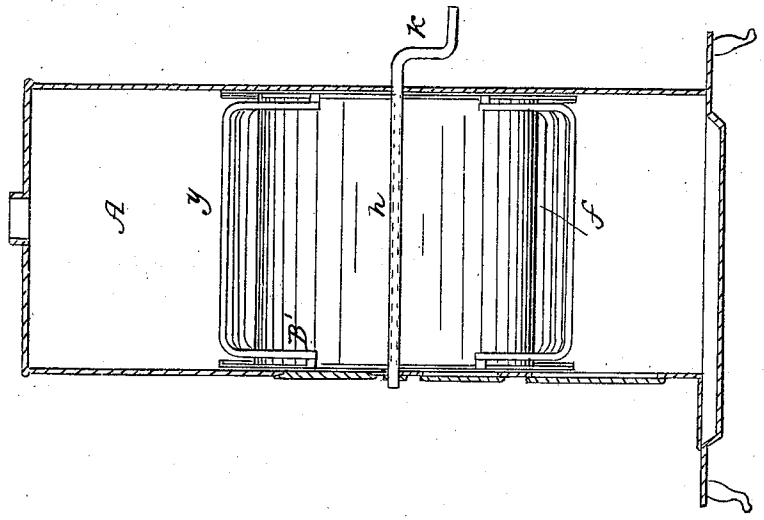
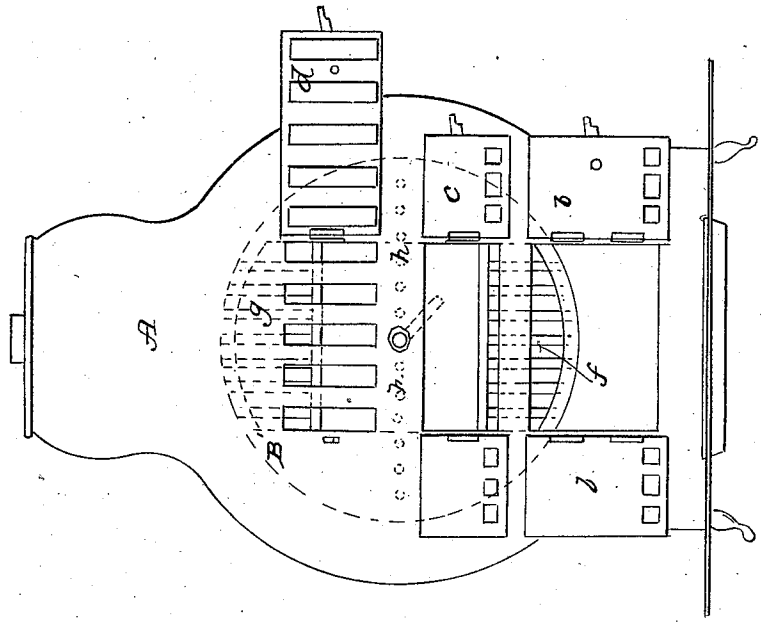
R. B. PULLAN.

Stove.

No. 24,148. Patented May 24, 1859.





Witnesses
H Eldridge
D. C. Poy

Inventor
Richard B Pullan

UNITED STATES PATENT OFFICE.

RICHARD B. PULLAN, OF CINCINNATI, OHIO.

STOVE.

Specification of Letters Patent No. 24,148, dated May 24, 1859.

To all whom it may concern:

Be it known that I, R. B. PULLAN, of Cincinnati, in the county of Hamilton and State of Ohio, have made a new and useful Improvement in Stoves; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, made to form a part of this specification.

The nature of my invention relates to the construction and arrangement, within stoves, of a rotating cylinder provided with grate bars in such manner as to form a double fire chamber, the smoke and gases from one of which will pass through the other as hereinafter specified and represented.

In reference to the accompanying drawings, Figure 1, represents a front view of a stove provided with the rotating cylinder. Fig. 2, is a transverse vertical sectional elevation, showing the double fire chamber and the device for operating the cylinder.

(A) represents the body of the stove, provided with the register doors (*b*) feed doors (*c*) and a door (*d*). Within the stove body (A) is arranged the cylinder (B), the sides of which (B′), and the rear end (*e*) are metallic plates, which prevent the coals and ashes from falling out of the cylinder when the same is made to rotate. At the top and bottom of the cylinder are arranged sets of grate bars (*f*, *g*) in such manner as to form a grate of the ordinary style when in the position of (*f*), and when in the position of (*g*) to afford draft openings, leading to the flue. Across the center of the cylinder are arranged grate bars (*h*) so that as the cylinder (B) is made to revolve and the grate (*f*) to assume the position of the grate (*g*) the burning coals will fall upon the grate bars (*h*), which form the fire bed, of the upper fire chamber.

The operation of the above described invention may be described as follows: Fire will be first kindled in the lower grate (*f*). When the coals become well charred, the cylinder (B) will be made to revolve by means of the crank (*k*) until the grate (*f*) is at the top of the cylinder and the empty grate (*g*) is at the bottom. The coals that were in the grate (*f*) will then have fallen upon the grate bars (*h*). Fresh fire will then be kindled in the furnace, or grate (*g*) the smoke and gases escaping from which, will ascend through the burning coke upon the bars (*h*) and be consumed. As often as it becomes necessary to add fresh coals, the cylinder will be rotated as before described, and the said fresh coals fed to the lower grate so that a bed of live coals will always be upon the bars (*h*).

The draft may be regulated in the ordinary manner, by means of registers in the doors (*b*).

What I claim as my invention and desire to secure by Letters Patent, is—

A rotating vessel provided, with two grates, and a central row of grate bars, arranged within stoves in such manner as to form two fire chambers, one above the other and which may be used alternately substantially in the manner and for the purposes set forth.

In testimony of which invention I have hereunto set my hand.

RICHARD B. PULLAN.

Witnesses:
H. E. CLIFTON,
D. O. PINGS.