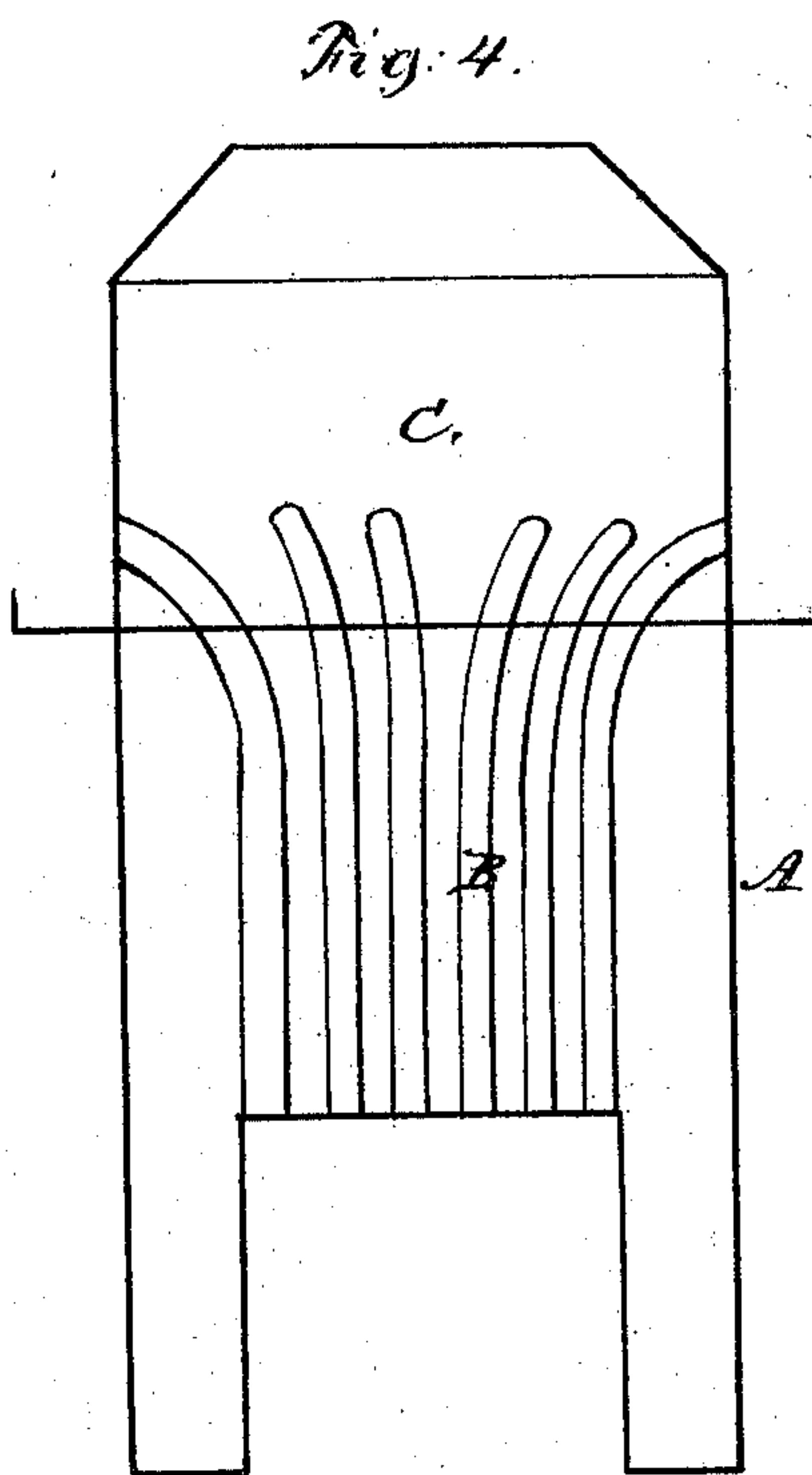
