

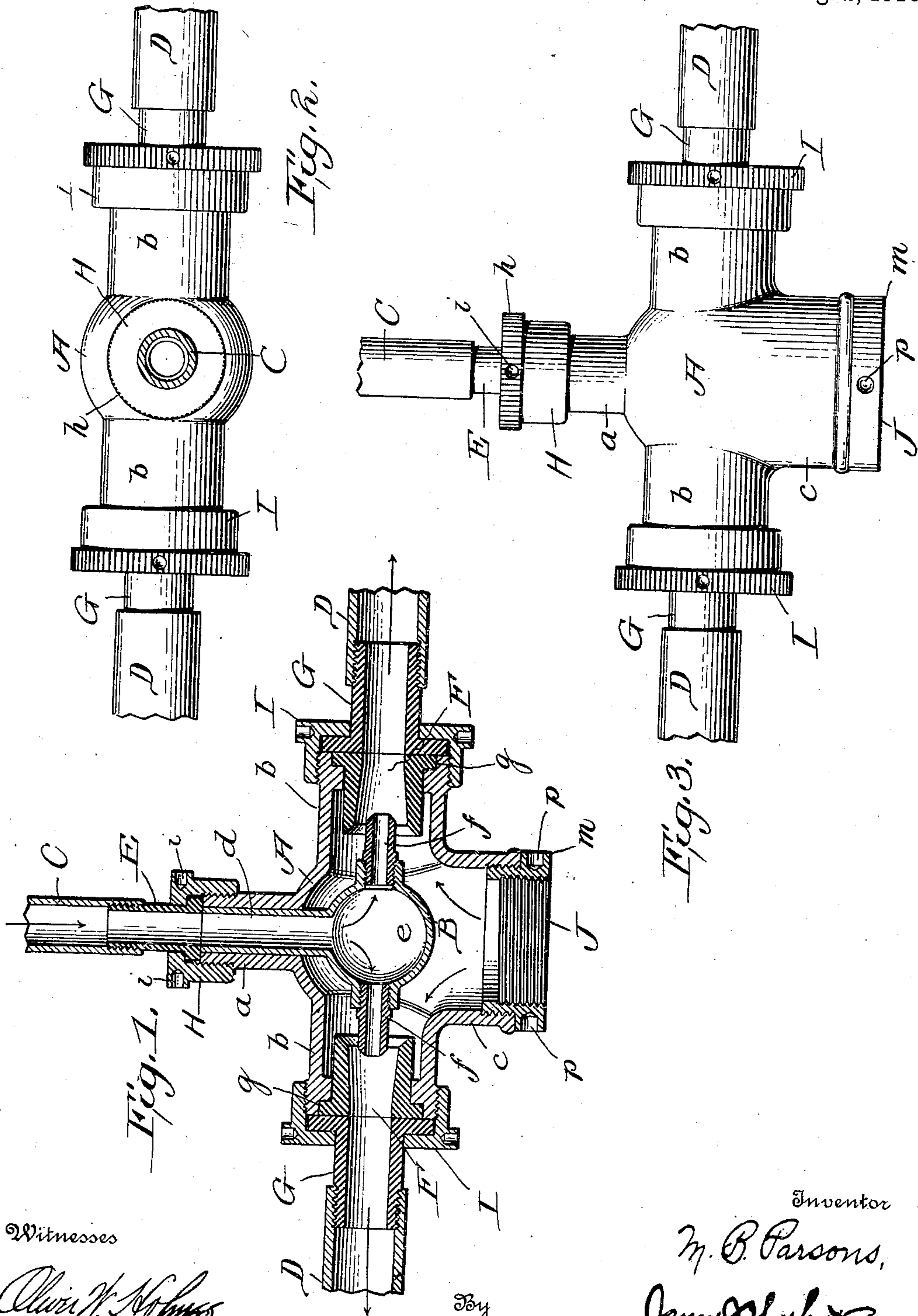
M. B. PARSONS.

EJECTOR.

APPLICATION FILED APR. 11, 1910.

966,048.

Patented Aug. 2, 1910.



Witnesses

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# UNITED STATES PATENT OFFICE.

MILES B. PARSONS, OF BIRMINGHAM, ALABAMA.

## EJECTOR.

966,048.

Specification of Letters Patent.

Patented Aug. 2, 1910.

Application filed April 11, 1910. Serial No. 554,637.

*To all whom it may concern:*

Be it known that I, MILES B. PARSONS, citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented new and useful Improvements in Ejectors, of which the following is a specification.

My present invention has to do with fluid ejectors; and it has for its main object the provision of a double ejector which, in proportion to its size, is possessed of large capacity.

Another object of the invention is the provision of a fluid ejector embodying simple and easily manipulated appurtenances through the medium of which tight connections may be effected between the ejector and the several pipes that it is necessary to employ in combination therewith.

