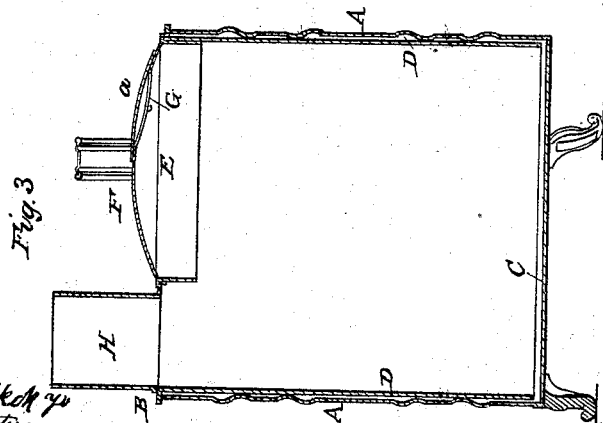
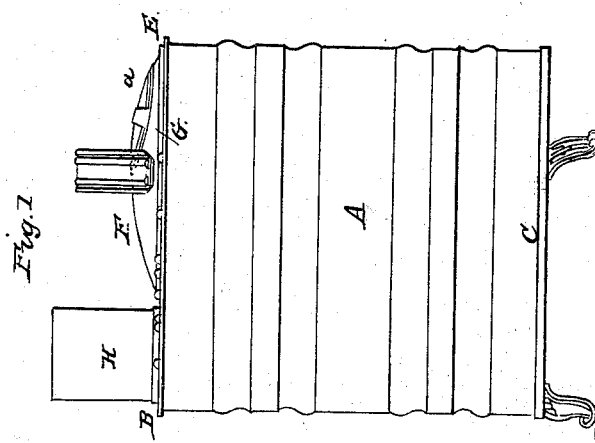
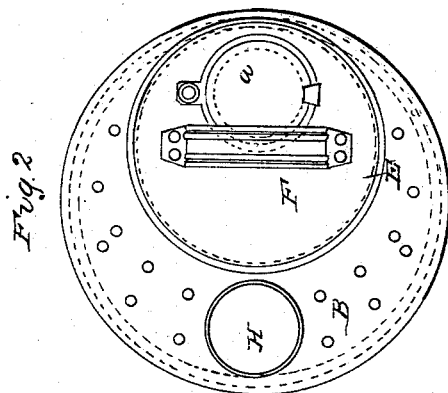


A. N. BEACH.

Heating Stove.

No. 54,814.

Patented May 15, 1866.



WITNESSES
William H. Holt Jr.
Alexander Naters

INVENTOR
A. N. Beach

UNITED STATES PATENT OFFICE.

ALBERT N. BEACH, OF WINSTED, CONNECTICUT, ASSIGNOR TO HIMSELF
AND EDWD. HATCH, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. 54,814, dated May 15, 1866.

To all whom it may concern:

Be it known that I, ALBERT N. BEACH, of Winsted, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Stoves; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a top view, and Fig. 3 a vertical section, of a stove constructed in accordance with my invention.

The object which I had in view in making my invention was to provide a stove which should not only possess the merit of being a good radiator of heat and economical in the consumption of fuel, (whether large or small,) but at the same time insure a greater degree of security than is ordinarily attained against accidentally inflaming or setting fire to any combustible matter in the immediate vicinity of the stove.

The nature of my invention consists in the peculiar construction of the stove—viz, with the fuel-supply door and the draft or air induct or inducts disposed over the fuel-chamber or in the top surface of the stove, in manner as hereinafter set forth.

In carrying out my invention or constructing my improved stove I dispense with the ordinary fuel-supply door and draft-opening as formed in the vertical face of the stove, and form my said stove as a hollow drum with no induct-opening in its bottom or sides.

In the drawings, A denotes the outer case of the stove, which may be of a cylindrical or any other desired shape in transverse section. The said casing I prefer to make of sheet-iron on account of its radiating quality.

B is the top, and C the bottom, of the stove, each of which may be made of either cast-iron or sheet-iron. Within the said casing A, and concentrically therewith, I dispose another cylinder or casing, D, the same extending from the bottom to the top plate, as shown in Fig. 3, and being properly secured to the top and bottom of the outer cylinder. The said cylinder D constitutes the chamber of combustion.

E is the fuel-supply opening, which is formed in the top of the stove, as seen in Fig. 2, the same being provided with a cover or door, F. Through this opening E the stove is to be

charged with fuel, and said fuel is to be inflamed on its top surface and burn downward. Within the said door or cover, and so as to extend downward through it, I make one or more air-induction openings, G, for the supply of air to the fuel while in a state of combustion. Each of these openings is provided with a cover or valve, *a*, which may be either hinged or pivoted to the door F, or applied thereto in any suitable manner, such as will enable it to readily close or uncloze its opening; or, if preferable, instead of making the door F with one or more openings and a separate valve or cover to each, the cover F may be furnished with an ordinary register or a series of air-inlets, or a register may be arranged in the top plate of the stove and around the door F; but I consider the arrangement shown in the drawings, on many accounts, as the best.

The stove is to be supported on feet in the ordinary manner.

H is the eduction-opening, which is formed in the top of the stove, and is to be provided with a pipe, by which the smoke and volatile products of combustion are to be conveyed into a chimney or flue.

From the above it will at once be evident that my improved stove is intended to operate with a downward instead of a direct and upward draft. This peculiar arrangement of the draft hole or holes, while it allows a sufficient amount of air for the combustion of the fuel, causes a more uniform consumption of the fuel to take place than is attained with the ordinary draft-hole arranged below or under the fuel.

By closing the valve or valves of the air-draft or draft-holes the stove will be caused to operate somewhat on the air-tight principle, and produce a very slow and even combustion of the fuel.

A stove constructed in my improved manner has many advantages. In the first place it effects a great saving in fuel; second, it is easily managed so as to produce a great uniformity of heat from the fuel while in a state of combustion; third, it enables the poorest fuel, such as tan, sawdust and peat, shavings, and large knotty wood to be utilized to great advantage; fourth, it can be cheaply constructed, is very durable, and not likely to get

out of repair; fifth, it is one of the safest stoves for carpenters, wheelwrights, cabinet-makers, and many others to employ.

I claim—

My improved stove as constructed with the fuel-supply opening E, furnished with a door or cover, F, and the draft or air induct or inducts provided with a valve or with valves, a,

arranged in the top of the stove and over the fuel-chamber, in manner and for the purpose set forth.

ALBERT N. BEACH.

Witnesses:

WILLIAM K. PECK, Jr.,

ALEXANDER WATERS.