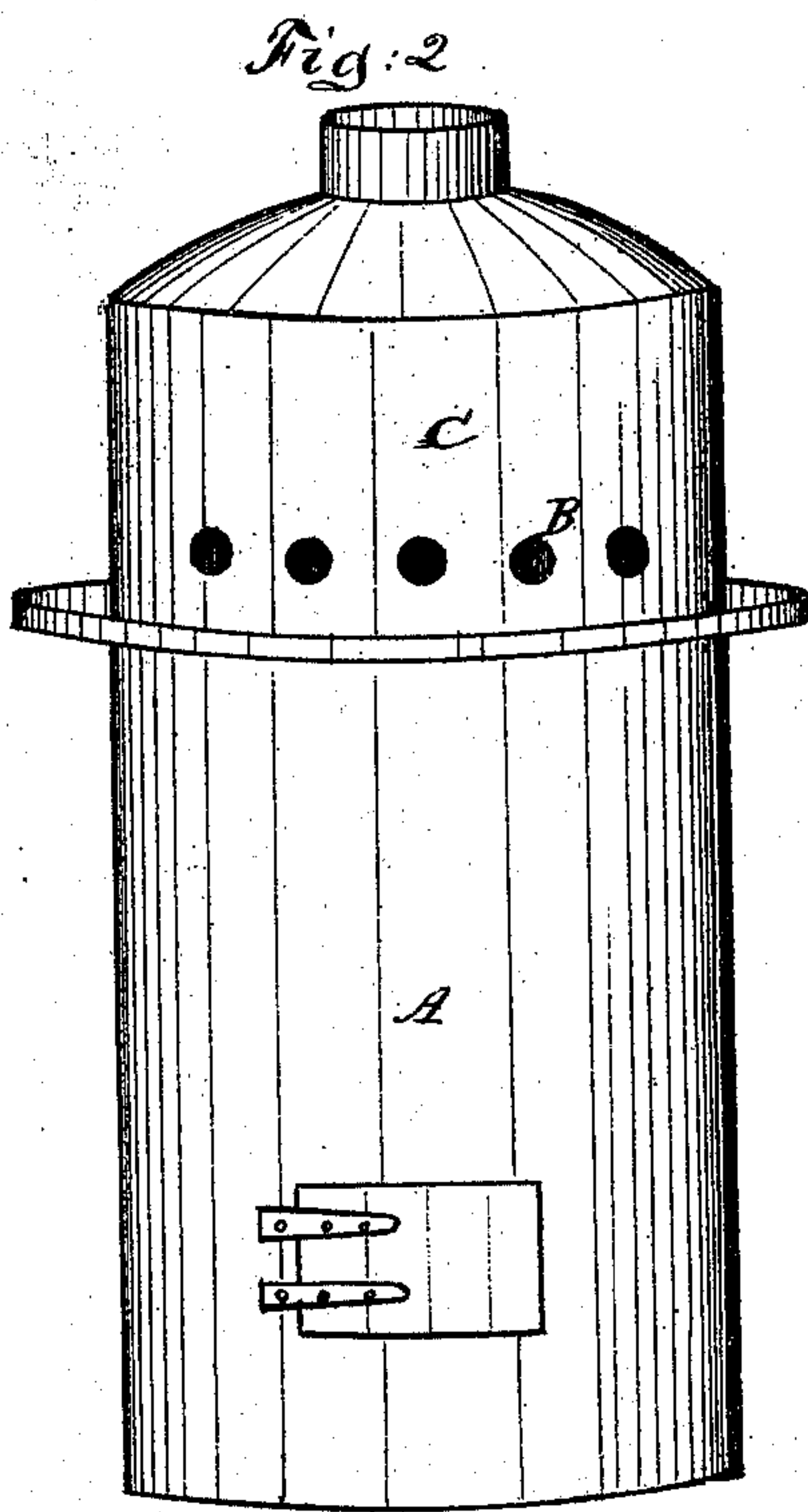
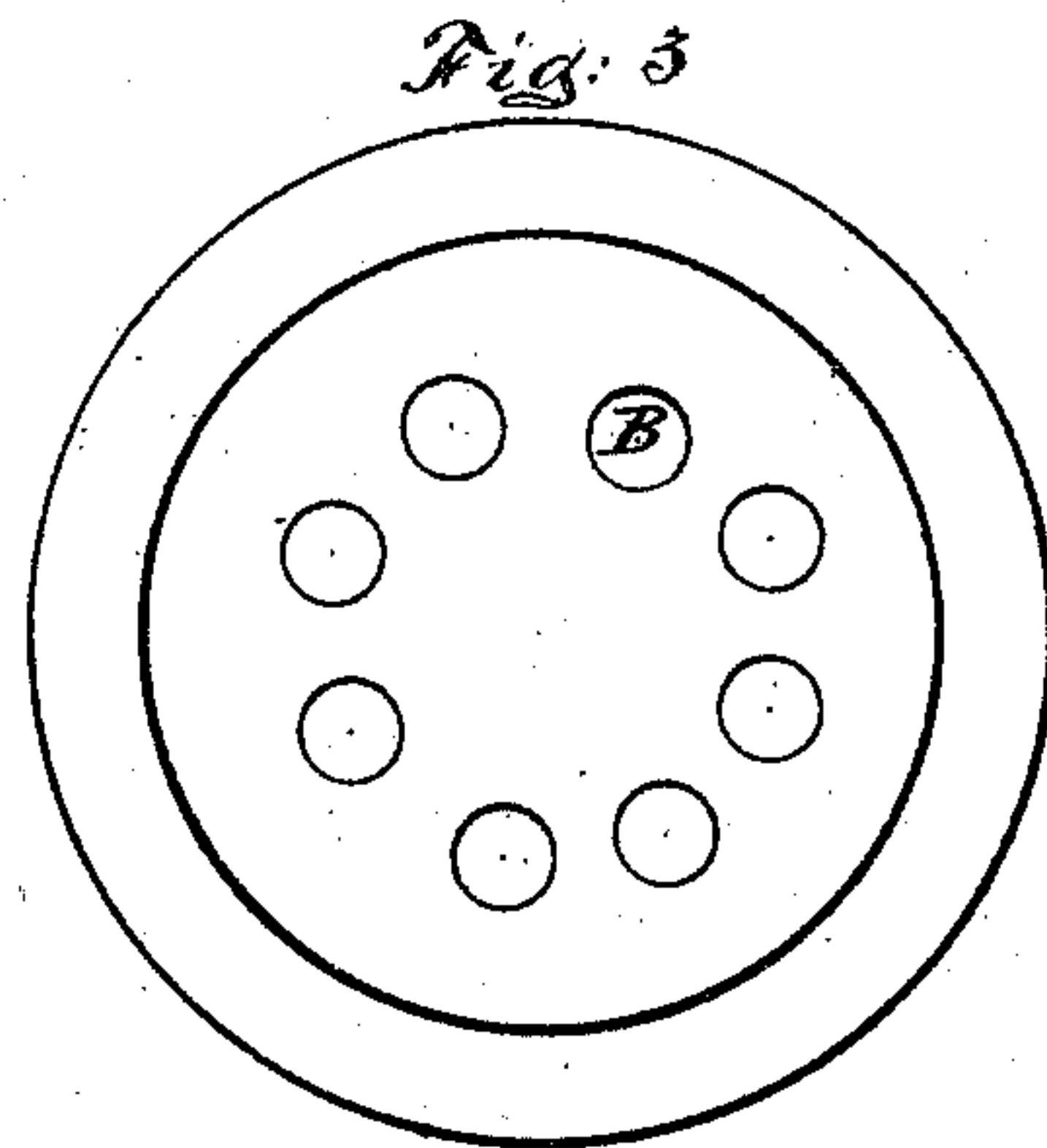
