I, John W. Coleman, of Medway, in the county of Norfolk and State of Massachusetts, have invented certain new 5 and useful Improvements in Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which-

Figure 1 represents a front elevation of the stove, showing the position of the sliding doors when open in front and closed behind the cylindrical fire box. Fig. 2 rep-resents a longitudinal vertical section 15 through the fire box and oven, showing the doors closed back of the fire box, and the flues through which the heat passes around the oven. Fig. 3, represents a sectional plan of the same, on line x x of Fig. 2, showing 20 the doors closed in front, when the heat is confined within the oven.

The object of my improvements in stoves is to transfer the heat from around the fire box within the oven, and vice versa, at pleas-25 ure; and thus economize the heat from the front and sides of the fire box for the purpose of heating the oven, and also to shut off the heat from the back of the fire box when it becomes too hot; and my invention 30 for effecting that object consists in the arrangement of the sliding doors around the cylindrical fire box of the stove—(between which is a space sufficiently wide to collect and allow the heat to escape through the 35 opening either in front or back of the cylinder)—by means of which the front of the oven is closed either in front or back of the fire box, and the heat from around the fire box is shut off from or confined within the

By reference to the accompanying drawings the nature of my invention will be clearly and more fully understood.

The fire box A of the stove is constructed 45 and arranged as in ordinary cylindrical stoves, but of smaller dimensions than the width of the stove whose sides extend forward to the center and inclose one-half of the fire box. When the sliding doors B, B, 50 are closed in front,—as seen at Fig. 3,—the fire box is entirely inclosed within the oven, and the front of the stove presents a semicylindrical shape. The heat of the fire box is then completely confined within the oven, 55 and the fire box is protected from the sur-

rounding colder air, by the doors and sides of the stove, from which it is separated by a space sufficiently wide to prevent the action of the colder air without from varying the heat within, through which space the heat is 60 reflected by the closed doors to the back of the When the front of the oven is closed back of the fire box, the front half of the fire box is then exposed to the surrounding air, and the back is separated by the closed doors 65 from the front of the oven, between which and the fire box is a space sufficient to allow the collected heat to escape in front, and prevent its heating the oven—from which arrangement, it will be seen, the heat of the 70 oven is regulated in a great measure without changing the current of hot air that passes through the flues above and below the oven, and the entire heat of the fire economized for baking purposes.

Circular rails a or grooves may be formed on the top and bottom plates of the stove around the cylindrical fire box, and the upper and lower edges of the sliding doors may be provided with corresponding grooves to 80 fit air tight over these rails, or may enter and slide in the grooves formed in the top and bottom plates of the stove, which serve to guide them around the sides of the cylindrical fire box to the front or back.

The top plate of the oven closely surrounds the fire box the heat from which is conducted by draft over the top of the oven through the flue C, and down the back and under the oven through flues D and E, 90 thence back through the flue F and up through the stove pipe.

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Having thus described my improvements in stoves, what I claim therein as new and desire to secure by Letters Patent of the 95 United States is-

The arrangement of the sliding doors B and B with the stove A and oven G, so that the heat from around the cylinder of the stove may be confined within or entirely cut 100 off from the oven, by closing or opening said doors in front or back of the stove; the whole being constructed and operated substantially in the manner and for the purpose herein set forth.

JOHN W. COLEMAN.

In presence of-A. M. B. FULLER, SEWALL FISHER.