## United States Patent Office.

NORRIS L. MARTIN, OF NEW YORK, N. Y.

## IMPROVEMENT IN REFINING TURPENTINE.

Specification forming part of Letters Patent No. 5,004, dated March 13, 1847.

To all whom it may concern:

Be it known that I, NORRIS L. MARTIN, a native of the city of New York, at present a resident of the city Brooklyn and State of New York, have invented a new and useful process to refine pine-oil or spirits of turpentine by means of combining with the same a strong solution of potashes and water, not to weigh less than twelve pounds to the gallon, combined by passing the same through a succession of finely-perforated tin or wire strainers, the holes in said strainers to admit a common-size pin to the head, where it stops. Smaller holes will answer as well. After passing the alkali and spirits of turpentine or pineoil, when united in the proportion of one gill of alkali to a gallon of pine-oil or spirits of turpentine, through a succession of strainers until well combined, at least twenty times through a single strainer, either by pump or hand, the alkali combines with the particles of turpentine or rosin that are found in the spirits of turpentine or pine-oil during the distilling process. After the substances men-

tioned have combined, weaken the solution by adding to it about four times the quantity of water that the oil contains of alkali, and put them through the strainers until well mixed and leave them to separate. When the oil has separated and its impurities combined with the alkali after its strength is reduced, a further and finishing process requires to add to each gallon of oil, when separated, half a pint of water and pass them through the strainers to more effectually refine the oil. After passing the oil and water, as directed, with the alkali and oil, through the strainers, leave them to separate, and the refined spirits of turpentine or pine-oil is prepared for use.

I claim—

Refining spirits of turpentine or pine-oil by the use of alkali and water, substantially in the manner above set forth.

NORRIS L. MARTIN.

Witnesses:

A. H. OSBORN, I. H. PATERSON.