

phia College of Pharmacy, and the following year succeeded him as professor of chemistry, holding the chair for 37 years, or until 1916, at which time he retired from active teaching work and was elected Emeritus Professor of Chemistry.

He was the author of a "Handbook of chemical experimentation for lecturers and teachers"; the first American editor of Atfield's "Chemistry"; the author of "Industrial organic chemistry" (Sadler); and, with Professor Henry Trimble, author of "Pharmaceutical and medical chemistry." In addition, he contributed freely to the columns of scientific publications of a periodical character.

For a quarter of a century he was chemical editor of the United States Dispensary; thrice he was a delegate to the United States Pharmacopoeia convention and for two decades was a member of the Revision Committee of the Pharmacopoeia.

He was a member of a large number of scientific organizations, having been one of the founders and the first president of the American Institute of Chemical Engineers.

In addition to his professional activities he maintained a laboratory for commercial work and, because of his wide knowledge of industrial processes, was frequently retained by one of the parties concerned in litigation over alleged infringement of patent.

He was active in the work of the Lutheran Church and served many years on its National Board of Publication. For many years he was a member of the board of trustees of the Philadelphia College of Pharmacy, and served as its chairman during the three years preceding his death. During the 40 years of his connection with the College of Pharmacy he was very active in the conduct of its affairs in many ways, and not a little of the prestige it has in its field of work to-day is due to his labors, his judgment and his wise counsel.

As a man among men he was ever kind and courteous to the "other fellow," no matter how much he might differ from him in thought or character, even-tempered, clean of speech, respected by all who knew him at all, loved by those who knew him well, a fine example of a cultured Christian gentleman.

CHARLES H. LA WALL

PHILADELPHIA COLLEGE
OF PHARMACY

SCIENTIFIC EVENTS

THE ROTHAMSTED EXPERIMENTAL STATION AND UNIVERSITY DEGREES

THE University of Cambridge is prepared to give favorable consideration to each individual case of applicants who desire to carry out at Rothamsted a

portion of their work for the degrees of M. Sc. and Ph.D.

The University of London has accepted the Rothamsted Experimental Station as a recognized institution from which research workers may submit work done at Rothamsted for the degrees of M.Sc., Ph.D. and D.Sc.

Intending workers at Rothamsted are strongly advised in the first instance to send a full account of their academic qualifications and training to the director, as the candidate will be allowed to enter his thesis only if these qualifications are acceptable to the university senate.

The general conditions imposed by the university regulations are briefly:

(1) *Cambridge.* These degrees are granted in full to men only; under certain limitations the titles of degrees are open to women without the privileges which the degree confers in the university. *M.Sc.* A minimum residence of five terms at Cambridge and one at Rothamsted. Thesis to be presented not earlier than the sixth and not later than the twelfth term from the term of admission as a research student. *Ph.D.* A minimum residence of six terms at Cambridge and three at Rothamsted. Thesis normally to be presented not earlier than the ninth term and not later than the twelfth term from term of admission as a research student.

(2) *London.* These degrees are open to men and women on equal terms. *M.Sc. and Ph.D.* A minimum residence of two calendar years at Rothamsted before submission of the thesis. *D.Sc.* Normally the candidate must first hold the M.Sc. degree of the university, but in special cases, on the ground of published work, this regulation may on application be waived. A residence of two years at Rothamsted is required. A student must ordinarily have taken his first degree not less than four years before the date of his entry for the D.Sc. examination. In the case of workers already holding a first degree of London University, they may enter as external students for higher degrees without any requirements as to residence.

A WORLD LIST OF PERIODICALS¹

A VALUABLE piece of bibliographical work which should simplify the task of science is now well on the way to completion. The results of researches, before they can be used by others than the original investigators, have to be printed and published. Their form is technical and their appeal is not popular, so, for the most part, they have to seek special vehicles of publication. Every civilized country supports a number of periodicals devoted to such work. In many

¹ From the *London Times*.

cases they are issued by learned societies or by universities; in others by semi-private groups of scientific persons. Few have a wide circulation and most appear rather irregularly. Some even have brief existences or change their names and places of issue; and yet in any one of them at any time there may be work of vital moment to other workers in the advancement of knowledge, or ready for immediate application to human needs.

