

R. BAILEY.

Stove Plate.

No. 90,218.

Patented May 18, 1869.

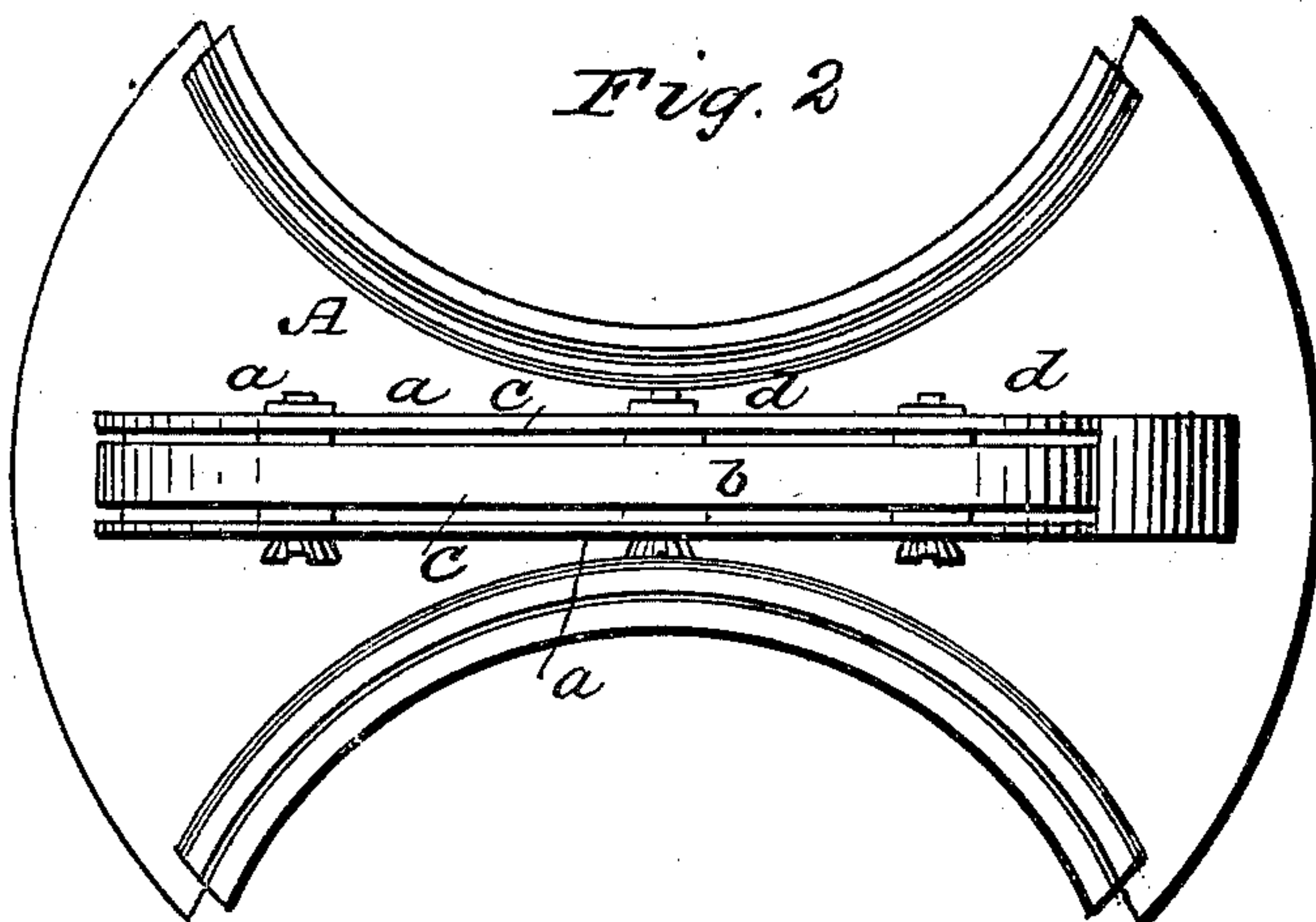
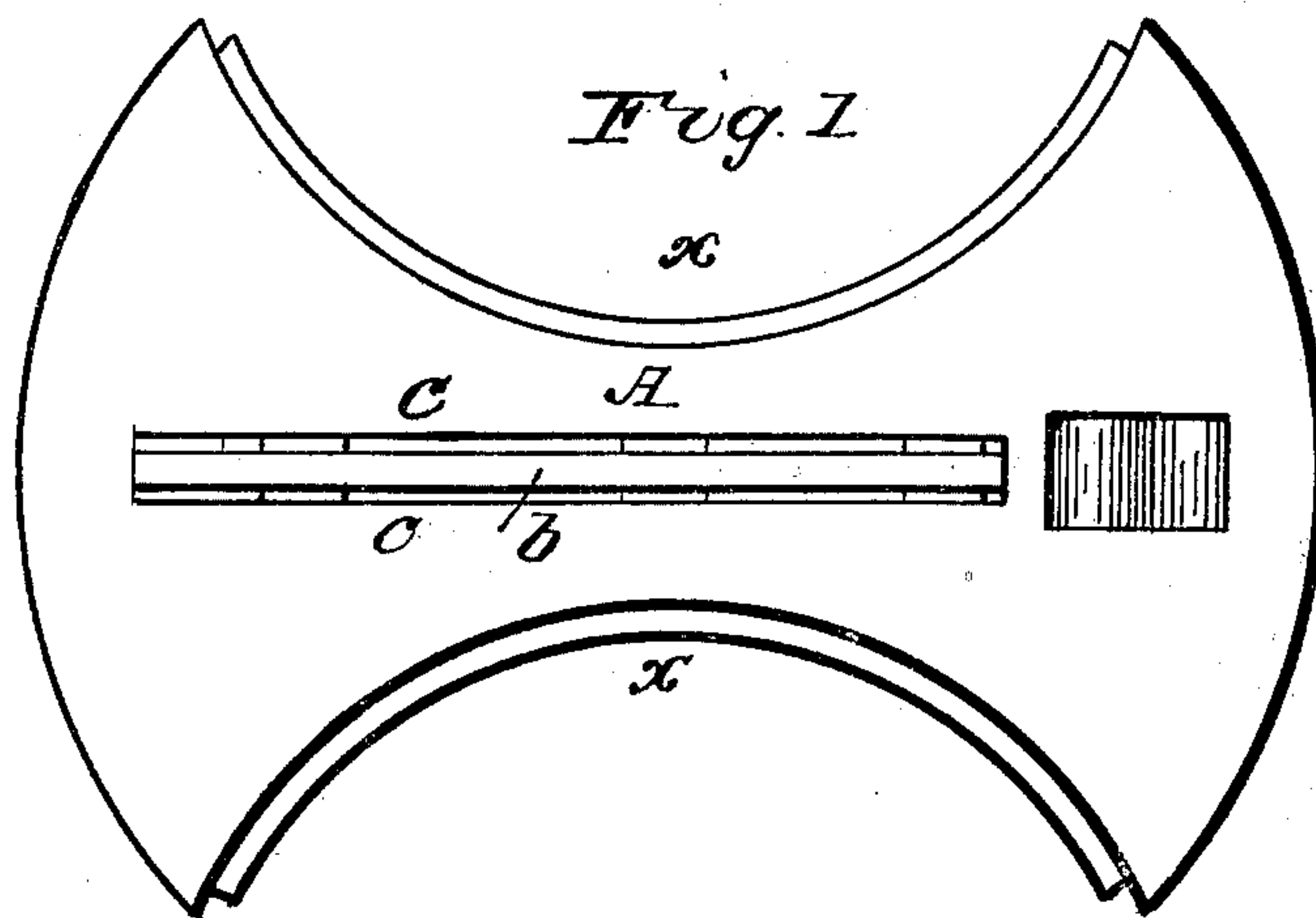
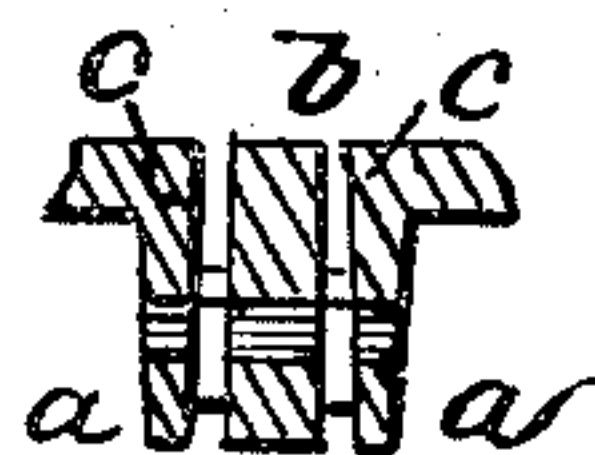


