T. H. SCHRIBER.

EJECTOR.

No. 109,553. Patented Nov. 22, 1870.

Fig. 1.

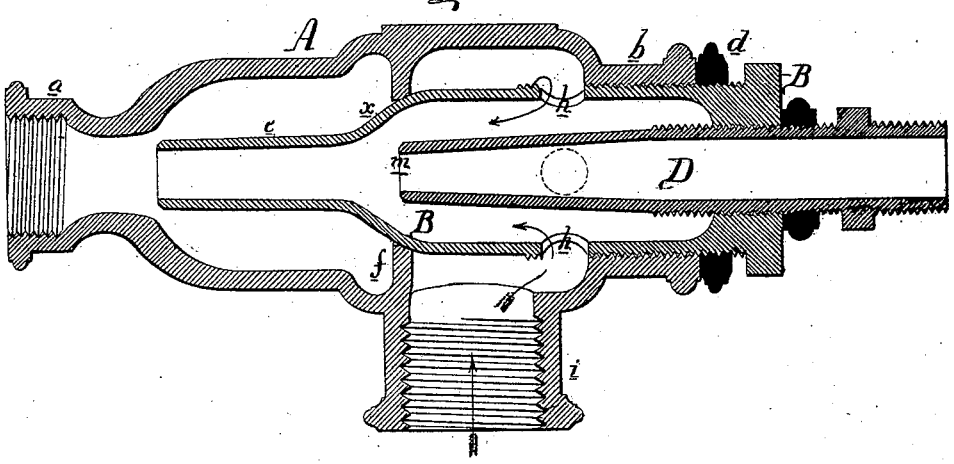
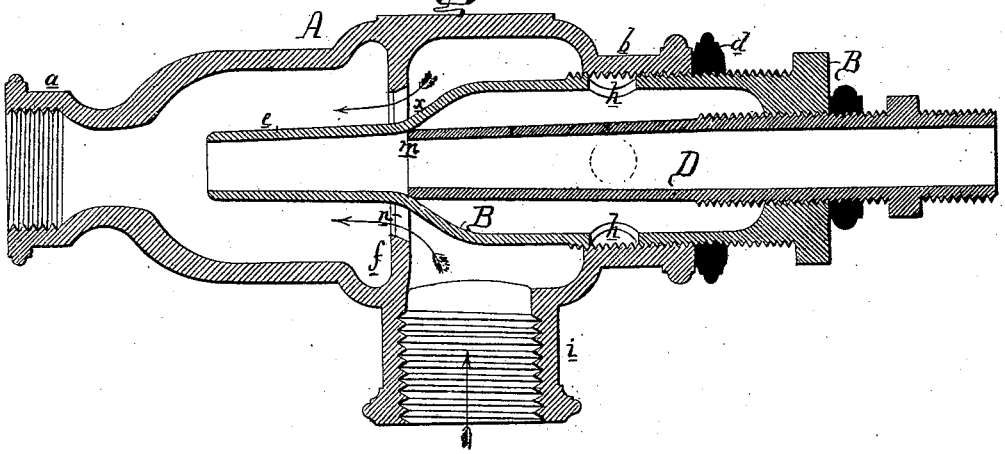


Fig. 2.



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By his Attys
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

United States Patent Office.

THOMAS H. SCHRIBER, OF EVANSVILLE, INDIANA.

Letters Patent No. 109,553, dated November 22, 1870.

IMPROVEMENT IN EJECTORS.

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

I, THOMAS H. SCHRIBER, of Evansville, county of Vanderburg, State of Indiana, have invented an Improved Ejector, of which the following is a specification.

Nature and Object of the Invention.

My invention consists of an ejector, constructed in the peculiar manner fully described hereafter, so that it can be readily adjusted to raise and force water; or to raise a large volume of water without forcing the same; or to raise a moderate volume of water, and force it to a limited height, as circumstances may require.

Figures 1 and 2 in the accompanying drawing illustrate the instrument, with the movable parts in different positions.

General Description.

A is the exterior casing of the instrument, terminating at one end in a branch, *a*, to which the discharge-pipe can be secured, and at the opposite end in a tubular projection, *b*, having internal screw-threads adapted to external threads on a nozzle, B, which projects into the casing A, and is reduced in diameter at *x*, where it forms a valve, adapted to a seat on the edge of an opening in a partition, *f*, in the casing A.

The nozzle B has any desired number of holes, *h*, and can be so adjusted that these holes shall communicate with the suction-branch *i* of the casing A, as shown in fig. 1, or cut off from such communication, as shown in fig. 2.

D is an inner nozzle, communicating with a steam-pipe, and having a screw-thread adapted to an internal thread in the head of the nozzle B, so that it can be adjusted until its end *m* is in contact with the interior of the nozzle B, where the latter is reduced in diameter.

As seen in fig. 1, the instrument is adjusted for raising and forcing water, the opening in the partition *f* being closed, so that the water must pass from the suction-branch *i* through the openings *h*, and forced thence, by and with the steam, through the end *e* of the nozzle, and through the branch *a*.

When the instrument is required for simply raising water without forcing it, the nozzles are adjusted to the position shown in fig. 2, thereby closing the openings *h*, exposing an annular opening, *n*, in the partition *f*, and causing the end of the nozzle D to be in contact with the interior of the nozzle B, where the latter is reduced in diameter. The water, in this case, must pass from the suction-branch *i* directly through the annular opening *n* in the partition *f*, and thence with the jet of steam from the nozzle D through the branch *a*.

A much larger volume of water can be raised and simply delivered at the discharge-branch *a* by the instrument when in the condition shown in fig. 2 than when it has been adjusted to both raise and force the water, as shown in fig. 1.

The nozzles may be so adjusted that the openings *h* are partly exposed, the end of the nozzle *m* a short distance from its seat in the nozzle B, and the latter so adjusted as to permit a limited opening in the partition *f*, in which case a comparatively large volume of water may be forced to a limited height through the branch *a*.

It will now be seen, without further description, that the instrument may be readily adjusted to raise water and force the same; or so adjusted as to raise a large volume of water and simply deliver it without forcing; or to raise a moderate supply of water and force it to a limited height, as the duty to be performed may require.

Both nozzles are furnished with tightening-nuts, so that they can be secured after adjustment.

Claim.

The exterior casing A, its branches *a b i*, partition *f*, and valve-seat, in combination with the adjustable nozzle B, adapted to the valve-seat, and having perforations *h h*, and steam-nozzle D adjustable in the nozzle B, all substantially as and for the purpose described.

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

THOMAS H. SCHRIBER.

Witnesses:

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W. J. R. DELANY.