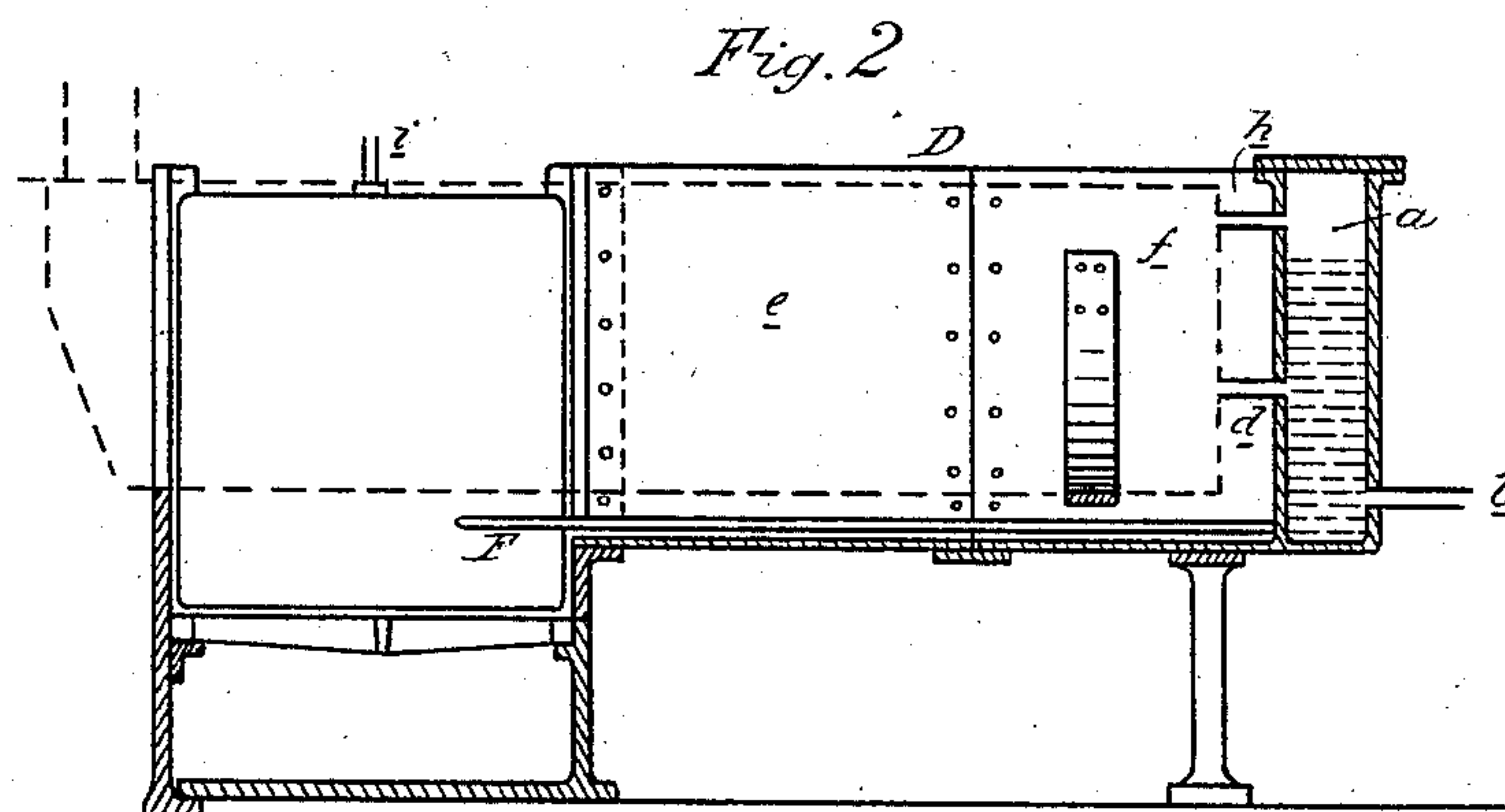
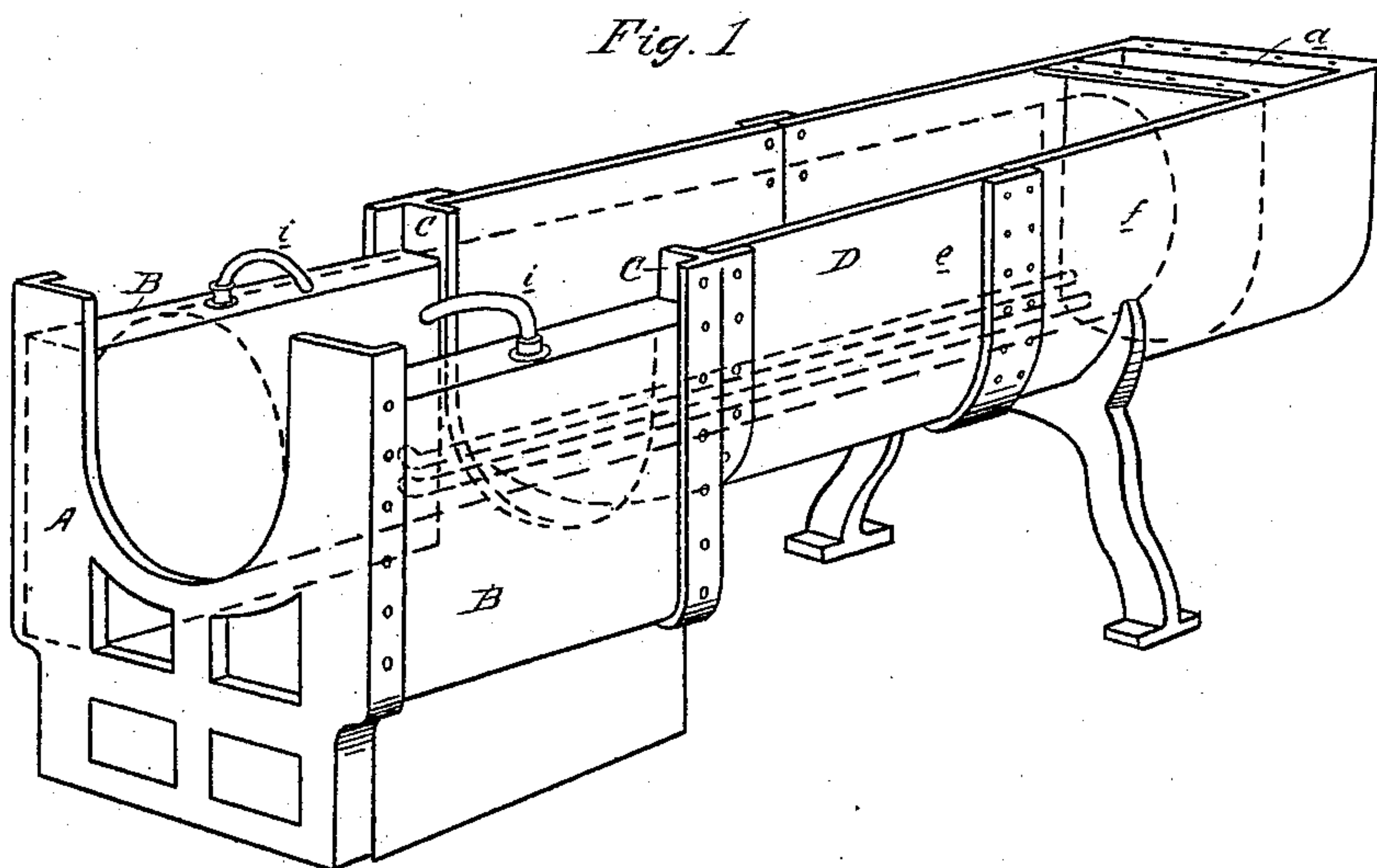


