EMINENT AMERICAN PHARMACOGNOSISTS OF THE NINETEENTH CENTURY.

BY HEBER W. YOUNGKEN.

(Concluded from page 152, February Journal.)

ALBERT SCHNEIDER (1863-1928).

Albert Schneider was born in Granville, Illinois, April 13, 1863. His boyhood days were spent on his parent's farm in McLean County, Illinois, where he worked during the summer and attended the district schools for a few months each winter. At the age of seventeen he entered Valparaiso, Indiana Normal School, where he intended to prepare for medicine but was compelled to relinquish his studies after about six months on account of an attack of inflammatory rheumatism. After recovering he entered the Dixon, Illinois Normal School and completed his preparatory studies. He then went to Chicago for the study of medicine. He was graduated from the College of Physicians and Surgeons of Chicago in 1887, the same year

he received his Bachelor of Science degree from the University of Illinois. He took graduate work at the University of Minnesota and obtained his M.Sc. from that institution in 1894, and his Ph.D. from Columbia University in 1897. He held the Fellowship in Botany at Columbia for two years, making a special study of Lichens. During a portion of his stay at the University of Minnesota he served as Instructor in Botany in that institution.

After graduation from Columbia he was called to the chair of Pharmacognosy and Bacteriology in the Northwestern University School of Pharmacy where he remained until 1903. From 1903–1919 he served as professor of Pharmacognosy and Bacteriology, and from 1904–1906 as professor of Materia Medica and Therapeutics in the University of California. While there he also filled outside positions. From 1906–1907 he was



ALBERT SCHNEIDER.

director of the Spreckel's Sugar Company Experiment Station, and from 1909–1915 pharmacognosist for the U. S. Dept. of Agriculture; from 1915–1919, microanalyst of the California State Food and Drug Laboratory, and from 1910–1915 was editor-in-chief of the *Pacific Pharmacist*. In 1919, he resigned his position at the University of California to accept the chair in Pharmacognosy at the University of Nebraska which he held until 1922 when he was called to the position of dean of the School of Pharmacy of North Pacific College, Portland, Oregon. He served for many years as a member of the Revision Committee of the United States Pharmacopæia on which he helped draft the monographs on powdered vegetable drugs. He was president of the American Conference of

Pharmaceutical Faculties from 1913–1914, and lecturer for several years in the Portland Police School and summer school of the University of California on crime investigations.

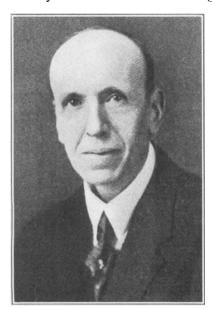
Professor Schneider's activities covered a wide field; he possessed a profundity of thought and a versatility of knowledge. He was always outspoken with his opinions. He was a frequent contributor of scientific articles upon microscopical subjects in which he was an investigator of marked ability. He also wrote on Coto, Paracoto, Winter's Bark and many other themes. His outstanding works were as follows: "Primary Microscopy and Biology," 1890; "Text-Book on General Lichenology," 1897; "Guide to the Study of Lichens," 1898; "Microscopy and Micro-Technique," 1899; "Hints on Drawings for Students of Biology," 1899; "General Vegetable Pharmacography," 1900; "Powdered Vegetable Drugs," 1902; "Bird and Nature Study Chart Manual," 1903; "Medicinal Plants of California," 1909; "Pharmaceutical Bacteriology," 1920; "The Microbiology and Analysis of Foods," 1920; and a "Translation of Westermaier's Compendium der Allgemeinen Botanik," 1896.

Dr. Schneider became internationally known for his work in the later years of his life on crime detection. He was an inventor of a lie detector, and also of a ventilating system for Pullman cars.

He died suddenly as a result of a cerebral hemorrhage on October 27, 1928, while on his way to the college.

HENRY KRAEMER (1868-1924).

Henry Kraemer was born in Philadelphia, Pa., July 22, 1868. He received his early education in Girard College from which he graduated in 1883. He then



HENRY KRAEMER.

entered the drug store of Dr. Clement B. Lowe where he served an apprenticeship of five years, attending the Philadelphia College of Pharmacy during part of this apprenticeship from which institution he was graduated in 1889 with honors. During his senior college year and the following year he served as assistant in general chemistry to Professor Sadtler at the University of Pennsylvania.

