The word 'elsewhere' as used in the statute might include a farm wagon upon the public square, but it is a matter of common knowledge, of which this department will take notice, that on such occasions the troubadour in question makes no charge for his soothing of the savage breast through the restful strumming of this three-stringed guitar. It is known to us, further, that ordinarily for such performances chairs are not provided, and in no event is any charge made for standing room or for seats upon the curb. It would seem from the text of section 38 that before the occupation tax thereby imposed can accrue one must require some sort of compensation for the musical or theatrical performance contemplated. A charge may be made only for seats, and not for the medicines or other article of value from the sale of which profit is to be derived, but at least seats or some other means of rest must be provided and a charge made therefor before the producer becomes liable to the occupation tax provided by section 38 of the statute."

BOOK NOTICES AND REVIEWS.

The Arithmetic of Pharmacy. By Clyde M. Snow, Ph.G., A.M., professor of pharmacy, University of Illinois School of Pharmacy; instructor in pharmacology, therapeutics and materia medica, University of Illinois College of Medicine, etc. 8 vo., 125 pages, cloth. St. Louis, The C. V. Mosby Company.

The results of the Fairchild Scholarship examinations indicate that the highest records are made in Pharmaceutical Arithmetic and, probably, a greater number of students go above the average in this branch. In this connection consideration is to be given to the fact that those who enter for this Scholarship have good records to their credit in the school, which would hardly be possible if they were deficient in mathematics.

A comment on this book in the *Pharmaceutical Journal and Pharmacist* states in that connection: "The average American student of pharmacy is apparently as slow at his arithmetic as his contemporary here. One would think that a good grounding in the principles of arithmetic would serve for all the purposes of pharmacy into which figures enter. But evidently that is not the case. There is a demand for books specially compiled for the student of pharmacy, and quite a number have been published. There is much truth in the author's observation that, 'notwithstanding that graduation from high school is now a prerequisite for entrance into a school of pharmacy, and that such graduation implies a sufficient knowledge of arithmetic and to solve all problems encountered in a course of pharmacy, the fact remains that this branch sees the failure of more students than does any other course.' What appears to be at the root of the trouble is that the present-day system of education does not take sufficient account of the three R's, for a similar backwardness is to be found in the subject of Writing, here as much as, if not more than, in America, and that applies not only to caligraphy itself, but to the composition of the written sentence. Those who write books, therefore, must take things as they find them, and that is why we have so many 'aids' of this kind."

The author has adopted the question and answer methods of his "Essentials of Pharmacy," and has endeavored to make and succeeded in making the "Arithmetic" serve proprietor as well as student through the subjects which are considered in connection with the mathematical problems involved. The considerations are progressive; that is, there is a sequence, beginning with the fundamentals of arithmetic and concluding with problems of alkalimetry and acidimetry; between these there are problems in weights and measures, common and decimal fractions, the metric system, alligation, doses, specific gravity, specific volume. There are problems of thermometry, measurement of gases, reducing and enlarging formulas; and the business problems have relation to buying and selling, percentage, brokerage. discount, etc. The book will be an aid to students and that is its purpose; however, it will also be found of value in the pharmacy.

The Modern Soap and Detergent Industry, including glycerol manufacture. By Geoffroy Martin, D.Sc., Ph.D., F.I.C., etc. D. Van Nostrand Company, New York. Royal 800, cloth. Price $12.00.

The author is a well- and favorably-known industrial chemist and engineer; fellow of societies and other organizations of his profession, and director of research of the Portland Cement Research Association; author of "Industrial and Manufacturing Chemistry,"

"Oils, Fats and Waxes," "Perfumes and Essential Oils," "Dyestuffs and Coal Tar Products," etc., "Salt and Alkali Industry," etc., etc.

