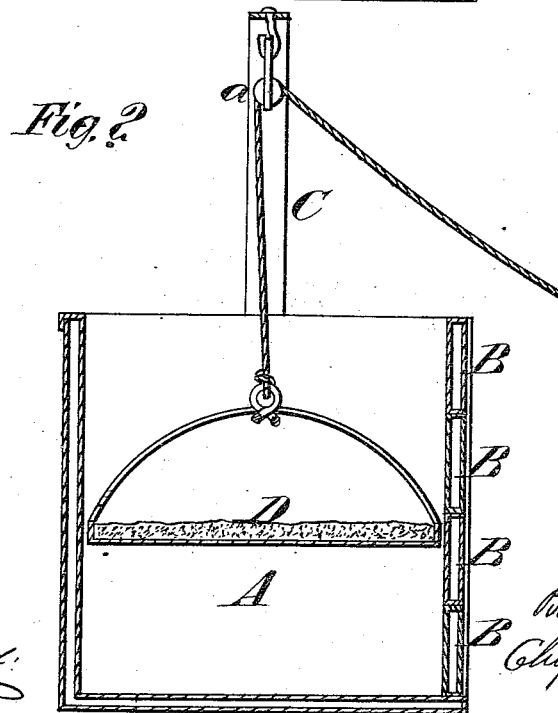
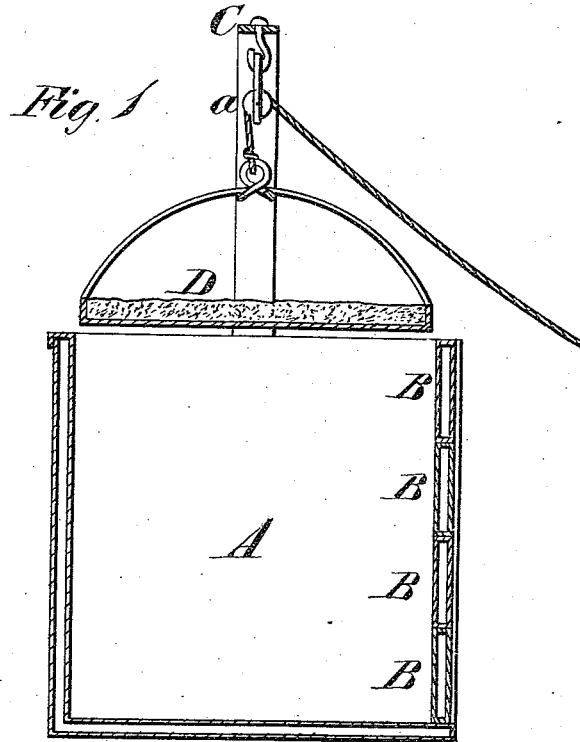


B. BOYER.

Oven for Annealing Building Blocks of Furnace Slag.

No. 161,380.

Patented March 30, 1875.



WITNESSES
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BASSLER BOYER, OF LEBANON, PENNSYLVANIA.

IMPROVEMENT IN OVENS FOR ANNEALING BUILDING-BLOCKS OF FURNACE-SLAG.

Specification forming part of Letters Patent No. **161,380**, dated March 30, 1875; application filed February 27, 1875.

To all whom it may concern:

Be it known that I, BASSLER BOYER, of Lebanon, in the county of Lebanon and State of Pennsylvania, have invented a new and valuable Improvement in Manufacturing Building and Paving Blocks Cast from Molten Slag or Cinder; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, and to the letters and figures of reference marked thereon.

Figures 1 and 2 of the drawings are representations of vertical sections of my device.

This invention has relation to means for cooling and annealing building-blocks which are made from furnace slag or cinder; and the nature of my invention consists in an oven having non-conducting walls, a vertically-movable non-conducting cover, and a front which is composed of a number of removable slats, as will be hereinafter explained.

Hitherto the process of annealing the blocks of slag was conducted by embedding them in sand, which has been found objectionable for several reasons.

In the annexed drawings, A designates a rectangular furnace, composed of three vertical non-conducting walls and a non-conducting floor. The front of this furnace is com-

posed of a number of narrow pieces, B, which are fitted into grooves in the two side walls of the furnace, so that they can be taken out and introduced at pleasure. C designates a frame which is erected over the furnace, and to which a grooved pulley, *a*, is attached. Over this pulley passes a rope or chain, which suspends a non-conducting cover, D, and by means of which this cover can be raised and lowered. Artificial heat is applied to the oven in any convenient manner before introducing the blocks, and when the proper temperature is arrived at the pieces B are removed and the blocks are introduced, layer after layer; at the same time the pieces B are applied, one after the other, and the cover is raised. By these means the blocks are prevented from being suddenly chilled.

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

An annealing-furnace having non-conducting walls, in combination with removable pieces B and a vertically-movable cover, D, substantially as and for the purposes described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

BASSLER BOYER.

Witnesses:

LEWIS REHR,
E. H. A. SNOWWHITE.