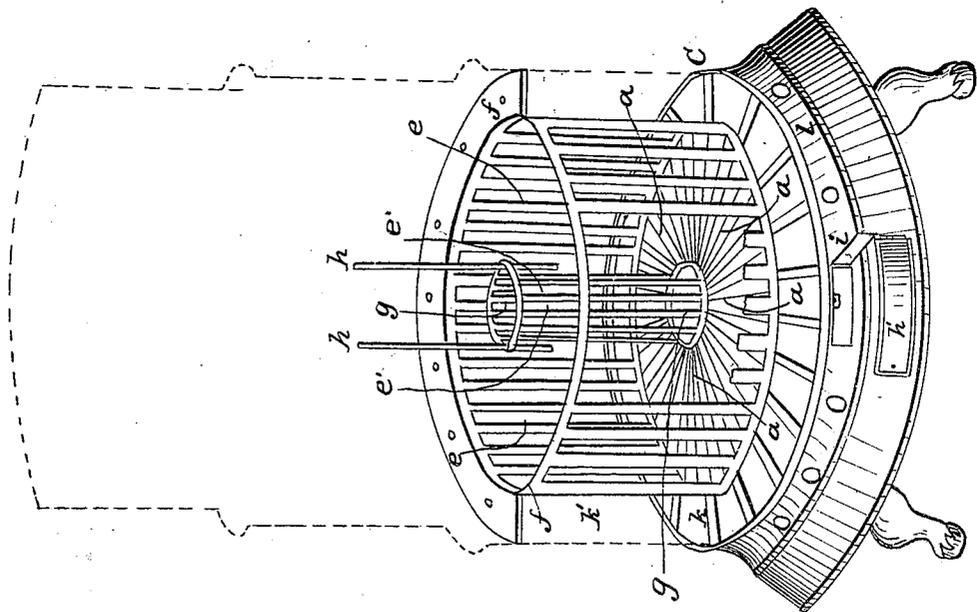
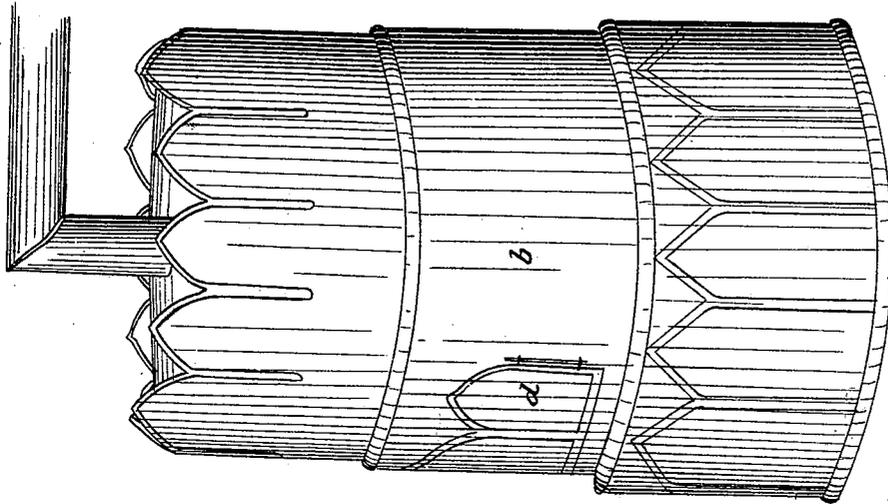


R. DAWES.
Heating Stove.

No. 19,240.

Patented Feb. 2, 1858.



UNITED STATES PATENT OFFICE.

RUFUS DAWES, OF WASHINGTON, DISTRICT OF COLUMBIA.

STOVE.

Specification of Letters Patent No. 19,240, dated February 2, 1858.

To all whom it may concern:

Be it known that I, RUFUS DAWES, of the city of Washington, in the District of Columbia, have invented a new and Improved Mode of Burning Coal in Stoves; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

10 The nature of my invention consists in so constructing the burner (which consists of grates or cylinders the one within the other), that the coal or other fuel shall be placed between concentric circles or between 15 similarly disposed boundaries of other forms, made of iron or other suitable material, so that there may be an abundant supply of oxygen around and within the fuel; the two currents of air meeting, and 20 concentrating by means of the cylinder *b*,— somewhat as the oxygen is supplied in the Argand lamp; by which arrangement the smoke of the fuel is effectually consumed, and an extraordinary degree of heat evolved.

25 To enable others skilled in the art to make and use my invention, I will proceed to describe its construction; its operation being already given.

30 *a, a, a, a* represent the chamber for fuel, and *b* the cylinder which is placed around the chamber and resting on the foundation at *C*, having one or more doors *p* for feed-

ing; *e, e* representing the outer grate, and *e'* the inner grate between which is placed the fuel, *k* being a perforated rim between 35 the cylinder and the outer bars, and *k'* an air passage, the air passing through the perforated plate *f, g* being the inner passage through which the oxygen is supplied centrally; the bars *h, h* being made to lift out, 40 in order that the exhausted coal may be raked out, so as to fall into the ash-room through *g; h'* being the door of the ash-room, and *i* the door of the opening for shaking down the ashes; *k* represents a rim 45 and flange on which the grate rests and slightly moves, which is made so that the coal escaping from the grate may fall below into the ash-room, *l* air-holes to be closed at will by slides. 50

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

The combination of the outer bars *e* and the inner bars *e'*, arranged so as to admit an air-passage *g* through the fuel, and an air-passage *k'* between the outer bars and the casing *b* for the purpose of supplying the inner and outer surfaces of the fuel with air, by which arrangement the combustion of smoke is effected. 55

RUFUS DAWES.

Witnesses:

HENRY MITCHELL,
ERASTUS BROOKS.