

UNITED STATES PATENT OFFICE.

ANDRÉ FEUBERT, OF BUFFALO, NEW YORK.

IMPROVEMENT IN CONDENSERS FOR RECTIFYING APPARATUS.

Specification forming part of Letters Patent No. 118,601, dated August 29, 1871.

To all whom it may concern:

Be it known that I, ANDRÉ FEUBERT, of Buffalo, in the county of Erie and State of New York, have invented an Improvement in Rectifying Apparatus for Spirits; and the following is declared to be a correct description of the same.

My invention is made with reference to the more perfect condensation of the spirit and the separation of the same into the various grades or qualities required.

In the ordinary worm-condenser the vapors are not all exposed equally to the condensing action, because they are more or less removed from the condensing-surface, so that the separation of the watery portions from the spirit is not as rapid and reliable as in my present apparatus.

My invention is for dividing up and separating the vapors in such a manner that the condensation of the watery portion will take place with less spirit mixed therewith; hence the spirit will be separately condensed in larger quantities, thus effecting the operation more perfectly, and with an apparatus occupying less space than heretofore.

In the drawing, Figure 1 is an elevation of the distilling apparatus in which my condenser is used, so as to show the connections of the same. Fig. 2 is an elevation, partly in section, showing the improved condenser; and Fig. 3 is a cross-section of the same.

The stills a^1 a^2 , rectifying column B, and purifier C are similar to those in Letters Patent No. 59,149.

The purifier D and refrigerator E are also similar to those before employed in rectifying apparatus, and the connections with the pipes, cocks, &c., are of the usual character, and will be understood without further description, and I remark that these parts are shown as illustrating the general construction and arrangement of

the rectifying apparatus which I find by experience to be the most advantageous, and of which my condensing apparatus forms a part. My condenser is made of a tank, l , or case of suitable size, within which are the condensing-tubes, in the general form of a helix or spiral; but instead of using one or two continuous coils I make use of numerous small tubes in bundles or sections, forming segments of the general spiral coil, but opening at the ends of each segment into a receiving-chamber, m , connecting with the vertical tube n , and the range of these tubes connects with the delivery-pipe o , from which pass the tubes q r s to the vessels that receive the spirit and high-wines of the different grades. The ends of the small tubes t , opening into the receiving-chambers m , are to be united to each other or to the ends of such chambers, either by solder or by being passed through perforations provided in the heads or ends of said chambers m , and soldered or brazed. The condensing water is supplied through a pipe, u , into a trough, v , and runs through perforations or openings in such trough over the tubes t and chambers m , and the chambers m and tubes t might be immersed, the water flowing off by the pipe x .

I do not claim a series of tubes connected at top and bottom with chambers, as these have been used.

I claim as my invention—

The condenser, made of groups of tubes arranged helically, and opening at their ends into the chambers m at the bottom parts of such helix, as and for the purposes set forth.

In witness whereof I have set my signature this 21st day of March, A. D. 1871.

A. FEUBERT.

Witnesses:

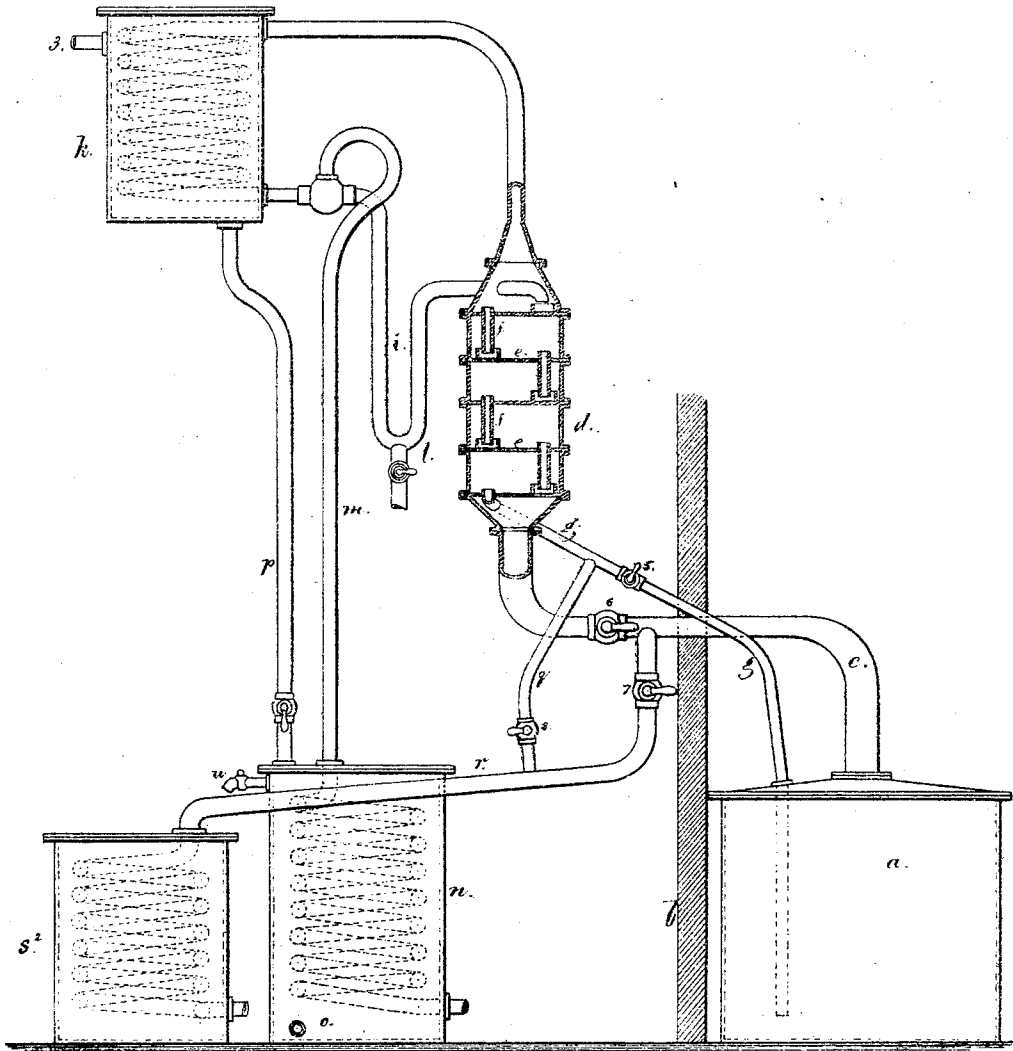
N. OTTENOT,
WM. F. HACHMANN.

[77.]

Andre Goubert.
Apparatus for Distilling and Refining Oils &c.

No. 118,602.

Patented Aug. 29, 1871.



Witness

Chas. H. Smith
Geo. J. Pinckney

Andre Goubert
Lemuel W. Perrell atty

