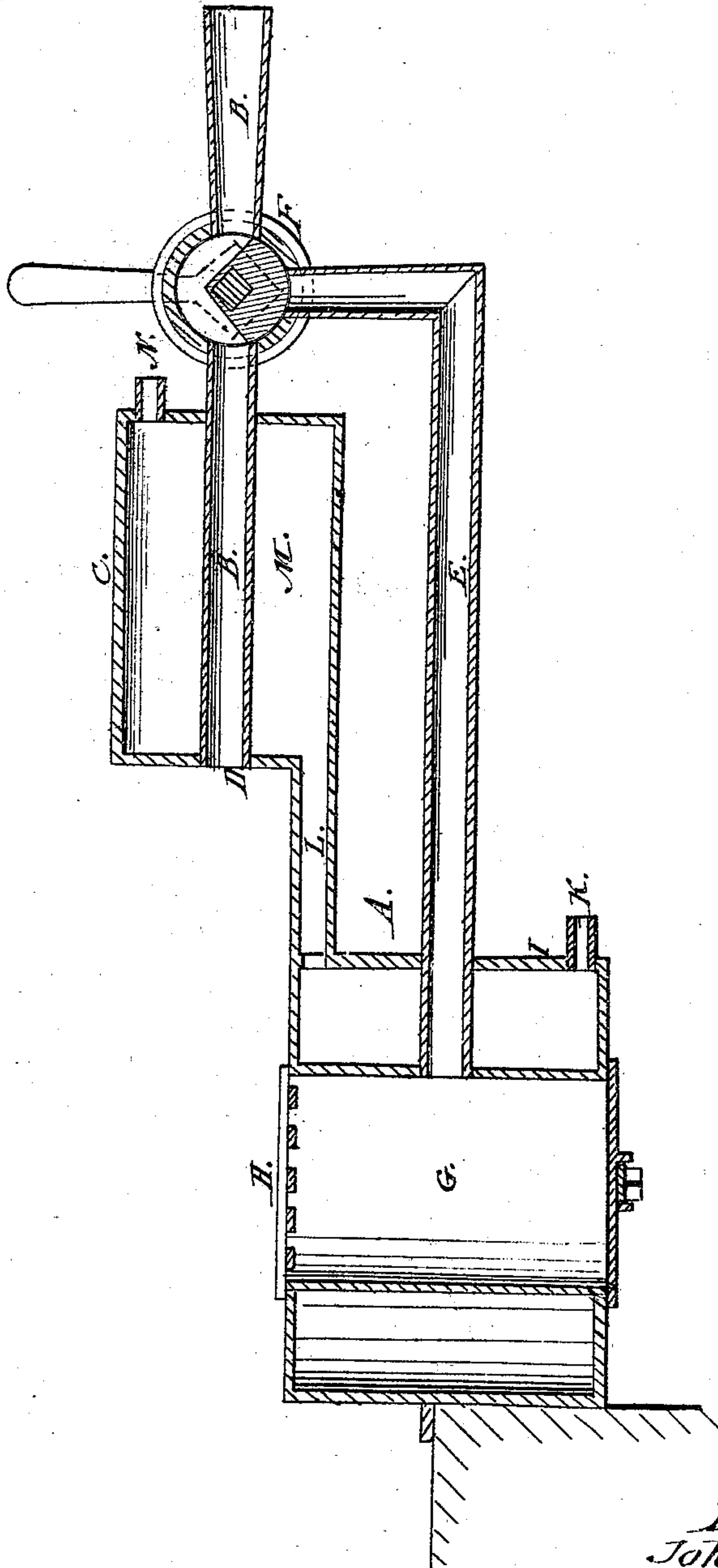


*J. C. Wilson.*

*Tuyere.*

*N<sup>o</sup> 88,687.*

*Patented Apr. 6, 1869.*



*Witnesses:*  
*E. Wolff.*  
*Wm. A. Morgan.*

*Inventor:*  
*John C. Wilson.*

*Wm. A. Morgan*  
*attorney*

# United States Patent Office.

JOHN C. WILSON, OF COALBURG, WEST VIRGINIA.

*Letters Patent No. 88,687, dated April 6, 1869.*

## IMPROVED TUYERE.

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, JOHN C. WILSON, of Coalburg, in the county of Kanawha, and State of West Virginia, have invented a new and improved Tuyere; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in tuyeres, having for its object to provide an arrangement whereby two fires may be blown simultaneously from the one tuyere, for convenience in heating large work, or two large pieces for welding.

The drawing represents a longitudinal section of my improved tuyere.

A represents the body of the tuyere, which I design to make by casting in one piece.

B represents the blast-pipe, passing through the water-cylinder, C, and delivering the blast, at D, to the side of a fire.

It is provided with a branch-pipe, E, and a three-way cock, F, so arranged that the blast may be divided between the two pipes, or it may be confined to either.

The branch-pipe leads into the vertical air-chamber G, having a grate, H, on the top, whereon a second

fire may be maintained at the same time that another fire is being used at D.

Water is maintained around the wall of the chamber G, by means of a supply delivered within the outer wall, I, through the pipe K, and conveyed through the pipe L to the cylinder M, surrounding the pipe B, and out through the pipe N.

The top surrounding the mouth of the chamber G is provided with recesses, for the reception of the grate-bars, the said recesses being formed when the casting is made.

Below the chamber G a valve, or gate is provided, in the usual manner, to be opened for the removal of the cinders.

I claim as new, and desire to secure by Letters Patent—

The improved apparatus herein described, consisting of the water-chambers I and M, blast-pipes B and E, in chamber G, fire-grate H, and three-way cock F, all substantially as described.

The above specification of my invention signed by me, this 26th day of December, 1868.

JOHN C. WILSON.

Witnesses:

F. CALVERT,

his

WM. X KIRK.

mark.