

UNITED STATES PATENT OFFICE.

CHARLES C. MENGEL, OF BROOKLYN, NEW YORK, AND ALOIS P. VON
PÖHRNHOF, OF ST. CATHERINE'S, CANADA.

IMPROVEMENT IN THE MANUFACTURE OF ILLUMINATING OILS.

Specification forming part of Letters Patent No. 125,067, dated March 26, 1872; antedated March 16, 1872.

To all whom it may concern:

Be it known that we, CHARLES C. MENGEL, of the city of Brooklyn, in the county of Kings and State of New York, and ALOIS P. VON PÖHRNHOF, a citizen of the United States, now residing at St. Catherine's, in the Dominion of Canada, have invented a new and useful Improvement in the Treatment of Crude Oils for the Manufacture of Illuminating Oils; and we do hereby declare that the following is a full, clear, and exact description of the same.

This invention consists in a novel process of treating crude oil or petroleum for illuminating and other purposes, by causing water in its liquid state, or liquids containing water, to be admitted, drop by drop, above or on to the surface of the crude oil in the still, as or after said oil has been heated to the point or degree of distillation, and whereby the distillate may be deodorized without the use of lead and sulphur.

The following description will suffice to explain how our improvement may be carried into effect in a simple and practicable manner.

We place the crude oil or petroleum to be treated in a still, and heat it to the point or degree of distillation, and, while thus heated, admit, by means of any suitable dripping device or devices in the upper portion of the still, water in a liquid state, or a liquid containing water, so that it will be dropped in a regular or systematic manner, as contradistinguished from a stream; or, in other words, be introduced drop by drop onto the surface of the heated oil in the still, the number of cocks or dripping-devices varying with the size of the still and

quantity of oil in it. This produces evaporation and a partial decomposition of the water, and the vapors thus eliminated and passing off from the still are condensed in the ordinary or any suitable way, and an illuminating-oil from the crude oil is obtained which may be deodorized without the use of lead and sulphur, as heretofore generally necessary in the conversion of crude oil into illuminating oil, and the use of which has deteriorated the burning qualities of the oil. The invention may consequently be applied with advantage to the treatment of crude oils having a bad or offensive odor.

What is here claimed, and desired to be secured by Letters Patent, is—

The manufacture of illuminating oil from crude oil without having recourse to lead and sulphur to effect its deodorization, by introducing water in a liquid state, or liquids containing water, drop by drop, onto the surface of the heated oil in the still and afterwards condensing the vapors thus eliminated and passed off from the still, substantially as specified.

CHAS. C. MENGEL.

ALOIS PÖHR V. PÖHRNHOF.

Witnesses to the signature of CHARLES C. MENGEL:

HENRY T. BROWN,

FRED. HAYNES.

Witnesses to the signature of ALOIS P. VON PÖHRNHOF:

E. L. NICHOLS,

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