

which the flavoring substances and caffeine are extracted, leaving the insoluble tannin behind.

The chairman stated that if the statement is to be accepted that theine is different from caffeine, it will be necessary to write "there" after caffeine, since much of the supply of caffeine is obtained from damaged tea. Dr. Edward R. Squibb, in a letter some years ago, declared that there was no difference between theine and commercial caffeine, and threw some doubt upon the existence of caffeine, as such in the living plant. A practical point, showing that tea is prized for something more than its alkaloidal content, lies in the fact that some cheaper grades of tea are richer in caffeine than the higher-priced teas. As regards the difference alleged to exist between the alkaloid derived from tea and that from coffee, it is possible that some of the volatile substances of the tea are not fully separated from the caffeine, and modify its physiologic action; just as piperine may owe much of its stimulating qualities to volatile substances usually associated with it.

In practical medicine, the insolubility of tannin should be remembered, and in making infusions for the astringent effects, as in antimonial poisoning, or for their action on mucous membranes, the tea or coffee should be boiled. On the other hand, when the stimulating effects alone are desired, a rapid infusion is all that is needed.

In closing the discussion, Dr. Prescott said that, During the discussion which followed the reading of this paper, the question had been asked, what extent of the effect of tea and of coffee is due to their essential oils; also to what extent caffeine or theine is changed by methods of extraction. To this he replied that, undoubtedly the essential oils in question are of decided influence. Many volatile oils are of active physiological effect. However, these oils have not been separated and examined. That of coffee is developed by roasting; that of tea, not improbably, is developed by the curing process, with its stage of fermentation, and of firing. As to the alteration due to modes of extraction, he believed they could hardly extend much beyond the liberation of the alkaloid from certain combinations of the same.

COLLABORATION IN MATERIA MEDICA AND PHARMACY.

Read in the Section of Materia Medica and Pharmacy, at the Forty third Annual Meeting of the American Medical Association, held in Detroit, Mich., June, 1892.

BY CHARLES RICE, PH.D.,
OF NEW YORK.

The new movement of establishing closer and official relations between the two professions of medicine and pharmacy was inaugurated at a time when its desirability, or rather necessity, had become generally recognized. Both professions have many interests in common, and both have to supplement each other by their special knowledge and attainments. Many are the topics—ethical, legal, historical, hygienic, statistical, educational, social, and particularly scientific—which can and will be profitably discussed at joint meetings of representatives of the two professions; and some of these topics may even be said to form burning questions which have hitherto been treated by the medical and pharmaceutical press mostly in an *ex parte* manner. It is hoped that these may, hereafter, be brought to a solution satisfactory to all.

But the discussion of professional topics, or the reading of papers thereon, at the joint annual meetings, does not seem to be sufficient to infuse life into a copartnership such as it is proposed to establish and maintain between the two professions. Something else, of a more lasting and permanent interest, something of tangible utility, so to say, seems to be wanted to serve as a firmer bond. In the judgment of the writer, such a bond can be established—and indeed its want has long been felt—by the official interchange of, and decision on professional or scien-

tific problems between the two professions. The physician as well as the pharmacist, each possesses, if properly trained, a fund of special knowledge, often laboriously acquired and constantly augmented by daily practice and experience, which, in these days of rapid progress, can no longer be expected to be met with combined in one and the same person, but which has to be gathered and studied by specialists for the benefit of the other members of their own or a kindred profession. Yet it is an indisputable fact that many important facts which have long been known to or recognized by one profession, and which yet vitally concern the other, remain often entirely unknown, or only imperfectly known to the latter for a long time. If there were an official channel through which such useful information could be conveyed, at regular intervals, from one profession to the other, much would thereby be gained. It may be well to mention an example by way of illustration. Many physicians are in the habit of prescribing *aconitine* without specifying what kind they intend. They are not aware that there are *four* or *five* different kinds in the market, each of them in vogue or preferred in some particular country or locality—one being the pure, crystallized alkaloid of great power; another an amorphous substance of comparatively feeble strength; another one made by a different process, or perhaps from a different kind of aconite, being of an intermediate strength, etc.—and that they are liable to have the most powerful dispensed when they perhaps intended the weakest, or *vice versa*. Would it not be useful to present to the medical profession, once a year at least, a concise summary of important matters of this kind, which would suggest themselves from time to time? As a rule, physicians do not read pharmaceutical journals, or circulars issued by chemical houses, hence information regarding subjects like that above mentioned often reaches them only when some serious accident has happened. If there were a source of information on topics of this kind, prepared by pharmacists specially for the benefit of physicians, much good would result. On the other hand, physicians often observe objectionable features connected with the form or efficacy of pharmaceutical or galenic preparations—as for instance deficiency of therapeutic action due to improper vehicles, improper coating, etc. The same medium of communication could be used for drawing the attention of the pharmacists to these matters.

If it is conceded that such a mutual exchange of information or of problems is desirable, it will not be difficult to devise a plan by which it may be carried out. The writer suggests the following, at least as a basis upon which something better may perhaps be erected:

1. The American Medical Association, through its proper Section (or in any other way that may be determined on), may annually appoint *seven* (or any other number) members, who, together with a like number of pharmacists, who may be appointed by the American Pharmaceutical Association, shall constitute the "Committee on Therapeutics and Pharmacy" (or whatever other name may be given to this).

