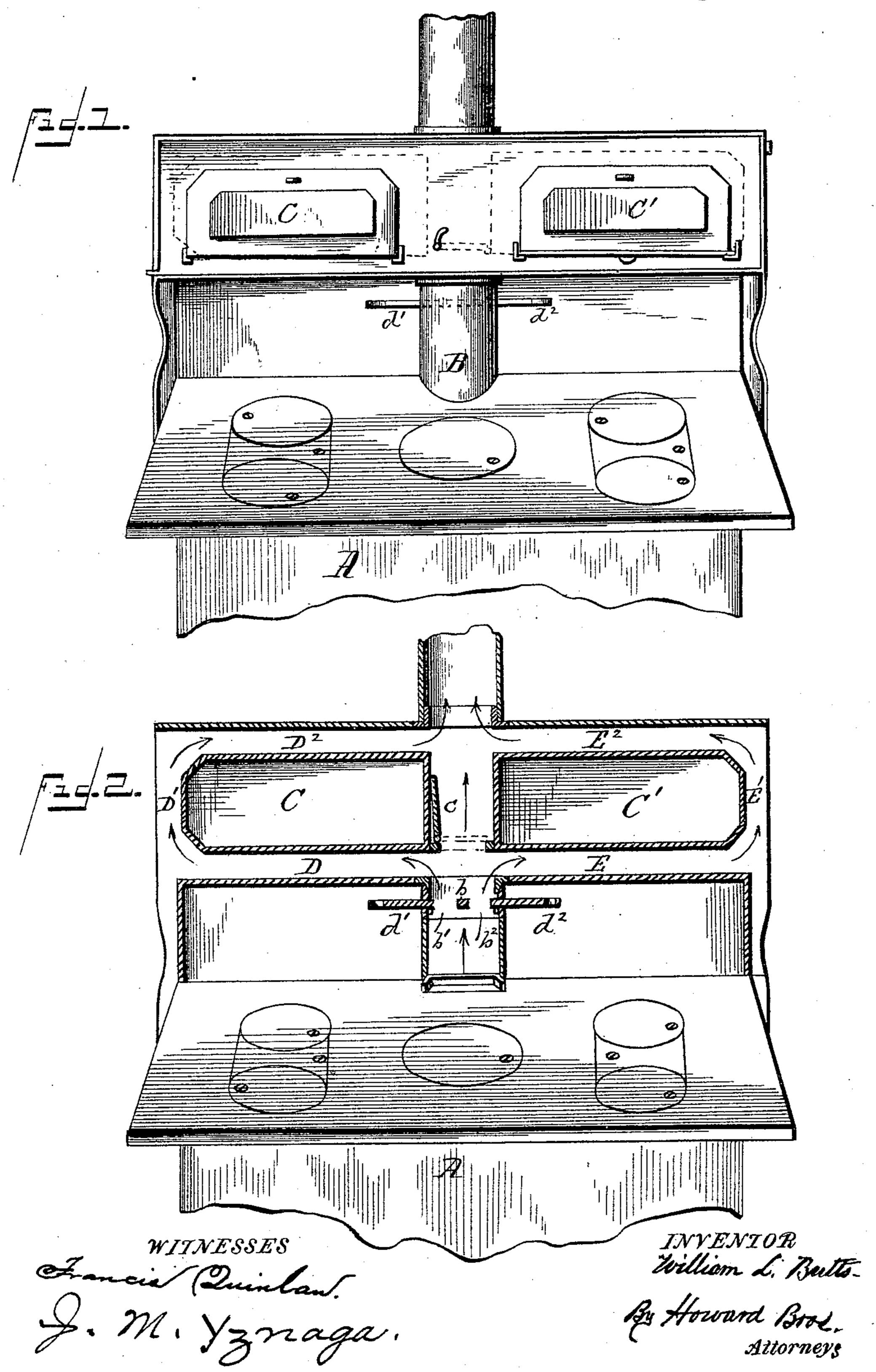
W. L. BUTTS.
RANGE.

