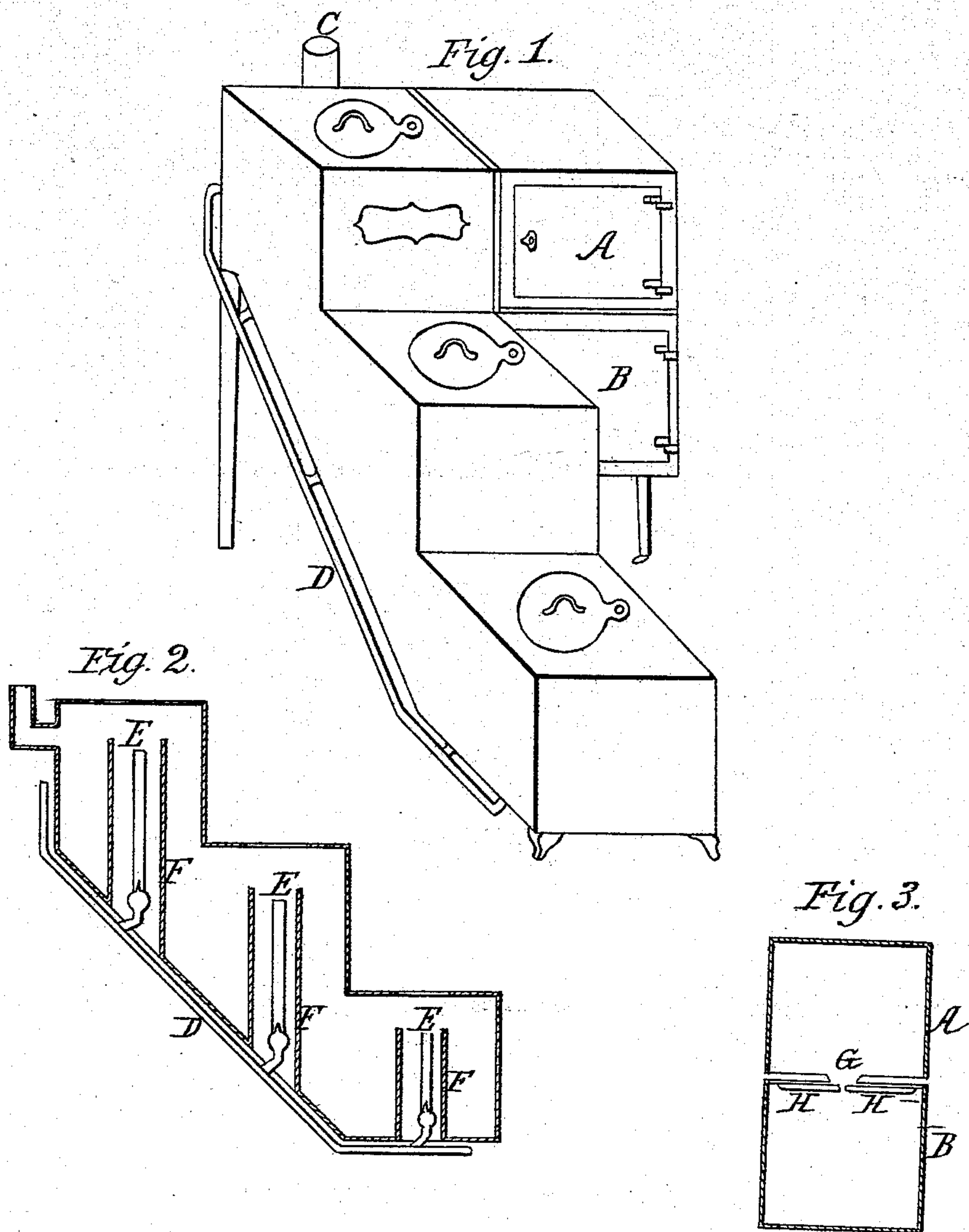


S. T. McDOUGALL.

Gas Stove.

No. 43,419.

Patented July 5, 1864.



Witnesses:
Geo. Peyton.
J. S. Brown

Inventor.
Samuel T. McDougall.

UNITED STATES PATENT OFFICE.

SAMUEL T. McDOUGALL, OF NEW YORK, N. Y.

IMPROVEMENT IN GAS-STOVES.

Specification forming part of Letters Patent No. 43,419, dated July 5, 1864.

To all whom it may concern:

Be it known that I, SAMUEL T. McDOUGALL, of the city, county, and State of New York, have invented a new and Improved Mode of Constructing Stoves for Burning Gas and other Fuels; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in constructing stoves in the form of steps or angles, and also in combining with them a baking and roasting oven.

To enable others skilled in the art to make and use my invention, will I proceed to describe its construction and operation.

I construct my stoves in the form of steps or angles, as shown at Figure 1, and also combined with them a baking and roasting oven, as shown at Fig. 1, A and B. Each step or angle has a hole and griddle. From the upper step or angle the waste heat is discharged through the pipe C. Attached to the stoves are gas pipes D, and the necessary supports to keep the stove in its proper position, as shown at Fig. 1. Each step or angle has its own burner or fire-box, according to the fuel used, as shown at Fig. 2, E E E. When gas or oils are used as fuel, I construct a cylinder—open at top and bottom—around each burner, as shown at Fig. 2, F F F. The gas is conveyed to the burners through the pipe D, each burner having the necessary stop-cocks. A fire under a vessel on the lower step discharges its waste heat into the step above and assists in heating a vessel there, and so on through any number required, each fire assisting the ones above, instead of discharging the waste heat around

the vessel, as is customary. When charcoal, coke, coal, or wood are used for fuel, the cylinders F F F are converted into fire-boxes by nearly closing the bottoms, and allowing only a sufficient opening at the bottom or side for draft. When oils, naphtha, or other liquors are used as fuel, I substitute the vapor or oil burners in place of the gas-burners E E E. The baking-oven A, I construct in the ordinary form of square metal ovens, having a door in one side and an opening in the bottom, as shown at Figs. 1 and 3. When used on the top of oven B, as represented, it receives its heat through the opening in the bottom. The oven A can also be used on any of the steps or angles by removing the griddle. The roasting-oven B is constructed in the same form as A, except it has an opening in the top instead of the bottom. Directly under this opening is placed the burner H H. This burner is made in the form of a flat metal case, perforated on the lower side, and burning the gas downward, as shown at Fig. 3, H H. The gas is supplied to the burner from the pipe D, said pipe passing around or under the stove and connecting with the burner in the oven B.

I do not confine myself to the precise form of stove here described, but shall construct them in any form substantially the same and which will produce the intended effect.

I claim—

A gas-stove constructed in a rising series, communicating with each other substantially as described, each supplied with a separate combustion-cylinder, operating as specified.

SAMUEL T. McDOUGALL.

Witnesses:

GEO. PEYTON,
J. S. BROWN.