

Jones' Steam & Hot Water Boiler.

No. 118,457.

Patented Aug. 29, 1871.

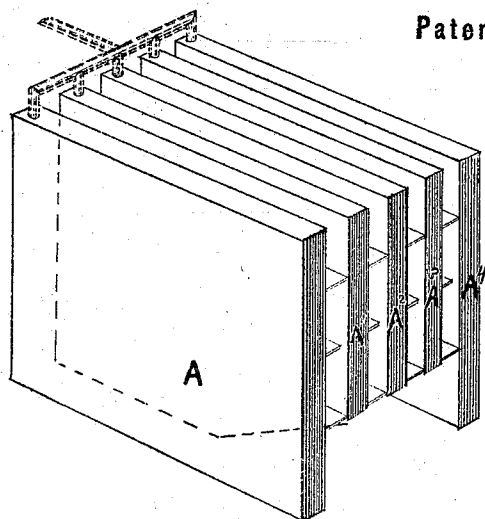


FIG. 1.

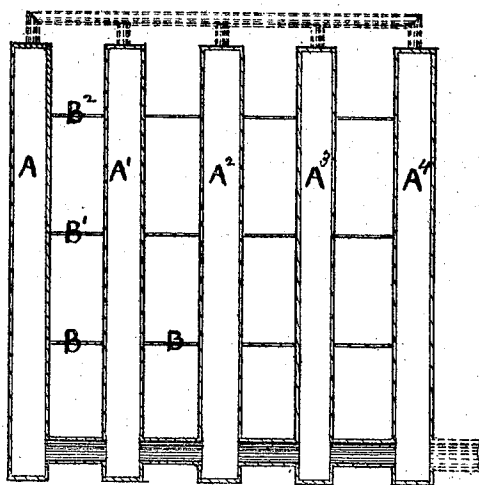


FIG. 2.

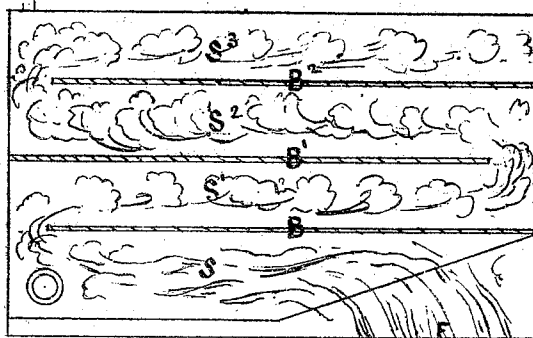


FIG. 3.

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Witnesses

William R. Jones { Inventor

UNITED STATES PATENT OFFICE.

WILLIAM R. JONES, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN STEAM-BOILERS.

Specification forming part of Letters Patent No. 118,457, dated August 29, 1871; antedated August 21, 1871.

To all whom it may concern:

Be it known that I, WILLIAM R. JONES, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented a certain new and useful Improvement in Boilers for Steam and Hot Water, of which the following is a complete specification:

The nature of my invention consists in combining a series of parallel-sided tanks or boilers with plates in such a manner that when set in position I have a device similar in principle to a return-flue boiler. Thus a long passage is provided for the heated products of combustion to traverse in contact with the boiler surface, and consequently time is allowed for the complete absorption of heat. This arrangement gives the benefit of the flue or tubular system, and also that of the sectional.

Figure 1 is a perspective view, showing the device as it appears before being set in brick-work. Fig. 2 is a rear-end elevation of the same. Fig. 3 is a vertical section taken between two of the tanks.

A, A¹, &c., is a series of tanks made of wrought or cast-iron, and in the form shown in the draw-

ing. The tanks A¹ A² A³, forming the inner series, may be beveled at the lower front part, as shown in Figs. 1 and 3, for convenience in forming the fire-box. Upon the sides of the tanks A, A¹, &c., small ledges may be made, upon which the plates B, B¹, B², &c., rest. These plates may not extend to the ends of the boiler so as to allow a passage for flame and smoke from the fire-box F through the flues S S¹ S² S³, as shown in Fig. 3.

If desirable, the plates B B¹ B² may extend the whole length of the boiler, and the passages S S¹ S² S³ connected in the brick-work.

The separate tanks are connected by suitable water and steam-pipes so as to form one boiler, and are to be set in proper masonry.

I claim as my invention—

The combination of the tanks A, A¹, A², &c., with the plates B, B¹, B², &c., when arranged to operate substantially as described, and for the purpose set forth.

WILLIAM R. JONES.

Witnesses:

FRANK G. PARKER,
JAS. S. CONANT.