P. GILLETT.

Cooking Stove.

No. 816. Patented June 30, 1838.

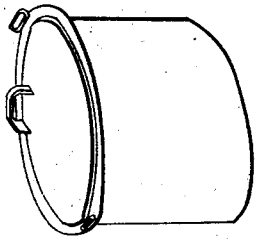

Fig. 4

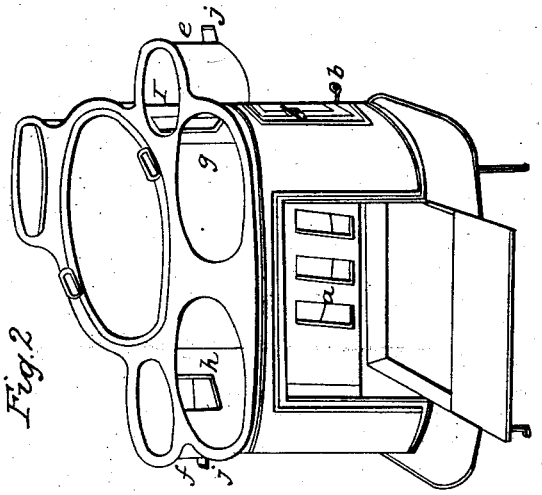

Fig. 2

Fig. 5

Fig. 3

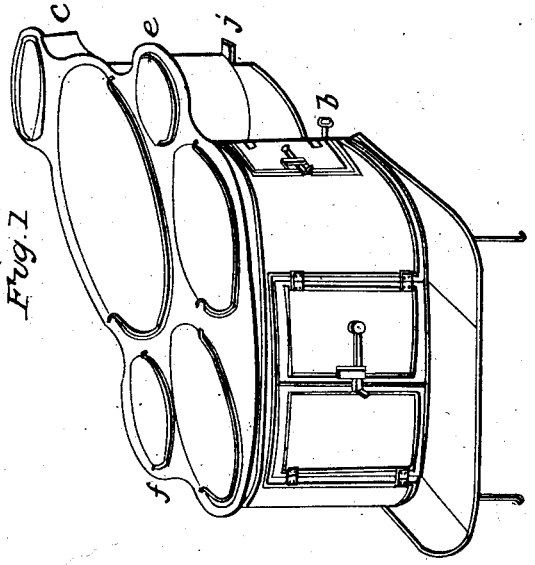

Fig. 1

UNITED STATES PATENT OFFICE.

PHINEAS GILLET, OF NEW HARTFORD, CONNECTICUT.

STOVE.

Specification of Letters Patent No. 816, dated June 30, 1838.

To all whom it may concern:

Be it known that I, PHINEAS GILLET, of the town of New Hartford, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Stoves; and I do hereby declare that the following is a full and exact description.

The stoves to which I apply my improvement are for cooking and kitchen purposes. I make the bottom plate with the exception of a common sunken hearth level from front to rear, and the fire place of the usual form extending across the front of the stove. In front also is a hearth and sliding damper. Directly back of the fire place is a circular cavity occupying the remaining length, width and depth of the stove excepting a projection for the stove pipe still back of the cavity. The stove in its general form of construction is represented in Figures I and II of the annexed drawings. The cavity is made to receive a movable circular oven for baking and cooking, which is so apportioned to it in size as to leave a space under the oven and around its side of an inch or more, excepting in front, where the space is greater. This is caused by a moderate inclination given to the back plate of the fire place from the bottom upward toward the oven for the purpose of reducing the bottom of the fire place in width to suitable dimensions and also to prevent the fire from acting too intensely upon that side of the oven. In this plate which constitutes the partition between the oven and fire place I provide one or more openings as a draft or passage from the fire into the cavity. These are made centrally in respect to the length of the plate commencing near its lower edge and extending up to any discretionary height, as shown at *a*, Fig. II. (The stove being there represented with the front door off and the openings for boilers and for the oven in the top plate without covers). The passages thus described leading from the fire place into the cavity are closed or opened in whole or in part by a sliding damper of corresponding form and dimensions in the same manner as those of similar construction in common use. The end of the rod by which the damper is operated is seen at *b*. The passage thus described being near the bottom of the oven when placed in the cavity and the outlet from the same cavity into the passage immediately under the opening for the stove pipe as formed by the projection partially seen at *c*, in Fig. I, being near the top on the opposite side of the oven, causes the fire and heated air to pass under and around it on every side. This as is believed and designed tends to equalize the heating process within the oven. In addition to which and for the better managing and regulating the oven and its concerns I provide a short stud-post or projection from the bottom plate of the stove as a pivot under the center of the oven on which it rests so as to be easily turned around while in its place within the cavity should occasion require. This pivot is shown in the sectional view of the bottom plate in Fig. III at *d*. Without this provision for supporting and turning the oven the rim extending as a flange from its upper edge and which surrounds it by being made to lap over upon the edge of the opening for the oven in the top plate will support it in the same position within the cavity as when resting upon the pivot. The rim in connection with the oven is shown in Fig. II, and is a view of the oven as detached from the stove in Fig. IV. A part of the oven is also seen through the openings in the back plate of the fire place in Fig. II.

