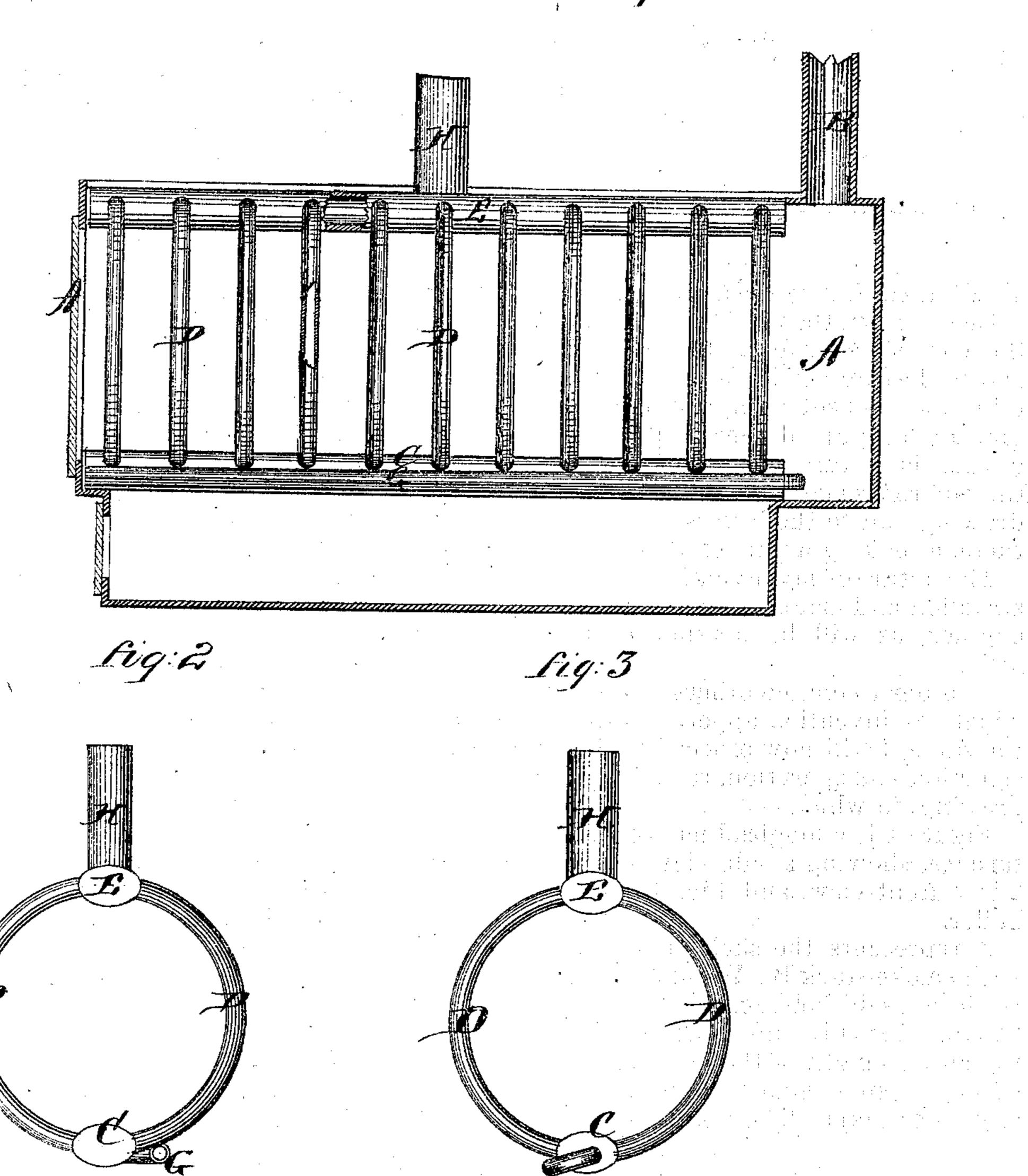
John HAnsell's Steam Engine Boiler

No 121.979. Patented Dec. 19, 1871. Eg. 1



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UNITED STATES PATENT OFFICE.

JOHN HENRY ANSELL, OF PONTIAC, MICHIGAN.

IMPROVEMENT IN STEAM-BOILERS.

Specification forming part of Letters Patent No. 121,979, dated December 19, 1871; antedated December 5, 1871.

To all whom it may concern:

Be it known that I, John Henry Ansell, of the city of Pontiac, in the county of Oakland and in the State of Michigan, have invented certain new and useful Improvements in Steam-Engine Boilers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a boiler for steamengines, 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 drawing, in which—

Figure 1 is a longitudinal vertical section of a furnace, showing a side view of my boiler. Fig. 2 is a front view, and Fig. 3 a rear view of the

boiler.

A represents the shell of a furnace provided with smoke-stack B. Within this shell my boiler is placed, said boiler consisting of a feed-tube, C, tubular ribs D D, and dome E. The tube C runs the entire length of the boiler, and may be made of any desired shape—round, oval, square, or any other shape. The ribs D D are made of pipes

or tubes of any desired size and bent in circular form, connecting at their lower ends with the main feed-tube C and at the upper ends with the dome E, so that the water can pass freely from the feed-tube to any part of the boiler. These ribs are also designed to form the grating, and are, consequently, to be set a suitable distance apart to answer this purpose. The steam-outlet pipe H is connected with the dome E at any desired point. G represents the feed-pipe, through which water is admitted, said pipe running under the boiler, thus forming a heater at the same time as the water enters the pipe at the front end and enters the boiler at the rear end.

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

Patent, is—

The combination of the boiler, formed of the feed-tube C, tubular ribs D D, and dome E, and the feed-pipe G running the entire length under the boiler and acting as a heater, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of March,

1871.

JOHN HENRY ANSELL.

Witnesses:

ADOLPHUS W. BURTT, ENOCH M. BEEBE.

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