

# UNITED STATES PATENT OFFICE.

LEON BLUMENTHAL, OF MINNEAPOLIS, MINNESOTA.

## ELIMINATING THE SMELL OF COAL-OIL.

SPECIFICATION forming part of Letters Patent No. 312,605, dated February 24, 1885.

Application filed June 9, 1884. (No specimens.)

*To all whom it may concern:*

Be it known that I, LEON BLUMENTHAL, of Minneapolis, Hennepin county, Minnesota, have invented a new and Improved Process of Eliminating the Smell of Coal-Oil, of which the following is a full, clear, and exact description.

My invention especially contemplates the treatment of refined oil, the object being to thoroughly remove all traces of the original odor from the kerosene; and to this end my invention consists in employing induced currents of air as a vehicle for carrying away a portion of the odorous impurities in the liquid, and of neutralizing or destroying a further portion of such impurities by the action of sulphuric ether, and, while changing the color of the product, in neutralizing the remaining impurities by the addition of a coloring compound and a mixture for imparting fragrance.

In the procedure of carrying out my invention I locate the oil to be acted upon in a suitable tank, wherein it is acted upon and thoroughly agitated for the period of four (4) hours, or thereabout, by currents of ordinary atmosphere induced by any suitable pumping apparatus connected to the said tank. Then a certain quantity of sulphuric ether—about one (1) dram to each gallon of oil—is added to the oil while in the tank and thoroughly incorporated therewith by the action of the air-currents, which are again supplied, as before stated, and continued for the period of ten (10) minutes. The color of the product so formed may now be manipulated to any desired shade by adding to each fifty (50) gallons a mixture consisting of one (1) ounce aniline (any color) and twelve (12) ounces linseed-oil. The addition of this coloring-mixture not only changes the color of the product, but a portion of the remaining impurities are neutralized thereby.

To still further and more completely destroy any remaining trace of odorous impu-

urity that may adhere to the product and at the same time to impart a pleasing fragrance thereto, a mixture consisting of one (1) ounce oil of almonds (or a like quantity of any other fragrant extract oil) and one (1) ounce sulphuric ether is added to each fifty (50) gallons of product.

I am aware that in refining crude oil air-currents have been utilized for agitating the liquid; but as my improved process relates particularly to refined kerosene, I disclaim the application of air-currents to the crude material.

I claim as my invention—

1. The process of eliminating the odorous impurities from refined kerosene, which consists in, first, subjecting the liquid to the action of induced air-currents; second, adding about one dram of sulphuric ether to each gallon of the product; and, third, continuing the action of the air-currents, substantially as described.

2. The within-described process of eliminating the odorous impurities from refined kerosene, which consists in, first, subjecting the liquid to the action of induced air-currents for the period of about four hours; second, adding about one dram of sulphuric ether to each gallon of the product; third, continuing the action of the air-currents for the period of about ten minutes; fourth, changing the color of the product by adding thereto aniline, sulphuric ether, and linseed-oil, combined in about the proportions mentioned; and, fifth, imparting fragrance to the product by the addition of a fragrant extract oil combined, with sulphuric ether in about the proportions stated, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LEON BLUMENTHAL.

Witnesses:

ELIJAH BLOOM,  
ELMAN CONNER.