(Model.)

T. H. BROOKS.

Indirect Radiator.

No. 237,429. Patented Feb. 8, 1881.

Fig. 2.

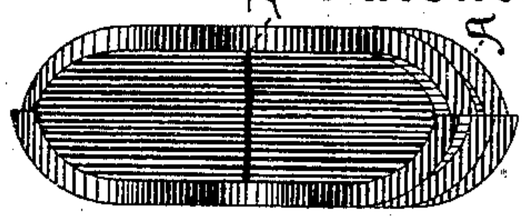
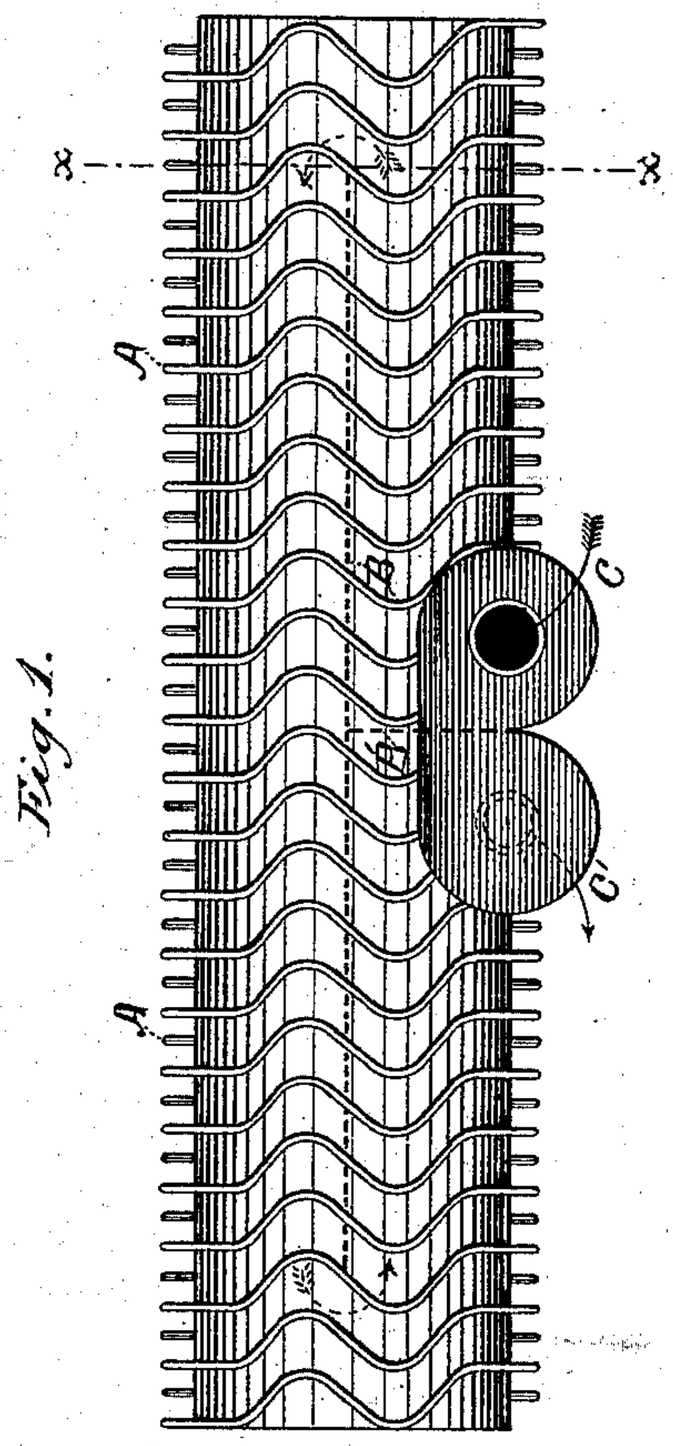


Fig. 1.



Witnesses
Wm. Kidd.
Oscar Baker.

T. H. Brooks, Inventor
By Geo. C. Tracy
Attorney

UNITED STATES PATENT OFFICE.

THOMAS H. BROOKS, OF CLEVELAND, OHIO.

INDIRECT RADIATOR.

SPECIFICATION forming part of Letters Patent No. 237,429, dated February 8, 1881.

Application filed March 9, 1880. (Model.)

To all whom it may concern:

Be it known that I, THOMAS H. BROOKS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Indirect Radiators; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to certain improvements in so-called "indirect-acting radiators" for steam-heating purposes, and has for its object such construction of cast-iron devices of this description as will create better circulation of air, more heating or radiating surface, and consequent economy in fuel, or a proportionate increase in heat from a given quantity. The circulation of the steam through the various sections of the apparatus is also effected in the most thorough manner by a rib cast into each section, and so arranged that a perfect movement of the steam from the inlet to the outlet is secured and all its heating power utilized to the best purpose.

In the drawings, Figure 1 is a view of my improved indirect-acting radiator, one section only of the nest or series being shown, in which A A are ribs or projections formed upon the side surfaces of the steam-chamber in wave-like shape and in alternate order, and extending beyond the upper and lower edges thereof, as shown, so as to present the utmost radiating-surface. The curved or wave-like construction of these ribs is designed to cause a free circulation of the air and bring it as much as possible in contact with the heating-surface of the radiator as it passes upward to the register or opening admitting it to inclosure to be warmed. B is an inner rib, supported at B′, and dividing the inner chamber of each section into two equal portions below the rib, and forming a channel above, as shown by dotted lines B B′ in Fig. 1, through which the steam passes from the port C around the rib in the direction indicated by the arrow, and out at the port C′, upon the opposite side, into the next section of the radiator. The curved ribs are so arranged that each one upon the left side of a section fits between two ribs upon the right side of the next section, and so on throughout the series, of which any desired number may be arranged.

Fig. 2 is a vertical section on the line *x x* in Fig. 1, showing the end of the rib B dividing the interior horizontally and centrally, as explained.

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

The radiator formed in two or more sections, as described, and having each section provided with a horizontally-central dividing-rib, B, with its central support, B′, and the inlet and exit steam-ports C C′, arranged respectively on each side of such central support, substantially as set forth and shown.

This specification signed and witnessed this 19th day of December, 1879.

T. H. BROOKS.

Witnesses:

W. G. MATHER,

EDW. S. TRACY.