

DISCOVERING PHARMACY THROUGH HISTORY.*

BY C. O. LEE.¹

In the preface to "The Rôle of the Scientific Societies in the Seventeenth Century," by Ornstein (1), the statement is made that historians have neglected to include the history of science in their works. Furthermore, the facts of the history of science will be taken up by the writers of general history only in so far as the latter are interested in both the facts of history and of science. It is also suggested that the history of science may be too technical for the history student and too bookish for the man of the laboratory. These ideas were expressed more than two decades ago and the truth of either of them is greatly to be regretted.

The achievements of our present scientific age have a thrilling historic background, which scientists may know in part, but which is not generally familiar to the writers of history, and the laity.

The history of pharmacy is the history of science, or perhaps several sciences. In 1914 Alpers said "Pharmacy needs the guide of historical knowledge more than any other profession because it is composed of parts of many sciences" (2).

We still speak of pharmacy as a science and an art. The professional aspects of pharmacy are, however, all but submerged, in the eyes of the public, by devious commercial trappings. Nevertheless, people of all walks of life still turn to the pharmacist for expert service as pertains to medicines and related necessities. Pharmacy touches intimately more persons than any other profession and has an enviable opportunity to acquaint an interested public with its history, science and training. We are professionally timid and hide all these things under a bushel and, in turn, boast of cut prices and increased volume.

I need not remind you of a situation which you know all too well. I should not be so bold as to write upon this subject, or appear before you, if I did not have the faith to believe that the situation can be improved.

PROFESSIONALLY MINDED.

We need first of all to become thoroughly professionally minded. This will be accomplished, in part at least, by becoming imbued with the idea that the lessons of pharmaceutical history, and its traditions, are of value. With a true historical picture of our profession at hand we should be able to go forward with intelligence, interest and enthusiasm.

In almost any field of research to-day the worker is expected to know, or at least find out, what is known and published upon the subject of his study. This principle is quite as applicable to professional understanding and progress. If we have not made adequate progress, it is quite likely that we can charge it to unscientific methods of approach. It is perhaps truthfully unkind to say that most of us have spent years in the service of pharmacy, in school, in stores and in the class room, with scarcely more than an appreciation of the fact that pharmacy, as a profession, has a history; its history is chiefly professional and scientific. The modern cut rate drug stores with their glaring neon signs and displays are subjects for historians to joke about but are not fit to be entered upon the annals of the ages. The

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scientific and professional progress of pharmacy will continue to be included in the records of history. We should clearly understand that these are the elements of any profession that make history. These are, moreover, the things we should strive to develop and promote.

HISTORY OF PHARMACY COURSES.

The Section on the History of Pharmacy of the AMERICAN PHARMACEUTICAL ASSOCIATION was organized more than thirty years ago. It has held one or two sessions at the annual meetings of the parent organization. About five hundred interesting titles have been presented, many of them read and discussed. The Section is never very largely attended. Only a limited number of the papers presented are ever printed. The Section continues to hold the interest of a number of persons but it has not gained much momentum through the years.

During the life of this Section our schools of pharmacy have graduated thousands of pharmacists without any knowledge of the history of pharmacy. Only a few of them have ever become members of the ASSOCIATION and still fewer have ever attended one of the national meetings. It is very clear to me that we need to begin with our students. We should see to it that they have a point of view, a certain amount of knowledge, and a spirit of inquiry concerning the profession of their choice. Knowlton (3), in commenting upon the problems of the history teacher, says, "It then becomes the problem of the teacher of history to hold up life in the past before the young student in order that it may serve as a true reflector of life in the present." We certainly should make use of the past in an effort to evaluate the present, and to plan for the future, in so far as is possible in pharmacy.

The history of medicine is a subject about which many books and stories have been written in recent years. Chemistry, too, is being written up in many interesting ways. The laity reads these stories and is impressed with these important phases of science. Pharmacy should not be left out of this high tide of interest in stories of science and medicine. A century and more ago the pharmacist was the research man of his age. His laboratory was often the center of important chemical discoveries. This was especially true in the days before laboratory instruction became a part of the college course. When Liebig's pranks with explosives threatened the buildings of the homestead he was apprenticed to a pharmacist. The reason for this act on the part of Liebig's father is not clear. I suspect, however, that the father thought the boy should have instruction in the mixing of dangerous chemicals and the most likely place for him to get it was in an apothecary.

I am inclined to believe that we, as teachers of pharmacy, should take seriously to heart the teaching of the history of our profession. Every year we permit students to enroll in the university who fail and go back home, not because of a lack of brains, but because of a background which did not prepare them for the demands of a college experience. We are apt to be quite as guilty in failing to give our students the proper background for a successful professional career. I believe that a reasonable knowledge of the history of pharmacy has as much right to a place in this background as a knowledge of chemistry, botany, pharmaceutical technique and other important curricular material.

Mudge has written an interesting article upon the subject, "Humanizing History" (4). He says, "History is full of human-interest material." Pharma-

ceutical history is certainly full of all sorts of human-interest stories. Students appreciate them and the laity is always interested.

I should like to pledge the teachers of pharmacy to the task of making the courses in history of pharmacy bright spots in their curriculums. There is no set way to do this but it should be done—it can be done.

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JÖNS JACOB BERZELIUS.*

(1779–1848.)

BY LOUIS H. RODDIS.

The biographies of those who have contributed to the advancement of the sciences of pharmacy and chemistry are of interest to every pharmacist for, as Goethe well said, "the history of a science is the science itself." A brief chronology and a

summary of the achievements of Jöns Jacob Berzelius is here given. Berzelius was like another even greater chemist and pharmacist, Scheele, also a Swede.



BIRTHPLACE JACOB BERZELIUS.

1779, August 20th—Berzelius was born at Väfersunda, Sweden. His father was a teacher in Linköping.

1783—His father died and his mother's second marriage soon ended in her death. The boy was brought up by his grandfather.

1784–1796—Educated in the elementary schools and the gymnasium or high school at Linköping. He was much interested in natural science but did little in the classics,

then so important a part of the curriculum, and apparently made no effort to obtain the favor of his teachers. As a result he received a certificate stating that he "justified only doubtful hopes."

1796—Entered the University of Upsala as a medical student. At first he did not do well, largely due to his neglect of certain academic formalities. One of his early instructors in chemistry then said he deserved to fail but that he would pass him if he did well in physics. He passed, though it is rather remarkable that one destined to be numbered among the world's greatest chemists nearly failed in that subject in school.

1802—Graduated in medicine at Upsala. Afzelius, a nephew of Torald Bergman, the eminent Swedish mineralogist, was professor of Chemistry at the time and Ander Gustav Ekeberg, the discoverer of tantalum, was his assistant.

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