The book under consideration is Volume II of the author's treatise under the title above given, published in three volumes. It treats of the manufacture of special soaps and detergent compositions, including—Toilet soaps, shaving soaps and creams, tooth-cleaning compositions, pharmaceutical, medicated and disinfecting soaps, textile soaps, chipped and flake soaps, abrasive and polishing preparations, soft soaps, hydrocarbon and protein soaps, soap substitutes, leather and furniture polishes; also full methods of analysis and statistics of the detergent industry. The outline given indicates the sections into which the book is divided, and each section is sub-divided into chapters in which consideration is given to specialties and items that properly are included under the heading given. For example, under "Soaps and Soap Preparations Used in Pharmacy" the following divisions are subjects of discussion: "Soaps and Soap Preparations Used in Pharmacy," "Theory of Disinfecting and Medicated Soaps," "Carbolic, Cresolic and Tar Disinfecting Soaps," "Miscellaneous Medicated Soaps, and Other Special Soaps," arranged alphabetically. Under "Miscellaneous Methods of Saponification" there is a chapter under the same heading, "Saponification of Fats under Increased or Diminished Temperatures and Pressures," "Manufacture of Sodium Soaps by Saponifying Fat with Caustic Potash and Then Treating with Salt," "Manufacture of Sodium Salts by the Double Decomposition of Calcium (or Lime) Soaps, Lead Soaps, Zinc Soaps, and Ammonium Soaps," "The Production of Soap from Oxidized Mineral Oils and Hydrocarbons," "Soaps from Hydrogenated Phenols and Similar Derivatives," "Miscellaneous Processes of Saponification Not Previously Classified," "Miscellaneous Methods of Bleaching and Deodorizing and Otherwise Improving Soap."

In this way we might go through the various sections and point out how completely the soaps have been studied and presented in this book. The reader may be surprised at the ingenuity and variety of the different methods and materials used in the manufacture of some of the special soaps; however, the manufacture of soaps dates back many centuries and, quite naturally, the methods to a large extent rest on an empirical basis. The unworkable processes of one generation often become the technical advances of the next. It may be said that the treatise is complete as far as work of this kind is possible. It is illustrated throughout, and the processes of soap manufacture have been brought up to the methods of the present day. It is also safe to say that there is no work in print which treats the subject so thoroughly as this publication, and with the unquestioned ability and experience of the author the book can be recommended to the manufacturer, and as far as the pharmacist is concerned there is much in it which he can make use of to his advantage; certainly it is a subject relative to which he should be informed. The author has turned out an excellent work, and the publishers have issued a volume which reflects credit. E. G. E.

Lehrbuch der Pflanzenkunde. Von. Dr. F. Höck, Professor an Realgymnasium in Perleberg. $1.50. Verlag von J. F. Schreiber, Esslingen, a. N.

This book is divided into two parts, I consisting of 112 pages, and II of 220 pages. The illustrations number 221 and are excellent, some of them occupying an entire page. They are a great help in the classification of the text. There are also 29 full page illustrations printed in natural colors, real works of art. I will mention a few of the medicinal plants: Coffea arabica, Olea europea, Juniperus communis, Ergota (claviceps purpurea), Capsicum annum, Solanum dulcamara and Aloe socotrina. Besides the book contains two double page colored charts on the Vegetation of the World and the German Flora.

The book is well printed on good paper, the illustrations are excellent and last, but not least, the binding is very durable, a great advantage to a book which is much used and sometimes misused.

Die Chemie und das Moderne Leben. Von Svante Arrhenius. Autorisierte deutsche Ausgabe von Dr. B. Finkelstein. Mit 20 Abbildungen. Octavo, 373 pp. Cloth. Mk. 9. Akadem. Verlagsgesellschaft, Markgrafenstr. 4, Leipzig.

From the pen of an authority with a world-wide reputation, the book before us treats "Chemistry and Our Modern Life." The subject is well chosen and, needless to say, well written as can be expected. Among the 15 chapters we want to call special attention to the following: Fire, Oxidation and Reduction; Chemistry of the Earthcrust; Chemistry of Water and Air; Electricity and Chemistry;