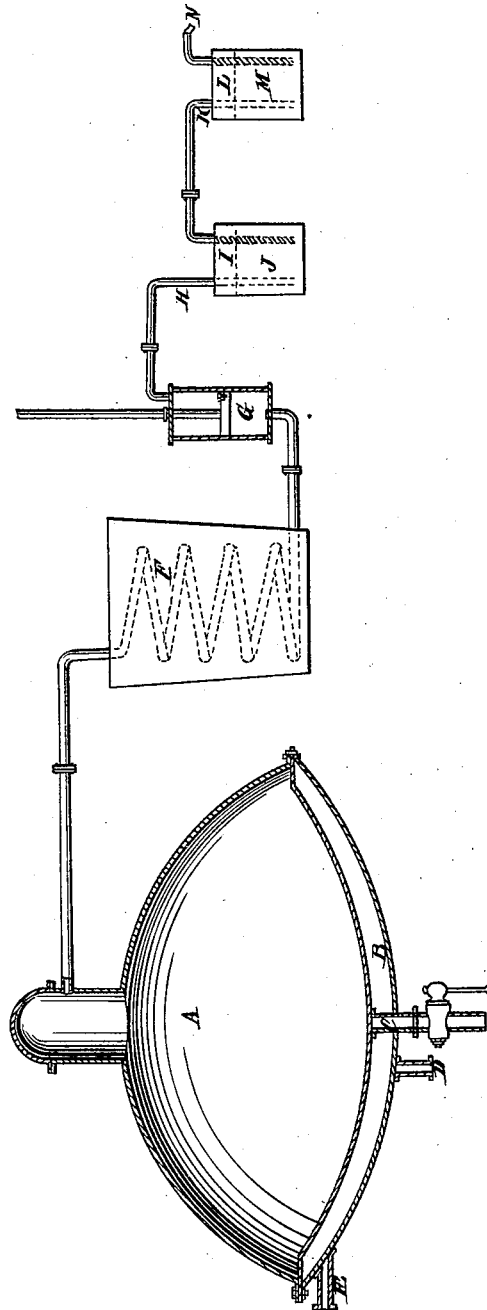


H. FLEURY.

Oil Still.

No. 50,571.

Patented Oct. 24, 1865.



Witnesses:

Arthur D. Shelton
Thomas H. Eray

Inventor:

Henri Fleury

UNITED STATES PATENT OFFICE.

HUOT FLEURY, OF NEW YORK, N. Y.

IMPROVEMENT IN DISTILLING PETROLEUM.

Specification forming part of Letters Patent No. 50,571, dated October 24, 1865.

To all whom it may concern:

Be it known that I, HUOT FLEURY, of the city and county of New York, in the State of New York, have invented a new and Improved Mode of Distilling and Rectifying Petroleum-Oil; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the distillation of petroleum-oil by a vacuum, and its rectification by one single operation, by means of the apparatus and process hereinafter described.

A is a boiler in which the crude petroleum-oil is first put; B, double bottom, where the steam of a generator is caused to come; C, emptying-tube, provided with a cock in order to allow the residue to flow out after the operation is ended; D, tube to allow the stream of condensed water to escape; E, tube through which enters the steam intended to heat the boiler A; F, serpentine intended for the condensation of petroleum-steam; G, a pump intended to cause the vacuum to take place in the boiler A, and which throws back the petroleum-oil through the tube H in the vase J, which is filled up to the line I with sulphuric acid at 66°.

The oil, by going through the sulphuric acid, leaves in it the tar matters which would have been dragged along in the distillation. It then goes through the tube K, in order to pass

through a solution of potash or of caustic-soda, at 40°, contained in the vase M, which is filled up to the line L. The potash takes off the sulphuric acid, which would have been dragged along. The oil purified in that manner runs out through the tube N, where it has only to be received, and then the light to be separated from the thick oil.

The advantage of this process consists, first, in operating the distillation at a very low temperature, which prevents at first the decomposition of a certain quantity of oil, which always happens at the end of the distillation through the old process; second, the whole operation is made without any manipulation being needed for the treating of the oil with sulphuric acid or potash, as it used to be done hitherto; third, during all the treatment the oil is entirely screened from the air; fourth, the oil obtained through that process is perfectly white, without it being necessary to decolor it.

What I claim as my invention, and desire to secure by Letters Patent, is not the apparatus itself, but

The new mode or process of distilling and rectifying petroleum-oil, as above described, taken altogether, and of which the apparatus is only a necessary part.

HUOT FLEURY.

Witnesses:

ARTHUR E. SHELDON,
THOMAS KEESAN.