

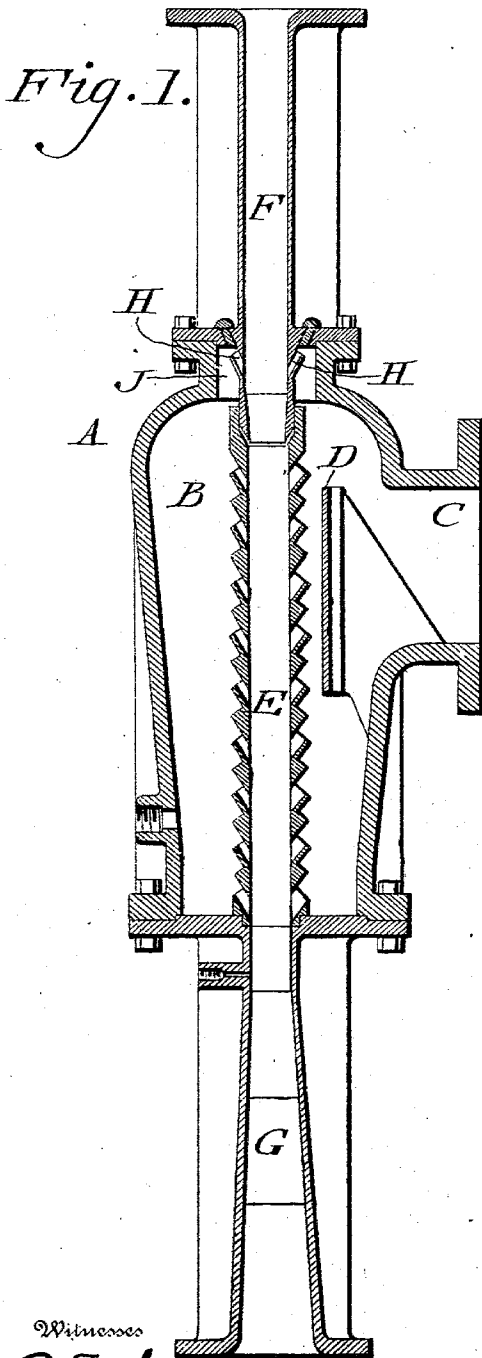
No. 720,908.

PATENTED FEB. 17, 1903.

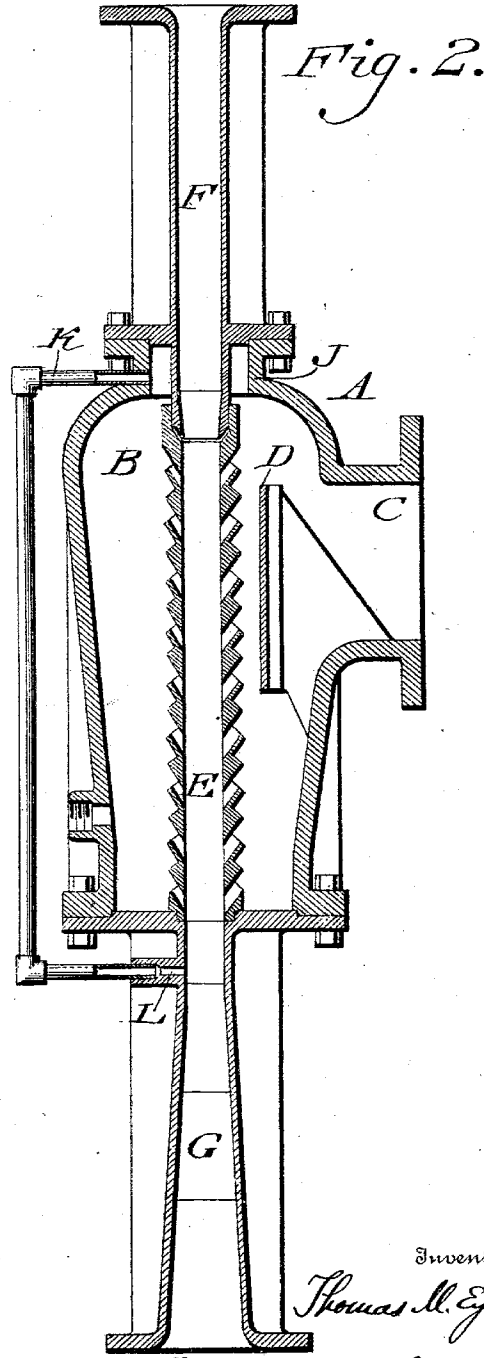
T. M. EYNON.
CONDENSER.

