UNITED STATES PATENT OFFICE.

HENRY T. SLEMMER, OF NORRISTOWN, PENNSYLVANIA.

IMPROVEMENT IN THE MANUFACTURE OF LUBRICATING-OIL.

Specification forming part of Letters Patent No. 52,897, dated February 27, 1866.

To all whom it may concern:

Be it known that I, HENRY T. SLEMMER, M. D., of the borough of Norristown, in the county of Montgomery, in the State of Pennsylvania, have invented a new and Improved Method of Producing Lubricating-Oil from the Heavy Distillate of Petroleum, of which the

following is a specification.

The nature of this process consists in returning to the still the heavy products of the distillation of petroleum, denominated "naphthaline" and "paraffine," adding thereto a strong solution of caustic alkalies, either potash, soda, or any other alkali, and redistilling, steam being introduced when at or near the boiling-point. The first products of the distillation—naphtha—and the lighter naphthaline oil or distillate being removed, the remaining distillate is received in the receiver. This is then passed into a washer or agitator and thoroughly washed with a hot solution of alkalies, the alkali subsiding and being drawn off. It is then washed with hot water to remove the alkali. The object of the alkali is to remove the free

acid produced by the distillation. It is then allowed to subside, the oily product being drawn off into another receiver. This is then frozen to crystallize the naphthaline and paraffine. The oil is then strained from the crystallized products at a temperature of 26° to 40° Fahrenheit. This produces an oil of 30° to 33° Baumé's hydrometer, of great lubricating properties, freer from gum or acid, and adapted equally well for light or heavy bearings.

I claim-

1. The production of an oil of the gravity as herein set forth and the rejecting of the first products of the distillate until it approximates 38° Baumé's hydrometer, and subsequent washing and treatment, as described.

2. As a new manufacture, the lubricatingoil prepared substantially as described.

HENRY T. SLEMMER, M. D.

Witnesses:

R. C. WEIGHTMAN, EDWD. J. FARQUHAR.