

(5) George L. Keenan: The Optical Properties of Some Amino Acids, *J. Biol. Chem.*, 52, 163-171 (Nov. 1924).

(6) George L. Keenan: The Optical Properties of Some Sugars, *J. Wash. Acad. Sci.*, 16 433-440 (Oct. 4, 1926).

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A PRESCRIPTION INCOMPATIBILITY THAT HAS BECOME A CLASSIC.*

BY EDWARD KREMERS.

In the April number of the *American Druggist*, the editor of this well-known journal comments editorially on "The Mysterious Affair at Styles," a detective story by Agatha Christie. Commenting upon the plot under the caption "Murder by pharmaceutical incompatibility," the editor makes the following statement: "The pharmacist will be interested in learning that the murder in this mysterious affair was accomplished by the introduction into a tonic containing strychnine of a bromide which precipitated out the strychnine from the mixture leaving sufficient strychnine in the last dose to prove fatal. The criminals would have escaped detection but for the trouble they took to direct suspicion against an innocent member of the household. The detective in the case quotes from the pages of the "Art of Dispensing," one of the best books on the subject prepared by that admirable editor and accomplished pharmacist, the late Peter MacEwan. The item quoted follows:

"The following prescription has become famous in textbooks:

Strychnine ¹ Sulph.....	gr. i.
Potassii Bromid ¹	dram vii.
Aqua ¹ qs. ¹	oz. viii.
Fiat mistura.	

"This solution deposits in a few hours the greater part of the strychnine salt as an insoluble bromide in transparent crystals. A lady in England lost her life by taking a similar mixture. The precipitated strychnine collected at the bottom, and in taking the last dose she swallowed nearly all of it.

"The patient is taking a tonic containing strychnine but no bromide. She, however, does occasionally take a bromide sleeping powder. The villain in the case, a member of the household, adds one of these powders to the tonic, thus precipitating the strychnine, and bringing about the death of the patient."

The author's source of information having been quoted in its entirety, no further comment on this aspect of the subject is necessary. The first line of Mr. MacEwan's comment, however, seems worth re quoting, *viz.*: "The following prescription has become famous in textbooks."

This prescription which has become famous in textbooks is given space in "Remington's Practice of Pharmacy." In the fourth edition of 1905, the author

* Read before Section on Practical Pharmacy and Dispensing, St. Louis meeting, 1927.

¹ The typographical errors are not those of Mr. MacEwan. (Edition of 1901, p. 368.)

includes the following statement in his comment thereon: "This solution deposits in a few hours the greater part of the strychnine salt as an insoluble bromide." Then follows the reference to "A Lady in England" (p. 1167). The writer is pleased to add that the latest edition of this text, edited by Cook and LaWall (1926), attributes the precipitation of the free alkaloid to the slightly alkaline reaction of the potassium bromide (p. 1635).

Several years ago when the writer had occasion to take charge of a class in prescription practice, he made use of MacEwan's book for the selection of a few instances of prescription incompatibility. The illustration under consideration attracted his attention as a case of improbability of incompatibility, at least for the reasons given. Not being able to find the solubility of strychnine bromide in either chemical or pharmaceutical texts available without going to the General Library, he had the students of the class try out the reported incompatibility. When at the next class period each member of the class came with a perfectly clear solution in his prescription bottle, they were at a loss. On the one hand they had the positive statement black on white, which, naturally was gospel truth to them in spite of repeated warnings to do some thinking for themselves and not to look upon even the U. S. Pharmacopœia as infallible; on the other hand they had the experimental results which, without exception, contradicted the printed word. The occasion was too good to be missed by the teacher to bring home a lesson that reasoning is more important than a dozen lessons in specific prescription incompatibilities performed mechanically.

The writer recalled having seen, way back in 1890, a prescription bottle filled with water in which a strychnine salt had been dissolved. The originally clear solution, however, had deposited most if not all of its strychnine. Professor Husemann of Goettingen, in whose Pharmacological Institute the bottle in question was kept, used this as an illustration to warn his students against possible alkalinity of the glass. So I had my students test out a number of new prescription bottles, a few of which gave off alkali to distilled water with which they were filled. This is readily demonstrated by any indicator giving a colored solution with alkali.

