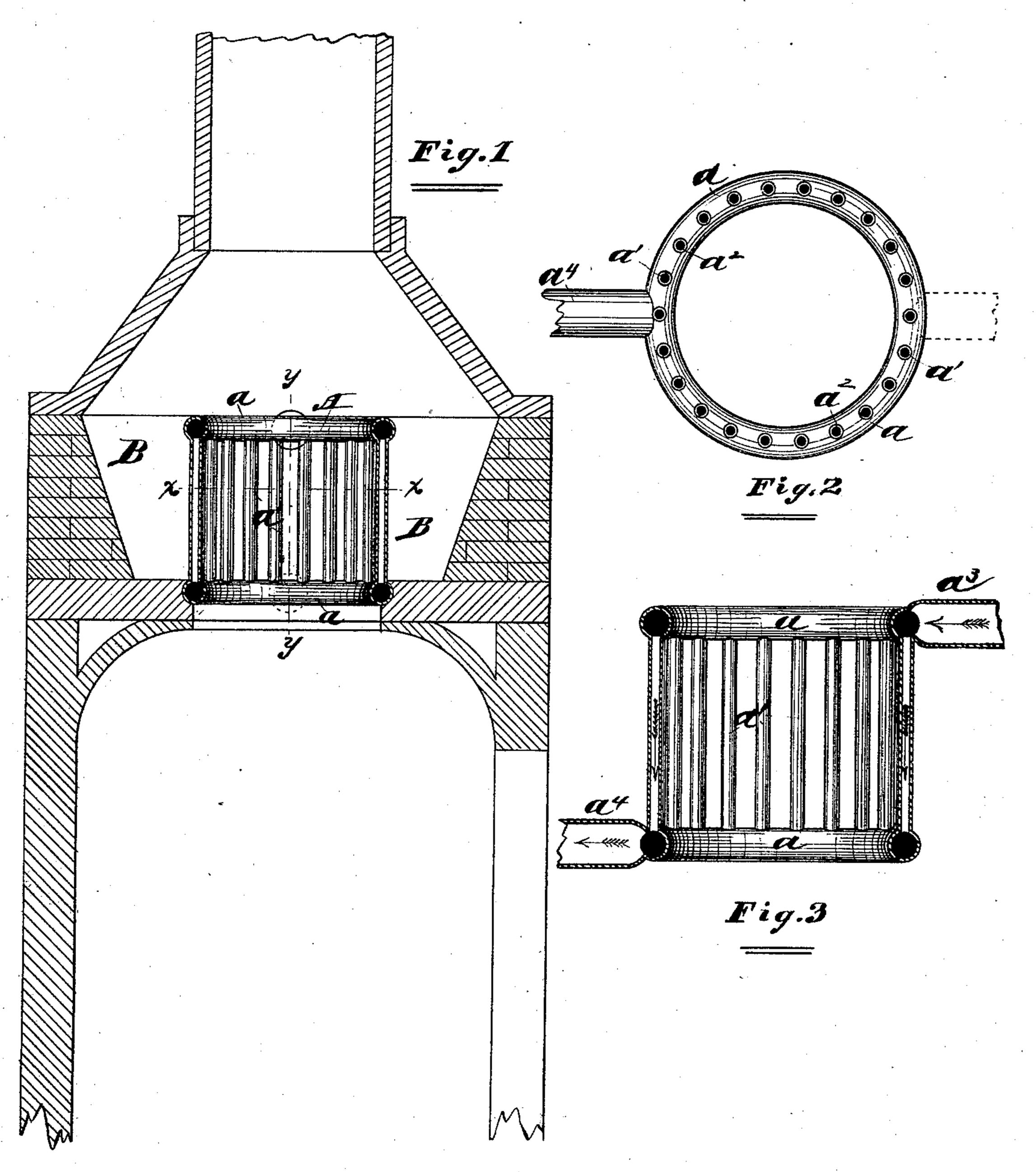
T. L. BOYD. Furnace for Singeing Hogs.

No. 222,653.

Patented Dec. 16, 1879.



Attest:

M. S. Baker Danil Stoner INVENTOR

Thomas Limbam Boyd.

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UNITED STATES PATENT OFFICE

THOMAS L. BOYD, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN FURNACES FOR SINGEING HOGS.

Specification forming part of Letters Patent No. 222,653, dated December 16, 1879; application filed April 22, 1879.

To all whom it may concern:

Be it known that I, THOMAS LUNHAM BOYD, of the city of Chicago, in the county of Cook, of the State of Illinois, have invented a new and useful Improvement in Furnaces for Singeing Hogs, of which the following is a specification, reference being had to the annexed

drawings, forming a part thereof.

My invention pertains to a furnace for singeing the hair off of hogs after being killed, containing a vertical cylindrical metallic grate, A, forming the inner side of an annular fire-box, B, and a passage for the hogs in process of being singed; and my invention consists of an improvement in the vertical cylindrical grate A, which I construct of an upper and a lower tubular or hollow ring, a, and a series of any required number of tubular or hollow bars, a', respectively made of wrought or cast iron or other suitable metal, the tubular bars a'being respectively secured at one end to the upper and at the other end to the lower tubular ring a, by the ends of the bars a'being inserted into perforations a^2 in the rings a, forming communication between all the parts of the grate A. The upper ring a is provided with an induct-pipe, a^3 , and the lower ring a with an educt-pipe, a^4 . The induct and educt pipes have a greater inside diameter than the rings a, and the rings ahave a greater inside diameter than the bars a', respectively, for the purpose of equalizing the capacity of the several parts composing the grate A.

In illustration of the foregoing description of my improvement see the annexed drawings, in which Figure 1 is a vertical section view of an entire furnace, showing a vertical section, as indicated by the dotted lines y y and z z, of my improved cylindrical tubular grate A. Fig. 2 is a top view of the lower ring a, showing the perforations a^2 , the educt-pipe a^4 , and the dotted lines the position of the induct-pipe a^3 ; and Fig. 3 is a vertical section view of my improved cylindrical tubular grate A complete.

The object of my invention is to provide for a furnace for singeing hogs a cylindrical grate, through which a continuous stream of water may be caused to flow for the purpose of preventing the destruction of the grate by the intense heat to which it is subjected during the process of singeing hogs, and for the purpose of heating water for use in the slaughtering business.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

In a furnace for singeing hogs, the cylindrical grate A, composed of tubular bars a', tubular rings a, induct-pipe a^3 , and educt-pipe a^4 , substantially as described, for the purposes set forth.

In witness whereof I hereunto set my hand this 15th day of February, 1879.

THOMAS EUNHAM BOYD.

In presence of— LYMAN M. PAINE, DANIEL STONER.