(No Model.)

J. C. HAAG.
SUPPORT FOR BOILERS.

No. 294,871.

Patented Mar. 11, 1884.



Attest:
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UNITED STATES PATENT OFFICE.

JOHN C. HAAG, OF LANSING, MICHIGAN.

SUPPORT FOR BOILERS.

SPECIFICATION forming part of Letters Patent No. 294,871, dated March 11, 1884.

Application filed October 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. HAAG, of Lansing, in the county of Ingham and State of Michigan, have invented new and useful Improvements in Supports for Steam-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.

This invention relates to certain new and useful improvements in the construction of supports for steam-boilers, and is especially designed as an improvement upon Letters Patent granted to me September 12, 1882; for a similar invention.

The invention consists in the peculiar construction and arrangement of the parts, whereby the support for the boiler forms water and steam spaces at the sides of the furnace and at the rear of the boiler, for the purpose of giving a greater boiler capacity, or more capacity for making steam, without necessarily increasing the size of the boiler, all as more fully hereinafter set forth.

Figure 1 is a perspective view of my improved boiler-support, and Fig. 2 is a central vertical longitudinal section of the same.

In the accompanying drawings, which form a part of this specification, A represents the front wall of my improved boiler-support, which is preferably made of cast-iron, and which is provided with the usual doors to afford access to the grates.

The side walls, B, of my device are formed hollow, as shown, of boiler-iron, being water and steam tight, and of a width preferably so that when in place their upper edges will be upon the same plane with the top of the boiler. The front ends of these side walls or "water-legs" are properly and rigidly secured by bolts to the flanges of the front wall, while their rear ends are likewise secured to the cast-iron plate C, to which latter is also secured the forward end of the semicircular flue D, which is constructed of sections *e* and *f*, substantially in the manner described in my hereinbefore-mentioned Letters Patent, with the exception that the rear end of the section *f* is formed double, so as to provide a steam and water tight compartment, *a*.

E represents in dotted outlines the boiler.

b is a feed-water pipe, through which water is introduced into the water-space *a* at the

rear of the support, and from this space there is a pipe, *d*, which forms communication between this water-space and the boiler below the water-line.

h is another pipe, which affords communication from the top of this space *a* to the steam-space of the boiler.

F represents a series of pipes, the forward ends of which communicate with the water-legs B, from whence they extend back along the bottom of the semicircular flue D and communicate with the water-space *a*; and *i* are pipes which connect the upper portions of the water-legs B to the steam-space of the boiler.

I design to fill in the space between the arch and circular flue and the boiler with a layer of brick, so as to prevent the escape of heat from the furnace, which is located below the bottom plane of the fire-walls, as in the ordinary manner. A suitable breeching should be provided for covering the exposed end of the boiler.

It will be seen that this support can readily and easily be taken apart and set up, and that by the addition of the water-legs or walls B and the steam and water space *a*, I greatly increase the capacity of steam-making in my boiler, as there is a free circulation of the water between all the parts.

The location of the water-leg in the rear of the boiler, as shown in my drawings, utilizes the heat which is usually wasted by passing up into the stack in that class of boilers where the water-leg is arranged directly in the rear of the furnace.

What I claim as my invention is—

1. A sectional support for boilers, consisting of the fire-box and combustion-chamber A, provided with side water-legs, B, and a water-leg, *a*, arranged in the rear of the boiler proper, and all detachably secured together, substantially as set forth.

2. A support or arch for boilers, consisting of the cast-iron front A, side water-walls, B, plate D, and combustion-chamber C, and provided with suitable pipes for connecting the side water-walls to the boiler, substantially as specified.

JOHN C. HAAG.

Witnesses:

H. S. SPRAGUE,
E. W. ANDREWS.