The Conjoint Board of Scientific Societies, before it was dissolved, more than a year ago worked out a scheme for preparing and publishing a list of the scientific periodicals published all over the world within the years 1900-1921, with an indication of the chief centers in Great Britain and Ireland where any of these periodicals were taken. The board, before winding up, transferred the scheme to Sir Arthur Schuster, Mr. Robert Mond and Dr. Chalmers Mitchell as trustees to place it on a permanent footing. This has now been done by the formation of a non-profit sharing registered company, "The World List." A large number of libraries have promised to subscribe for the volume when issued and the Carnegie United Kingdom Trust have generously guaranteed a grant-in-aid by which publication is assured.

The trustees of the British Museum, recognizing the importance of the undertaking, consented to allow the work of compilation to be made part of the official duty of the Department of Printed Books. Under the able direction of Dr. A. W. Pollard, keeper of the department, the compilation of the list has now been completed. Over 20,000 scientific periodicals have been catalogued and arranged in alphabetical order, but it is already apparent that before the volume is finally printed materials will have accumulated for a supplement containing certain journals whose existence had not been discovered, as well as others published since 1920.

The Clarendon Press has undertaken the printing. The first sheet has already been passed through the press, and the work will go on continuously until completion. The lists are in double columns on quarto pages printed only on one side of the page, so that there will be space for such notes as to the contents or character of the periodicals as may suit individual libraries to make. By the use of a rubber stamp to indicate which periodicals it contains, any library may turn this part of the volume into its own catalogue.

So far the compilation has required only time and expert knowledge. There now remains the difficult but vital business of indicating the chief libraries at which the periodicals may be found. In the alphabetical list each entry has a consecutive number. It will be followed by an index-section, in which the number assigned to each periodical will have printed

against it alphabetical symbols for the cooperating libraries possessing a file of it, printed in small capitals grouped under alphabetical symbols for the towns in which these libraries are situated. A third section will explain the symbols for the towns and libraries.

THE LIBRARY OF THE NEW YORK BOTANICAL GARDEN

CONSIDERABLE progress has been made in classifying and shelving the newly acquired collection of books purchased for the Library of the New York Botanical Garden from Geneva, but the work, which is being pushed as rapidly as possible by Dr. John Hendley Barnhart, bibliographer, and Miss Sarah H. Barlow, librarian, will require considerable time to finish. The Geneva collection when received filled ninety-three large packing cases and weighed more than twelve tons.

A brief summary of the collection, which was sold for 72,000 Swiss francs, and which is considered the most important collection of books on botany and horticulture that has come to the new world from the old, has been made to the *Times* by Dr. Barnhart. He is reported to have said that the city of Geneva, Switzerland, has long been the home of three botanical institutions ranking among the most famous of their kind in the world. One was the De Candolle herbarium, established by Augustin Pierre de Candolle (1778-1841), and maintained and developed by his son Alphonse, his grandson Casimir, and his great grandson Augustin de Candolle. Another was the Boissier herbarium, established by Pierre Edmon Boissier (1810-1885), afterward owned and enlarged by his son-in-law, William Barbey. Until ten years ago these two great collections remained under private ownership, although visited and used almost as if they were public institutions by students from all parts of the world. The third, actually public, was the botanical conservatory of the city of Geneva, its great collections brought together from various sources, but based originally upon the Delessert herbarium, one of the most extensive private collections of dried plants ever brought together. This was amassed by Baron Benjamin Delessert (1773-1847).

William Barbey died in 1914, Casimir de Candolle in 1918, and in both cases their famous collections soon afterward became the property of the city of Geneva and were consolidated with the collections of the already existing city institution. Each of the great herbaria had required an equally extensive and important library for use in connection with it, and the consolidation resulted in much duplication. Some of the duplicates could be used, but it was decided to sell them in a single lot to some other botanical insti-