Fig. 3.



Witnesses

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United States Patent Office.

ROBERT BAILEY, OF CLEVELAND, OHIO.

Letters Patent No. 90,218, dated May 18, 1869.

CENTRE-PLATE FOR COOKING-STOVES.

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

To all whom it may concern:

Be it known that I, ROBERT BAILEY, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Cross-Plates or Centre-Pieces for the tops of Cooking-Stoves, Fire-Plates, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

My invention has a twofold object, to wit:

First, to obviate the liability of the removable and stationary cross-plates or centre-pieces, in the tops of cooking-stoves and ranges, and plates in their combustion-chambers, to warp and break from the effects of heat; and

Second, to provide for the admission of atmospheric air into the combustion-chamber, to cause the gases to be more effectually consumed.

These objects I effect by a combination of strengthening-bars, with suitable air-openings on each side or between them, to keep them from becoming highly heated, and at the same time to supply oxygen to the products of combustion, to aid in the consumption of the gases.

In the accompanying drawings—

Figure 1 is a top view of a centre-piece made in pursuance of my invention;

Figure 2 is a view of the lower side of the same, it being inverted; and

Figure 3 is a cross-section, in line *x x*, fig. 1.

The centre-piece *A* is cast with two bars *a a*, in the form of grate-bars, on its lower side, extending the greater portion of its length, and with an open slot between them.

Into this open slot a separate bar, *b*, is inserted, so

as to leave a narrow slot, *c c*, on each side of it, and is secured in its place by bolts or rivets *d d d*.

The bars *a a*, and the centre-bar *b*, riveted in between them, give great strength to the plate, while the currents of cold air, constantly flowing in through the slots *c c*, prevent said bars from becoming highly heated, and thus obviate the warping of the plate, and, at the same time, supply oxygen to the combustion-chamber, to aid in the consumption of the gases.

It is manifest that the principle of the invention may be carried into effect by having only one or two bars *a a* cast with the plate, and a narrow slot or a row of perforations on each side, or between them; or there may be three or more bars cast with the plate, with narrow slots or rows of perforations between them, or on each side of them; or the centre-bar *b*, instead of being bolted or riveted in between the bars *a a*, may be made to rest in steps at each end; but I prefer bolting or riveting it in, as shown in the drawings.

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

1. The cross-plate or centre-piece *A*, provided with one or more strengthening-bars, substantially as described, in combination with narrow slots or rows of perforations for the admission of air, arranged substantially as described.

2. Also, in combination with two or more fixed bars *a a*, one or more separate bars *b*, bolted, riveted, or otherwise held between them, substantially as herein described.

R. BAILEY.

Witnesses:

T. K. BOLTON,
F. L. BALDWIN.