

E. J. MILDREN.

BOTTOMS FOR BESSEMER CONVERTERS.

No. 190,890.

Patented May 15, 1877.

Fig. 1.

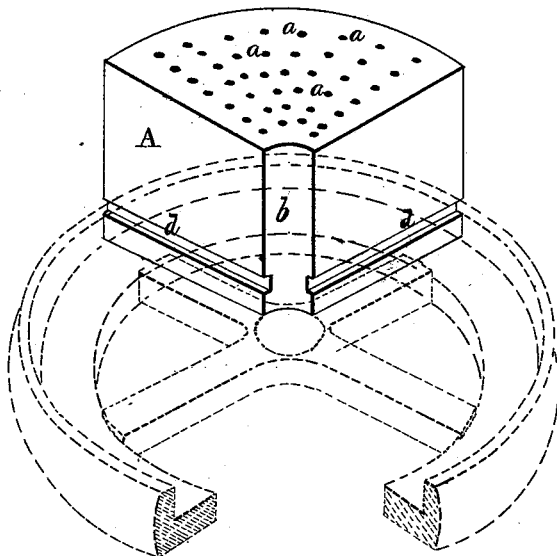


Fig. 2.

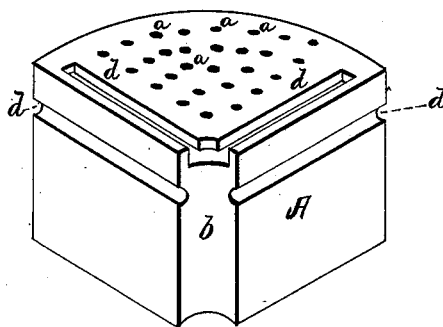
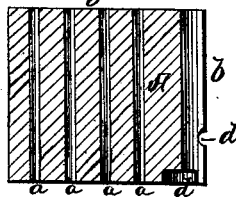


Fig. 3.



WITNESSES

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EDWARD J. MILDREN, OF BLACK LICK, PENNSYLVANIA.

## IMPROVEMENT IN BOTTOMS FOR BESSEMER CONVERTERS.

Specification forming part of Letters Patent No. 190,890, dated May 15, 1877; application filed December 28, 1876.

*To all whom it may concern:*

Be it known that I, EDWARD J. MILDREN, of Black Lick, in the county of Indiana and in the State of Pennsylvania, have invented certain new and useful Improvements in Bottoms for Bessemer Converters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to Bessemer converters; and it consists in constructing the bottom for the same of fire-clay, or other suitable material, and provided with a number of perforations extending entirely through the same, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 represents a perspective view of one of the sections of the converter bottom, showing in dotted lines one form of device by which means the bottom may be supported. Fig. 2 represents a perspective view, taken from the under side of one of the sections. Fig. 3 represents a cross-section of the same.

The bottom of a Bessemer converter is made in circular form, either in two or more sections.

In the drawings, A represents one of such sections, made of fire-clay or other suitable material, and provided with a number of vertical perforations, *a a*, extending entirely through the same for the passage of the air-blast.

Each section A is formed with a concavity, *b*, so that when the sections are united a circular eye or hole will be formed in the center for the insertion of a tuyere.

Grooves *d d* are also formed in the top and sides of the section for convenience in uniting the sections.

The Bessemer converter bottom described may be arranged for operation in any suitable manner, so that the vertical perforations will be free. One method may be to connect cross-arms to a ring or band, and rest the sections thereon. Various other methods may be used for supporting the sections; but I do not wish to be understood as claiming any particular method of supporting the same, as my invention consists simply in the construction of the Bessemer converter bottom herein described.

By thus forming the bottom with a number of vertical perforations, *a*, the use of a number of tuyeres is entirely obviated.

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

A Bessemer converter bottom composed of a series of sector section pieces, the sections being perforated vertically for the equal distribution of the blast, and provided with radial face grooves or channels for securely interlocking them in place, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of December, 1876.

EDWARD J. MILDREN.

Witnesses:

JAMES H. BELL,  
McCONNEL MOORE.