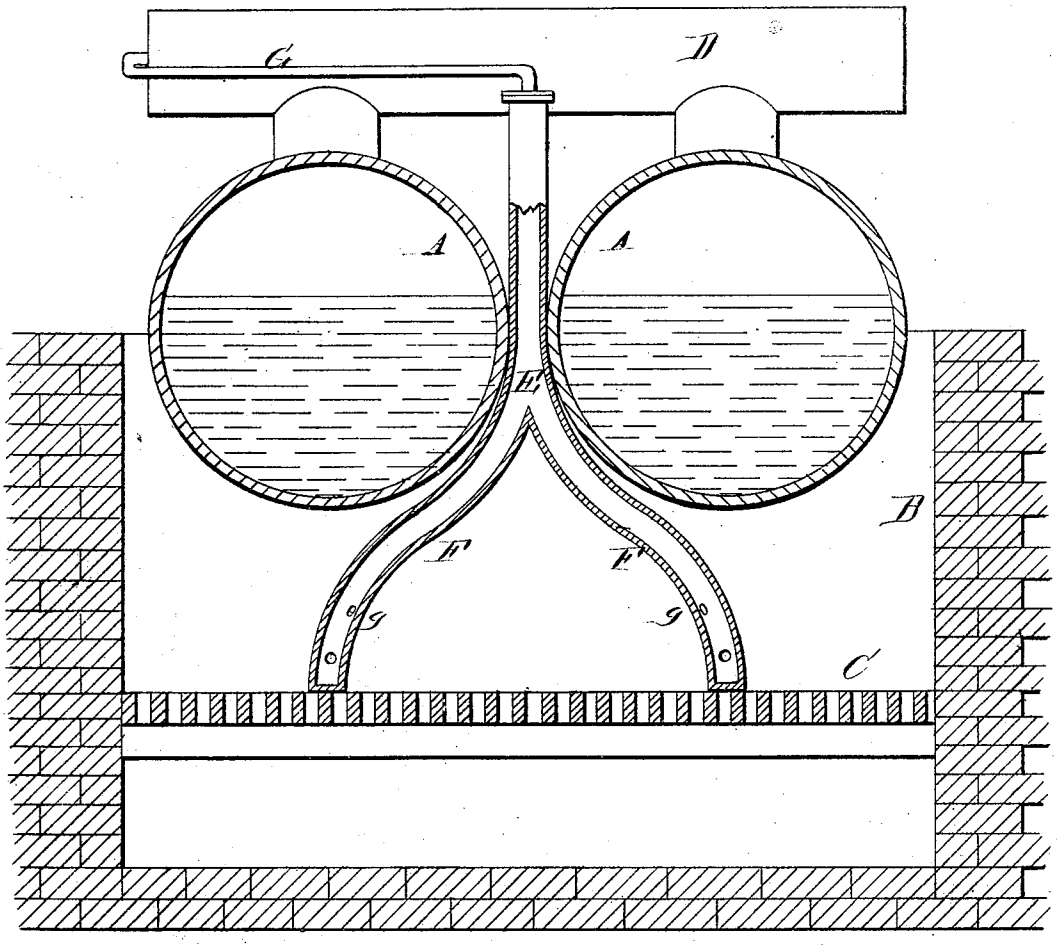
2 Sheets--Sheet 1.

J. S. ANDERSON.

Steam Blow-Pipes.

No. 135,058. Patented Jan. 21, 1873.

Fig. 1.



WITNESSES.

