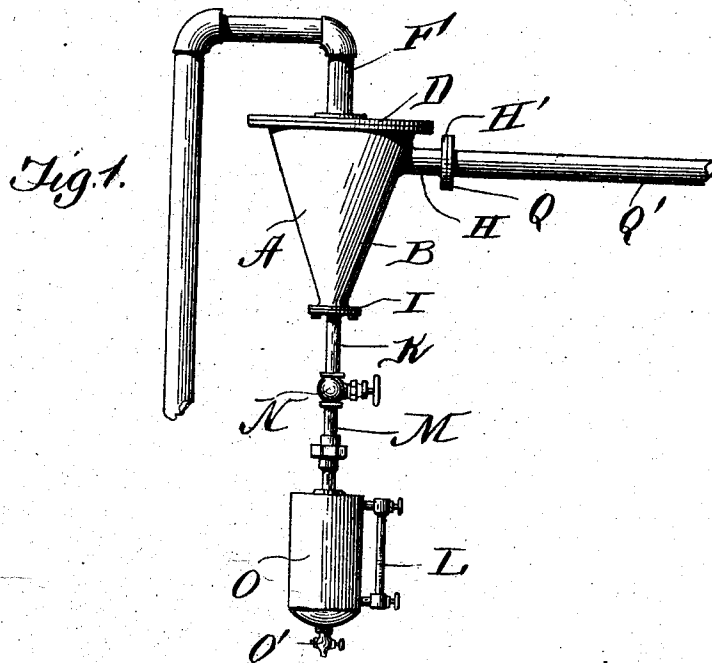
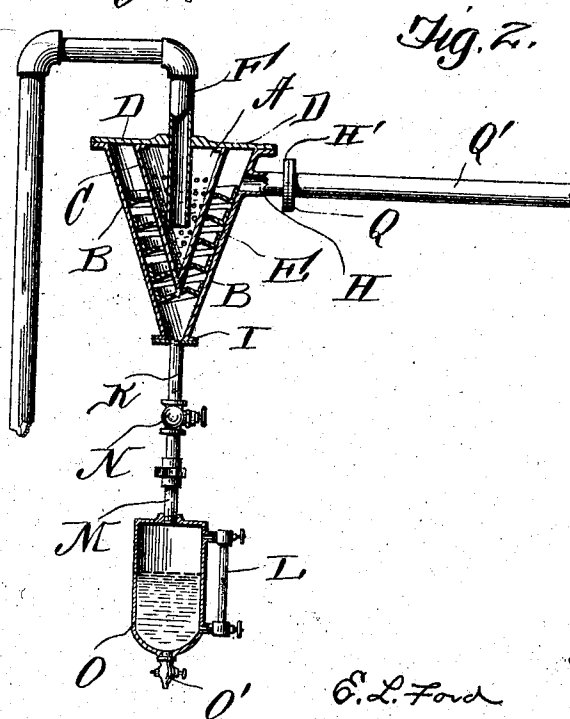


No. 806,129.

PATENTED DEC. 5, 1905.

E. L. FORD.
STEAM SEPARATING APPARATUS.
APPLICATION FILED JULY 7, 1905.



Witnesses

R. A. Boswell,
Hester E. Drayton

E. L. Ford

Inventor

By

Franklin N. Hough

Attorney

UNITED STATES PATENT OFFICE.

EDWARD L. FORD, OF ZWOLLE, LOUISIANA, ASSIGNOR OF ONE-HALF TO
T. V. WILSON, OF ZWOLLE, LOUISIANA.

STEAM-SEPARATING APPARATUS.

No. 806,129.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed July 7, 1905. Serial No. 268,607.

To all whom it may concern:

Be it known that I, EDWARD L. FORD, a citizen of the United States, residing at Zwolle, Sabine parish, State of Louisiana, have invented certain new and useful Improvements in Steam Drying and Separating Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in steam drying or separating apparatus, and comprises means whereby the excess of moisture in steam may be separated therefrom before the steam enters a cylinder; and the invention comprises various details of construction and combinations and arrangements of parts, which will hereinafter be fully described, and then specifically defined in the appended claim.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved apparatus, and Fig. 2 is a vertical section of the same.

Reference now being had to the details of the drawings by letter, A designates a conical-shaped receptacle, having two walls B and C spaced apart. D designates the top of the receptacle, which is centrally apertured to receive a pipe F, which is adapted to communicate with a cylinder or other object to which the steam after being entirely separated from excessive moisture is adapted to be fed. The space intermediate said walls B and C of the receptacle is provided with a spiral passage-way E, extending from the upper portion of an inlet-pipe H down to the lower end of said receptacle. The bottom of said receptacle is flanged, as at I, and is apertured to receive an exit-pipe K, which leads to a globe-valve N, and from said globe-valve a pipe M leads to a cylinder O, provided with a stop-cock O' at

its bottom and carrying a gage-tube L. Said inlet-pipe H has a flange H', which is connected to a flange Q of a pipe Q' and through which steam from the boiler passes under pressure to the space intermediate the walls B and C of the receptacle A. The inner wall C, it will be observed, is provided with perforations through which the steam, after a portion of the excessive water thereof has been separated, is adapted to pass and make exit through the pipe F, while the water of condensation, as the steam comes in contact with the walls of the spiral passage-way, runs down through the pipe K and may be drawn from the receptacle.

From the foregoing it will be observed that a simple and efficient means is provided for separating the excess of water from steam, allowing the dry steam to pass direct from the receptacle to a cylinder, while the water condensing from the steam may be utilized for feed-water or other purposes.

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

An apparatus for separating excessive moisture from steam, comprising an outer conical shell, with a flanged top and bottom, a spiral angle-bar fitted to the inner circumference of said shell, an inner conical shell with perforated circumference, with a space intervening between said inner shell and the inner marginal edge of said spiral angle-bar, a common top to said shells fastened to the flanges projecting from the outer shell, a pipe leading through said top and into said inner shell, a passage-way leading into the space intermediate said shells near the top thereof, and an exit passage-way leading from the bottom of the outer shell, as shown and described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

EDWARD L. FORD.

Witnesses:

HOSEA MITCHELL,
L. HENINGTON.