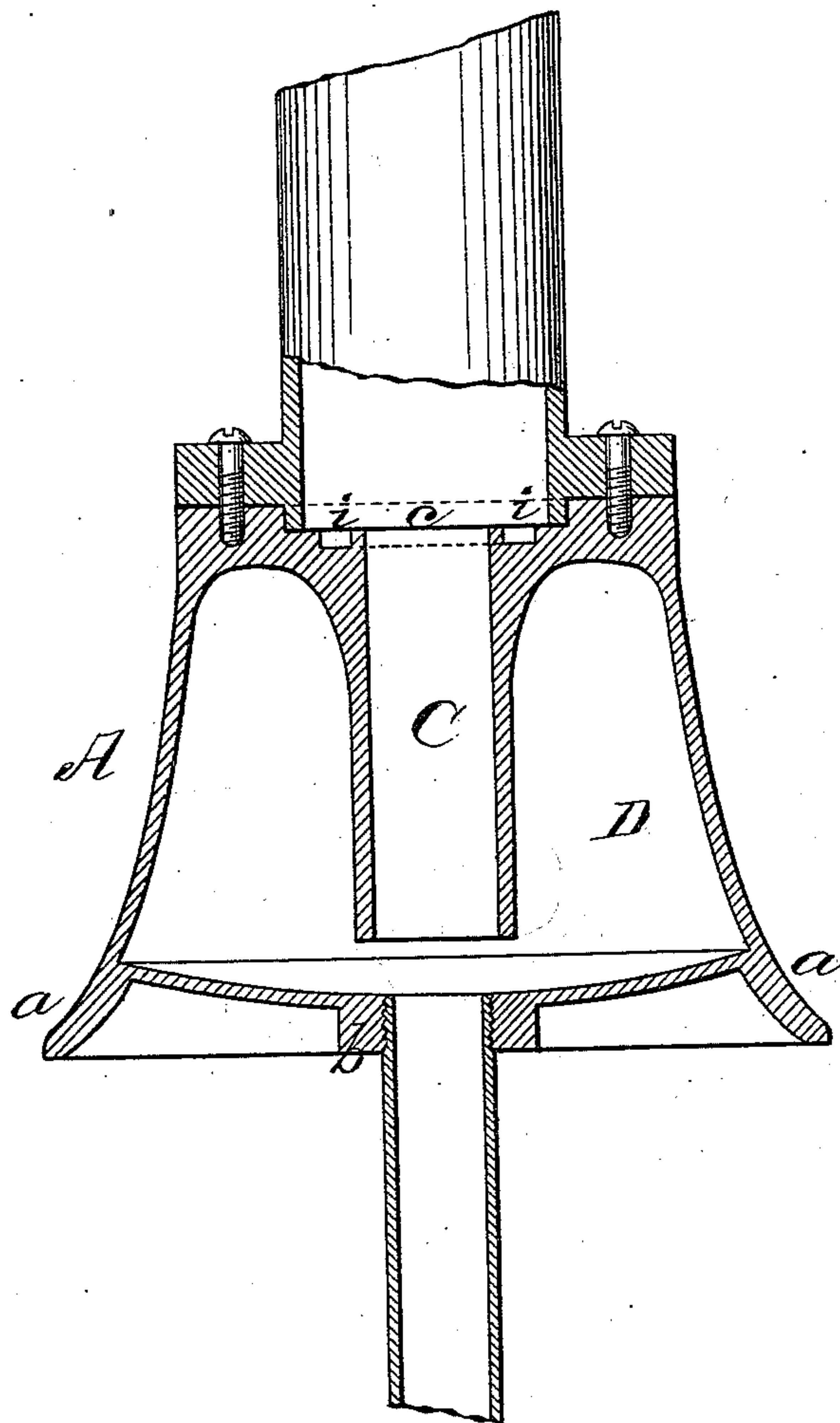


G. PAYNE.
Vacuum-Pump Bases.

No. 213,243

Patented Mar. 11, 1879.



WITNESSES

Mary J. Atley.
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GEORGE PAYNE, OF ROME, NEW YORK.

IMPROVEMENT IN VACUUM-PUMP BASES.

Specification forming part of Letters Patent No. **213,243**, dated March 11, 1879; application filed November 9, 1878.

To all whom it may concern:

Be it known that I, GEORGE PAYNE, of Rome, in the county of Oneida and State of New York, have invented a new and valuable Improvement in Vacuum-Pump Bases; 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 a part of this specification, and to the letters of reference marked thereon.

The drawing is a vertical central section of the improved chambered base.

This invention has relation to improvements in vacuum-pumps; and the nature of the invention consists in a hollow base having at its upper end a seat for the lower valve of the pump, at its bottom a coupling device for the supply-pipe, and inside a tube extending from the valve-seat nearly to the bottom of the base, the pump being attached directly to the base, whereby the flow of water is steadied and increased when the pump-handle is worked, by the vacuum in the chamber of the base, and the suction continued during the downstroke of the said plunger, as will be hereinafter more fully set forth.

In the annexed drawing, the letter A designates the base, the same being a hollow metallic body, usually of the general appearance of a conical frustum, and provided with an annular base-flange, *a*. Base A is provided upon its under side with a tubular neck, *b*, opening into the chamber D, and female-threaded for the attachment of a supply-pipe, and upon its top with a recessed valve-seat, *c*, having in its flat part an annular groove, *i*, for the collection of sand, to which the lower

valve of the pump is applied in any suitable manner. It has also an inside tube, C, extending from the top of the base nearly to its bottom, and open at each end. The pump is secured directly to the base over its valve-seat, and, not differing from those in common use, is not described herein.

The operation of the chamber-base in connection with a pump is as follows: The operation of the pump-handle creates a vacuum, more or less perfect, in the chamber D at every upward stroke of the plunger in the pump-barrel. Water then rushes up the supply-pipe, filling this chamber until the downward stroke commences. It is then partly or wholly emptied, a partial vacuum being thus caused, which during the downward stroke continues to suck water up the supply-pipe and maintain a constant steady flow to the pump. By this means the supply and flow of water are greatly increased without additional labor, and it issues from the spout in a steady, regular stream.

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

The hollow base A, interposed between the pump and supply-pipe, having a valve-seat, *c*, with sand-groove *i*, threaded neck *b*, and an inside tube, C, extending from said seat nearly to the bottom of the said base, substantially as specified.

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

GEORGE PAYNE.

Witnesses:

JOHN S. BAKER,
WILLIAM E. WRIGHT.