APPLICATION FILED APR. 2, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

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CONDENSER.

SPECIFICATION forming part of Letters Patent No. 720,908, dated February 17, 1903.

Application filed April 2, 1902. Serial No. 101,122. (No model.)

To all whom it may concern:

Be it known that I, THOMAS M. EYNON, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Removing Non-Condensing Gases from the Steam-Chamber of Condensers, of which the following is a specification.

My invention consists of an improvement in condensers whereby the non-condensed gases, &c., are removed from the steam-chambers thereof. It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a vertical sectional view of the condenser embodying my invention. Fig. 2 represents a vertical sectional view of a condenser, showing a slight change in construction.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a condenser having the steam-chamber B provided with the usual steam-opening C, the baffle-plate D, and the combining-tube E, situated within the steam-chamber B, the upper end of which communicates with the water-nozzle F and the lower end of said combining-tube communicating with the discharge-tube G.

H designates openings or passages which are made in the water-nozzle, forming a communication between the collecting-chamber J in the upper portion of the steam-chamber B and the interior of the water-nozzle, it being seen that said openings or passages are situated in substantially the upper portion of the steam-chamber B, whereby the non-condensed gases, &c., which rise to the top of said chamber, will be drawn in through said passages into the interior of the water-nozzle and will be carried off by the water to any suitable point of discharge, the suction which causes the drawing in of said gas being caused by the passage of the water through the waterway or water-nozzle. It will of course be evident that I do not desire to be limited to the passages being situated in the water-nozzle or in the collecting-chamber J in the upper por-

tion of the steam-chamber B, since it will be apparent that the combining-tube may be extended up into the collecting-chamber J or the said collecting-chamber J may not in some cases be formed, in which event the passages H will be somewhat lower in position, the operation, however, being the same in both cases, it being seen that my object is, broadly, to provide a communication between the upper portion of the steam-chamber and the waterway or pipes and tubes through which the water passes in order that the non-condensed gases, &c., may be carried off.

In Fig. 2 I have shown a construction substantially the same as that in Fig. 1, excepting that I provide an opening in the upper portion of the chamber B and have a pipe K communicating with said chamber B, which passes around outside of the casing of said chamber B and discharges, as at L, into the discharge-tube, it being evident that in this manner I also form a passage or communication between the upper portion of the steam-chamber and the pipes or tubes through which the water passes. It will be evident that various changes may be made by those skilled in the art which will come within the scope of my invention, and I do not, therefore, desire to be limited in every instance in the exact construction herein shown and described.

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

1. In a condenser, a steam-chamber, an inlet therefor, a collecting-chamber in the upper portion of said steam-chamber, a waterway and a passage communicating with the upper portion of the steam-chamber and with said waterway, whereby the non-condensed gases in the upper portion of said steam-chamber are withdrawn therefrom by the suction caused by the passage of the water through said condenser.

2. In a condenser, a steam-chamber, an inlet therefor, a collecting-chamber in the upper portion of said steam-chamber, a waterway and a passage in the walls of said waterway forming a communication therebetween and the upper portion of the steam-chamber, whereby the non-condensed gases in the upper

portion of said steam-chamber are withdrawn therefrom by the suction caused by the passage of the water through said condenser.

3. In a condenser, a steam-chamber, an inlet therefor, a collecting-chamber in the upper portion of said steam-chamber, a water-nozzle, a combining-tube communicating therewith, a discharge-tube communicating with said combining-tube and passages in said water-nozzle at substantially the upper portion of the steam-chamber, whereby the non-condensed gases in the upper portion of said steam-chamber are withdrawn therefrom by the suction caused by the passage of the water through said condenser.

4. In a condenser, a steam-chamber, an inlet therefor, a collecting-chamber in the upper portion of said steam-chamber, a waterway, and a passage communicating with said collecting-chamber and with said waterway.

5. In a condenser, a steam-chamber, an inlet therefor, a collecting-chamber in the upper portion of said steam-chamber, a waterway and an external passage communicating with said collecting-chamber and leading downwardly therefrom to said waterway.

THOMAS M. EYNON.

Witnesses:

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