## THE RELATIONSHIP OF PRESCRIPTION INCOMPATIBILITIES\* TO PHARMACY.

## BY LEON W. RICHARDS.

Just what is the true relationship of prescription incompatibilities to the present-day pharmacist? If catalog descriptions and A. Ph. A. convention discussions are to be taken as true indications of the materials taught in the various dispensing departments, the subject of prescription incompatibilities occupies a place of importance in most colleges of pharmacy. In the way of illustration, a catalog description of a three-credit two-semester dispensing course of a certain college is given as follows: "A comprehensive study of the incompatibility and the compounding of medicinals, with regard to dosage, physical, chemical and therapeutic incompatibilities." Such emphasis on incompatibilities apparently is not the exception but rather the rule in dispensing classes of to-day.

The question arose as to whether the value of this knowledge of prescription incompatibilities warranted the time and money spent on this subject. In seeking to answer this question, a number of owners of both professional and commercial drug stores were interviewed as to their experiences and opinions. Their reactions indicated one of two things to be true; first, either the subject is overemphasized, or, second, the teachers have failed to get a working knowledge of the subject across to the students.

The dispensing pharmacists seem to be mildly unconcerned relative to this entire subject. Several factors influencing this present-day indifferent attitude are, first, the new type of to-day's prescription; second, the difficulty involved in making a change in an incompatible prescription with the whole-hearted consent of the physician; third, the vagueness in the minds of the graduating students concerning the subject, and, lastly, the relative infrequency of incompatible prescriptions.

There has been considerable change in the types of prescriptions in the last fifteen to twenty years. The art of compounding, though broader in scope, is less complex than of former times. It is an accepted fact that the day of the so-called "shotgun prescription" is past and the tendency is toward simplification. Nowadays the doctors are constantly being detailed on this and that specialty. The figures of the "St. Louis Drug Store Survey" clearly show the natural result from this practice. It was found that a total of 35% of all prescriptions contain only one ingredient and the average for all prescriptions surveyed contained only 2.4% ingredients; which is astonishingly low as compared to the ten and fifteen components of not so long ago. Obviously, these simplified prescriptions have greatly reduced the number of cases of incompatibilities, a fact which most assuredly has an important bearing on this subject.

Moreover, with the advent of this new type of prescription, there has come an increasing use of the proprietary remedies which has added more confusion to an already difficult subject. The very nature of these preparations limit the compounder in applying his knowledge in instances of incompatibilities. Of course he knows the general nature of these materials but in the end he usually is forced to add a shake label and dismiss the case.

<sup>\*</sup> Section on Practical Pharmacy and Dispensing, A. Ph. A., Madison meeting, 1933.

Now as to the difficulty involved in changing incompatibilities in physician's prescriptions one finds quite another problem. The suggestion is always made to the dispensing student that he get in touch with the doctor and they correct the difficulty together. This theoretical plan is difficult to carry through to a satisfactory close. A number of physicians resent this attitude of the pharmacist and insist that the prescription be dispensed as written. Such a condition necessarily fosters the shake label remedy and cannot help but have a derogatory influence on future practices. If the druggist proceeds to the correction without this consultation, which many are doing, there are the self-evident encumbering difficulties. However, there seems to be no acceptable solution for this situation and the problem is most frequently settled with the already over-exercised "shake" label.

In the third factor, which pertains to the vagueness in the minds of the graduating student concerning this complex subject, one encounters a vital question. As a student, he is instructed in the various types of incompatibilities possible and he learns there are a number of general rules as to how groups of substances may or may not react. Then he learns of the exceptions to these rules, and then possibly the hundreds of special cases are brought to his attention. In the end he endeavors to correlate his qualitative chemistry, his general pharmacy, etc., to the point of recognizing and correcting these hundreds of possible incompatibilities. Time will permit him to investigate at first hand only a very few examples of this broad field. The neophyte becomes more or less imbued with the subject and graduates expecting to plunge into incompatibilities by the score; but, as a matter of fact, he meets very few.

This brings up the last point involved, that of the infrequency of occurrence. The average pharmacist, through lack of application, soon forgets his heterogeneous assortment of rules pertaining to the subject and hence pays it little attention in the scramble to make more money. A little mucilage of acacia may be added now and then, or some other simple remedy brought into use occasionally, but the "shake well" label is always handy.

Therefore, it is the author's belief that changing conditions in the field of pharmacy have relegated prescription incompatibilities to a minor rôle in pharmacy of to-day and these conditions necessitate a revision in the methods of teaching this subject.

## SUPERSTITION, CREDULITY AND SKEPTICISM.

THREE BUGBEARS WITH WHICH PHARMACY HAS ALWAYS HAD TO CONTEND.

## BY CHARLES WHITEBREAD.\*

A belief in the interposition of supernatural powers in the direction of earthly events has prevailed in every age and country in the exact proportion to its want of knowledge. "In the opinion of the ignorant multitude," says Lord Bacon, "witches and imposters have always held a competition with physicians." Galen also complains of this circumstance, and observes that his patients were more obedient to the oracle in the Temple of Æsculapius, or to their own dreams, than they were to his prescriptions.

<sup>\*</sup> Assistant Curator, Division of Medicine, U. S. National Museum.