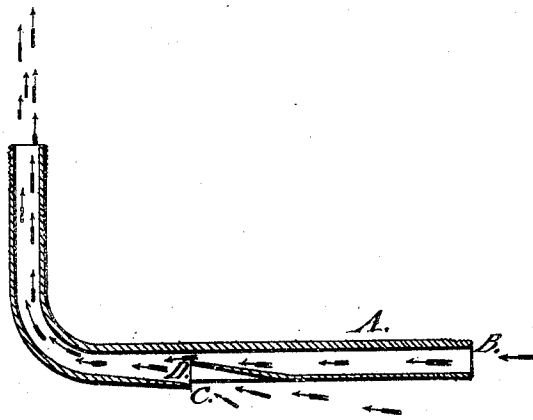


D. A. Dunham,

Water-Elevator.

Nº 94,582.

Patented Sep. 7. 1869.



Witnesses:

Gustave Dietrich
Geo. W. Mober,

Inventor:

D. A. Dunham
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United States Patent Office.

D. A. DUNHAM, OF PILATKA, FLORIDA.

Letters Patent No. 94,582, dated September 7, 1869.

IMPROVEMENT IN WATER-ELEVATOR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, D. A. DUNHAM, of Pilatka, in the county of Putnam, and State of Florida, have invented a new and improved Water-Elevator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in devices used for raising or injecting water by a jet of steam. Those at present known to the public, which are constructed with reference to the same general principle of operation as mine, are comparatively complicated and expensive, the simplest of them consisting in an arrangement of two pipes, one within the other; with the necessary accessories of perforations and couplings, &c., for connecting and preserving the proper relative position of the parts.

My invention, while effecting the same result, and operating in an analogous manner, consists of a single pipe of any suitable metal, the same having a transverse incision made in its under side, and the shell being bent in at that point, to form a "throat" or contracted passage, as will be hereinafter more fully described.

The drawing represents a sectional elevation of my improved apparatus.

I take any suitable metallic pipe, A, and bend it into the form best adapted for the place to which it is to be

applied, for receiving and conveying the water, and provide the proper steam-connection at B, beyond the steam-connection, and preferably at the bottom, or that part of the pipe which can be placed in the lowest position.

I make a water-receiving passage, C, bending the shell of the tube inward at the place where it is cut to form the said passage, so as to contract the steam-passage as at D, while opening the space C for the water.

The steam, passing through the throat at D, creates a vacuum in the water-passage C, thereby inducing it to flow in, and be forced up the pipe through the mouth E, or any suitable connection.

The especial advantages of this arrangement are the simplicity of construction and the adaptability of the device to draw the water from the lowest position, or from the bottom in the hold of a vessel.

Having thus described my invention,

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

The improved "water-elevator" herein described, consisting of a single pipe or tube, A, provided on its under side with a transverse incision, to allow the shell of the same to be bent inward at that point to form a steam-passage, D, and also a water-passage, C, as and for the purpose specified.

D. A. DUNHAM.

Witnesses:

A. L. RICE,
N. L. SPERRY.