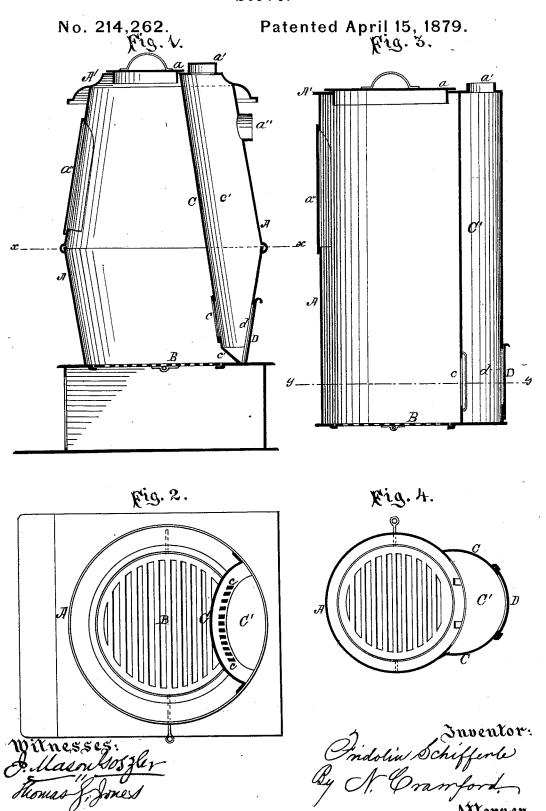
F. SCHIFFERLE. Stove.



UNITED STATES PATENT OFFICE.

FRIDOLIN SCHIFFERLE, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. 214,262, dated April 15, 1879; application filed February 17, 1879.

To all whom it may concern:

Be it known that I, FRIDOLIN SCHIFFERLE, of the city and county of St. Louis, in the State of Missouri, have made a certain Improvement in Stoves, of which the following is a specification.

The object of this invention is to simplify the construction and at the same time improve the heating properties of the stove, when the same amount of fuel is consumed; and it consists in the construction of the stove, as will be fully hereinafter described.

In the drawings, Figure 1 represents an upright sectional view of the stove; Fig. 2, a cross-section on line x x of Fig. 1, looking down; Fig. 3, a modification of Fig. 1, inside or upright view; and Fig. 4, a cross-section on line y y of Fig. 3.

A represents the shell of the stove, which may be in any of the known forms, and has the top A', cover a, and exit-pipe a', the door a'' to feed the fuel into the stove, and the grate B, all these parts in the usual place and common to stoves.

C is an inner curved plate within the body of the stove, as seen in Figs. 1 and 2, and may be permanently a part of the outer shell of the stove, or so constructed as to be removable when necessary to replace it, or it may be attached to the top A' of the stove. Plate C thus formed extends from the under side of the top to the base of the stove, and has upright slots or openings c near its bottom; or a large opening may be made in the plate C, and a permanent or removable grate placed before it. This opening is for the purpose of causing the combustion of the fuel in the stove to take place at or near to this opening, and the grate or bars between the slots in the opening will prevent any of the unconsumed fuel from passing through into the upright flue C'. At the bottom of plate C there is an angle-plate, c', which causes all the ash and fine dust to fall down and out to the outer shell, A, of the stove.

D is a sliding valve to cover opening d in shell A, directly opposite the opening c in plate C, for the purpose of admitting cool air into flue C', and thereby regulating the heat,

as it can be graduated to be opened more or less at discretion, and also for the cleaning out of any dust or ash deposited at the bottom of flue C'.

It is evident that the construction and arrangement of flue C' can be changed, as seen in Figs. 3 and 4, by having the flue C' altogether outside of the shell, and the grated opening c in the shell, and the sliding valve D in the plate C, that forms the outside flue, C', instead of the grated opening being in plate C and the slide-valve in shell A, without departing from the invention described.

A stove thus constructed is a base-burning stove, and is made so by a much cheaper method than that heretofore used, and at the same time is efficient in draft to completely consume the fuel, and can be easily regulated as to the amount of heat to be radiated by the stove and the flue, because the flue $\check{C'}$ rises to the full height of the stove and becomes if necessary, a combustion-chamber itself, and increases the radiating surface, and can be used with any form or shape of stove.

The pipe that conducts away the products of combustion from the stove may be either at the top or side of the flue, as seen in Fig. 1 at $a' a'^{\tilde{i}}$.

I am aware that fire-pots to stoves are grated on their side walls, and I do not broadly claim such grated walls, as I only claim such openings when in connection with the incased flue, as described in my construction.

Having thus described my invention, what

1. In a stove, the flue C', formed by the plate C, and having the grated or slotted opening c therein, constructed as and for the purposes described.

2. In a stove, the combination of the plate C, having the grated or slotted openings c therein, with the sliding draft or cold-air valve D, to cover opening in shell A, constructed substantially as and for the purposes described.

FRIDOLIN SCHIFFERLE.

Witnesses:

EMIL S. GIOVANONI, CORNELIUS CREEDON.