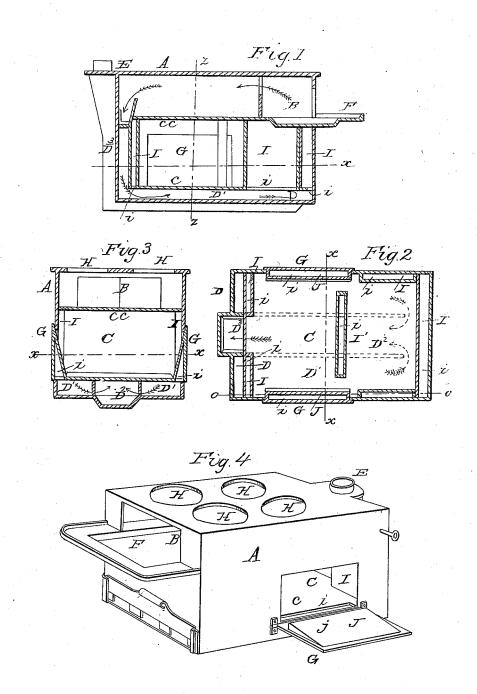
Patented Sept. 19, 1845.



## UNITED STATES PATENT OFFICE.

PETER J. CLUTE, OF SCHENECTADY, NEW YORK.

STOVE.

Specification of Letters Patent No. 4,197, dated September 19, 1845.

To all whom it may concern:

Be it known that I, Peter J. Clute, of the town of Schenectady, in the county of Schenectady and State of New York, have invented a new and useful Improvement in Stoves, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a vertical longitudinal section through two of the side dumb flues at the line oo of Fig. 2. Fig. 2 is a horizontal section through the stove at the line x of Fig. 3. Fig. 3 is a vertical transverse section at the line z of Fig. 2—showing the dumb flues in the doors of the oven. Fig. 4

dumb flues in the doors of the oven. Fig. 4 is a perspective view of the stove showing one of the oven doors turned down to a horizontal position, exposing one of openings *i* in the bottom plate of the oven.

The stove A generally is made like some other stoves in use—for instance it is made of a rectangular form—has a fire chamber B in front above the level of the top of the large oven C—diving flues D at the rear corners of the stove—horizontal parallel return flues D' under the oven and center return flues D' under the oven—a central vertical ascending flue D³ between the two diving flues, communicating with the smoke pipe E—hearth F—oven doors G—boiler holes H and other appendages of cooking stoves.

The improvement that I have made consists in combining and arranging with the

several parts of the oven and around the 35 interior of the same a series of dumb flues I J for the purpose of heating the oven more regularly throughout its sides and ends and effectually. To accomplish this object the bottom plate of the oven is made with 40 a number of openings (i) therein communicating with the bottom parallel smoke flues D', which openings are surrounded by vertical plates I resting upon the said bottom oven plate c and are carried up through the 45 oven to the top plate thereof having the joints made perfect so as to prevent the escape of gas into the oven, which ascends in a heated state from the parallel bottom flues D'. The dumb flues may be of any size 50 shape and number and may extend into the oven to any height required and be closed at top by a separate corresponding plate. The dumb flues for the doors may be of a triangular shape as shown at J j in Figs. 3 55 and 4 or of any required shape. The central dumb flue I' may also be carried up to the top of the oven.

What I claim as my invention and desire

to secure by Letters Patent is—
The arrangement of the dumb flues surrounding and within the oven, in the manner and for the purpose set forth.

PETER J. CLUTE.

Witnesses:

PETER ROWE, D. EDGAR FONDA.