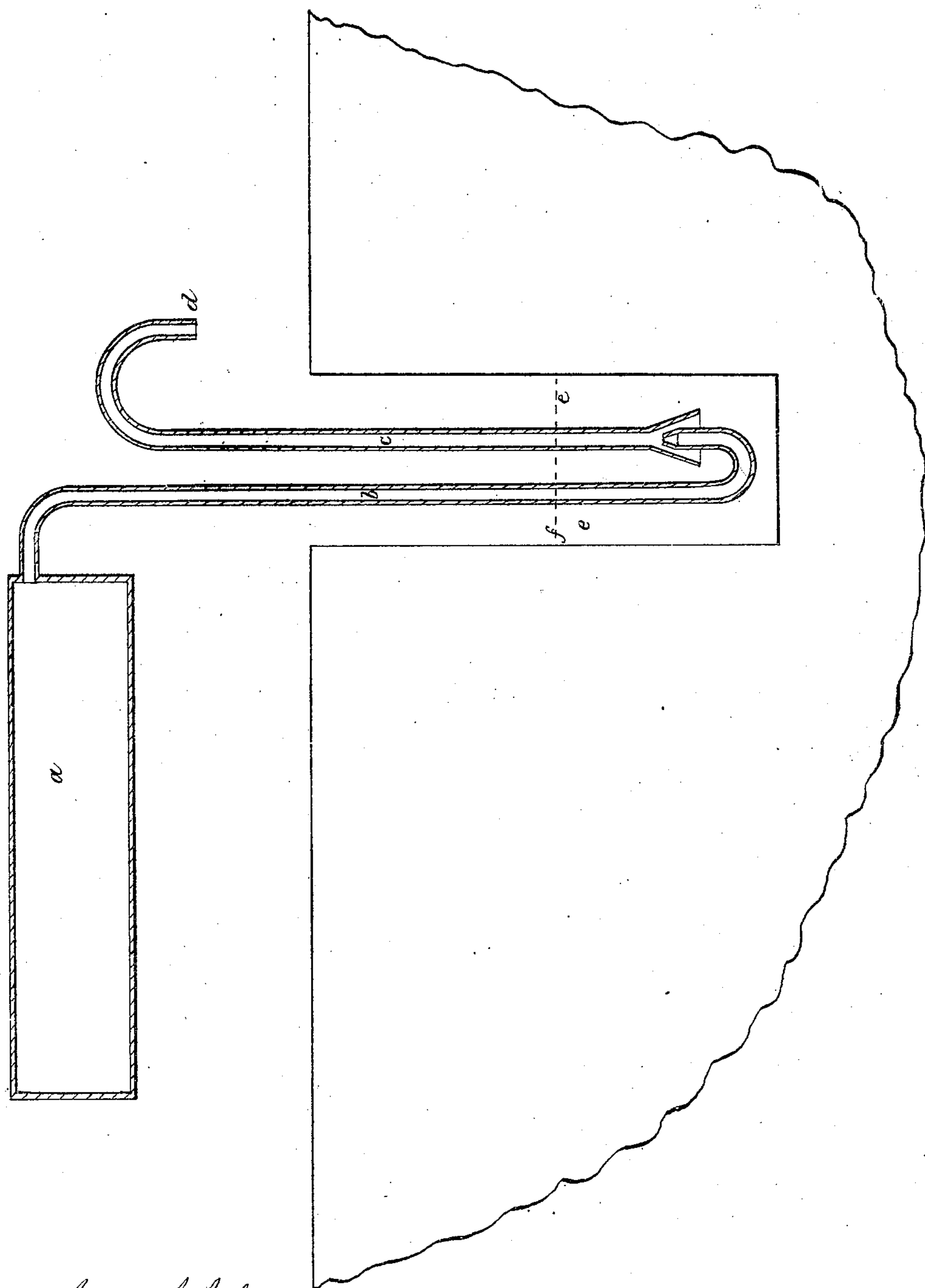


C. W. Glass.
Water Elevator.

N^o 92718.

Patented July 20. 1869.



Witnesses. James J. Johnston
J. A. Blackstock

C. W. Glass. Inventor.

United States Patent Office.

GEORGE W. GLASS, OF NEW BRIGHTON, PENNSYLVANIA.*

Letters Patent No. 92,718, dated July 20, 1869.

IMPROVEMENT IN EJECTORS.

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, GEORGE W. GLASS, of New Brighton, in the county of Beaver, and State of Pennsylvania, have invented a certain new and useful Improvement in Device for Ejecting Oil, Water, &c., from wells, ships, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the combination and use of pipes, as hereinafter described, for forcing, blowing, or ejecting liquids from wells, ships, or other places, by steam or air.

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

In the accompanying drawings—

a represents an ordinary steam-generator, for generating steam.

To this boiler is attached a pipe, *b*, the curve on the lower end of which enters within the funnel-shaped piece on the lower end of the pipe *c*.

The pipes *b* and *c* are arranged in the well *e*, with their lower ends sunk below the surface of the oil or water, as indicated by the dotted line *f*.

The pipes *b* and *c* may be secured in the well, or other place, in the position desired, by any known means, care being to have them arranged substantially in the manner represented in the accompanying drawings.

When steam is used, the pipe *b* should be protected from the cold by covering it with some suitable material, so that the condensation of the steam will be prevented.

When air is used instead of steam, then the upper end of the pipe *b* is attached to a suitable air-pump,

or other device, which may be used for forcing air down the pipe *b*.

I wish it to be clearly understood, that I do not confine myself to any particular kind, size, or form of pipes, or to any particular bend, shape, or form of the parts sunk below the surface of the oil or water; provided, however, that in all cases, the arrangement herein represented, of the pipes, with relation to each other, must be substantially the same.

It will readily be observed that the ordinary seed-bags used for closing the mouth of the well, and for cutting off currents of water from the well, can readily be used in connection with the pipes *b* and *c*.

The operation of my improvement is as follows:

Steam or air is forced down the pipe *b*, which will force the oil or water up the pipe *c* and out at the end *d*.

Having thus described the nature, construction, and operation of my improvement,

What I claim as of my invention, is—

1. The combination of the pipes *b* and *c*, so arranged as to be used for the purpose of forcing, blowing, or ejecting liquids from wells, ships, or other place, as herein described and set forth.

2. The ejector, composed of the pipes *b* and *c*, the lower end of pipe *b* entering within the conformed mouth of the pipe *c*, substantially as herein described.

3. The construction and combination for immersing in oil or water, in wells or other place, the lower end of pipes arranged so that by the use of steam or air forced down one pipe, liquids will be forced up the other, substantially upon the principle as herein described and set forth.

GEO. W. GLASS.

Witnesses:

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