

cess the goods are exposed for six hours to the action of alkali, soap, calcined magnesia, and hydrogen peroxide. These bleaches are claimed to do no injury to the fibers.

Sod Oil, Wool Grease, and Degras. BY ERASTUS HOPKINS. *J. Am. Chem. Soc.*, 22, 351-353.—By a confusion of names in paragraph No. 279 of the tariff act of 1897, a question as to the identity of wool grease and sod oil arose, and an investigation of the nature of these substances was undertaken. It was shown that sod oil and wool grease have different constitutions and characteristics. Wool grease is extracted from sheep's wool; sod oil is an oxidized oil expressed from leather which has been curried with fish oils. Sod oil contains a substance designated as "degras former," which is stated to be characteristic of this oil; it is not present in wool grease, nor in other oils. Degras is a trade name including both substances.

A. H. GILL, REVIEWER.

Texas Petroleum. BY F. C. THIELE. *Am. Chem. J.*, 22, 489-493.—The Corsicana oil resembles the Lima oil, but does not have the disagreeable odor of the latter; it has a specific gravity of 0.829, and seems to be closely related to the Pennsylvania oil of the Washington district; it contains a certain proportion of substances closely resembling asphaltum, as is shown by its giving a precipitate with SnCl_4 . The oil from the Nacogdoches district is black and very heavy, and strongly impregnated with sulphuretted hydrogen, resembling a maltha. Its specific gravity is 0.915. Saratoga oil has a gravity of 0.955, and that of Sour Lake a gravity of 0.963, the heaviest oil in this hemisphere. It leaves a residue of 71 per cent. above 641°F ., and contains no paraffin, but 20 per cent. asphaltum. It is composed of hydrocarbons excellently well adapted for lubricating purposes. A pitchy mass was obtained from the oil, which resembled that obtained from the distillation of stearin, a fact which may substantiate the theory of Höfer and Engler regarding the origin of petroleum.

BIOLOGICAL CHEMISTRY.

A. G. WOODMAN, REVIEWER.

On the Elimination of Nitrogen, Sulphates, and Phosphates after the Ingestion of Proteid Food. BY H. C. SHERMAN AND P. B. HAWK. *Am. J. Physiol.*, 4, 25-49.—Experiments conducted upon healthy human subjects under normal conditions of nutrition show that the rates of excretion of nitrogen and sulphates are quite similar, the minimum being reached during the

night; the rate of excretion of phosphates, however, is essentially different from either and reaches a minimum after breakfast. When lean beef, sufficient to furnish about 63.7 grams of extra protein, was taken, the nitrogen excretion began to rise in the first three hours and reached a maximum between the sixth and ninth hours, again reaching the normal after about thirty-six to thirty-nine hours. The increased excretion of sulphates followed the same general course. The increased rate of excretion of the phosphates reached a maximum at the same time as that of the nitrogen, but regained the normal after about twelve to fifteen hours. The increased heat of combustion of the urine was but little greater than would correspond to an amount of urea equivalent to the extra nitrogen eliminated.

The Gluten Constituents of Wheat and Flour and Their Relation to Bread-making Qualities. BY H. A. GUESS. *J. Am. Chem. Soc.*, 22, 263-268.—The author has tabulated the results of analysis of a number of samples of Canadian wheat, giving the locality, the buyer's grading mark, the percentages of gliadin and glutenin, the ratio of the two, and a "composite factor" representing the product of this ratio by the total percentage of gluten. This composite factor is considered to be more truly a measure of gluten value, since it represents the total number of units of gluten present multiplied by the value per unit.

The Digestibility of American Feeding-stuffs. BY WHITMAN H. JORDAN AND FRANK H. HALL. *U. S. Dept. Agr., Expt. Sta. Bull.*, 77, 1-100.—This bulletin contains a compilation of the experiments made at experiment stations in the United States on the digestibility of feeding-stuffs by farm animals. A résumé of the data practically complete to 1899 is given, coefficients of digestibility for all important American feeding-stuffs being thus available.

Analyses of Strawberries. BY G. W. SHAW. *Ore. Agr. Expt. Sta. Bull.*, 62, 6-9.

A Normal Chlorine Map of Long Island. BY GEORGE C. WHIPPLE AND DANIEL D. JACKSON. *Tech. Quart.*, 13, 145-148.—The map constructed from the results of analyses of eighty samples of water, apparently normal, shows that, except at the eastern end of the island, the normal chlorine is below six parts per million. At the eastern end the chlorine is very high and varies greatly in different localities, resembling the chlorine of Cap Cod, in Massachusetts, in this respect.