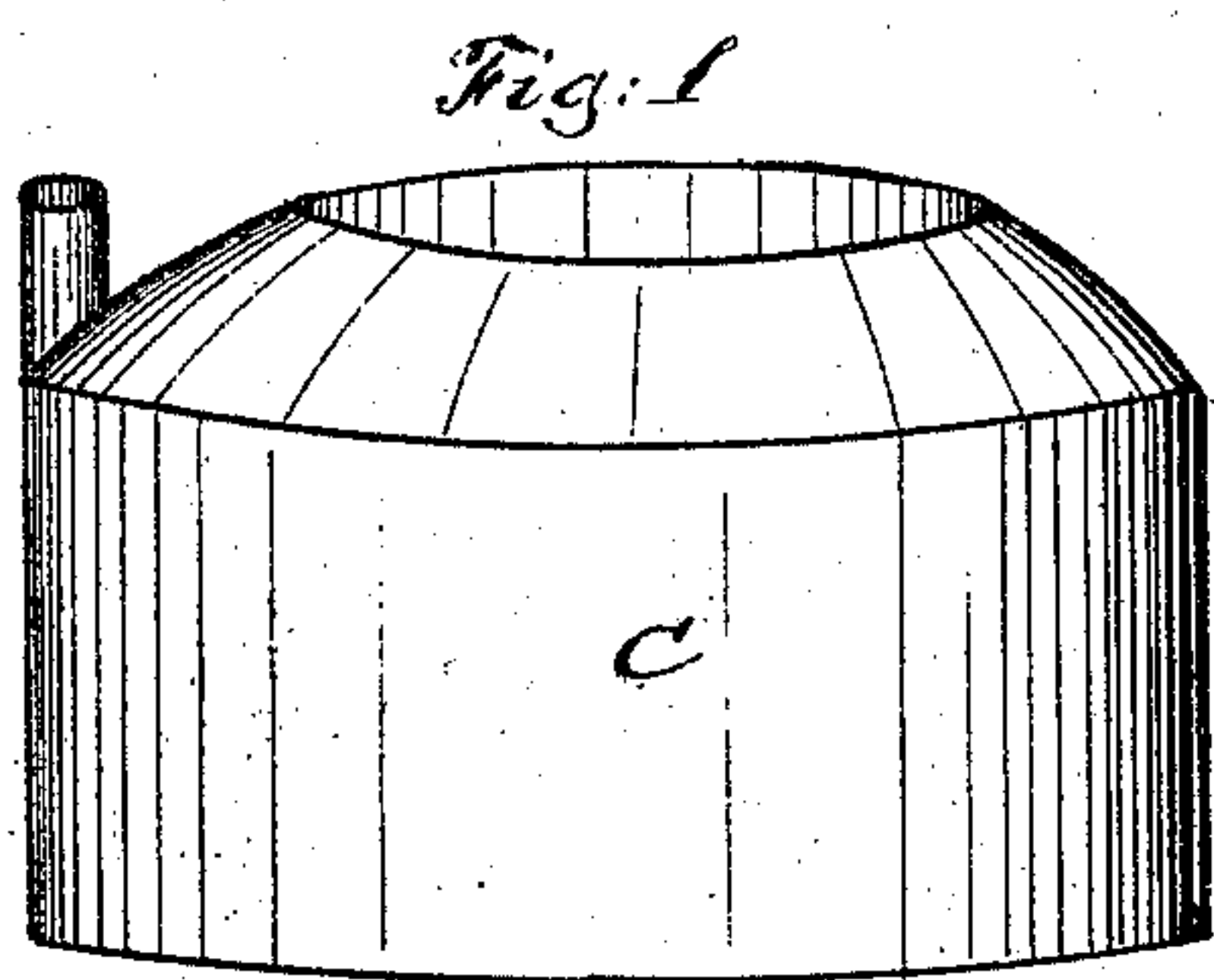


