

*The Story of Chemistry.* By James Maxson Stillman, late Professor Emeritus of Chemistry, Stanford University. With a foreword by Stewart W. Young. New York: D. Appleton & Co. Pp. 556 + xiii.

This excellent volume embodies in permanent form the numerous themes on the History of Chemistry, delivered by the late Prof. Stillman to his classes at Stanford University. The preparation of the voluminous material for publication, in book form, necessitated many and frequent references to original sources, when still extant. The subject is well adapted alike for those whose scientific knowledge may lack profundity, as well as for the professional scientist who might not have the available time nor the opportunity to refer to manuscripts and records that are still preserved.

The text commences with the practical chemical applications of the ancients and continues on throughout the scientific developments and achievements in chronological order, concluding with the subsequent nullification of the Phlogiston Theory at the time of Lavoisier. Fourteen pages are devoted to an exceptionally fine and replete bibliography.

This volume is concise in its presentation of a vast subject and represents a valuable contribution to the technical literature of the year.

SIMON MENDELSON.

The Akademische Verlagsgesellschaft M. B. H., Leipzig, publisher of scientific works and well known throughout the universe submits the following two books for review:

*Sir Henry Roscoe, Ein Leben der Arbeit.* Von Rose Thesing. Mit einer Einführung von Wilhelm Ostwald. Lexicon 362 pp. Cloth. Goldmark 10.

This is volume VII of a series of biographies edited by that genius Wilhelm Ostwald entitled "Grosse Männer" (Great Men). The ones previously published are: Jacobus Henricus van't Hoff, Victor Meyer, Ernst Abbe and Emil Rathenau, Grosse Männer, History of Sciences and Scientists during two Centuries.

The volume before us is an autobiography of Sir Henry Roscoe, the eminent British chemist and pupil of that bright light at the University of Heidelberg, Robert Wilhelm Bunsen. Two chapters entitled "Old Heidelberg the Finest" and "Bunseniana and Heidelberg Friends" are devoted to his German university studies and experiences. These are illustrated with pictures of Bunsen, Helmholtz and a group picture of Kirchoff, Bunsen and Roscoe, together with reproductions of 3 autograph letters from

Bunsen to Roscoe. These chapters are full of historical facts, the invention of the Bunsen burner, the photometer, the spectrum analysis, his friendship with the celebrated Heidelberg Trio—Bunsen, Helmholtz and Kirchoff, and many anecdotes. Among the 13 other chapters, a total of 15, we want to point out the following: "Owens College," "Work in the University of Manchester," where Roscoe was professor of chemistry, director of the chemical laboratory and then dean, "Political Activity," "London University" and "Family Life."

It might not be so well known that Roscoe was so convinced of the success of German University studies that he transplanted that system in the British colleges. He was such an ardent champion that he transformed the educational colleges into research institutions similar to German practice. It might furthermore be unknown that Roscoe was forever thankful for the studies and inspiration gained at Heidelberg and that, unlike others, continued this friendly feeling all during the world war. After all true science knows no war!

The volume is properly entitled "A Life Full of Work," as Sir Henry E. Roscoe's literary works alone are a testimonial, namely: Lessons in Elementary Chemistry, Bunsen and Roscoe Photochemical Researches and the 9 volume masterwork Roscoe and Schorlemmer's Treatise on Chemistry. Roscoe's achievements were duly celebrated by the Golden Anniversary of his doctorate on April 22, 1904 in Whitworth Hall, University of Manchester.

The book is not only a biography, it is a mine of valuable information to the student of history, of chemistry and of chemical education. Thanks are also due to the progressive publishers for the addition of many excellent illustrations.

*Grundzüge der Kolloidlehre.* von Prof. Dr. Herbert Freundlich. Octavo, 157 pp. Goldmark 6.

This book, just off the press, is written by a authority with a world-wide reputation being a member of the Kaiser Wilhelm Institute for Physical Chemistry and Electrochemistry in Berlin—Dahlem. It is an abridged test of the author's masterwork "Kapillurchemie," the leading authority in colloidal chemistry.

