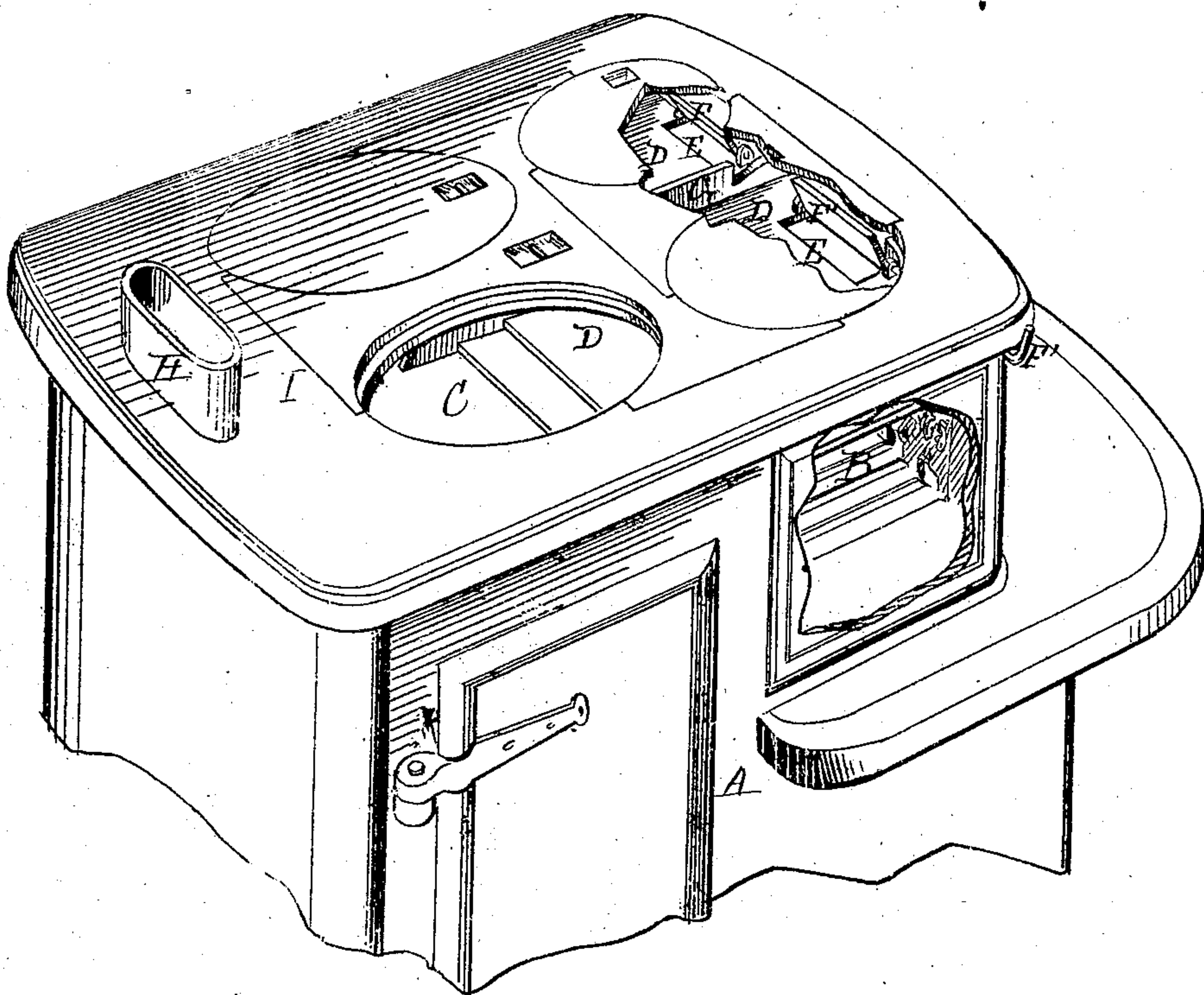


J. WILDEN.

COOKING STOVE

PATENTED JUL 11 1871

116905



ATTEST
Mayron H. Church.
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INVENTOR

John Wilden
per Atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

JOHN WILDER, OF DETROIT, MICHIGAN, ASSIGNOR TO HIMSELF AND ALEXANDER TOLL, OF SAME PLACE.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 116,905, dated July 11, 1871.

To all whom it may concern:

Be it known that I, JOHN WILDER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Cooking-Stoves; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which my invention is shown, in perspective, attached to a cook-stove, with a portion of the top removed to show the attachment.

The nature of this invention relates to an improved construction of cook-stoves, so that the flame or heat may be directed to any of the boiling places at will; that will enable the operator to effectually close the draught when desired, thereby effecting a very material saving in the expenditure of fuel. The invention consists in extending the top plate of the oven, in one piece or in sections, over the combustion-chamber or fire-pot to the front thereof, and providing suitable openings in said plate over the fire-pot, and proper dampers to be operated from the outside of the stove or range; also, in connection with said plate, of a vertical flange, extending from the front plate of the stove nearly or quite to the rear, and from said plate to the top plate of the stove, thereby dividing the space between said plate and the top plate into two flues, with at least one of the openings hereinbefore mentioned affording a communication between the fire-box and each of the said two flues.

In the accompanying drawing, A represents an ordinary cook-stove, of which the top plate is partly broken away, and also with a portion of one side broken away to show the combustion-chamber B. C is the top plate of the oven, and D is an extension of the same, extending over the entire top of the combustion-chamber B. This extension may be cast with and form a part of the plate C, or it may be cast separately in one piece or in sections. Near its front end are the openings E, provided with suitably-fitting dampers F, which may be opened or closed by the rods

F' extending outside the stove. G is a vertical flange, cast with and forming a part of the plate C and extension D, and extends from the front plate of the stove to or near to the rear or exit-flue H. It also extends vertically from said plate C and its extension to the top plate I of the stove, so as to divide the space between said top plate and the upper oven-plate into two or more flues, with which communication is had by means of the openings E from the combustion-chamber.

By opening all the dampers F a direct draught is had, carrying the heat and smoke, with the exit-flue H, from the combustion-chamber, when all the boiling places in the top of the stove may be used. When it is desired to use but one boiling place, or those on one side of the stove, the damper closing the opening leading into the opposite flue should be closed, thereby turning all the heat thrown off by the combustion of the fuel into the flue immediately under the boiling place or places in use. By closing both or all the dampers F the fire-box is rendered nearly airtight and the draught is cut off, thereby effecting a great saving in fuel when a brisk fire is not required.

This invention is applicable to coal as well as wood-stoves, and to stoves provided with what are termed "elevated ovens," and to ranges where there is a direct-draught flue between the combustion-chamber and exit-flue, immediately under the top plate, where the boiling places are situated.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The extension D of the plate C over the entire combustion-chamber B, said extension being provided with openings E and dampers F, substantially as and for the purposes set forth.

2. In combination with said extension D, constructed as described, the vertical flange G, substantially as and for the purposes set forth.

JOHN WILDER.

Witnesses:

THOS. S. SPRAGUE,
MYRON H. CHURCH.