The oven is supplied with grates or racks one or more for the purpose of placing thereupon such articles as are to be baked or cooked, with provisions also for supporting the grates along required elevations within the oven as by flanges or the like projecting from its sides. When the oven is not used a vessel of suitable dimensions if required is placed in the same cavity for the purpose of boiling. When neither oven nor boiler is used, the opening in the top grate is covered like common boiler openings with a cast iron lid. In the top plate I provide two openings for boilers directly over the fireplace, and also an opening of smaller size on each side of them as at *e* and *f*, Fig. II. These are for what I call the side boilers and being out of the limits of the fireplace are provided with a cavity under each adapted to the use and purpose for which it is designed. Into each cavity an opening sufficient for a draft from the fireplace is provided as seen at *g* and *h*, and a like opening from the cavity so as to continue the draft through it into the large cavity for the oven as at *i*, thus communicating with the passage from the fireplace to the stove pipe as above described. The entrance from the fireplace into each of these side cavities is supplied with a damper by

which it is closed or opened at discretion. In order to fit my damper to the vertical position of the opening I provide a plate long and wide enough to cover it, curving the plate in its horizontal or crosswise direction so as to conform it to the circle of the cavity. I then attach or cast with it, if made of cast iron, a narrow flat plate, extending at right angles from its lower end or the concave side to a little past the center of the cavity. At the point of that center I attach a pin to this foot plate of the damper or in like manner have one cast with it so as to extend down through a perforation provided for the purpose in the bottom of the cavity, on the underside of which I attach the handle of the damper extending it out from under the cavity a little beyond its outer edge as seen at *j*. By means of this the damper is moved edgewise one way or the other in the line of the circle which it describes upon this center pin with its convex surface in easy contact with the side of the cavity or over the opening which it closes. The damper with its appendages is represented in Fig. V.

As I construct my stoves with or without the above described provisions for side boilers at my option I provide in case of their omission an opening in the back plate of the fireplace directly in rear of each of the front boiler openings and near the upper edge of the plate as passages in addition to that as first above described at the bottom of the same plate from the fireplace into the oven cavity. These are also supplied with sliding dampers, fixed and operated in the same manner as those of like nature in common use. By means of the several passages from the fireplace into the cavity for the oven and through the latter to the stove pipe and the dampers therewith connected as above described a direction is given to the fire and its connections in whole or in part through the opening near the bottom of the oven or in like manner through either or both of the upper passages, or distributively through them all at the same time at discretion. From all which in connection with the sliding damper of the hearth for regulating the admission of air to the fire, together with the facilities for turning the oven while it is in the cavity as above provided for, it is obvious that under any ordinary state of the fire the process of baking and cooking may be conducted and regulated with all the exactness and effect that is required. In order to check or extinguish the fire the dampers are closed.

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

The manner of constructing the movable oven and of managing and heating it for the purpose of baking or cooking in a cavity extending from the top to the bottom of the stove.

PHINEAS GILLET.

Witnesses:
FANNIE WHITING,
THOMAS WEAVER.