

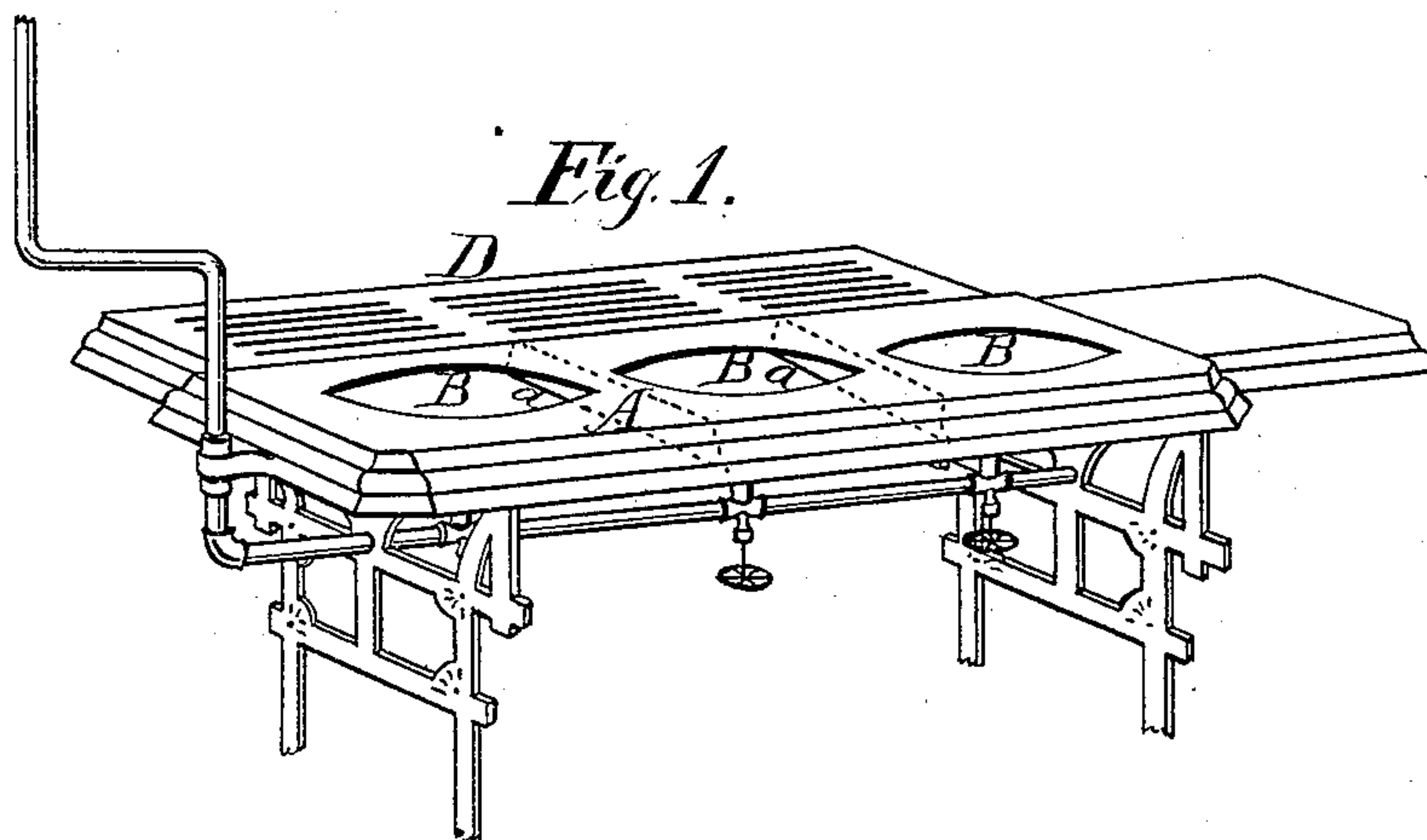
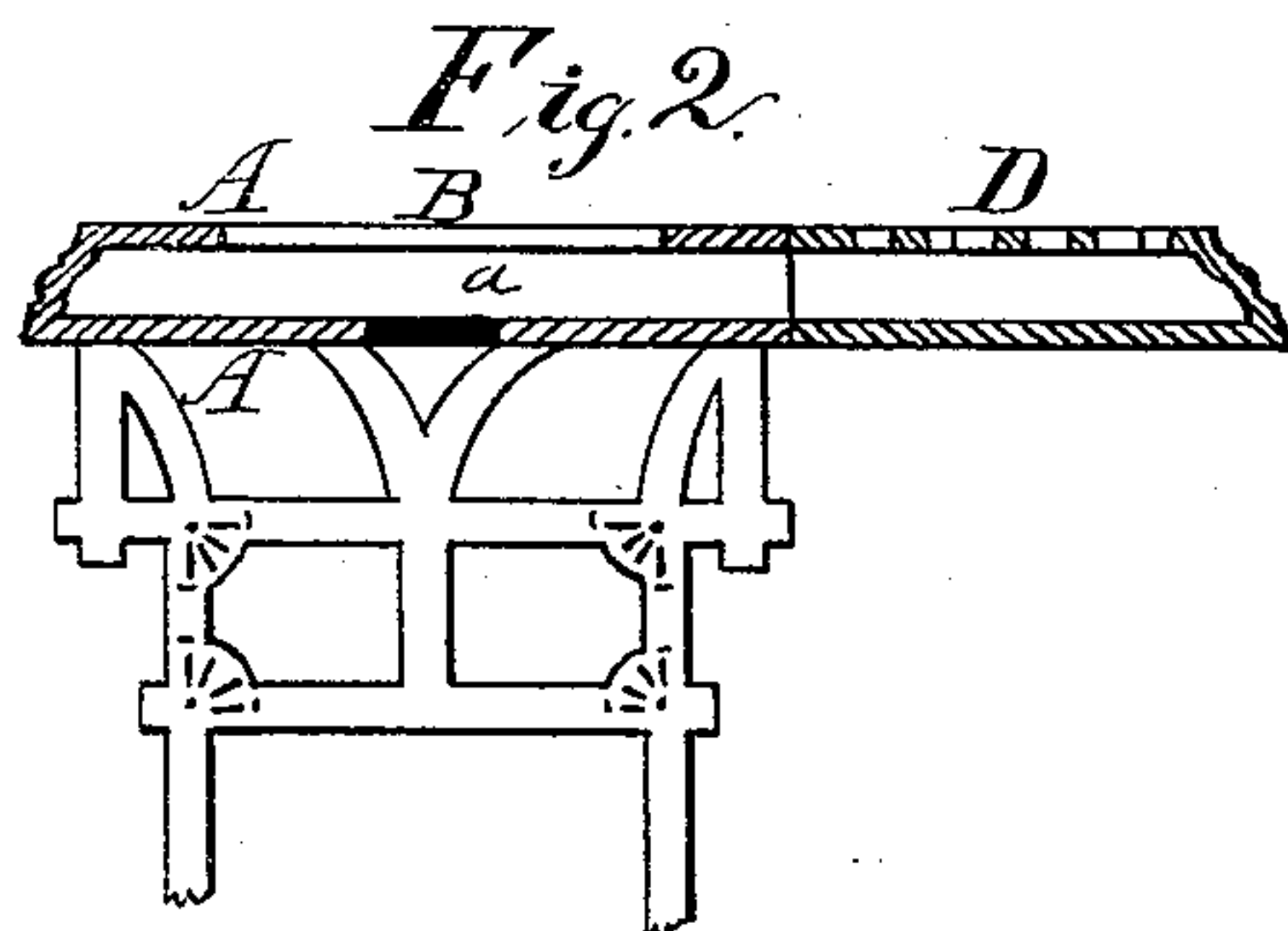
(No Model.)

