

and is compelled to write prescriptions and they are marked. If all medical schools were handled in that way, by the time the students graduated they would know something about prescription writing.

Mr. W. F. Root. I take it that the paper refers to the application, rather than to the work of a pharmacist. I do not think that the paper refers to the educating of a physician to make preparations but rather to know the ingredients, the materia medica. To my mind, the real doctor is developed from the man who started in as a druggist, who then goes to a college of pharmacy and later to a medical school.

Mr. Phillips: I think that sometimes we try to get too much into the college course. Pharmacists should use their efforts with the young physician when he first begins to practice and help him in his prescription writing, otherwise the detail man will get hold of him and show him the easy way to prescribe so that he becomes lost for a long time. I also think that the bringing together of physicians and pharmacists through the colleges, through the alumni, is really higher education.

MORE ENGLISH FOR THE PHARMACIST.*

CHARLES P. VALENTINE.

The tendency of pharmacy today, is toward the elevation of educational requirements for those who enter it. Many examining boards of pharmacy require that its applicants be graduates from a recognized college of pharmacy; the latter, in turn, are gradually, and wisely, demanding higher entrance requirements, and are lengthening the various courses they maintain. A number of our leading colleges of pharmacy are departments of the larger universities; their students receive collegiate training in chemistry, botany, and biology, along with that in the strictly pharmaceutical subjects, and yet the students in pharmacy are the only university students who are not required to take, nor do they receive, at least the first year's course in college English, during their attendance. If the student in law, in engineering, in commerce and accounting, in chemistry, or in a liberal arts or academic course, is given a course in college English, why should not the student in pharmacy, in the collegiate course, receive the same?

As yet the matter has received but little attention, and less recognition on the part of the schools of pharmacy. The American Conference of Pharmaceutical Faculties, it is true has prescribed a year of high school English for the schools complying with its standards for pharmaceutical educational requirements. Many colleges of pharmacy include college English as a requisite in their three and four years courses in pharmacy. This is, however, at present of little significance, since the great majority of students in pharmacy elect the two year course only.

The value and importance of English to the pharmacist must become apparent upon the analysis of the demands his calling makes upon him. The pharmacist of today is not only the professional man; to be successful he should be an intelligent carefully trained and versatile business man as well. Peculiar then, in that pharmacy combines the advantages as well as the difficulties of both a professional and a business career, it appears that the college of pharmacy

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should strive to combine those college subjects which make for a practical as well as theoretical maximum of educational efficiency in its students. Among those subjects, not strictly technical, college English as a required course in pharmacy, would be of immense value and benefit.

English, in its broadest sense, implies the correct use of our language, in oral as well as written discourse, and in expression of thought. Matters of good usage, grammar, spelling, punctuation, paragraphing, manuscript arrangement, and letter writing, are hence essentials of paramount importance. To indicate the value of correct English in daily conversation, and as an aid to individuality and power in self-expression, seems superfluous in that it applies to the pharmacist no less than any and every individual.

To the pharmacist English means this and more: consider if you will, his business correspondence and letter writing, salesmanship, and show card writing. Would not college English prove of inestimable aid and value in these specific examples of the young pharmacist's necessary qualifications? Efficient salesmanship and advertising is the very life of any successful enterprise, be it pharmacy or any other profession or business. And what other than English is the foundation upon which these modified forms of expression depend?

On concluding, consider the pharmacist apart from his calling—as a citizen and a member of the community in which he lives. He, too, should cultivate interests outside of his art. He should, no less than his fellow professional and business men, be broad minded, and make his profession incidental to his being a good citizen. A college training should help make him so, and of those few not strictly pharmaceutical subjects permissible in an already congested course, college English deserves, above all others, a place in the course of our schools of pharmacy.

EXAMINATION OF FLUID EXTRACT OF CONDURANGO AND OF CONDURANGO BARK.

The German Pharmacopœia requires that when a mixture of 1 cc. (mil) of fluid extract of condurango and 4 cc. (mils) of water are heated to boiling, the liquid should become very turbid, but that the turbidity should disappear again on cooling. Two cubic centimeters (mils) of the cooled solution mixed with 8 cc. (mils) of water should yield a copious precipitate on the addition of tannic acid solution. Richter (*Apoth. Zeit.*) has utilized these reactions for determining the quality of both the fluid extract of condurango and of the bark. Four cubic centimeters (mils) of the boiled and subsequently cooled liquid are mixed with 16 cc. (mils) of water and 2 cc. (mils) of a 5 per cent. tannic acid solution. The precipitate is then allowed to separate and in the liquid 6.5 grammes of finely powdered sodium chloride are dissolved by gentle shaking. The mixture is then carefully transferred to a burette, and the quantity of precipitate is noticed, removing any foam by the addition of a few drops of alcohol. A good fluid extract of condurango should yield when examined by this method about 5 cc. (mils) of precipitate. For examining the bark, 50 grammes of the latter are macerated with 50 grammes of water for 4 hours. The mixture is filtered, the filtrate boiled and cooled again and 4 cc. (mils) of the cold liquid are treated as given above. The precipitate thus produced should measure from 5 to 6 cc. (mils).—*Through Druggists Circular.*