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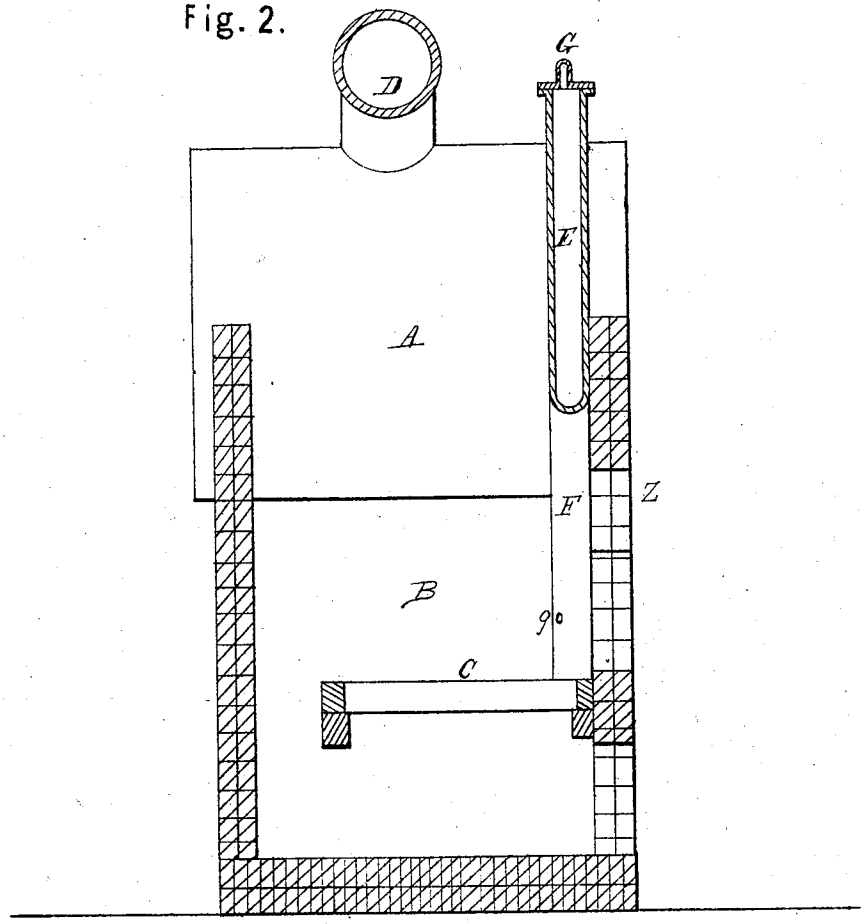
2 Sheets--Sheet 2.

J. S. ANDERSON.

Steam Blow-Pipes.

No. 135,058. Patented Jan. 21, 1873.

Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN S. ANDERSON, OF FLINTVILLE, WISCONSIN.

IMPROVEMENT IN STEAM BLOW-PIPES.

Specification forming part of Letters Patent No. **135,058**, dated January 21, 1873.

To all whom it may concern:

Be it known that I, JOHN S. ANDERSON, of Flintville, in the county of Brown and State of Wisconsin, have invented a new and valuable Improvement in Steam Blow-Pipes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a transverse sectional view of my invention. Fig. 2 is a longitudinal section of the same.

This invention has relation to steam blow-pipes for boiler-furnaces; and consists in the construction and novel arrangement of the same, whereby greater simplicity, convenience, durability, power, and cheapness are obtained than heretofore in the use of steam blow-pipes.

Referring to the accompanying drawing, A designates a pair of horizontal steam-boilers; B, the furnace; C, the grate; and D, the steam-drum. The blower consists of a vertical pipe, E, located directly behind the fire-front Z, between the two boilers, and constructed with two curved diverging branches, F, having their lower ends closed and resting on the grate. The pipe E rises above the tops of the boilers and communicates with the steam-drum by means of a small tube, G. The steam, passing down through the branches F, is allowed to escape therefrom through perforations *g* in the sides, so as to blow the fire and to scatter the sawdust, when the latter is used as fuel.

The principal advantages attending the use of this blow-pipe are, first, it obviates the difficulties heretofore caused by the burning out of the blower, which is usually so arranged as to come in direct contact with the fire; secondly, the inconvenient method of putting the pipe through the fire-front is dispensed with; thirdly, the steam, in descending, becomes superheated and generates gas before reaching the fire. When only one boiler is in use, the blow-pipe may be arranged at one side.

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

1. A steam blow-pipe located directly between the two boilers and behind the fire-front of a furnace, substantially as specified.

2. The steam blow-pipe, consisting of the vertical section E having the diverging perforated branches F, in combination with steam-drum D, constructed and arranged substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN S. ANDERSON.

Witnesses:

J. S. BAKER,

ALVIN HUNTER.