The book is divided into 2 parts:

I. The Physical-chemical Foundation of Colloid Chemistry, again subdivided into Capillary Chemistry, The Rapidity of a New Phase and the Brownian Movement.

II. The Colloid-dispers Systems, subdivided

into Colloidal Solutions, Sols and Gels and Colloid-dispersoid formations as fog, smoke and foam.

The clearness of the text, the 27 illustrations and a complete author's and subject index, all help to make this book one of the most desirable volumes on this subject.

OTTO RAUBENHEIMER, PH.M.

PUBLICATIONS RECEIVED.

*Popular Science Talks*, Volume II. Continuation of a series of popular lectures delivered by members of the faculty at the Philadelphia College of Pharmacy and Science. Price \$1.00.

The lectures of this volume are entitled: "The Romance of Drugs," by Charles H. LaWall; "The Story of Rubber," by J. William Sturmer; "Invisible Light," by Henry Leffmann; "Idiosyncrasies, or the Study of a Sneeze," by Ivor Griffith; "Social Insects," by Marin S. Dunn; "Household Insect Pests," by Louis Gershenfeld; "Chemistry in and about the Home," by Freeman P. Stroup; "Something about Gases," by Frank X. Moerk. "Sugar," by Horatio C. Wood; "Chocolate," by E. Fullerton Cook; "Drugs of the North American Indian," by Heber W. Youngken, of the Massachusetts College of Pharmacy.

There is much interesting matter in these lectures for the pharmacist; each one of them contains a thought which may be applied to advantage in other communities. These public lectures are giving the public—for they are listened to and "listened in" by an audience composed of the laity—a better and higher appreciation of pharmacy; the estimate which has been limited to a viewpoint of merchandising is different from several years ago.

*Proceedings of West Virginia Pharmaceutical Association*, 18th annual meeting held at White Sulphur Springs, June 17-19, 1924. The proceedings report the interesting sessions of the Association and quite a number of pages are given to the report of the Asheville A. Ph. A. meeting. Without making comparisons for the purpose of holding one event above another, a paper by Roy Bird Cook on "Pharmacy in West Virginia" offers the suggestion—for Associations that have not done so—to collect data relating to pharmacy in the respective states. As has been pointed out before, and again in the December number of the JOURNAL A. PH. A.,

pp. 1105 and 1175, the early history of pharmacy in every state differs.

*Hygienic Laboratory Bulletin No. 138* reports—I, Studies on the Bio-Assay of Pituitary Extracts: Concerning the use of desiccated infundibular powder as a standard in the physiological evaluation of pituitary extracts, and II, some factors concerned in the deterioration of Pituitary Extracts. Report is made of the work of Maurice I. Smith and Wm. T. McClosky. The method and technic of the Bio-Assay is detailed and a diagram of the perfusion apparatus used in the assay is shown; twenty illustrations show tracings and some of the results are tabulated. From the experiments described the following conclusions are drawn:

1. Infundibular lobes of the pituitary gland from cattle do not show seasonal variations in oxytocic activity.

2. There is no appreciable difference in oxytocic activity of infundibular lobes from steers and from cows.

3. Freezing freshly removed pituitary glands for several hours does not affect their oxytocic activity.

4. The oxytocic activity of properly acidulated extracts is not affected by fractional sterilization in steam at 100° C. Heating in the autoclave at 15 pounds pressure, for even brief periods, causes deterioration in activity.

The conclusions relative to factors concerned in preservation and deterioration of pituitary extracts are, in part, as follows:

1. Infundibular extracts, carefully prepared and sterilized, do not depreciate in activity for at least one year, if kept in the cold room at a temperature of about 0° C.

2. Temperatures up to 37° C., and up to about two months, do not affect the oxytocic or pressor activity of sterilized extracts, etc.

3. Slight deterioration occurs at 45° C., nearly complete destruction of its active principle, after a period of three months' exposure, at 60° C. Deterioration of pressor activity and oxytocic activity run parallel.

4. Frozen fresh infundibular lobes retain their oxytocic activity at a temperature of -10° to -17° C. for at least two months; at a temperature of about 0° C., the activity is not retained longer than about two weeks.

The conclusions in the foregoing are not reported in full.—EDITOR.