2. This committee shall elect a chairman and vice-chairman, only one of whom shall be chosen from the same profession. These two officers shall also be the chairmen of their respective sections (medical and pharmaceutical) in the committee.

3. The committee may either hold joint sessions at such times as may be agreed upon, or it may transact its business by correspondence.

4. Either section of the committee shall be authorized and instructed to consider any professional questions or problems which may be submitted to it by the other, and after deliberation, to give such an opinion or such a decision as the subject may warrant, from the standpoint of the profession rendering the opinion or decision.

5. The section of the committee making the request or appeal shall bring the reply or decision of the other to the knowledge of the whole of its own profession, or, when this is unnecessary or inadvisable, at least to the notice of those to whom it more particularly applies.

6. The committee, or, if so determined by it, either or both of its sections separately, shall annually report at the joint meeting of the two professions (or say to the Section on Materia Medica and Pharmacy of the American Medical Association?) the nature of the questions and problems mutually submitted, if any, and the respective opinions or decisions rendered. These decisions shall be subject to a revision, if one is called for, at this meeting.

7. Each section of the committee shall annually present a report upon professional topics which it may be thought particularly necessary to bring to the attention of the other profession. Thus, the section on pharmacy may present, for instance, a report on new remedies, accompanied by practical suggestions as to their best mode of administration, as to precautions to be observed in prescribing them, as to incompatibilities to be avoided, and similar topics. And it may submit questions or problems involving *therapeutics as it affects pharmacy* to the other section, with a view of having them answered or decided. The section on therapeutics may, in its turn, present problems or questions involving *pharmacy as it affects therapeutics* to the other section for solution or answer.

In presenting this plan, the writer had in view scientific professional topics rather than ethical ones. There is no doubt that the latter would also form an abundant source of discussion and that this would, if properly conducted, bring the two professions still closer together; but it will under most circumstances be preferable to relegate such topics to the general annual meeting, there to be fully discussed and decided, rather than to have them passed upon by a small committee, the action of which may after all not be finally endorsed by the Association. On the other hand, a reversal of any decision by the committee on *scientific* topics, rendered after proper study and discussion, is scarcely to be apprehended.

The practical benefit which may be expected to be derived from an active coöperation of the two professions in the manner above outlined, provided the plan is fairly tried in practice, are believed to be such that the annual reports of the joint committee would be looked forward to with eagerness and interest.

New York, May 20, 1892.

MR. JOHN L. WOODS, of Cleveland, Ohio, made a Christmas gift of \$125,000 to the Medical Department of the Western Reserve University.

SECTION ON MATERIA MEDICA AND PHARMACY.

The sessions were held in the building of the Detroit Young Men's Christian Association, on the afternoons of June 7, 8 and 9. Dr. Frank Woodbury, of Philadelphia, Chairman of the Section, occupied the chair. On account of the absence of Dr. Whelpley, of St. Louis, Dr. F. E. Stewart, of Wilmington, Del., kindly accepted the position of Secretary *pro tem*. A delegation from the American Pharmaceutical Association was present and contributed largely to the proceedings. Among those present were Joseph Remington, Professor of Pharmacy in Philadelphia College of Pharmacy; Dr. A. B. Prescott, of the University of Michigan; Dr. H. A. Hare, of Jefferson Medical College; Professor P. W. Bedford, New York; E. H. Squibb, M.D., Brooklyn, N. Y.; H. W. Snow, Omaha, Neb.; Lewis C. Hopp, Cleveland, O.; J. E. Clarke, M.D.; H. W. Snow; A. S. Parker; J. W. Rabe; F. W. Jackson; F. A. Thompson; Prof. Eli H. Long, Detroit Medical College, and others.

The Chairman, in opening the deliberations of the session, directed attention to the evident disposition of the Association to devote more time to scientific work, and thus greatly increase the usefulness of the Sections. A peculiar feature of the Section on Materia Medica and Pharmacy, is that the Association has formally invited the American Pharmaceutical Association to be represented by delegates who shall participate in its scientific work. This recognition of the high standing of representative pharmacists is a just tribute to their professional attainments, and establishes pharmacy as a department of medical science. This is a consummation of immense value to both medicine and pharmacy; and that we have been able in any way to assist in bringing it about, should be a subject of congratulation. Its consequences upon the development of pharmacy in this country must be great and far-reaching. Biological chemistry and practical pharmacy are closely related and should be studied together. The present aspect of medicine, speaking from the therapeutic standpoint, is largely chemical, and is mainly based upon chemical ideas. Nutrition is largely a chemical problem. Indeed, we might almost represent health by a very complex chemical formula, graphically written, so as to express exact molecular composition. Various modifications and substitutions may take place, representing departures from the normal, more or less marked and corresponding with certain diseases or diatheses. While the researches of bacteriologists have revealed specific micro-organisms characteristic of different infectious diseases, later observations serve to establish the fact that these so-called disease germs do not so much cause disease directly by their numbers as they do so indirectly by their chemical products, which enter the blood and act as toxic agents. The important relation of pharmacy to medical practice is, that it supplies chemical substances capable of acting as antidotes to the poisonous action of these agents. As illustrations we have quinine and arsenic against malaria; Koch's tuberculin against phthisis; acids against cholera, etc. It may be regarded as demonstrated that phagocytosis is influenced materially by chemical substances.

The first paper was one by Dr. