

differences of opinion on what constituted a proper course in pharmacy and many stormy times have resulted from these and other causes.

Dr. Henry L. Taylor, of Albany, N. Y., an official of the New York State Education Department, was secretary-treasurer of the Committee from 1906-1914, and has done more than any other one man for the Syllabus. Dr. Taylor is an educator and not a pharmacist, and his point of view was often very different from that of other members of the Committee. He is a man of tireless energy with the courage of his convictions and he was often at odds with various members. We believe that in the future the great amount of unselfish work done by Dr. Taylor will be appreciated at its true worth. On the issuance of the second edition, Dr. Taylor withdrew from the office of secretary-treasurer, in accordance with notice previously given, and the writer was elected to the office.

The recent agitation against the Syllabus came almost entirely from certain members of the Committee, apparently because they could not induce the Committee to adopt some of their ideas and they were unwilling to accept a compromise. We believe that these gentlemen are sincere in their efforts, but we could not agree to all of their propositions and thus we antagonize them.

No member of the Committee believes that the Syllabus is near to perfection. The first edition was very imperfect in many parts. In the second edition these faults are largely corrected, or replaced by new matter, and this edition is a great improvement over the first. This is the only way in which such a book can be prepared and if succeeding editions each show improvement over the immediately preceding one we shall ultimately have as nearly perfect a work as can be obtained. With this in view, the Committee is planning for revision every five years. The proposal, which has been made and rejected, that all of the good in the present syllabus be thrown away and a new one prepared, was not a good one. What we need is constructive, not destructive criticism.

THEODORE J. BRADLEY.

NEW ORLEANS, LA.

The object of the Syllabus, is uniformity in teaching the various branches of pharmacy and as a guide to both the teachers of schools of pharmacy and the examiners of boards of pharmacy. It must be admitted that graduates of pharmacy are examined by other boards than the one of the school, it is rather the exception than the rule.

If there is no unanimity of action between colleges and boards of pharmacy of the same state, the object of the syllabus is defeated.

Personally, the Syllabus appeals strongly to me and while there is, as has been too often admitted, gross errors in the old issue, it can be made to serve a most excellent purpose in the pharmaceutical education of this country, but, not only is its adoption by every college and board of pharmacy necessary, to carry out the objects of those credited with its introduction, but the boards and colleges of the same state must work along the same lines.

The fact that this work is the result of the combined efforts of members composing every avenue of pharmaceutical endeavor, is in itself an indication of the kind of pharmaceutical thought that it reflects. Composed of committee of seven each, from the American Pharmaceutical Association, the National Associations of Boards of Pharmacy and the American Conference of Pharmaceutical Faculties, it does not seem possible that such a Committee could have issued something wholly at variance with the pharmaceutical educational needs of this country.

The work of the Syllabus Committee proper could be materially strengthened by the appointment of sub-committees of five members each, from the same associations from which the Syllabus Committee was derived, to correct and eliminate any of the short-comings in the publication that may exist. This would not be any additional expense to the Syllabus Committee, as these members could be selected from the membership of the three bodies who regularly attend the annual meeting of the American Pharmaceutical Association.

PHILIP ASHER, M. D., DEAN.

BALTIMORE, MARYLAND.

Sir:—I am somewhat embarrassed by your request for an expression of my views upon the second issue of the Pharmaceutical Syllabus, since I feel incompetent to discuss a subject which has had such long and careful study and such close attention from an unusually able committee; on no account, would I discuss any part of the Syllabus, excepting that which refers to the branches which I am trying to teach.

Much pleasure and encouragement have followed an examination of the last edition; the changes made bring it more nearly in accord with my ideas regarding the teaching of dispensing and commercial pharmacy. I have, lately, gone over the outline given for these branches and am pleased to note that, during the last twelve years, our efforts have been in close accord with the suggestions of the Syllabus committee. As an instance of the help I derive, I will state, that, for several years I have been wondering if I should continue to instruct students how to spread plasters. I find that the Syllabus recommends that such instruction be given, consequently, I am justified in continuing the practice.

The separation of pharmaceutical jurisprudence from the commercial course is, in my

opinion, entirely proper, and another instance of progress, as this was not so in the former edition of the Syllabus.

In regard to the time devoted to the different branches, I notice that seventy-five hours is suggested for commercial pharmacy. We have given but forty-eight hours to this branch and have found it quite enough to equip the better students for the commercial part of pharmacy. If I could be decided in any criticism of the dispensing course, I would say that the time allotted to this important work is entirely too little. We find that a hundred and ninety-two hours in the two years is none too much to give students the knowledge and practice necessary to equip them for prescription work.

On the whole, I am one of those "simple-minded fellows" who believe that the Syllabus Committee has done wonderfully well with a most difficult problem, and if the members of the Committee continue their good and helpful work, the Syllabus will soon be of great assistance to pharmaceutical schools and teachers and a credit to all concerned.

HENRY P. HYNSON.

BROOKLYN, N. Y.

With much interest did the writer follow the discussions on the Pharmaceutical Syllabus at the A. Ph. A. Convention at Detroit, and also the minutes as published in the November number of the Journal.

The chief object of the Pharmaceutical Syllabus is to indicate the general scope and character of the instruction to be given by the teacher, and to outline the work to be done by the pharmaceutical student. It is an everlasting credit to the A. Ph. A. to have originated this splendid idea, which has resulted in a work which represents not only the A. Ph. A., but also the American Conference of Pharmaceutical Faculties, as well as the National Association of Boards of Pharmacy.

