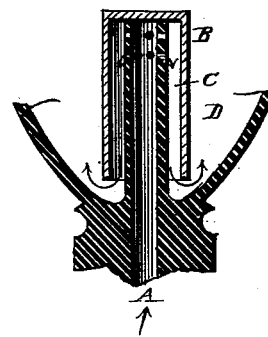
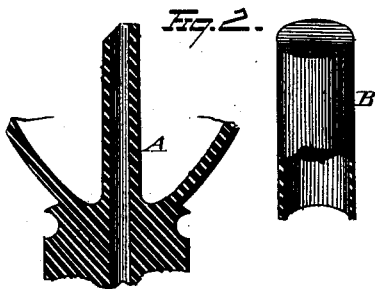
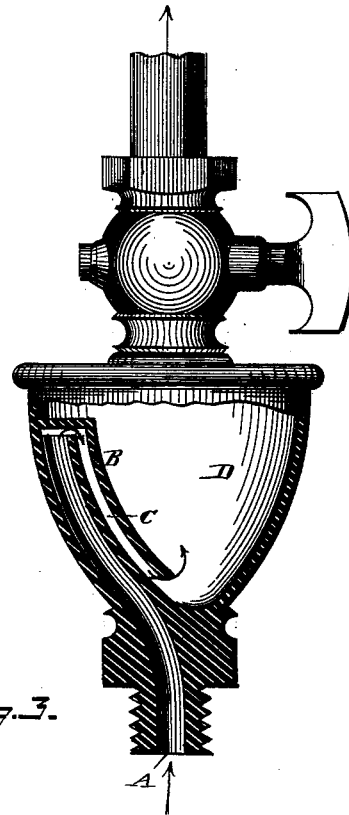
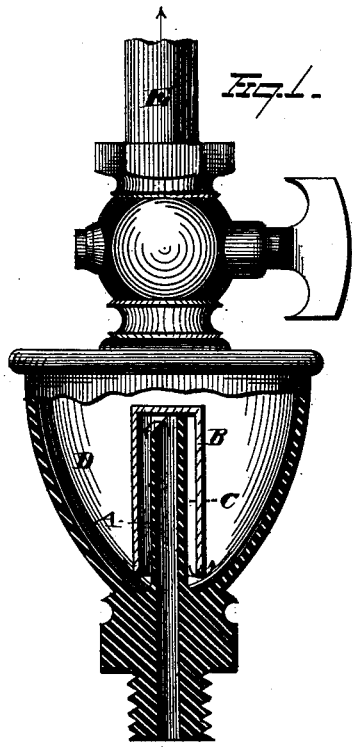


J. A. PRINDLE.
Steam-Gage Siphon.

No. 204,449.

Patented June 4, 1878



WITNESSES
Ed. J. Nottingham
A. M. Bright.

INVENTOR
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UNITED STATES PATENT OFFICE.

JOHN A. PRINDLE, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO JAMES R. WORSWICK, OF SAME PLACE.

IMPROVEMENT IN STEAM-GAGE SIPHONS.

Specification forming part of Letters Patent No. **204,449**, dated June 4, 1878; application filed
April 15, 1878.

To all whom it may concern:

Be it known that I, JOHN A. PRINDLE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Steam-Gage Siphons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to a device for use in connection with steam-gages, whereby said gages shall be operated by a direct water-pressure; and said invention consists in a construction as follows: An induction-pipe, made in same piece with the condensing-chamber, extends up within the latter, and terminates near its top. Over this pipe a casing is fitted, either wholly or partially surrounding the same, and adapted to form a steam space between itself and the side of said induction-pipe. This space provides passage-way communicating from the top of the induction-pipe to the bottom of the condensing-chamber.

In the drawings, Figure 1 represents one form of my invention, as shown in longitudinal section. Fig. 2 represents detached portions of my device, showing one form of its construction. Fig. 3 includes some of various modifications of which my device is susceptible.

A is the inlet-pipe; B, a cap, hood, thimble, or the like, either loosely or rigidly placed in connection with the inlet-pipe A. C is what I term the "steam-space," and D the condensing-chamber. E is the outlet, connected in any suitable manner with a gage.

The device just described may be placed anywhere between the gage and source of pressure, and its operation is as follows: The steam from the boiler enters the inlet A, escapes into the steam-space C, and is condensed in the chamber D. The water of condensation escapes at the outlet E and impinges against the mechanism of the gage. This direct water-pressure is continued during the time that

the pressure is kept up, but when the pressure is relieved the water will drain back into the boiler down to a level with the bottom of the cap or hood B.

This function constitutes an important feature of my device, as it always insures an emptying of the chamber D, which, if permitted to be filled with water, might be bursted by freezing.

What I claim is—

1. A steam-gage siphon, consisting in the combination, with a condensing-chamber and steam induction-pipe terminating near its top, of a casing made independent of said pipe, and forming a passage-way from the same to the bottom of the chamber, substantially as set forth.

2. In a steam-gage siphon, the combination, with a condensing-chamber and upright steam-induction pipe terminating near its top, of a thimble or casing made independent of and fitting about said induction-pipe, the same forming an annular passage connecting the top of the induction-pipe with the bottom of the condensing-chamber, substantially as set forth.

3. In a steam-gage siphon, the combination, with a condensing-chamber, having a steam-induction pipe formed in same piece therewith, and terminating near its top, of a casing which wholly or partially surrounds the side of said pipe, and connects its open top with the bottom of the chamber, substantially as set forth.

4. In a steam-gage siphon, the combination, with a condensing-chamber, having an upright steam-induction pipe made in same piece therewith, and terminating near its top, of a thimble made independent both of said chamber and pipe, and fitting over the latter, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JNO. A. PRINDLE.

Witnesses:

F. TOUMEY,
W. E. DONNELLY.