

T. E. C. BRINLY.  
TWYER.

No. 60,333.

Patented Dec. 11, 1866.

Fig. 1.

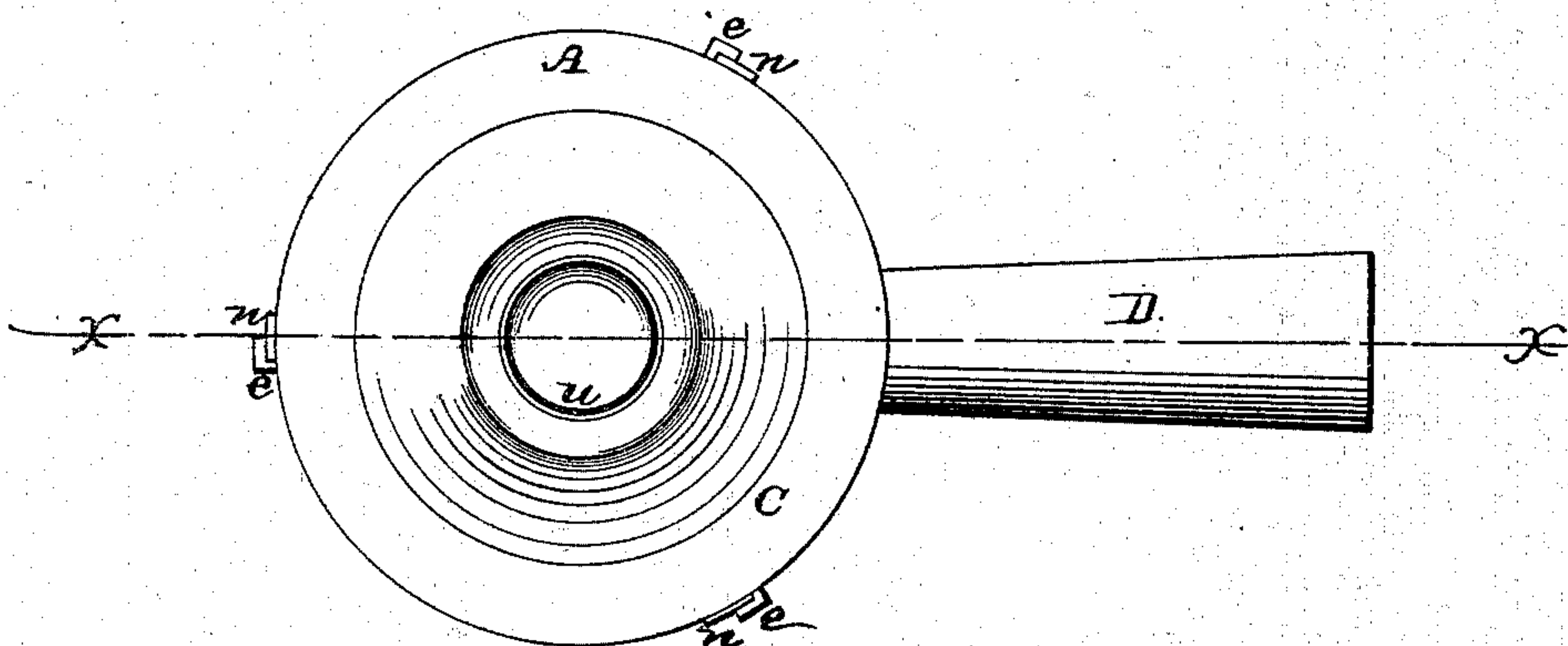
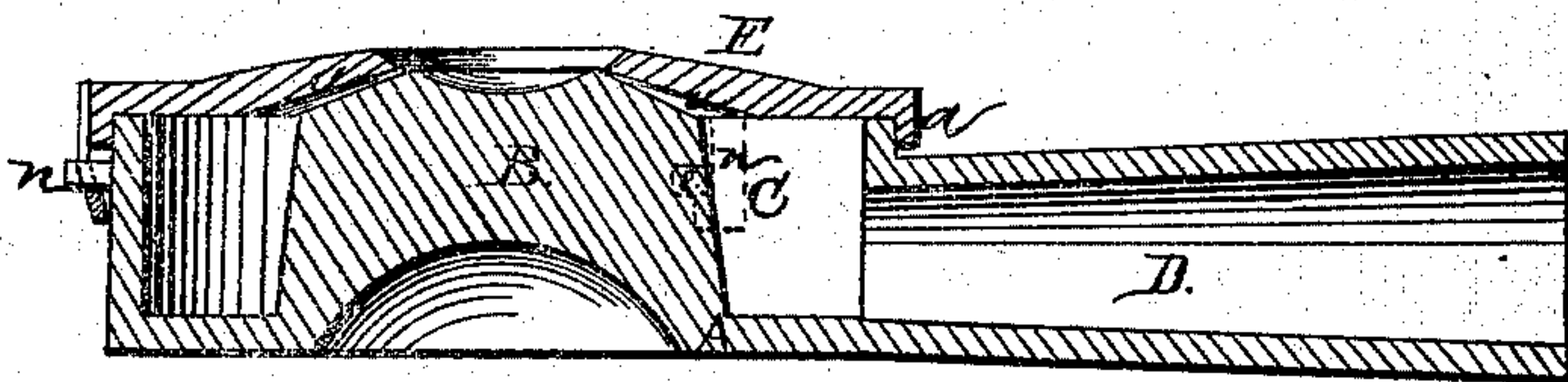


