

## PRELIMINARY EDUCATION OF THE STUDENT OF PHARMACY.

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The early history of pharmaceutical education proves that the aim was to supplement and not to supplant apprenticeship. Prior to the Civil War high ideals were maintained, but soon thereafter these were forgotten. Many conditions were conducive to this fact. The rapid expansion of the country, the revival of commercial interests, the vast opportunities for the rapid acquisition of wealth, all tended to the decay of the apprenticeship system. Commercial exploitation infected all ranks and schools of all kinds were no exception. It was the period of revival of dormant colleges of pharmacy which had aimed at high ideals and still maintained them by a code of ethics unsurpassed by any profession. Unfortunately, the spirit of the period did not recognize their sufficiency. Other colleges devoted to the study of pharmacy opened without any consideration of supply and demand.

Every method of commercial exploitation was resorted to, alluring advertisements, quite commonly exaggerations and not infrequently outright misrepresentations were the means used to attract the ignorant. Such conditions could not last and soon movements of reform began. The pioneers of pharmaceutical education prevailed. Candidates for matriculation in a college of pharmacy were subjected to an examination in the branches of the ordinary grammar school to determine their fitness for admission. This aim towards better qualified students was a movement in the right direction, but like all other reforms under competitive environments, soon became a farce.

The less conscientious saw to it that all applicants were qualified to join the ranks of pharmacy. The failure of this first movement of reform resulted in the drafting of pharmacy laws "for the benefit of the dear public by keeping out incompetent druggists from *other* states." Each state in succession lauded itself in the belief that it was the mecca for all undesirable material of adjoining states. Those that were not quite so egotistical hoped to obtain relief from poor material furnished by colleges of pharmacy and consequently also became staunch supporters of pharmacy legislation. On the other hand, those connected with teaching institutions of pharmacy of commercial exploitation perceived great danger to their financial interests and hence made every effort to incorporate in such laws a clause exempting college graduates from Board examinations. Efforts in this direction proved failures, although a few state pharmacy laws still grant this exemption. Pharmacy legislation by systematic commercial exploitation materially enhanced the financial status of many of these institutions.

It was the period of hot-house development of schools of pharmacy. Scientific schools strongly supported by state finances violated their code of ethics and fostered this commercial exploitation in order to increase their annual state appropriations. Scientific pharmacy was taught in the most entertaining and instructive manner. Education was made easy and profitable by "Quiz Compend" and "Essentials of Pharmacy." These inducements, combined with the general belief that pharmacies were gold mines, brought the most ignorant into the field

of pharmacy. Upon this commercial basis dividends were the essentials and hence the cheapest and most profitable methods to the owners of the institution were maintained. This hot-house period increased the number of schools twelve hundred percent, while the total number of students enrolled yearly barely represents seven thousandths percent of the total population. Preliminary education of a fair degree, combined with the manipulative skill of applied pharmacy were *presumed* and accepted with the knowledge of their being a negative quantity. Again the cry for a higher education was raised, and after many pros and cons, a definite amount of preliminary education was set as a standard for admission to colleges of pharmacy. This demand was not a voluntary one on the part of the colleges. This requirement consisted of one year high-school education or its equivalent. Ten years of agitation finally culminated in an enactment by New York State which induced the majority of pharmacy schools to scramble for recognition.

Many of them have been prolific in promises but very slow in their fulfillment, notwithstanding the fact that some thirty of these institutions have formed a cordon of teaching faculties to enforce all the requirements that will tend to make better pharmacists. Perusal of the proceedings of the thirteenth annual meeting prove conclusively that not all is harmony.

Educators must recognize that the student body is imbued with the idea that they become pharmacists by following the routine work of the present day pharmacy, and that the only qualification is "legal qualification." The pharmacy laws of every state in the Union leave this impression—students apparently care nothing for the "theory and practice of pharmacy," display no desire or curiosity to master its principles, since the routine work does not demand it, and only resort to colleges of pharmacy when they discover that Quiz Compendes and Essentials are not productive of legal qualification. On the other hand, the old line of colleges of pharmacy, acting with the best faith and thoroughly honest in their efforts to raise the standard of education, have increased their facilities and the opportunities for acquiring true pharmaceutical knowledge upon the broadest basis and yet fail in their efforts owing to their too broadening field. The student body have recognized long ago that boards of pharmacy examinations are not in keeping nor within the scope demanded by colleges. That a low estimate is made of pharmacy, its schools and its boards of pharmacy, no one will deny. What are the environmental influences surrounding prospective students of pharmacy to produce this low estimate of the science of pharmacy? Psychologists as well as educators have shown that there is an amazing degree of mental retardation among the school-going population of the United States. Astounding figures are given that are indicative of a gross error. Where is the error? In the American race itself or in the general educational system? Twenty-five years of study and analysis of the recruits to the student ranks in pharmacy have shown a lamentable and constant decrease in culture. Lack of self respect, disrespect to the institution, its rules of common order and decency, even a spirit of condescension in enrolling with the institution, pervades. Unfortunately our public schools of the present day do not produce competent, reliable or thorough knowledge. The whole system of training is faulty and exists solely through the grace of political influence. It is a means of securing political

prestige by catering to the prejudices, ignorance and credulity of the masses. In the very beginning the rod is spared, not for humanitarian reasons, but for fear of antagonizing the voting prerogative of the parent. Idleness, indifference, carelessness and snobbery are condoned and sanctioned for the same reason. Extravagance is encouraged, discontent for the home surroundings is sown by the excessive ornamentation of school buildings and their surroundings; moral culture is ignored completely.