A. Demaree,
Steam Generator.
No. 90,083. *Patented May 18, 1869.*



Witnesses

J. W. Shaffer
D. B. Wilson

Inventor

Anthony Demaree

United States Patent Office.

ANTHONY DEMARCE, OF FAIRFIELD, IOWA.

Letters Patent No. 90,083, dated May 18, 1869.

IMPROVEMENT IN STEAM-GENERATORS.

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, ANTHONY DEMARCE, of Fairfield, in the county of Jefferson, and State of Iowa, have invented certain new and useful Improvements in Upright Boilers; and I do hereby declare that the following is a full, clear, and exact description of my invention, reference being had to the accompanying drawings, in which—

Figure 1, letter C, represents the smoke-box.

Figure 2, letter A, represents the boiler in its natural position, with the smoke-box removed, letter B showing the openings of the bent flues.

Figure 3. The letter B represents the openings of the flues where they communicate with the fire-box.

Figure 4 represents the skeleton of the boiler, showing the curved flues B.

The smoke-box (fig. 1) C, into which all the flues open, gives a very large extent of heating-surface for the water surrounding the flues in that part of the boiler, so that there is the greatest possible economy of fuel, and the least waste of heat.

The steam-dome, shown at the top of fig. 2, is large enough to admit a man to clean the boilers, and should

be made with a top, to fasten on with screws, with a ground joint, that it may be taken off, like a cylinder-head, and put on again.

Fig 3, letter B, shows but eight openings for flues; but these may be increased to any desired number, so that there will be the least possible amount of water, the spaces being occupied by the flues.

The fire-box in the skeleton drawing, No. 4, is in such relation with the flues and the boiler, that the depth of water there need not exceed two inches, and may be less, making spaces the same size between the flues and fire-box.

Having thus described my invention,

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

The arrangement of the bent tubes B, with reference to the boiler A and smoke-box C, substantially as herein set forth.

ANTHONY DEMARCE.

Witnesses:

J. M. SHAFFER,

D. B. WILSON.