Another explanation lies in the alkalinity of the potassium bromide, the other ingredient of the prescription under consideration. This afforded the opportunity of a little lesson in so-called pharmaceutical arithmetic that has possibly never found its way into State Board questions, yet should prove much more practical than many a question on this much talked of subject *viz.*:

1. From the purity test for Potassium Bromide in the U. S. P., compute how much KOH may be present in 8 drachms of the pharmacopœial article.
2. From the amount thus found compute how much of the 1 grain of strychnine sulphate of the prescription would be set free as alkaloid.
3. Look up the solubility of strychnine in water and compute how much might be expected to crystallize from the 8-oz. mixture.

We are all guilty of not thinking at times, and more frequently we seem to be guilty of loose thinking. How a case of this sort can pass from one text to another without thought or experiment, seems well nigh incomprehensible. Yet some of our most highly reputed authors would have to plead guilty if they were still among the living.

Mr. A. H. Hamilton, who is referred to in the editorial that will have to be blamed for my bringing this to your attention, as a noted expert in the field of criminology states elsewhere in the same number that he can think of no better embryo "expert investigators" in criminal cases than graduates of certain colleges of pharmacy. With all due respect for the graduate of the pharmaceutical college, the writer could not avoid being reminded of a piece of advice given years ago by a teacher of pharmaceutical chemistry to his students. In his textbook he told them how to make a sanitary water analysis but warned them not to attempt a complete water analysis because of insufficient chemical training. The advice seemed good forty years ago and in large part, seems good to-day though a sad confession of faith. If there are so many embryo expert criminologists among our pharmaceutical graduates, why did not one of their number cause the correction of this pseudo example of incompatibility that had been "famous in textbooks" so many years.

CONFERENCE OF PHARMACEUTICAL ASSOCIATION SECRETARIES.

An organization which promises to be of great value in association work was effected at St. Louis during the meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION. The Council of the latter extended hearty approval to the Conference. The name of the organization is "Conference of Pharmaceutical Association Secretaries." The membership will be composed of State pharmaceutical secretaries and secretaries of Pharmaceutical Associations.

The officers of the Conference are a *President*, two *Vice-Presidents*, *Secretary-Treasurer*, and an *Executive Committee*, consisting of the officers of the Conference and five elective members. The officials for the first year are: *President*, A. L. I. Winne, Virginia; *First Vice-President*, John Culley, Utah; *Second Vice-President*, J. G. Beard, North Carolina; *Secretary-Treasurer*, W. H. Lamont, Missouri. *Directors*: J. G. Noh, Pennsylvania; R. P. Fischelis, New Jersey; W. Bruce Phillips, California; William B. Day, Illinois; W. E. Bingham, Alabama.

Among other purposes the members of the Conference will arrange their programs for interchange of information anent programs, donations, legislative activities and the many problems which are subjects for discussion or problems to be solved by State associations; also for Round Table discussions.

The membership dues were fixed for the present at \$5.00. The Executive Committee acts for the Conference during the interim between annual conventions.

The meetings will be held annually and when otherwise convened. The annual conventions will be held at the same time and place as the AMERICAN PHARMACEUTICAL ASSOCIATION.

The opportunities for constructive coöperative work are good, because in helping others the members most certainly help themselves in the work they are engaged in. We hope the Conference will make frequent use of the JOURNAL.

NATIONAL PHARMACY WEEK—OCTOBER 9TH-15TH.

The 60,000 or more drug store windows of the United States offer an invaluable opportunity for pharmacists to disseminate public information, and to dress a Pharmacy Week window should be the very minimum of effort in this coöperation. Many pharmacists will have Pharmacy Week folders to wrap up with each purchase made in the store; others will have additional comprehensive displays inside their stores. Many local associations and individual pharmacists will run newspaper spreads. Local and other associations will arrange for broadcasting Pharmacy Week messages at radio stations, and the furnishing of Pharmacy Week speakers at luncheon clubs, chambers of commerce, etc.

The Committee on National Pharmacy Week is ever willing to be of assistance in offering suggestions for window displays, furnishing copies of addresses to be broadcast or delivered before clubs, copy for newspaper spreads and editorials, etc. You have but to write the *National Chairman* at 80 Beekman St., New York City. Coöperation and observance on the part of every American pharmacist will assure success, renew pharmaceutical prestige and inspire our profession with a needed enthusiasm.