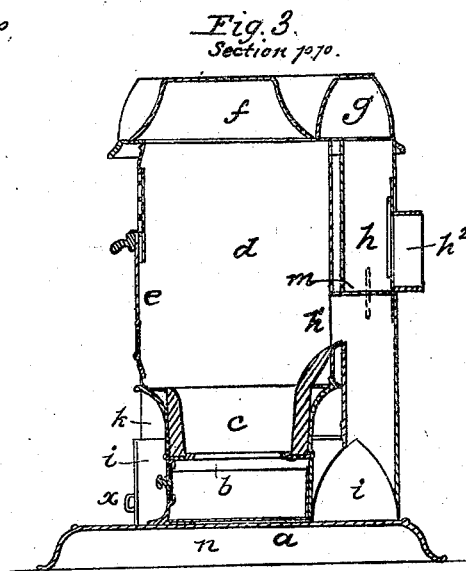
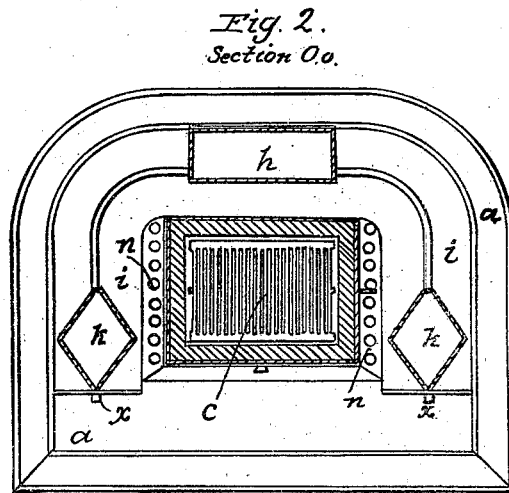
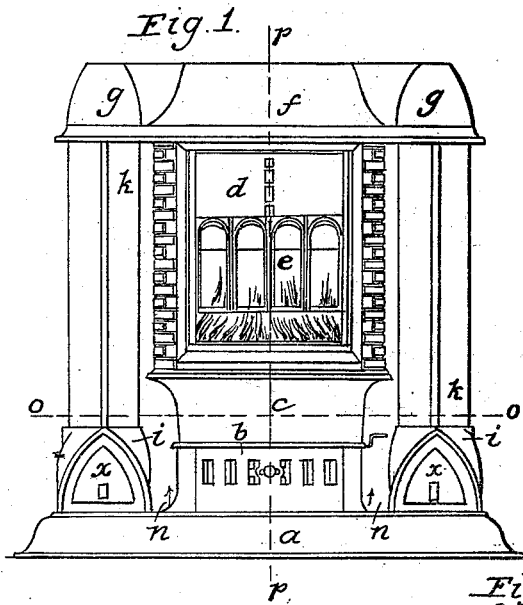


G. CHILSON.

Heating Stove.

No. 7,436.

Patented June 18, 1850.



UNITED STATES PATENT OFFICE.

G. CHILSON, OF BOSTON, MASSACHUSETTS.

PARLOR-STOVE.

Specification of Letters Patent No. 7,436, dated June 18, 1850.

To all whom it may concern:

Be it known that I, GARDNER CHILSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Parlor-Stove, termed a "Perfect Parlor-Stove," and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawing.

I have in this new construction for parlor stoves endeavored to bring into a graceful, and perfect design, as many improvements in the economy of heat, and its proper diffusion, as were required to form what its name indicates, a perfect parlor stove; which should at once prove a beautiful ornament, and great comfort; each part being especially adapted to the purposes intended, and the whole strictly harmonizing, with the beauty of the design.

The parts are constructed as follows; first a broad, oblong base (*a*) with a deep molding, around its edges, forming a recess below, serves as the foundation, upon which the other parts rest. At the center of this base, (*a*) I place the central portion of the stove, consisting first of the ash box (*b*), of oblong form, and curving upward from the base, in a hollow molding, and gradually contracting to a proper size, as clearly shown in the drawing; in this the ash draw is situated, the front of it having the same curve, as the front of the ash box, and forming a part thereof. In this front there is a paneled damper, to admit a draft to the fire. Above the ash box the fire pot (*c*), is situated, its form being similar to that of the ash box, reversed, which causes it to flare, and produces the best form for burning coal; and from the top of the fire pot, four straight plates stand up perpendicularly, forming the sides of a nearly cubical box (*d*). The front plate has a door (*e*), in it, which instead of being hinged, slides upward and downward, and is held at any desired elevation, by a small catch jointed thereto, which catches into a rack made in the front plate. By this convenient arrangement, all the difficulty attending the employment of hinged doors are obviated. This main body of the stove is surmounted by a top plate of very peculiar form, the central portion (*f*) of which, rises up like a truncated pyramid,

the sides of which are concaved. Around the ends, and back of the center part, the same plate, is formed by an upward projection into a flue (*g*), the curvature of the sides of which, are convex, as clearly shown in the drawing. This portion of the plate projects out beyond the stove, on either side and forms in connection with a bottom plate, a flue around the back and two ends; the corners being curved at their junction, and showing in the sectional plan a U form. At the center of the back of this flue, there is a rectangular one (*h*), opening into it, that extends down to the other flue (*i*), of similar form horizontally, as that just described lettered (*g*); but somewhat larger in dimension, and in its cross section a pointed arch. At the two ends of this flue, there are two lozenge shaped prisms, forming connecting pipes (*k*), between the lower flue (*i*), and the upper one (*g*).

The rear rectangular pipe (*h*), has an opening at (*h'*), into the fire chamber, and just above it, a valve (*m*), that when shut closes the whole area of the pipe above the opening, and causes the products of combustion to descend into the flue (*i*), around which it courses in each direction, to the front when it ascends the pipes (*k*), to the upper horizontal flue, (*g*), and thence returns to the first named pipe (*h*); from which it escapes through an exit pipe, at (*h''*). This exit pipe is made to move, up and down like the one, for which I have applied for patent, in an open fire place. Of course when the valve (*m*), is open, the smoke passes off direct, otherwise it causes the heat to descend to the most useful point, and heat a flue near the floor, thus greatly economizing fuel.

I admit air in under the base, either from the apartment, or some place exterior to it, from whence it rises up through openings (*n*), on each side between the ash box, and lower flue (*i*), a very effective mode of carrying off the heat from the sides, and disseminate it through the apartment. It will be observed that in this construction, each of the flues is separate from, and independent of, the main body of the stove, in which it materially differs from other stoves, with descending flues, especially in the horizontal flues, which are ordinarily in one piece, with the base and capital of the stove. To clean out the ashes, from the lower horizontal pipe, it is necessary to have openings there-

in, which I locate in the front ends, and close with doors (x, x), so placed in front of the ascending pipe, as to prevent any leakage of gas.

5 Having thus fully described my improved stove, what I claim therein as new, and for which I desire to secure Letters Patent, is—

The arrangement of the flues in combination with the fire chamber, substantially in the manner, and for the purposes set forth. 10
GARDNER CHILSON.

Witnesses:

J. J. GREENOUGH,
ROWLAND ELLIS.