

# UNITED STATES PATENT OFFICE.

CHRISTOPHER HOULKER, OF FRANKFORD, PENNSYLVANIA.

IMPROVEMENT IN PURIFYING OILS WHICH HAVE BEEN USED IN LUBRICATING MACHINERY.

Specification forming part of Letters Patent No. **110,364**, dated December 20, 1870.

*To all whom it may concern:*

Be it known that I, CHRISTOPHER HOULKER, of Frankford, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Process for Purifying or Cleaning Refuse Petroleum Oil; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

My invention has for its object to furnish an improved process for cleaning or purifying petroleum oil that has been used for oiling shafting and other machinery, and which has heretofore been thrown away, so as to enable it to be again used with as much advantage as new oil; and it consists in the process for accomplishing this, as hereinafter more fully described and set forth.

The dirty black oil, as it runs or drips from the shafting or other machinery, is caught, and when a sufficient quantity has been ob-

tained it is run through a coarse sieve. Soda-ash liquor, at fifteen degrees of the alkalimeter, is added to the oil in the proportion of five pounds of the soda-ash to forty gallons of the refuse oil. The mixture is then well agitated and allowed to settle. The oil, during the process, should be kept at a temperature of from 70° to 75°. When settled the clear oil is drawn off and the refuse at the bottom is rejected.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The process herein described for purifying or cleaning refuse petroleum lubricating-oil that has been used for oiling shafting or other machinery, as and for the purpose set forth.

CHRISTOPHER HOULKER.

Witnesses:

JAMES BANNISTER,  
THADDEUS STEARNE.