In 1890 he became Instructor in Botany and Pharmacognosy in the College of Pharmacy of the City of New York. Desiring further training in the natural sciences, he took a special course in botany at Barnard College and in 1891 entered the School of Mines of Columbia University from which he graduated with a Ph.B. in 1895. While a senior at Columbia he was elected Professor of Botany, Pharmacognosy and Materia Medica in the School of Pharmacy of Northwestern University with one year's

leave of absence before entering on his duties. He spent this year abroad at the

University of Marburg (Germany) studying under Meyer, Cohen, Zincke and Melde, and received the degree of Ph.D. cum laude in June 1896. His doctorate thesis was on "Viola tricolor." He then assumed his duties at Northwestern University but resigned at the end of the year to accept the chair in Botany and Pharmacognosy at the Philadelphia College of Pharmacy in the Fall of 1897.

In 1899 he became editor of the American Journal of Pharmacy, succeeding Professor Henry Trimble, and he made a large number of contributions to this Journal during his nineteen years of editorship.

While at the Philadelphia College of Pharmacy he became a voluminous contributor to the literature of botany and pharmacognosy. He wrote textbooks on botany and pharmacognosy, applied and economic botany, and scientific and applied pharmacognosy; he also published many papers on a variety of topics pertaining to pharmacognosy, the outstanding of which are as follows: "Calcium Oxalate Crystals in the Study of Vegetable Drugs;" "Effect of Heat and Chemicals on the Starch Grain;" "Some New Methods in the Study of the Commercial Starches;" "Valuation of Vegetable Drugs and Foods;" "Microscopical and Chemical Examination of Cloves;" "Assav of Drugs by the Use of Living Plants;" "The Nature and Structure of Cochineal;" "Substitution of the Fruits of Rhus Typhina for Rhus Glabra;" Histology of the Rhizome and Roots of Phlox Ovata;" "Adulteration of Marjoram and Coriaria;" "Some of the Distinguishing Morphological Characters of Belladonna and Scopola;" "Plant Colors;" and "Color Standards of Powdered Vegetable Drugs."

In addition to his regular courses, he introduced and carried on special courses at the college on the microscopical examination of foods and technical products and in bacteriology. He was always popular with his students, many of whom sought his counsel.

In 1900 he became a member of the Committee of Revision of the United States Pharmacopæia and was made chairman of the Sub-Committee on Botany and Pharmacognosy which position he held through the revision period of 1910 and a portion of the period of 1920. He was president (in 1917) of the American Conference of Pharmaceutical Faculties and the Philadelphia Botanical Club.

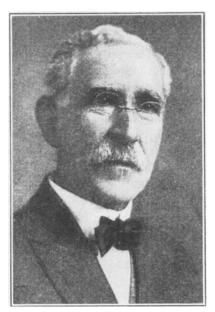
In 1917 he resigned his position at the Philadelphia College of Pharmacy to become Dean and Professor of Pharmacognosy at the University of Michigan. In 1920 he resigned from this position and moved to Mount Clemens, Michigan, where he opened an office and laboratory as a consulting bacteriologist and chemist. He died at Mount Clemens, September 9, 1924.

LUCIUS E. SAYRE (1846-1924).

Lucius Elmer Sayre was born in Bridgeton, New Jersey, November 2, 1846, where he received his early education in the public schools and as an apprentice in the drug store of Robeson and Whitaker. In the early sixties he came to Philadelphia and clerked in the drug store of Dr. L. Updycke while attending the Philadelphia College of Pharmacy from which he graduated in 1866. He then obtained a position in the pharmaceutical laboratory of Frederick Brown and, later, with Henry C. Blair's Sons, Apothecaries, in Philadelphia.

Sayre was a close friend and classmate of Professor Remington and in 1879 they opened a drug store as partners at 18th and Market Streets, Philadelphia, in which they manufactured a number of pharmaceuticals including scale pepsin. During the partnership, Sayre became a quiz master in materia medica of the Alumni Association of the Philadelphia College of Pharmacy and lecturer on pharmacy in the Women's Medical College of Philadelphia.

Upon the founding of the School of Pharmacy at the University of Kansas in 1885, Mr. Sayre was elected dean and also professor of Materia Medica and Pharmacy. In 1907, Professor Sayre became director of drug analysis for the Kansas



LUCIUS E. SAYRE.