W. C. NORTH.

VAPOR STOVE.

No. 250,744.

Patented Dec. 13, 1881.



Witnesses:
F. R. Tibbitts
M. E. Norton

Inventor,
Wm C. North

By Geo. W. Tibbitts, Atty

UNITED STATES PATENT OFFICE.

WILLIAM C. NORTH, OF CLEVELAND, OHIO.

VAPOR-STOVE.

SPECIFICATION forming part of Letters Patent No. 250,744, dated December 13, 1881.

Application filed July 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. NORTH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful
5 Improvements in Vapor-Stoves, which are fully set forth in the following specification.

The nature and objects of this invention will fully appear from the subjoined description, when considered with reference to the accom-
10 panying drawings, in which—

Figure 1 is a perspective view, having portions broken away to show interior construction. Fig. 2 is a cross-section in line *x x* of Fig. 1.

15 My invention consists in the combination, with the double top of a vapor-stove of a double detachable shelf, whereby the surplus heat contained between the two plates of the double top is conveyed into the chamber of the said
20 double shelf, there to be used again for heating purposes before it escapes through aperture in the rear of said shelf into the open air.

To carry out these objects I make a double top, A, consisting of two plates, arranged with
25 a space between them for receiving the heated air about the cooking-vessels, which now passes off into the open air, and retaining it therein, the said plates being connected at the edges by a flange or rim. After the heated air has
30 passed into the shelf through the opening in the rear side of stove, it is allowed to escape by the openings in the top of said shelf into the closet, or it may pass off into the open air through openings in the rear side of the shelf.
35 The said plates are provided with the usual openings for the burners B B, over which the cooking-vessels are placed. The space surrounding these openings is left open between the said plates, so that the heat may pass in
40 between them. The space between said plates is divided into chambers by a cross-partition, *a*, so that there are separate chambers for each burner, and the hot air will not be lost through an adjoining opening uncovered by cooking-vessel or the like. The burners stand in the
45 opening through the lower plate. Between the said plates are placed two pipes, *c c*, connected to a water-reservoir, C, lying along each

side of the burners B B, at a suitable distance, so as not to interfere with their efficiency, but
50 yet be heated by the impinging of the lower jets of flame from the burners. At their farther ends they are connected together in the form of a bow surrounding the burner, as seen in dotted lines, Fig. 1.

At the rear side of the table formed by the two plates A, there is attached a shelf, D, having a chamber like that of the table, and is connected thereto, and receives a portion of the
55 heated air, and is consequently warmed thereby. Upon said shelf D is placed a warming-closet, E, into which heated air is discharged through openings in the top plate of the shelf D. The front of the closet is left open and is
60 provided with a half lid or door, F, hinged at the top, so that it can be thrown over on the top of the closet, when desired, for opening the entire front of the closet. The closet has a rack or open shelf, *e*.

The advantages of these improvements are
70 obvious. First, the utilization of the heated air which passes up around the cooking-vessels on the open or grated-top stoves, and is lost in the open air, is by this means retained and employed for warming the whole top of
75 the stove and the closet, whereby plates, cooked food, &c., are kept warm; second, by the arrangement of the water-pipes *c c*, as described, the water is heated by either one of the burners, or all of them, if they should all be in use,
80 without the necessity of using one burner exclusively for that purpose; third, in the use of a warming-closet for keeping cooked food or dishes warm, making this an economical and
85 superior vapor-stove.

Having described my improvements, I claim as follows:

In a double-top vapor-stove provided with burners located in openings in the lower plate, and having partitions for separating said burn-
90 ers, the combination of a double detachable shelf, as and for the purpose specified.

WILLIAM C. NORTH.

Witnesses:

F. W. CADWELL,
GEO. W. TIBBITTS.