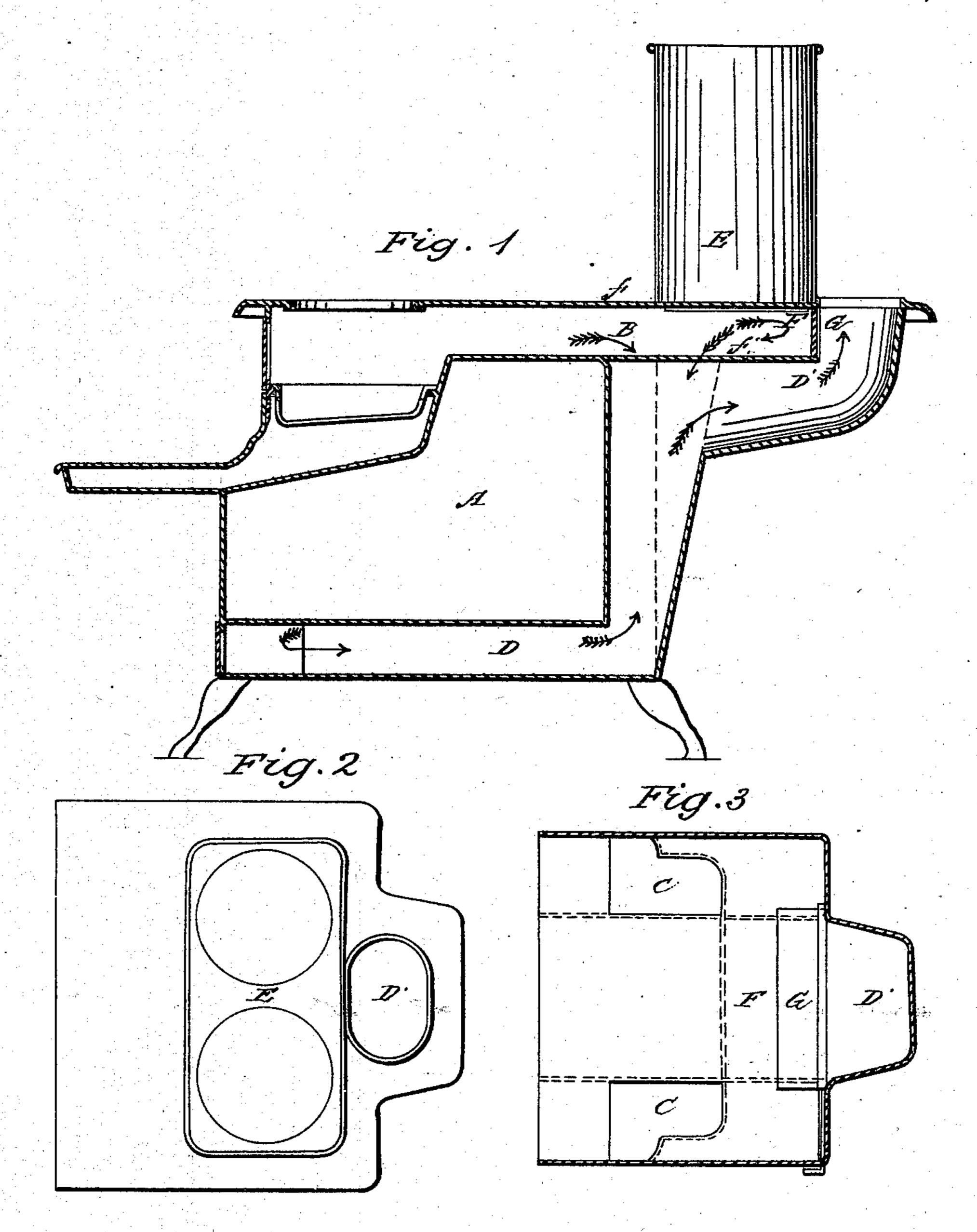
## JEWETT & ROOT.

Cooking Stove.

No. 104,461.

Patented June 21,1870.



Witnesses:

Inventors:

SS fasett
F. H. Root

by Forbush Hya

atty

## Anited States Patent Office.

SHERMAN S. JEWETT AND FRANCIS H. ROOT, OF BUFFALO, NEW YORK.

Letters Patent No. 104,461, dated June 21, 1870.

## COOKING-STOVE.

The Schedule referred to in these Letters Patent and making part of the same.

We, SHERMAN S. JEWETT and FRANCIS H. ROOT, of the city of Buffalo, county of Erie and State of New York, have invented a certain Improvement in Cooking-Stoves, of which the following is a specification.

Our improvement relates to what are known as rear

extension stoves; and

The invention consists in extending the boiler-flue, of the full width of the stove, backward beyond the driving-flues and back-plate of the stove, and providing it with a damper at its rear, opening directly into the upcast-flue, which extends backward under the said extension and upward at its rear, in the form of a projection therefrom, whereby such extension can be heated to a sufficiently high temperture to enable it to be used for the ordinary purposes of cooking or heating water when a boiler or reservoir is arranged thereon, in the same manner as the forward portions of the stove, all as hereinafter shown and described.

In the accompanying drawing—

Figure I is a central vertical section of our improved stove.

Figure II is a plan of the rear portion.

Figure III is a horizontal section through the boiler-flue.

Like letters of reference designate like parts in each of the figures.

A is the oven. B, the boiler-flue.

C'C, the diving-flues.

D, the return and upcast-flue, and

D, a water-boiler.

The top plate f of the stove, and bottom plate f of the boiler-flue, extend back beyond the diving-flues so as to form an extension or heating-chamber, F, the top plate of which we prefer to provide with suitable holes to receive a water-boiler, as shown, or any other ordinary vessel, as may be required.

The back-plate of the diving and upcast-flues is made to incline backward from the bottom, as shown

in fig. I, so as to enlarge the mouths of the divingflues, which facilitates the draught, while it brings the rear portion of the mouths under the boiler, or other vessel placed over the extension F.

The upcast-flue, as it reaches the bottom plate f of the boiler-flue, extends backward under it and up at the rear of the extension F, from which it projects,

as shown.

G is the damper in the center of the back plate of the extension F, through which the products of combustion from the boiler-flue can be let directly into the

upcast, when required.

The space F, formed by the backward extension of the top and bottom plates ff of the boiler-flue, as before described, and which is of the full width of the stove, forms a chamber in which a portion of the heat from the boiler-flue reverberates before it enters the enlarged mouths of the diving-flues.

By this construction the requisite temperature for cooking, or other culinary operations, can be obtained in the extension F even when the oven is employed in baking, which obviates the great objection that exists against the rear-extension stoves now in use, which are mainly heated by the return or upcast-flue.

The damper G, at the rear of the extension F, communicating with the upcast-flue D', which is arranged below and at the rear of the latter, as before described, converts the entire width of the extensoin, when the damper is opened, into a direct boiler-flue, and subjected to the full influence of the heat thereof.

What we claim as our invention is—

The extension F of the boiler-flue, provided with a damper, G, at its rear, when constructed and arranged with the diving-flues C C and projecting upcast-flue D', in the manner and for the purpose here-inbefore set forth.

S. S. JEWETT. F. H. ROOT.

Witnesses:

JAY HYATT, JNO. J. BONNER.