State Board of Health and a member of the botanical staff of the Kansas State Board of Agriculture.

He received an honorary Bachelor of Science degree from the University of Michigan in 1896 and the Master of Pharmacy degree from the Philadelphia College of Pharmacy in 1897. He was a member of the Revision Committees of the United States Pharmacopæia of 1890, 1900 and 1910, chairman of the Scientific Section in 1893 and of the Historical Section of the A. Ph. A. in 1917, and president of the American Pharmaceutical Association, 1919–1920.

Professor Sayre contributed a variety of papers embracing historical, botanical, pharmacognostical and chemical subjects. He was especially interested in the proximate analysis of vegetable drugs and foods. He wrote several papers on the alkaloids of Gelsemium and others on the analysis of

Gymnocladus Seed, "Assay of Datura Stramonium," "Cactus Grandiflorus," "Drug-Eating Insects," "Drug Culture," "Euphrasia," "Oregon Balsam," "Golden Seal Gardens," "Characters of Distinction of Viburnum Prunifolium and Viburnum Opulus," and "Viburnum Barks, Microscopical Distinctions." He collaborated with D. H. Robinson, professor of Latin at the University of Kansas, on Robinson's Latin Grammar of Pharmacy and Medicine. His best known work was "Organic Materia Medica and Pharmacognosy" which extended through four editions.

He died at Lawrence, Kansas, on July 21, 1924. Professor Sayre was a leader in the development of the teaching of materia medica and pharmacognosy, a modest yet impressive worker, and a great figure in American Pharmacy.

отто A. WALL (1848-1922).

Otto Augustus Wall was born in St. Louis County, Missouri, on September 27, 1848, the son of a German clergyman. He received his early education in the schools of St. Louis and in 1864 entered the drug store of Dr. Sanders. During his apprenticeship under Dr. Sanders he attended the St. Louis College of Phar-

macy from which institution he graduated in 1868. He then entered the Missouri Medical College, receiving his M.D. in 1870. He also graduated from the Bellevue Hospital Medical College, New York, in 1871. From 1869–1873 he was proprietor of a drug store in St. Louis.

Upon returning to St. Louis he became professor of Materia Medica, Pharmacognosy and Botany in the College of Pharmacy, a position which he held for forty-

nine years He was also professor of Therapeutics and Materia Medica in the Missouri Medical College.

In 1882 he and Dr. Oldberg established the Oldberg-Wall Laboratory. At one time he was a member of the editorial staff of the *National Druggist* and editor of the college publication. He was a member of the U. S. P. convention from 1880–1920 and a member of the U. S. P. Revision Committee 1880–1900, and presided over the U. S. P. convention of 1910. He was also president of the Missouri Pharmaceutical Association from 1883–1885.

Dr. Wall was a large man with an impressive bearing. He was affable and warm hearted, very apt with the pen and brush and an excellent parlimentarian. His brain was a vast storehouse of facts covering a wide field of general knowledge and he was a very popular teacher. He was noted for the study of sections of drugs with the microscope and for making lantern slides of these.



OTTO A. WALL.

His best known contributions in pharmacognosy are his "Notes on Pharmacognosy," and "Handbook of Pharmacognosy," the fifth edition of which was revised in 1928 by Professor Leo Suppan. Wall was also author of "The Prescription," "Latin for Pharmacy and Medical Students," "Sex Worship," etc. He was co-author with Dr. Oldberg of "The Companion to the Pharmacopæia." He also wrote a number of papers, the last of which entitled "Vegetable Taxonomy" was presented at the 1916 meeting of the A. Ph. A.

Professor Wall died of heart failure on February 13, 1922, in his 76th year.

MEETING OF THE NATIONAL ACADEMY OF SCIENCES AND OF THE EXECUTIVE COMMITTEE OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The annual stated meeting of the National Academy of Sciences will be held under the presidency of Dr. W. W. Campbell, in the building of the academy at Washington, on April 22nd, 23rd and 24th. The autumn meeting will be held at the University of Virginia on November 18th, 19th and 20th.

The spring meeting of the Executive Committee of the American Association for the Advancement of Science will be held in New York City on April 14th. Communications to be brought to the attention of the committee should be sent to the permanent secretary, the Smithsonian Institution Building, Washington, D. C.