UNITED STATES PATENT OFFICE.

JOSEPH M. LIPPINCOTT, OF KILBUCK TOWNSHIP, ALLEGHENY COUNTY, ASSIGNOR TO HENRY C. VAN TINE, OF PITTSBURG, AND ANDREW HOWARD, OF WILKINS TOWNSHIP, PENNSYLVANIA.

IMPROVEMENT IN LUBRICATING COMPOUNDS.

Specification forming part of Letters Patent No. **210,461**, dated December 3, 1878; application filed December 18, 1877.

To all whom it may concern:

Be it known that I, JOSEPH M. LIPPINCOTT, of Kilbuck township, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in the Manufacture of Lubricating Oils; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the production of a new lubricant, consisting of crude petroleum, the residuum produced by the distillation or refining of petroleum and turpentine, whereby certain new and useful results are obtained,

as will be fully explained.

I take of crude petroleum about twenty parts, and of petroleum residuum about twenty parts. These ingredients I heat to about 100° to 130° Fahrenheit, and when at this temperature I mix or incorporate them one with the other thoroughly. I add about one part of turpentine, and also mix this thoroughly with the other materials. I have found that the addition of the turpentine had better be made when the other ingredients are at a temperature of about 100° Fahrenheit.

I have discovered that although crude petroleum and petroleum residuum will mix freely at comparatively high temperatures, yet they will separate when subjected to such a degree of cold as they are exposed to during ordinary handling and use in the winter; and I have also discovered that turpentine, even when used in a comparatively small quantity,

acts as a solvent for both the crude petroleum and the residuum, and has so great an affinity for both that it unites with them to form a compound having such a cohesion between its elements that they will not be separated by the action of cold under ordinary circumstances such as it would commonly be placed under

I am aware that turpentine and crude petroleum have been united in lubricants, and that turpentine and petroleum have also been used in lubricating compounds. Hence I do not claim, broadly, their use under any and all circumstances; but I believe that I am the first to use, in combination, three ingredients, having formulas corresponding to the formulas of these three; and I believe that I am the first to employ turpentine as a mutual solvent to promote the cohesion of lubricating elements which would otherwise be separated by the action of such cold as a lubricant will be subjected to in ordinary use and transportation.

What I claim is—

As a lubricant, the herein-described compound of crude petroleum, petroleum residuum, and turpentine, substantially in the proportions as set forth.

In testimony whereof I, the said JOSEPH M. LIPPINCOTT, have hereunto set my hand.

JOSEPH M. LIPPINCOTT.

Witnesses:

F. D. Nobbs, James I. Kay.