

UNITED STATES PATENT OFFICE.

P. WEISENBERGER, OF PITTSBURG, PENNSYLVANIA.

IMPROVED PROCESS OF REFINING HYDROCARBON OILS.

Specification forming part of Letters Patent No. **54,984**, dated May 22, 1866.

To all whom it may concern:

Be it known that I, P. WEISENBERGER, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and Improved Process of Refining Hydrocarbon Oils; and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention consists in using water at the temperature of 212° Fahrenheit, or approximate degree of temperature, instead of alkalies, in the treatment of distilled petroleum or other liquid hydrocarbons, in the manner more fully described below.

The petroleum or other liquid hydrocarbon oil is placed in a still and is put through the process of distillation. It is cut off at a gravity of 64°, 65°, or 66° Baumé, or approximate degrees. The gravity of the distillate will be then about 60°.

The sulphuric acid is introduced in proper quantity, the agitation made, and after settling the acid is drawn off. The oil is next washed with cold water until no traces of acid remain in it. So far this treatment is the same as generally followed in good refineries. The oil is now mixed with from ten to twenty per cent. of boiling water, or water at or near its

boiling-point, and thoroughly agitated until the boiling water has accomplished its object, which is to bleach the oil and reduce its gravity.

By my improved treatment no alkalies are used, which is a great saving. The oil is produced of purer color, nearly equal to standard white, and the fire test is obtained of 112° to 130°.

I am aware that warm or tepid water has been used in extreme cold weather to wash oil after it has been treated by chemicals, and therefore I do not wish to be understood as claiming, broadly, hot or tepid water for washing oil; but

What I do claim as my invention, and desire to secure by Letters Patent of the United States, is—

The above-described process of purifying distilled petroleum or other liquid hydrocarbons, without the aid of any alkalies, by means and with the use of water at 212° Fahrenheit, or approximate degree of temperature, in the manner specified.

PHILIPP WEISENBERGER. [L. S.]

Witnesses:

H. P. GENGEMBRE,
JAMES O'CONNER.