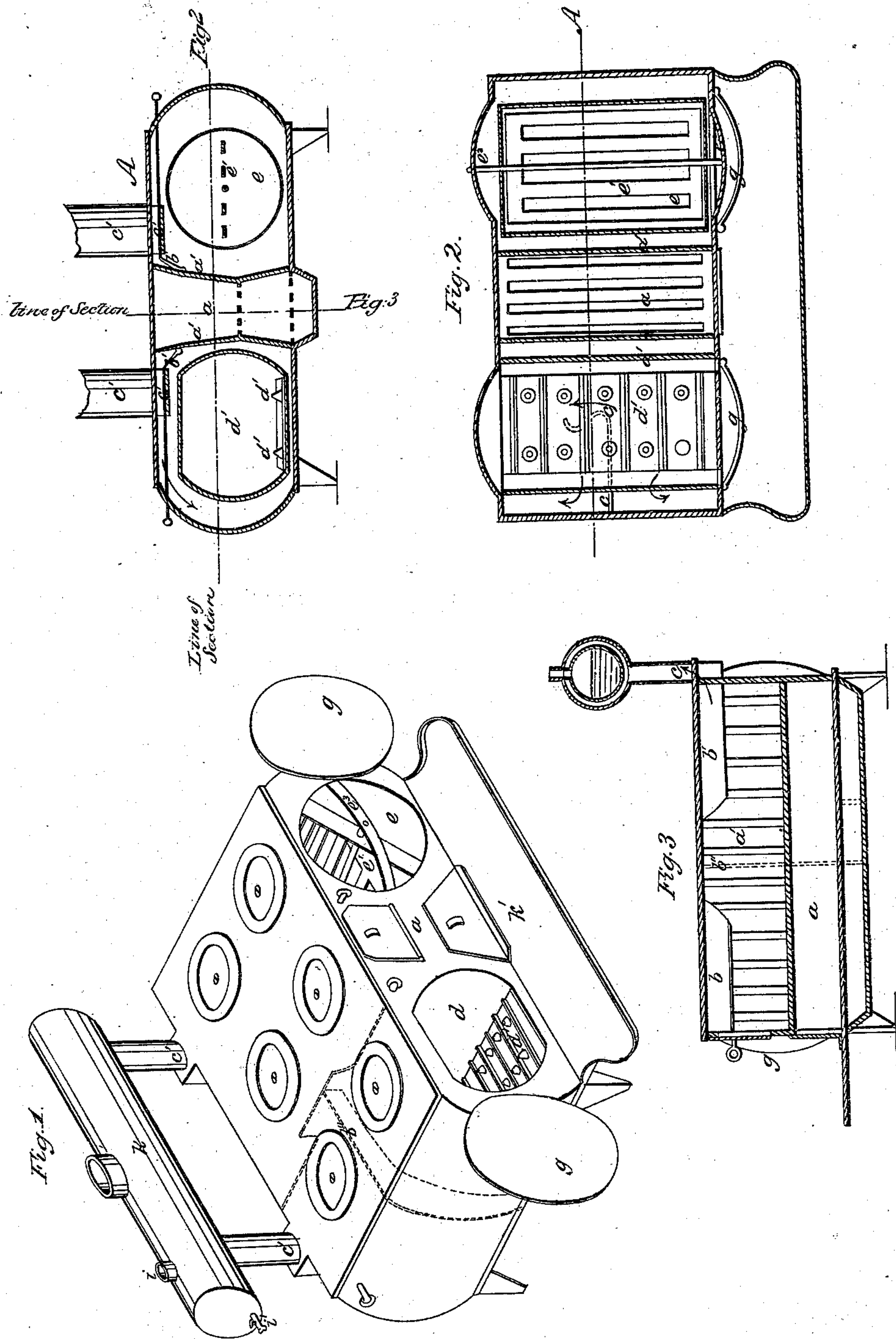


YOUNG & PARKER.

Domestic Boiler.

No. 3,430.

Patented Feb. 12, 1844.



UNITED STATES PATENT OFFICE.

J. YOUNG AND E. PARKER, OF PHILADELPHIA, PENNSYLVANIA.

COOKING-STOVE.

Specification of Letters Patent No. 3,430, dated February 12, 1844.

To all whom it may concern:

Be it known that we, JAMES YOUNG and ELMON PARKER, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Cooking-Stoves; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification, in which—

Figure 1, is an isometrical view; Fig. 2, horizontal section; Fig. 3, section through the fire chamber showing the dampers.

The nature of our invention consists in forming a stove with a fire chamber in the middle between two ovens, one of which is made to revolve, the heat from the fire being made to circulate around both. The stove is of an oblong form the ends swelling out into the segment of a horizontal cylinder. In the center of the length of this stove is a fire chamber (*a*) the sides of which flare a little at the top; the chamber extends through from front to back and separates the ovens the side plates (*a'*) rising to the top plate of the stove; two apertures are formed in each side plate at the top see Fig. 3 which can be closed with valves (*b*, *b'*), so hinged as to close the apertures when standing up, and when open they rest on the top of the oven. From the space between the apertures of the side plates above named, a division plate (*b²*) extends across the top of the oven reaching from the top plate of the stove to that of the oven and thus dividing the flue; this division plate continues down around the outside of the oven and under the bottom where it terminates about half the distance across toward the fire chamber, the end being turned backward, and curved into the form of a letter S, see Fig. 2 in which it is shown by dotted lines (*c*) under the oven.

When the back dampers (*b'*) are closed the products of combustion are conducted through the front apertures, of the side plates, of the fire chamber, and around under the oven, past the end of the division plate

(*c*), and back up out of the smoke pipe (*c'*). If the ovens are not to be heated, the damper (*b'*) is opened making a direct exit for the smoke to the pipe (*c'*). One of the ovens (*d*) is made to the shape of the space on one side of the fire chamber a space being left for the flue between it and the side, and top and bottom of the stove—the bottom of this oven has a number of conical radiators (*d'*), or angular ribs, extending up into the stove; they are hollow and increase the radiating surface.

The oven (*e*) on the opposite side of the fire chamber is of cylindric form and is suspended at its axis (*e²*), by a journal passing through the back plate of the stove and the front journal passing through a cross bar (*e³*) at the front, on the outer end of which there may be a crank. This oven is supplied with a stationary grate (*e'*) similar to others now in common use. The doors (*g*) are convex, the inside of it being concave and tinned so as to reflect the heat. The top plate of the stove has six more or less boiler holes in it and over each oven a smoke pipe (*c'*) ascends to a horizontal cylinder (*h*) that connects them inside of this is another cylinder forming a boiler entirely surrounded by a flue there being only a small tube (*i*) through the outside case into it to fill it by on top and a stop cock (*i'*) to draw the water from.

A hearth (*h'*) extends along the whole front of this stove and the grate of the fire chamber is elevated about half its height.

What we claim as our invention and desire to secure by Letters Patent is—

The combination of the boiler with the elevated and concentric flue smoke pipe constructed and arranged as herein described.

JAMES YOUNG.

ELMON PARKER.

Witnesses to signature of J. Young:

J. J. GREENOUGH,
L. CALDWELL.

Witnesses to signature of E. Parker:

EDWARD BRACE, Sr.,
J. MITCHELL.