No. 457,921.

Patented Aug. 18, 1891.



## United States Patent Office.

WILLIAM L. BUTTS, OF EVANSVILLE, INDIANA.

## RANGE.

SPECIFICATION forming part of Letters Patent No. 457,921, dated August 18, 1891.

Application filed December 20, 1890. Serial No. 375,325. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. BUTTS, a resident of Evansville, in the county of Vanderburg and State of Indiana, have invented 5 certain new and useful Improvements in Ranges; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to 10 make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in 15 ovens for ranges or stoves for baking, cook-

ing, and warming purposes.

My invention consists in arranging the ovens above the range or stove having flues | surrounding the same upon all sides, commu-20 nicating at the bottom with direct draft or | flue, and leading into the said flue at their exits, with suitable dampers for controlling the direction of the products of combustion either around the ovens on one or both sides, 25 or causing a direct draft out of the chimney, and also to certain details in the construction and arrangement of parts, all as hereinafter explained.

In the accompanying drawings, Figure 1 is 30 a front view, partly in perspective, of an ordinary form of range, showing the ovens arranged above the same, and Fig. 2 is a similar

view showing the ovens in section.

The range A may be of any usual or pre-35 ferred form with the central flue B, with said central flue leading therefrom to the chimney. Above the top plate of the range and upon each side of the central flue are ovens C C', with flues D D' D<sup>2</sup> E E' E<sup>2</sup> extending 40 around the bottom, end, and top walls and the extension of the central flue forming a dividing space between them. B is the chimney or flue leading to the same, secured by a suitable thimble to the top plate of 45 the ovens. The central flue below the ovens is divided by a wall b, forming an outletopening b' b2 on each side of the flue, each of which openings is controlled by a suitable slide-damper  $d' d^2$  for causing the products 50 of combustion to be directed to either side of I

the flue, for a purpose hereinafter explained. The central flue at a point slightly above these dampers communicates with the flues D and E, which extend under the ovens, and located in the central flue on a line with the bottom 55 of the ovens is a damper c for closing off the direct draft between the ovens and to the chimney B. The flues D<sup>2</sup> and E<sup>2</sup> communicate with the direct flue above the ovens and thence

with flue or chimney B.

The manner of directing or controlling the direction of the products of combustion either around one or both ovens or directly out the chimney is as follows: When it is desired to heat both ovens for cooking or baking, the 65 damper c is fully closed and the dampers d' $d^2$  opened, when the products of combustion will be divided and a portion caused to pass into the flues D E under the ovens, thence into the flues D' E' at the ends, and thence 70 into the flues D<sup>2</sup> E<sup>2</sup> above the ovens and to the flue or chimney F. If, however, it is desired to heat one side and only keep the other slightly warm, either the damper d' or  $d^2$  is closed, when the products will be thrown or 75 directed to one side and the larger amount caused to pass either through the flues D D' D<sup>2</sup> or E E' E<sup>2</sup>. When it is only desired to keep both sets of ovens slightly warm, the dampers d',  $d^2$ , and c are all opened, when a 80 direct draft will be created and only the ends of the ovens next the central flue will be heated. By this construction it will be seen that as the ovens are located above the range that the products of combustion are all util- 85 ized and that a very cheap and convenient structure is obtained.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The ovens arranged above the range or stove, the flues surrounding the same, the central flue having a divided opening with independent dampers arranged below the ovens and a single damper above the same, 95 also in the main flue, substantially as set forth.

2. In a range, the ovens CC', arranged above the range, a central flue leading from the range and passing between the ovens, the flues 100

DD' D' EE' E', extending around the bottom, end, and top walls of the ovens, the central flue below the ovens, having the dividing-wall b, forming an outlet-opening b'  $b^2$  on each side, dampers d'  $d^2$  for said openings, and a damper c, located in the central flue on a line with the bottoms of the ovens, all arranged and operating substantially as set forth.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

WILLIAM L. BUTTS.

Witnesses:

D. A. NISBET,

D. C. GIVENS.