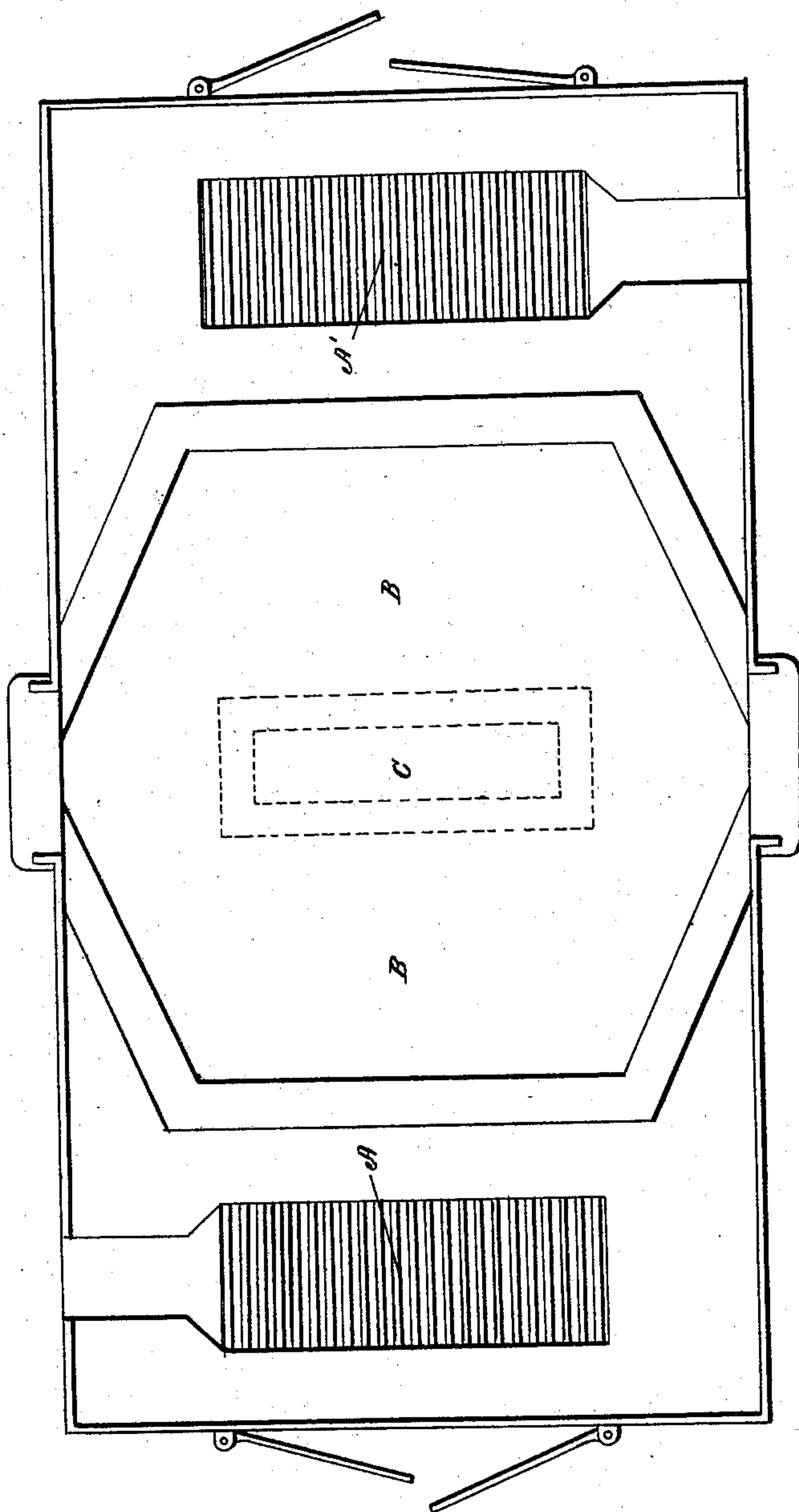


W. & J. GROVES.

Puddling Furnace.

No. 48,390.

Patented June 27, 1865.



Witnesses:  
Socrates Scholfield.  
Geo. W. Rogers.

Inventors:  
William Groves.  
John Groves.

# UNITED STATES PATENT OFFICE.

WM. GROVES AND JOHN GROVES, OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN PUDDLING-FURNACES.

Specification forming part of Letters Patent No. **48,390**, dated June 27, 1865.

*To all whom it may concern:*

Be it known that we, WILLIAM GROVES and JOHN GROVES, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Puddling-Furnaces; and we do hereby declare that the following is a full and exact description, reference being had to the accompanying drawings, making a part of this specification.

The nature of our invention consists in the employment or use of two fire-chambers arranged on opposite sides of the body of the furnace, and connecting with a flue directly over the same, about midway between the two fires.

To enable those skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

Figure 1 represents a horizontal section, showing the relative position of the two fire-

chambers, A A', and body of the furnace B, and also the position of the flue C. In this arrangement the flame from both fires meets at the flue between them creating a more uniform heat in the body of the furnace than in the old method where but one fire is used, which will enable us to make a better quality of iron.

This furnace can also be constructed with a less amount of brick than is required for those now in use.

What we claim as our invention, and desire to secure by Letters Patent, is—

The employment or use of fire-chambers on opposite sides of the body of the furnace, substantially as specified.

WILLIAM GROVES.  
JOHN GROVES.

Witnesses:

SOCRATES SCHOLFIELD,  
A. R. ABBOTT.