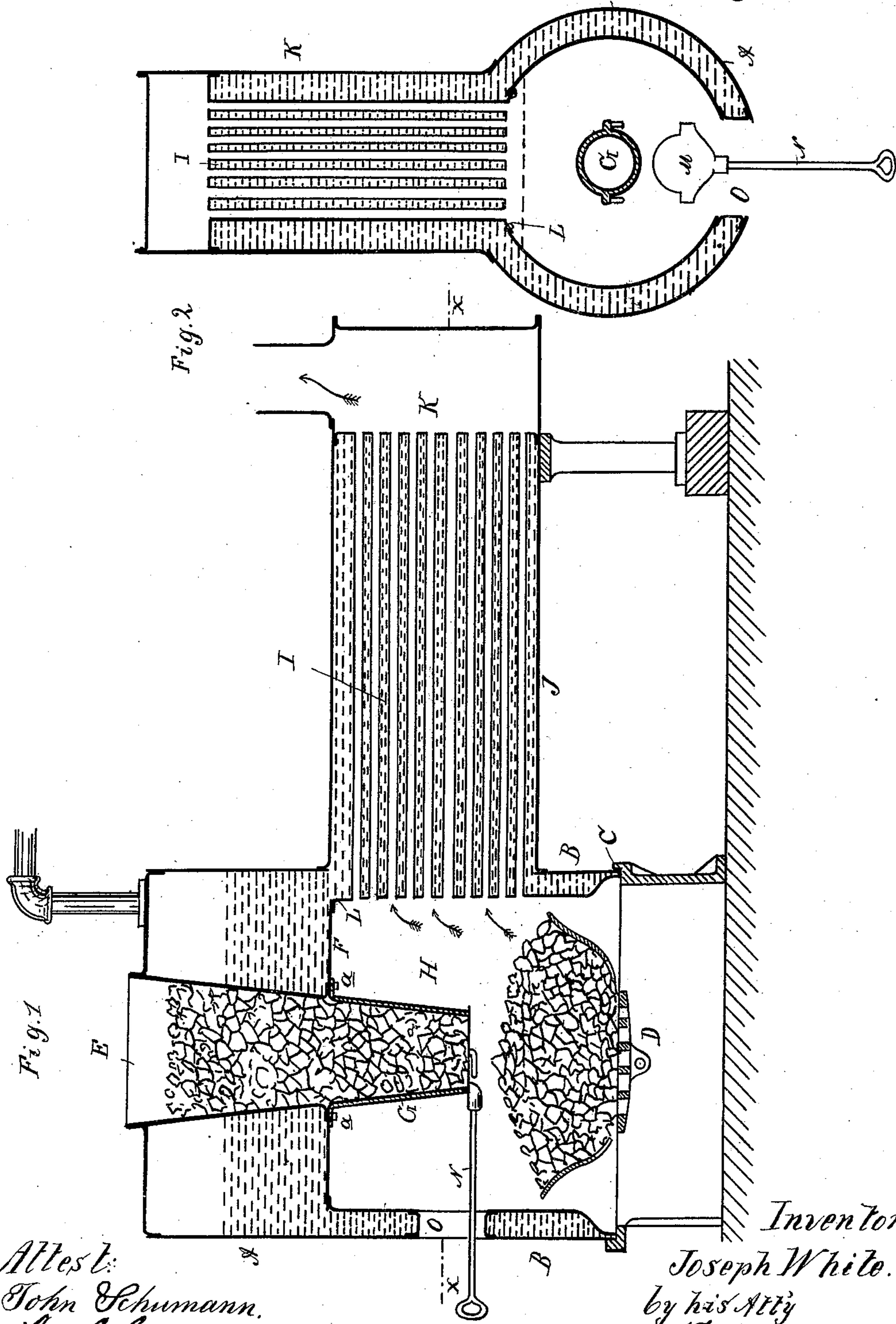


(No Model.)

J. WHITE.
MAGAZINE BOILER.

No. 323,764.

Patented Aug. 4, 1885.



Attest:
John Schumann.
A. S. Sprague

Inventor:
Joseph White.
by his Atty
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UNITED STATES PATENT OFFICE.

JOSEPH WHITE, OF PORT HURON, MICHIGAN.

MAGAZINE-BOILER.

SPECIFICATION forming part of Letters Patent No. 323,764, dated August 4, 1885.

Application filed October 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WHITE, of Port Huron, in the county of St. Clair and State of Michigan, have invented new and useful Improvements in Magazine-Boilers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to certain new and useful improvements in the construction of boilers more especially designed for generating steam for heating purposes.

15 The invention consists in the peculiar construction of the parts and their operation, all as hereinafter more fully described and claimed.

20 Figure 1 is a vertical central horizontal section through my improved boiler. Fig. 2 is a horizontal cross-section.

25 In the accompanying drawings, which form a part of this specification, A represents an upright cylindrical boiler having an annular water-leg, B, extending down, or nearly down, to the bottom of the grate C, this grate being preferably basket-shaped, as shown, and provided with a dumping and shaking center, D, of any of the known constructions.

30 E is the upper end of the magazine, projecting above the top of the boiler and inserted therein, and made of boiler-iron, properly secured to place, and its bottom riveted to the crown-sheet F.

35 G is the continuation of the magazine, extending into the combustion-chamber H, and this section of the magazine is made of cast-iron, preferably, and is secured in coincidence with the upper section, E, and to the under side of the crown-sheet by means of bolts and lugs a in any suitable manner that will allow this section G to be removed readily should it be burned off and need replacing, or should it become necessary to get at the flues I, which extend horizontally from the combustion-chamber through the horizontal portion J of the boiler to the jacket K. The inner cylindrical wall of the boiler A is interrupted by the flue-sheet L, which is flat and stands vertical, as shown in Fig. 2, and is riveted to the inner shell; and this flat flue-sheet enables the flues I to be cut the same length and more

easily inserted and calked than though inserted through the circular side of the boiler.

M is a cut-off bottom to the magazine G, and is operated by means of the rod or lever N 55 through the front of the boiler or through a suitable opening therein, or in the door which is designed to close the doorway O.

By means of a boiler thus constructed a supply of fuel may be regulated as easily as the 60 supply of fuel in a magazine-stove, and the boiler will be found very efficient, making steam for heating purposes in a sufficient quantity with a minimum of fuel; and it will be found also well adapted to burning anthracite coal. 65

I am aware of the Patents No. 248,411 and No. 272,692, and make no claim to the constructions shown therein as forming part of my invention. 70

I deem it important that the lower section, G, of the magazine project into the combustion-chamber, and that it be removably secured to the crown-sheet, for by this construction the lower section can readily be removed 75 when the same needs to be replaced or repaired, or should it be desired to get at the flues I.

What I claim as my invention is—

1. A steam-generator having a magazine 80 composed of two sections, the lower one of which extends into the combustion-chamber and is removably secured to the crown-sheet, substantially as described, such generator being cylindrical in form and having a flat 85 crown-sheet, in combination with the horizontal portion of the boiler and its flues, substantially as specified.

2. In a steam-generator consisting of the vertical section A, water-legs B, grate C, magazine E G, the part G being removably secured to the crown-sheet F, combustion-chamber H, flue-sheet L, horizontal section J, and flues I, and the cut-off bottom M, provided with the lever N, the parts being constructed, 95 arranged, and operating substantially as and for the purposes described.

JOSEPH WHITE.

Witnesses:

H. S. SPRAGUE,
CHARLES J. HUNT.