Other advantageous characteristics of the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is a longitudinal vertical section of the ejector constituting the best practical embodiment of my invention of which I am cognizant. Fig. 2 is a horizontal section taken through the steam or other fluid-pressure pipe that leads to the ejector, looking downward. Fig. 3 is a side elevation of the ejector.

Similar letters of reference designate corresponding parts in all of the views of the drawings.

The body A of my novel ejector is preferably formed in one piece of the shape shown, and is provided with a comparatively small upwardly extending arm *a*, larger arms *b* which reach laterally from it in opposite directions and are arranged in alinement with each other, and a still larger depending arm *c*; the arms *a* and *b* being exteriorly threaded at their outer ends, and the arm *c* being interiorly threaded at its lower end.

Suitably secured in the upwardly reaching arm *a* of the body A is the tube *d* of the forcing device B, which forcing device in addition to the said tube *d*, comprises a globular body *e* arranged at the lower end thereof, and nozzles *f* screwed into the said globular body and arranged in the longitudinal centers of the arms *b* of body A, and so as to discharge in opposite directions.

C is a pipe for leading steam or other fluid under pressure to the ejector.

D D are pipes for leading fluid from the ejector.

E is a nipple connected to the pipe C and having a flanged base superposed on the upper ends of the arm *a* and tube *d*.

F F are removable delivery tubes which surround the outer portions of the nozzles *f* and have flanged outer ends seated in annular recesses *g* provided in the outer ends of the arms *b*.

G G are flanged nipples connected to the pipes D and opposed at their inner ends to the outer ends of the arms *b* and delivery tubes F.

H is a flanged and threaded union which couples the nipple E to the arm *a* in detachable manner, and is provided, by preference, with a milled portion *h* and with sockets *i*, the latter to receive a wrench rod. I I are larger unions which effect detachable connection of the nipples G to the arms *b*, and J is an interiorly and exteriorly threaded union for effecting detachable connection between the arm *c* of the body A and a pipe (not shown), designed to lead from a source of fluid supply. The said union J is provided with an exterior flange *m*, designed to bring up against the lower end of the arm *c*, and is also provided, by preference, with sockets *p* to receive a wrench rod, spanner or the like.

In the practical use of my novel ejector it will be understood that when the arm *c* of body A is connected with a suitable source of water supply or other fluid supply, and fluid under pressure, preferably steam, is permitted to pass downward through the pipe C, the said fluid under pressure will pass forcibly through the nozzles *f* and the suction created thereby will adequately raise fluid through the arm *c* which fluid will be forced through the delivery tubes F, the nipples G and the pipes D to the points or point desired.

It will be gathered from the foregoing that incidental to the operation of my novel ejector, the lifted body of fluid will be divided with a minimum amount of friction, and portions of the fluid will be synchronously forced in opposite directions from the ejector, with the result that the action of the ejector will be steady, and its large capacity in proportion to its size maintained.



While I have shown and described one form of my invention, it is to be understood that I am not limited to the details or the form or relative arrangement of parts disclosed, but that modifications may be made therein without departing from the spirit thereof.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. In an ejector, the combination of a body having arms extending laterally in opposite directions therefrom and provided with exterior threads and interior recesses at their ends, and also having a comparatively small arm extending at a right angle to the first-named arms and provided with an exterior thread, and further having a comparatively large and interiorly threaded arm extending in the opposite direction to the small arm and at a right-angle to the first-named arm; delivery tubes arranged in the first-named arms of the body and having end flanges seated in the recesses thereof; flanged nipples opposed to the outer ends of the first-named arms of the body and the outer ends of the delivery tubes; flanged and interiorly threaded unions effecting detachable connection of said nipples to the first-named arms of the body; a flanged and threaded union connected with the last-named arm of the body; a forcing device having a tube fixed in the second-named arm of the body and also having a globular body at the inner end of the tube and nozzles

extending in opposite directions from said globular body and disposed in the inner portions of the delivery tubes; a nipple having a flanged inner end opposed to the outer ends of the second-named arm of the body and the tube of the forcing device; and an interiorly threaded and flanged union effecting connection of said nipple to said second-named arm of the body.

2. In an ejector, the combination of a body having an arm extending in one direction therefrom and designed for connection with a source of fluid-pressure supply, an arm extending in the opposite direction from the body and designed for connection with a source of fluid supply, and arms extending in opposite directions from the body and at angles to the first-named arms; delivery tubes carried in the last named arms of the body and designed for connection with delivery pipes; and a forcing device connected with the first-named arm of the body to receive fluid under pressure and having a globular inner portion and also having nozzles extending in opposite directions from said globular inner portion and disposed in the inner portions of the delivery tubes.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MILES B. PARSONS.

Witnesses:

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J. L. BRASHER.