Fig. 2.



Witnesses:  
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# United States Patent Office.

## IMPROVEMENT IN TUYERES.

T. E. C. BRINLY, OF LOUISVILLE, KENTUCKY.

*Letters Patent No. 60,333, dated December 11, 1866.*

*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, T. E. C. BRINLY, of Louisville, in the county of Jefferson, and State of Kentucky, have invented a new and useful Improvement in Tuyere Irons; and I do hereby declare that the following is a full, clear, and exact description thereof.

The nature of my invention consists in the combination of hooks secured to the cap of a tuyere iron, with lugs or ears secured to the side of the body or chamber of the tuyere, so that the cap may be readily removed in order that access may be had to the interior of the air chamber of the tuyere for the purpose of removing the cinders that may have collected there.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a top plan view of my improved tuyere iron.

Figure 2 is a longitudinal vertical sectional elevation from the line *x x*.

Letters of like name and kind refer to like parts in each of the figures.

A represents the body of a tuyere made of cast iron or other suitable metal, cylindrical in form, with the centre rising to the upper surface of the body which forms the bed for the fire, as shown at B, in fig. 1. By means of the centre of the body being raised in the manner described, forms an annular air chamber, C, which connects with the pipe D. This pipe D connects with the pipe or tuyere of the bellows, through which the blast passes from the bellows into the annular chamber C. E is a cap made of the same material as the body of the tuyere A, provided with a flange, *a*, that fits over the outside of the tuyere and secured thereto by means of hooks, *e e e*, which engage with the lugs or ears, *n n n*, upon the outside of the body of the tuyere, as shown in the model and drawings. In the centre of the cap E is an aperture, circular in form, of proper dimensions, that is fitted to the top of the centre of the tuyere. The top of the centre portion of the body of the tuyere is made concave for the bed of the fire, and to prevent any obstruction to the blast as it is forced out between the cap and centre of the body of the tuyere. *u* shows the space between the centre B and cap E, through which the blast is forced into the fire.

I do not confine myself to the particular construction of the body of the tuyere provided with the cap, as it may be made in two sections and the sections secured in the same manner as shown.

The advantages of my invention will at once be observed, as the cap may at any time be removed without disturbing the body of the tuyere or any liability of breaking or injuring any portion of the tuyere, which is very liable to be the case when bolts are employed to secure the cap in its position.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The cap E, provided with a flange *a*, and hooks *e e e*, body A, with the raised centre forming an annular air chamber C, and ears *n n n*, when arranged as herein set forth and operating as and for the purpose specified.

The above specification of my invention, signed by me this 8th day of September, 1866.

T. E. C. BRINLY.

Witnesses:

JOHN WOLPERT,  
FRANK HAMMOND.