

character it once had is no longer recognizable. It is impossible for me to reconcile the fact that Pharmacy as a profession, which I spent so much time and money to learn, and years of experience as an active druggist to perfect, could have completely changed complexion as far as the public is concerned.

We thought we had everything when the Pharmacy and Registration Laws passed; before that any blacksmith with a few thousand dollars could buy up a drug store and call himself a druggist.

No other type of store could compete with the old-time drug store in human interest. A grocery store had a stomach, but the good old drug store had a heart in it. In sickness, health, pleasure, woe or leisure, the drug store had no rival. It seemed there was something in the sign of the Apothecary that made people want to go into a drug store whether they wished to buy or not. There they found the touch they could get nowhere else; to spend a few waiting minutes was a privilege not so valued in any other place. What appealed to them most, we druggists could only imagine from the pleased expression on their faces. We didn't know but that they came in because of the aroma of good cigars in the case, the odor from the sweet-scented soaps and perfumes, the gold fish, the long rows of pretty bottles of uniform size (containing medicine, of course), all lettered in gilt, which were kept on the shelves. And let me not forget that first drug store, where I washed bottles packed in straw, trimmed the coal-oil lamps, dusted the old sponge basket sitting in the center of the floor and cleaned the colored show globes in the window which were the chief decorations.

There is a tinge of sadness in the thought, and I can't quite realize it to be true, that the place I once owned and operated for forty years, known to all men as a drug store, is no longer in existence. I have a hard time trying to explain to my young grandchildren the difference in the drug store I sold less than twenty years ago, and the one they see to-day. I can imagine them telling me that they don't see anybody at the store doing things in the way I said I used to do them, and they might keep the idea to themselves, that Grandpa couldn't have been much of a druggist anyway.

ELISHA DEBUTTS, PHYSICIAN, CHEMIST, TEACHER, DEAN AND
DELEGATE TO THE 1820 UNITED STATES PHARMACOPŒIAL
CONVENTION.*

BY LYMAN F. KEBLER.¹

During my studies of the activities of that versatile super-man, Dr. Samuel L. Mitchill (1) in stimulating uniformity in the manufacture of medicines, in aiding unification in the writing of prescriptions and establishing drug standards, the activities of Dr. DeButts came to the fore. Little is of record of his work in the above fields. He was one of the five physician-chemists, who took a prominent part in supporting the first United States Pharmacopœial Convention and the results issuing therefrom. The five physician-chemists were Lyman Spalding, Samuel L. Mitchill, Elisha DeButts, Wm. MacNevan and Joseph Parrish. Dr. DeButts took a continued active part in the work.

* Presented before the Historical Section, A. Ph. A., Minneapolis meeting, 1938.

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Elisha DeButts (1773–1831), of Irish extraction (2), came to this country with his parents, age about thirteen, about the time of the Twelfth Continental Congress. He was sent to live with his uncle, Dr. Samuel DeButts, in Alexandria, Virginia, where he attended school and grew into manhood. His medical studies were probably begun with his uncle and continued in the University of Pennsylvania, where he received his medical degree in 1805. Elisha, like Samuel Mitchill, had the advantage of being reared in a medical atmosphere. While engaged in his medical studies he came under the benign influence of the ingenious James Woodhouse, dean and professor of chemistry in the Medical School of the University of Pennsylvania. He also probably came into personal contact with Benjamin Smith Barton, John



ELISHA DEBUTTS.

R. Coxe, Adam Seybert, Benjamin Rush, Robert Hare, Samuel Cooper, Caspar Wistar and other prominent scientists, who were either domiciled or studied in Philadelphia at the time, the scientific center and the largest city in the United States. The Philadelphia Chemical Society was then in a flourishing condition and brought many distinguished scientists to its meetings; certainly an inspirational environment for a young man in which to acquire an education. Furthermore Dr. Barton was then collecting data for a future American Pharmacopœia. In 1804, he discussed drugs (3), before the Philadelphia Medical Society, which he believed should be included in such a pharmacopœia, when it is developed.

After acquiring his medical degree the doctor practiced medicine on the Potomac, in Alexandria and Washington (2), for several years and later made Baltimore his home. In 1809 he was appointed to the chair of Chem-

istry in the Maryland College of Medicine, rendered vacant by the death of John Shaw, the first professor of Chemistry in the college. A few words about Professor Shaw would seem to be appropriate. John Shaw (1778–1809), a Bachelor of Arts alumnus of St. John's College of Annapolis, one of the founders of the Maryland College of Medicine, studied medicine in Philadelphia and Edinburgh, accepted a medical appointment in the United States Navy, later practiced medicine as a partner of his preceptor in Annapolis, but never received a degree in Medicine. In 1807 he publicly offered his services to the people of Baltimore, began a series of private lectures in Chemistry, and in November or December was appointed to the chair of Chemistry. He died at sea while in search of health, January 10, 1809.

