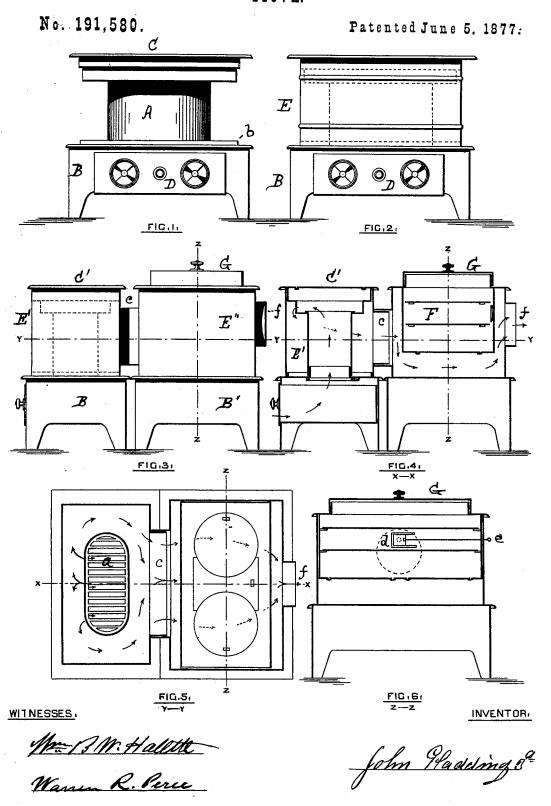
J. GLADDING, 3d. STOVE.



UNITED STATES PATENT OFFICE.

JOHN GLADDING, 3D, OF BRISTOL, RHODE ISLAND.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. 191,580, dated June 5, 1877; application filed March 17, 1877.

To all whom it may concern:

Be it known that I, JOHN GLADDING, 3d, of the town and county of Bristol, in the State of Rhode Island, have invented a new Improvement in Stoves; and declare the following to be a specification thereof, reference being had to the accompanying drawing.

Like letters indicate like parts.

Figure 1 is a front elevation of my invention as a summer-stove. Fig. 2 is a front elevation of my invention as a parlor-stove. Fig. 3 is a side elevation of my invention as a kitchen-stove. Fig. 4 is a longitudinal vertical section on the line x x. Fig. 5 is a longitudinal horizontal section on the line y y. Fig. 6 is a transverse vertical section on the line z z.

My invention consists in so constructing a stove with detachable parts, to allow of the combination of said parts to form either a summer-stove, parlor-stove, or full kitchenstove.

The cylinder A forms the fire-pot, and is a separate detachable piece, fitting upon a rim on the base B, over a grate, a, and is covered by the top piece C, the latter having stove-covers and center-piece, as usual. The ashpan is shown at D. These parts together constitute a summer-stove, as shown in Fig. 1. This stove is admirably adapted for heating sad-irons, or for general use in summer.

To convert this into a parlor-stove, I remove the top C and fire-pot A, and fit the sheet-iron case E upon the ledge b on the base B, and then replace the top C and fire-pot A in their former positions, as indicated by dotted lines in Fig. 2. The space thus inclosed between the case E and cylinder A forms a hot-air chamber, and the exterior of the case E furnishes a large radiating-surface. The parlor-stove thus constructed is shown in Fig. 2.

To form a full kitchen-stove, as appears in Fig. 3, I use the fire-pot A, base B, and a top piece, C', (similar to the top C, except that it has an elongated flue-opening, as wide as the stove, which flue-opening I place to the front, as shown in section in Fig. 4,) and a case, E', (in shape and adjustment similar to the case E, except that in the rear it has a large rectangular pipe, as shown in section in Figs. 4 and 5.) In combination with these parts I use the detachable portion, consisting

of a base, B', whereon is the case E", the latter containing the oven F. This portion is connected with the stove proper by a pipe, c.

The bottom of the oven is provided with holes (covered, as usual, by center-piece and stove-covers) to admit of pots and kettles for boiling. The steam arising from the boiling is carried into the draft-flue by means of a slide, d, or damper, operated from without by a rod, e. The oven is also furnished with racks, as usual, and is covered by a baker, G.

The direction of the draft is indicated by arrows in Figs. 4 and 5, by which sectional views it is shown that there is a continuous flue the entire width of the stove from front to rear.

The fire-pot A radiates heat from all its sides, which fills the chamber above described. The heated currents rising from the fire pass to the front down into this chamber. From thence the heat-currents pass through the pipe c, and strike against the whole of the front, bottom, and rear sides of the oven, and then make exit through the draft flue f into the chimney. I thus secure the greatest available radiating-surface, a large volume of inclosed hot air, and conduct the heat into contact with the front, bottom, and rear sides of the oven.

The device above described to carry off from the oven the steam occasioned by boiling therein is useful, and permits the boiling to be done within an inclosed space, and conducts away all noisome vapors or odors therefrom.

I, therefore, claim as a novel and useful invention, and desire to secure by Letters Patent—

1. The improved summer-stove, consisting of the cylinder A, base B, grate a, top piece C, and ash-pan D, in combination with the case E, by which it is made convertible into a parlor-stove, substantially as described.

2. The improved kitchen-stove, consisting of the following detachable parts: the cylinder A, bases B B', top piece C', ash-pan D, cases E' E", oven F, pipe c, slide d, and rod e, with or without the baker G, substantially as specified.

JOHN GLADDING, 3D.

Witnesses:

WARREN R. PERCE, WM. B. W. HALLETT.