The National Syllabus Committee, thus formed, has so far published two editions of the National Syllabus. As was to be expected, the first edition of this book did *not* prove very satisfactory. However, pharmacists at large and quite especially the pharmaceutical educators in the United States had reason to expect that the second edition of the Pharmaceutical Syllabus would be a decided improvement. But to the great surprise of all of those looking for an *improved* edition, a sad disappointment resulted.

The writer has always taken an active interest in pharmaceutical education, and still more so since his appointment as Professor of Pharmacy, Pharmaceutical Chemistry, and History of Pharmacy in the Department of Pharmacy in the College of Jersey City. That the second edition of the Pharmaceutical Syllabus did *not* prove satisfactory to the Faculty of our College, can be seen from the following comments which have been published in our catalogue for the Session 1914 to 1915.

#### OUR ATTITUDE TOWARD THE PHARMACEUTICAL SYLLABUS.

The aim of the Pharmaceutical Syllabus is to outline a minimum course of study which would be broad enough and sufficiently well balanced to be acceptable as a basis of instruction to our schools of pharmacy and at the same time would be sufficiently extensive to be of use to our boards of pharmacy, to examine candidates for state conferred rights and privileges.

The Second Edition has been compiled by the National Committee of the Pharmaceutical Syllabus and published in June, 1914. Our College immediately appropriated a copy for each department. After careful consideration our faculty found itself heartily in sympathy with the objects of the Pharmaceutical Syllabus and considers the present, Second Edition a material improvement on its predecessor. However, our College is unable to *adopt* the Pharmaceutical Syllabus in its present status, in its entirety and for the following reasons:—

1.—Because no lectures are provided on the Theory of Pharmacy for the Senior year, which in our experience is a serious deficiency.

2.—Because the Syllabus for the subject of pharmacy provides during the Junior year only a total of 195 hours and for the Senior 205 hours. This time is entirely inadequate for a thorough course in this important branch of the work in order to provide the student with sufficient knowledge to take charge of a pharmacy in which drugs are dispensed and prescriptions compounded and also to pass the state board examination in a competent manner.

3.—Because as many as seventy-five hours are provided for Commercial Pharmacy and only sixty for Dispensing Pharmacy during the Senior term. This allotment of time is in the opinion of the Faculty unjust, as it lays too much stress upon commercialism and too little upon the professional side.

Nevertheless, in the arrangement of our courses, the Syllabus has been followed as much as possible and as far as in the opinion of our Faculty it was justified by experience and in accordance with our principles.

To the above comments, the writer may add the following personal ones:—

1.—In carefully looking over the second edition of the Pharmaceutical Syllabus, I find that only thirty-five pages are devoted to Pharmacy, while on the other hand, *Materia Medica*

occupies fully fifty-six pages. Let me ask the pharmaceutical educators and pharmacists in general if this is *fair* to the student at a school of pharmacy?

2.—Physiology occupies eleven pages and Dispensing Pharmacy only three pages! Just think of it!

3.—Posology, a Junior Study of but fifteen hours, occupies thirteen pages! Evidently, the gentleman who prepared this *outline* most certainly did *stretch* same!

4.—Last, but not least, Chapter VI, Reference Works, and Chapter VII, Text-books and Pharmaceutical Periodicals, both of which chapters occupy such a prominent place in the second edition of the Pharmaceutical Syllabus, are so full of mistakes, grammatical and otherwise, that they are certainly a disgrace to American Pharmacy. This latter fact has been so fully commented upon at the Detroit Convention, that it is unnecessary for the writer to dwell upon it any longer.

#### CONCLUSION.

In conclusion, I beg to state that the aim of the Pharmaceutical Syllabus is most certainly a laudable one. Let us hope that the third edition will be a great improvement upon its predecessors, and that it will prove satisfactory to our schools of pharmacy, and also to our boards of pharmacy. Up to the present time, there has been quite some confusion between the fact that the Pharmaceutical Syllabus is *sometimes adopted*, but *most generally only approved!*

Let us hope that the next edition of the Pharmaceutical Syllabus will be a master-work, which will be *adopted by all* the colleges of pharmacy and *all* the boards of pharmacy!

OTTO RAUBENHEIMER.

## DERIVATIVES OF SALICYLIC ACID.

JOHN W. FORBING, PH. C., B. S.

### ACETYLAMINO-SALICYLIC ACID AND ACETYLAMINOACETYL-SALICYLIC ACID FROM SALICYLIC ACID.



The following paper presents detailed methods for the production of the various acids which compose the steps of the synthesis. Interest is attached specially to acetylamino-salicylic acid  $C_6H_3(NHCOCH_3)OHCOOH$ , in that its structural formula bears a resemblance to what might be termed, a composite of the active radicles of Phenacetin,  $C_6H_4O.C_2H_5.NHCOCH_3$ , and Aspirin

$C_9H_7COOH.OCOCH_3$ .

Acetylamino-salicylic acid forms soluble salts with,  $NH_4$ , K, Na, Ca, and Sr. If tests indicate clinical usefulness, the product would have a decided advantage over the various insoluble varieties of Analgesics and Antipyretics.

The process of synthesis is based on the nitration of salicylic acid, the production and isolation of assymetric metanitro-salicylic acid (1-2-5) with liberal yield; the conversion of the nitro-salicylic into amino-salicylic acid hydrochloride and subsequent acetylation of the Amino and hydroxyl groups:—

