

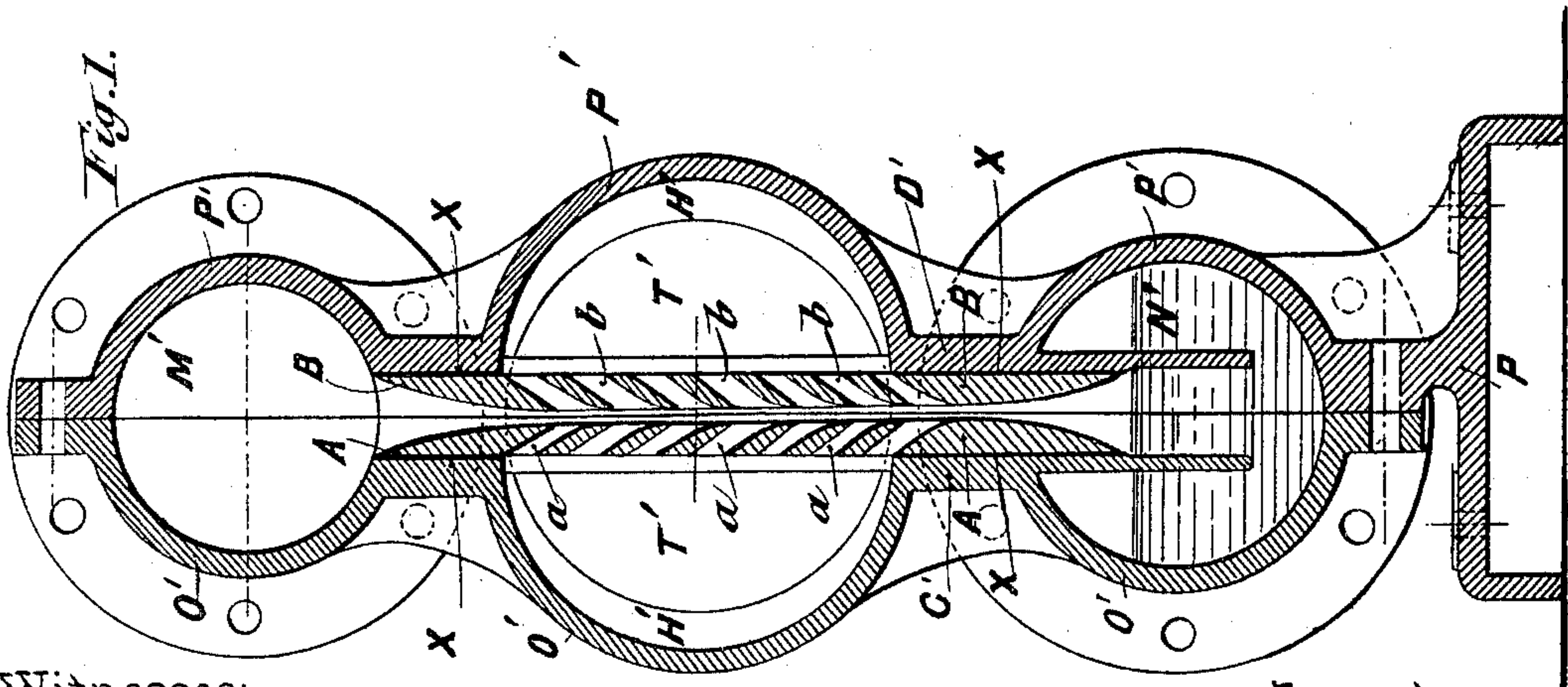
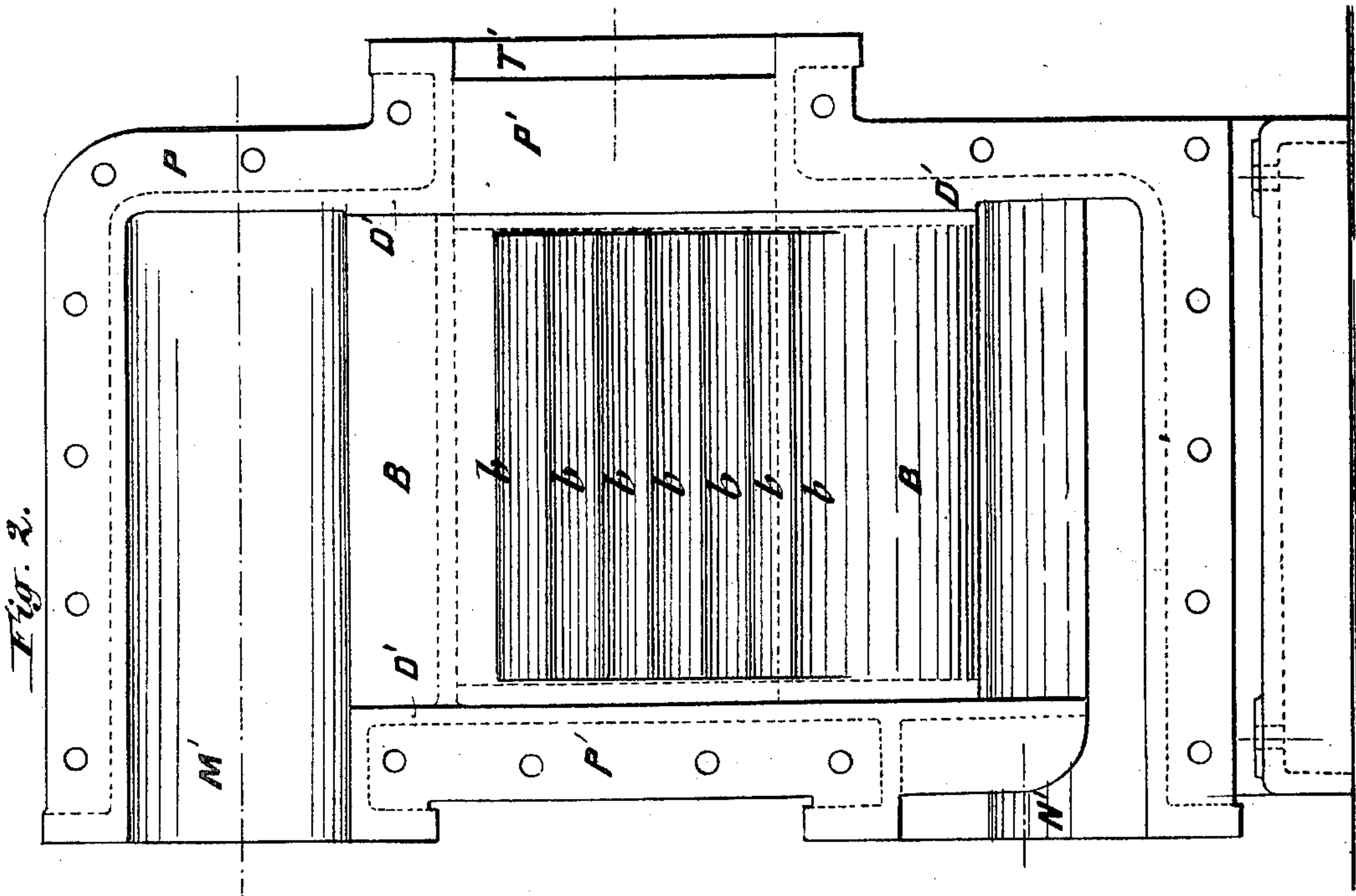
No. 681,726.