Development of character essential to educational progress finds no consideration and hence it is no wonder that even graduates of our high schools, having all the necessary counts preliminary to the required admission standard of a college of pharmacy, cannot compose a letter clearly and accurately expressing their thoughts; cannot apply the simplest rule of proportion or percentage; in fact, are totally deficient of the power "to think."

The conditions as they exist clearly demonstrate that pharmacy of the present day must be considered from two viewpoints, namely, commercially and professionally. The commercial aspect simply requires the same training that makes any other business man a success in his field of labor. The professional aspect requires particular training in science and this in turn demands more than the common preliminary training. In this there can be no half-way measure; the broadest preliminary education is essential for the proper conception of a professional knowledge of pharmacy. Credentials of preliminary education based upon counts, credits or hours are not worth the paper written on. Legislation presuming a definite kind of preliminary education as a prerequisite to college admission or to state board examinations will never cancel the deficiency in educational quality.

Colleges of pharmacy as well as boards of pharmacy should fully ascertain the educational qualification of the applicant, but it does not concern them how, when or where the qualification was gained. Individuality in colleges as well as in boards of pharmacy will soon assert itself and as in former days each tub will stand upon its own bottom. Each body must adopt its own method of discrimination. It may be guided by suggestions or set rules depending upon environment and economic conditions. They must be qualified to gauge the mental qualification and possess the moral courage to reject if necessary. As a guide to the conservation of professional pharmacy, the Pharmaceutical Syllabus offers a means thoroughly in accord with pharmaceutic progress. This syllabus aims to group the studies essential to the proper conception of pharmacy around a common center. That each of these studies may retain its individuality, it was found advisable to permit expansion or contraction according to the viewpoint of those directly concerned in the teaching of the branch. Secondly, that true depth of knowledge and not a smatter of knowledge be acquired, three grand divisions were instituted, namely *Materia Medica*, *Chemistry*, and *Pharmacy*, with variable time limits for their elucidation. These divisions were further subdivided into twenty-six branches to produce the desired elasticity for individuality of teachers. Minds may differ as to the time limits or allotments of each branch of study, but it is of importance how that time shall be employed, whether wholly didactic, or wholly practical, whether continuous or interrupted.

Under the present status of pharmaceutic legislation, the difficulties of con-

ducting a school of pharmacy are steadily increasing. The demands upon student as well as institution are increased. The expense to the student for the opportunities offered is materially decreased, while the expense to the institution is increased more than five-fold and yet the supply of students is less. That such should be the case is but natural and but the sequence of unnatural, unjustifiable and uncalled for competition. It cannot be remedied by forcing a time limit of twenty-five weeks in two separate years, under the plea of helping the student on the installment plan, ostensibly to give him a chance to earn his living and tuition, but in reality to keep the institution alive. These self-sacrificing institutions increase their probabilities of securing the student's total earning capacity in a period of two and even three years, when the actual time devoted to the whole course amounts to one hundred and fifty to two hundred days of six hours each. It is a method that does not redound to the glory and honor of pharmaceutical education. When dollars and cents are the consideration, the student body can figure as well as the best mathematician and hence avoids schools until forced into them to maintain his earning capacity. The opportunities for acquiring pharmaceutical knowledge must not be restricted to time or place; some acquire it in one year while others may take ten years. Under present conditions, boards of pharmacy are the censors of this knowledge and aim to harmonize the commercial and professional status of pharmacy, and as a result true pharmacy does not progress. To remedy the existing evils, all state pharmacy laws need revision. Druggists with specific privileges and pharmacists with specific education must be created; both under the control of a State Commission composed of qualified men and having the means at their disposal to carry out the provisions of legislation.

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#### SCHOOLS, STATE BOARDS AND PREREQUISITES.

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Pharmacy certainly is associated with troubles in this day of persecution and prosecution. Every pharmacist is likely to be charged at some time or many times in his career with practices beneath the standing of manhood and with being a corruptor of morals and a parasite, preying upon the superstitions, ignorance and innocence of an uninformed public. The responsibility for this situation must be charged to a certain few, who are guilty of all these offenses, and have brought disrepute and disgrace upon our calling. Added to this the passage of the pharmacy laws has caused a further distrust in the minds of many people who do not understand their intent. Next, the "Pure Food and Drugs Act" caused another spasm of distrust and open accusation. Now the anti-patent medicine crusade is taken by the public to be directed against the poor, helpless, struggling druggist. It is a case of "The man is down, don't hit him—kick him!"

Must I mention further, another thorn in the flesh of the druggist—the question of counter prescribing? Here, some unscrupulous ones have incurred the dis-