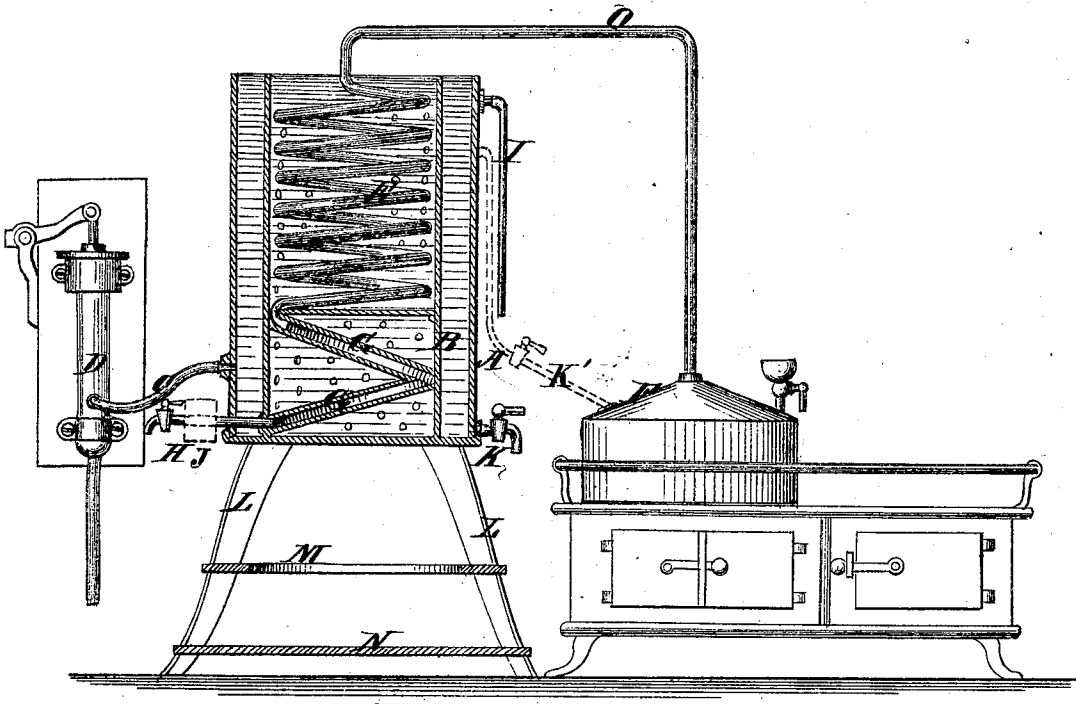


ALLAN M. RING.

Improvement in Distilling Fresh Water from Salt.

No. 127,797.

Patented June 11, 1872.



Witnesses:
John Beecher.
N. A. Graham.

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UNITED STATES PATENT OFFICE.

ALLAN M. RING, OF ST. JOHN, NEW BRUNSWICK.

IMPROVEMENT IN DISTILLING FRESH FROM SALT WATER.

Specification forming part of Letters Patent No. 127,797, dated June 11, 1872.

Specification describing a new and Improved Salt-Water Condenser, invented by ALLAN M. RING, of St. John, New Brunswick.

My invention consists of a simple, cheap, and durable portable condenser for obtaining fresh water from salt water, to be used in connection with the galley for generating the steam, which said condenser comprises an outer and an inner hollow cylinder mounted vertically on a stand, either open or closed at the top, with a condensing coil of lead pipe extending from the top downward in the inner cylinder about two-thirds of the way, more or less, and discharging into a narrow space between inclined plates traversing the remaining space of the inner cylinder, constituting the lowermost portion of the condensing-coil, and affording a large area for the action of the cold salt-water surrounding them, which is forced in by a pump.

The steam is supplied from a copper boiler on the galley, to be lined with tin or zinc, as preferred.

The stand for supporting the cylinder is also adapted for holding the boiler when not on the galley for heating, the said boiler being placed under the generator, and said stand is also adapted for holding a large lamp for generating steam when the boiler is so placed in the stand, in case it may be required to do so.

The drawing is a sectional elevation of the condenser and side elevation of the steam-generator and pump.

A is the outer vertical hollow cylinder, and B the inner cylinder of the condenser, into which cold sea-water is forced through pipe C by the pump D. E is the condensing-coil of lead pipe for introducing the steam from a boiler, F. G represents the broad thin plates constituting the lower portion of the condensing-coil, between which the steam and water of condensation pass, after leaving the coil E,

to the faucet H for drawing off the fresh water of condensation. Said plates are calculated to greatly increase the condensing capacity of the apparatus, by reason of the greater surface they present for the action of the cold water. I is the waste-pipe for the cold water, which is to be kept flowing through the cylinders to carry off the heat as fast as possible. K is a cock for drawing off the water when required. The stand L has an upper shelf, M, with a large hole in it, and is adapted to hold the boiler under the cylinders when it is required to be removed from the galley, and below this is another, N, for holding a lamp, by which to generate steam when required. The boiler is connected with the coil E by a pipe, O, which may be constructed in any approved way for being readily connected or disconnected to facilitate the removal of the boiler from the galley and placing it on the shelf M.

I propose to draw off the distillate through a carbon or silicate filter, J, for purifying it; and for supplying the steam-generator I propose to have a pipe, K', connecting the cylinder A with it to feed it with warm water therefrom.

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

1. The combination of the cylinders A B and coil E G constructed and arranged, and said cylinders provided, with thin pipe connections and cocks, all substantially as specified.

2. I also claim the stand for the cylinder provided with the shelves M and N, and the boiler adapted to be placed on shelf M for generating steam there or by a lamp on shelf N, substantially as specified.

ALLAN MOTT RING, M. D.

Witnesses:

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