Oils and Varnishes.—510,050, December 5, Scollay, G. W., siccatives, formed by adding to a vegetable oil a metallic oxide. 510,734, December 12, Trageser, A. F., apparatus for distilling and concentrating glycerol and heavy oils. 510,672, December 12, Brown, E. G., *et. al.*, "sweet residual petroleum products," purified by passing steam through petroleum while it is boiling for distillation and finally air. 511,051, December 19, Lahusen, J. C., production of neutral wool-grease.

Plaster and Cement.—509,924, December 5, Lorenz, J., artificial stone, from "ashes, cinder, burnt sand and cement." 511,735, December 26, Jones, J. K., wall plaster, sugar, 100 parts, flour, 25 parts, air-slaked slime, 250 parts, plaster of Paris, sand, and water. 510,874, December 12, Dutrey, J., artificial emery stones, sulphur, Portland cement, emery, Venetian red, and sugar form the composition. 511,740, December 26, McIlvried, J. R., retarders for plaster, air-slaked lime is kept in an air-tight receptacle and mixed with water, flour, liquid glue, and wood ashes and dried.

Miscellaneous.—510,421-22-23-24, December 12, Haley, A. E., parchmentized paper board. 509,951, December 5, Schroëder, E., manufacture of metal foil. 510,276, December 5, Lyte, F. M., electrolysis of fused metallic chlorides in a specially devised chamber. 510,834, December 12, Blackmore, H. S., electrolytic process for dissociating soluble salts. 510,065, December 5, Frédureau, J. B. F., composition of matter for crockery ware, consisting of aluminum silicate combined with a soluble alkaline salt and impregnated with fatty or resinous substances. 509,887, December 5, Fischer, J. F., and Peters, O., artificial stone filter, made by heating pulverized silica and glass to a high temperature. 510,376, December 5, Bertrand, P. H., depositing metal upon metal by immersing in solution of soluble salts of metals in dilute sulpho-carbolic acid. 510,013, December 5, Endruweit, C., method of producing metal film and metal paper. 511,271, December 19, Hoskins, Wm., safety paper for checks, made by adding to paper a soluble ferrocyanide and a per-salt of iron, insoluble in water but decomposed by weak acids in presence of a soluble ferrocyanide, and a salt of manganese, decomposed by alkalies or bleaching agents.

NEW BOOKS.

DIE SCHMIERMITTEL. METHODEN ZU IHRER UNTERSUCHUNG UND WERTHBESTIMMUNG. Von Josef Grossmann pp. 186. Wiesbaden, 1894. Price M. 4.80.

This treatise is a valuable addition to the literature of lubrication—and while no new methods are described, the bringing together of the various tests, as made use of by the German chemists, simplifies the subject and renders the book one of ready reference.

Especial attention is given to the subject of viscosity—both theoretical and practical—including the "internal resistance" of fluid lubricants. This latter subject has received but little attention in this country, and it is questionable if it is of much practical importance. Eight different viscosimeters are described, not one of which can be considered standard, showing that the same lack of uniformity in determining viscosity exists there as here.

The flash and burning tests are made in a manner similar to methods in use in our railroad laboratories, but the cold test is radically different and liable to error.

Evidently the very complete articles on this subject, by C. B. Dudley and F. N. Pease,[1] have not been consulted by the author. The tests, as formulated by Dudley and Pease, leave little to be desired in the way of accuracy and rapidity in the determination of the value of lubricants used in railroad practice.

The method for estimating rosin oil in mineral oil (Valenta's) could be supplemented by the process described by E. Twitchell (*J. Anal. Appl. Chem.*, **5**, 379). A large portion of the treatise is devoted to descriptions of various lubricants for different kinds of machinery.

The author with many years practical experience as chief engineer of the Austrian Northwestern Railroad, gives the results of experiments in this direction, and the reasons for selecting either simple mineral oil or mixed mineral and seed-oil, for special purposes.

This portion of the work will be of value to the manufacturer of compounded oils. The treatise, while in the nature of Engineering Chemistry, is not complete enough in the qualitative reactions of the different oils and fatty acids derived therefrom to enable a chemist to accurately determine seed-oils and animal oils in the presence of each other.

If, however, Dr. Carl Schaedler's work, upon the reactions of fats and oils, be used in connection therewith, the chemist will be amply provided with the reference matter necessary on this subject. T. B. S.

[1] *The Railroad and Engineering Journal*, 6, 76.