Acting on a memorial of the president and the professors of the Medical

College, the General Assembly of Maryland in 1812 established the University of Maryland (4). Dr. DeButts because of his professorship is credited as one of the founders of the University. His title then was Professor of Chemistry and Mineralogy. He served as dean of the Medical College in 1816 and again from 1822-1824. To this office he brought great honor. During his deanship he had the privilege of seeing the University confer the honorary degree of L.L.D. on Major General Marquis de Lafayette, while the latter was visiting the United States. The faculty chose Dr. DeButts in 1812 as a delegate of the Middle District to the National Pharmacopœial Convention. He met with the other four delegates of the Middle District in Philadelphia, June 1, 1819. These five delegates remained in session for five days and evenings, preparing a rough draft of a proposed Pharmacopœia. The rough draft was sent to the Pharmacopœial Convention in Washington. The five delegates were the five physician-chemists alluded to above.

The general write-ups of the first National Pharmacopœial Convention give one the impression that the work was accomplished in a day or so, but the contrary is true. Six delegates met in Washington, Saturday, January 1, 1820, spent the day on the material submitted and adjourned late in the day to meet the following Monday. On Monday five more delegates reported for duty. The delegates spent the entire week, discussing, revising and comparing notes. During these meetings the delegates certainly had an opportunity to ascertain who of them was best qualified and in position to carry the work to completion, after the convention adjourned. Dr. DeButts was named on the committee of publication, appointed before the delegates adjourned. Three of the six members of the committee were physician-chemists.

The duties of the committee on publication included a revision of the work, preparing it for the printer and providing for the publication of the Pharmacopœia, the first edition of which was copyrighted December 15, 1820. This is the date of its publication as usually given. The committee met in New York, New Haven, Hartford and Boston. To what extent Dr. DeButts attended these meetings is not of record but there is immediate evidence that he was a member of the editing committee and corrected portions of the page proof of the first United States Pharmacopœia. These are in the possession of Editor E. G. Eberle, through whose kindness they have been reproduced and made available. The authenticity of the page proof is certified to by a letter in the handwriting of Dr. Spalding. The annotations show that Dr. DeButts was required to give immediate attention to the chemical features involved. On page nineteen, in longhand, appears the following: "*Saml. L. Mitchill. Scribe.*" which shows that Dr. Mitchill took an active part in correcting the page proof.

The eminent Dr. Edgar F. Smith, chemist, historian and provost of the University of Pennsylvania, in his "Dedicatory Address," dedicating the Chemistry Building of the University of Maryland in November 26, 1927, in reference to Dr. DeButts said: (5) "This science (Chemistry) and this University (Maryland) had great lustre shed upon them by Elisha DeButts through his eloquence, his skill in manipulation and his deep knowledge of the science. It has been said 'that as a teacher of chemistry he was perhaps unequalled'—certainly unexcelled—."

The chromium industry of Baltimore had its beginning during the time of Dr. DeButts and it is believed by some that he was an active participant in its develop-

ment but so far nothing of an authentic character has been located on the subject.

From my study of the life, work and accomplishments of Dr. Elisha DeButts I feel justified in calling him the first prominent physician-chemist of the State of Maryland.

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(3) Collection for an Essay toward a *Materia Medica* for the United States, published privately by the author.

(4) Cordell, Eugene F., "Historical Sketch University of Maryland," 24 (1891).

(5) Private communication from the Edgar F. Smith Memorial Collection of the University of Pennsylvania.

A BRIEF HISTORY OF COMMERCIAL MEDICINAL PLANT CULTURE IN THE UNITED STATES.

At a recent meeting of the City of Washington Branch, A. PH. A., A. F. Sievers, Senior Biochemist, Division of Drugs and Related Plants, Bureau of Plant Industry, Department of Agriculture, read a paper under the above title.

The following is a summary of the paper.

The possibilities of growing medicinal plants for the crude drug market have interested persons in all walks of life and in all parts of the country. It seems to have a special appeal to almost all classes. Few persons are really qualified to undertake such a project because it requires special knowledge of plant culture and the evaluation of the crop in many cases requires technical skill and equipment. Moreover the economic aspects are so frequently not thoroughly understood or given insufficient consideration.

A review of the attempts at commercial drug plant culture in the United States and a study of the factors and circumstances that accounted for their success or failure provides a fairly clear picture of the question as a whole. In fact the prospects of such an industry in the future may well be judged from the records of attempts in the past. Successful competition with foreign sources of supply appears no more likely to-day than formerly and the steady decline in the use of botanical drugs has further reduced the market outlet.

In this country successful commercial drug-plant culture has been limited to two periods. In the colonial days and early part of the past century herb growing as a community industry was quite profitable. Thereafter until the World War there was much experimenting but little more. The high prices during the war of many of the drugs usually imported provided an opportunity for domestic growers for several years but with the restoration of foreign supplies the new enterprises could not survive.

On the whole the situation is unchanged to-day. The same obstacles exist and the same remedies are proposed but there is no real progress toward making medicinal plant growing a staple agricultural industry in this country.