Patented Sept. 3, 1901.

P. NEZERAUX.
CONDENSING APPARATUS.

(Application filed May 4, 1901.)

(No Model.)



Witnesses:

E. Hoffman.
G. S. Noble

Inventor,

Phacide Nézerant
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UNITED STATES PATENT OFFICE.

PLACIDE NÉZERAUX, OF FIVES-LILLE, FRANCE.

CONDENSING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 681,726, dated September 3, 1901.

Original application filed September 23, 1900, Serial No. 31,419. Divided and this application filed May 4, 1901. Serial No. 58,829. (No model.)

To all whom it may concern:

Be it known that I, PLACIDE NÉZERAUX, a citizen of the Republic of France, and a resident of Fives-Lille, France, have invented certain new and useful Improvements in Condensing Apparatus, of which the following is a specification.

The present application is a division of my prior application, Serial No. 31,419, filed September 23, 1900.

My present invention relates to a condensing apparatus, the object being to provide an improved condenser to be employed in conjunction with a pump or any other source of pressure adapted to supply water under pressure, said condenser producing condensation of steam or any gas by means of an oblong jet of water capable of making the vacuum within a suitable chamber and carrying with it and condensing the fluid to be condensed.

A further object of my invention is to provide an apparatus which is of simple and compact construction and which may be easily started, it being noted that the novel construction has no movable parts subject to get out of order during the operation.

With these objects in view my invention consists of the novel construction and combination of parts fully described and claimed hereinafter, reference being had to the accompanying drawings, wherein—

Figure 1 is a vertical sectional view of a condenser constructed in accordance with my invention, and Fig. 2 is a side elevation of same.

In the drawings, A and B are two converging and diverging plates suitably secured to the parts C' D' of the casings O' P'. Said plates are perforated at *a a* and at *b b*, respectively, as shown. The casings O' P' are suitably secured to each other at their adjacent rims and form a capacity or chamber H', provided with a steam admission T'. Within said casings are arranged an upper condensing-water inlet M' and a lower condensation-water outlet N'.

This construction operates as follows: The

condensing-water forced under pressure at M' into the apparatus is discharged in the form of strata between the plates A and B and through the nozzle N into any discharge-conduit. This steam entering the apparatus at T' passes into the chamber H' and is condensed by contact with the liquid jet, the velocity of which is thus increased, thereby producing a perfect vacuum.

It will be noted that the distance between the plates A B may be easily adjusted by inserting sheets of metal or other material between said plates and their seatings for the purpose of obtaining a more rational consumption of water, that said adjustment may be effected from the outside by making provision whereby said plates may be moved on their seatings, so that they may be moved close to or apart from each other, as required, that the converging angle between the movable plates may also be determined, so as to simultaneously control the passage of steam through the plates and the passage of condensing-water between said plates, and that simple holes of equivalent cross-section and suitable incline may be substituted for the perforations of the plates, as shown in the drawings.

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

In a condenser of the class described, the combination with a steam-chamber, and a water-tank, of a pair of oppositely-arranged converging and diverging plates between said chamber and tank, inclined perforations in said plates, means for leading water under pressure between the plates into the tank, and means for leading steam into said chamber, substantially as and for the purpose set forth.

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

PLACIDE NÉZERAUX.

Witnesses:

CHARLES PETIT,
ALFRED CHERVE.