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S. GURSKI.
CONDENSING DEVICE.
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1,440,917.

Fig. 1.

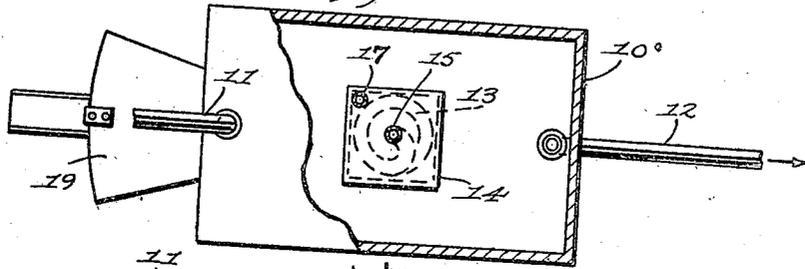
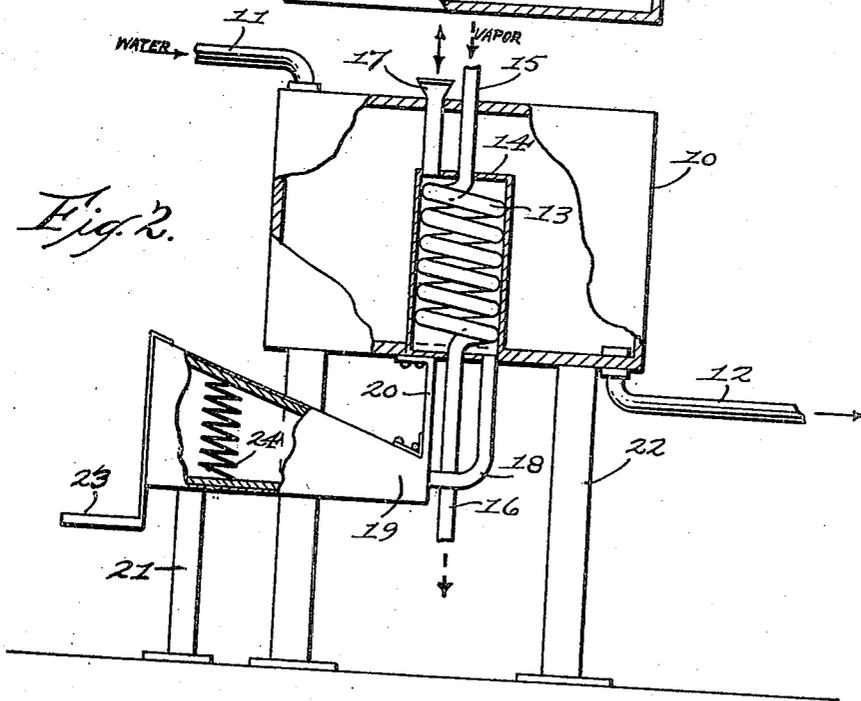


Fig. 2.



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UNITED STATES PATENT OFFICE.

STANISLAW GURSKI, OF UTICA, NEW YORK.

CONDENSING DEVICE.

Application filed February 3, 1921. Serial No. 442,064.

To all whom it may concern:

Be it known that I, STANISLAW GURSKI, a citizen of Poland, residing at Utica, county of Oneida, and State of New York, have
 5 invented certain new and useful Improvements in Condensing Devices, of which the following is a specification.

This invention relates to improvements in distilling apparatus and more particularly
 10 to improvements in the condensing means used in connection with such apparatus.

It is the principal object of the invention to provide a combined air and water cooled condenser which enables the operator to use
 15 either water or air as a cooling medium.

A further object of the invention is to provide a condensing apparatus whereby material may be condensed economically, expeditiously, safely and without encountering
 20 the usual difficulties attending the methods heretofore employed in condensing.

In the accompanying drawing:—

Figure 1 is a top plan view of my apparatus constructed according to the present
 25 invention, part of the covering being broken away, and

Figure 2 is a side view of the apparatus, partly in section.

The cooler 10 has the customary inlet 11 on top for the entrance of the cooling medium and at the bottom the outlet 12 for the same. The condensing coil 13 is arranged
 30 within a chamber 14 built into the cooler 10 from which its upper end 15 projects for connection with the retort or boiler, while
 35 its lower end 16 is extended through the bottom of chamber 14 and cooler 10 for connection with a receiver.

An air inlet or exhaust pipe 17 is arranged
 40 on top of the chamber 14, while an air sup-

ply pipe 18 is attached at the bottom of said chamber.

The air is supplied to the pipe 18 by means of a bellows 19 secured by means of a bracket 20 to the bottom of the cooler 10 and
 45 supported by a standard 21 parallel to posts 22 supporting the cooler.

This bellows 19 is operated by means of a foot or hand operated board, while a spring
 24 in its interior effects its expansion after
 50 the customary compression by means of the operation of the board 23.

From the foregoing, the operation of the device will be clear, the operation of the bellows will press the air or exhaust the
 55 same, as the case may be, through pipe 18, chamber 14 and pipe 17 thus supplying an additional cooling medium.

It will be clear that changes may be made in the general arrangement and construction
 60 of the minor details of my apparatus without departing from the spirit and scope thereof.

What I claim as new and desire to secure by Letters Patent of the United States, is—
 65

In a cooler of the character described, for distilling apparatus, a chamber centrally disposed in said cooler for the reception of the condensing coil of the distilling apparatus,
 70 air inlet and exhaust pipes for said chamber, a bellows under said cooler, and means for operating said bellows to alternately supply and exhaust air to and from said chamber during the operation of said bellows, and while the cooling medium is circulating
 75 around said chamber within said cooler.

In testimony whereof I have affixed my signature.

STANISLAW GURSKI.