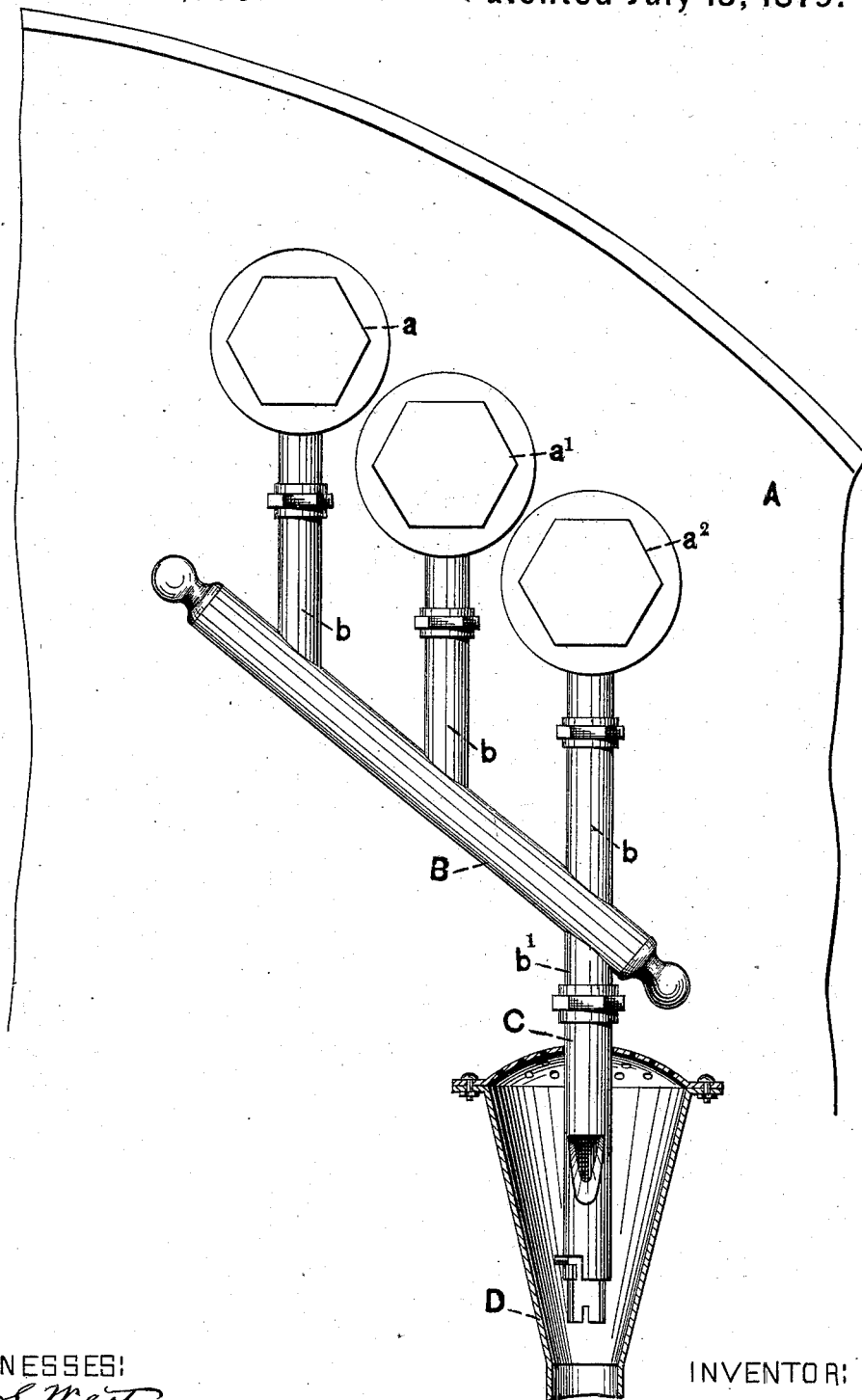


C. R. JOYCE.
Drip-Pipe.

No. 217,538.

Patented July 15, 1879.



WITNESSES:
L. S. West
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UNITED STATES PATENT OFFICE.

CHARLES R. JOYCE, OF ALEXANDRIA, VIRGINIA.

IMPROVEMENT IN DRIP-PIPES.

Specification forming part of Letters Patent No. **217,538**, dated July 15, 1879; application filed June 21, 1879.

To all whom it may concern:

Be it known that I, CHARLES R. JOYCE, of the city and county of Alexandria, in the State of Virginia, have invented a new and Improved Drip-Pipe; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention is an improved drip-pipe for gage-cocks, the special construction of which will be fully described hereinafter.

In the drawing, is represented a front elevation of a boiler having my improved drip-pipe applied thereto.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents a boiler-head provided with gage-cocks *a a' a''*, of any proper construction. *b b b* represent branch pipes leading from the discharge ends of the gage-cocks to the main pipe B, as shown. *b'* represents the discharge end of the main pipe, and C a whistle of any proper construction, attached thereto in any suitable manner.

The pipe B may be closed at the ends, but is preferably made open and provided with removable plugs, so that it may be readily cleaned when desired. D represents a pipe-section extending through the foot-board into which the discharge end of the whistle opens, as shown. This pipe-section is provided with a removable cover having perforations, as shown.

The operation will be readily understood. All the gage-cocks communicate by means of the branch pipes with the main pipe to which the whistle is attached, so that if either one of them is opened the fluid issuing therefrom will be caused to pass through the whistle.

Certain advantages result from this construction. A single whistle, it will be observed, serves for all the gage-cocks, the action being precisely the same when a cock is opened as if no other one was attached to the whistle. No water or steam whatever, if the gage-cocks are in proper order, can escape into the cab. The difference between water and steam will, of course, be indicated by the sounding of the whistle if steam only is escaping, and by its not sounding, if water is escaping.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In connection with the gage-cocks of a steam-boiler, the branch pipes, main pipes, and single whistle, as described.

2. In connection with the branch pipes, the main pipe having the removable plugs, as described.

3. In combination with the whistle C, the pipe D having the removable perforated cover, as described.

C. R. JOYCE.

Witnesses:

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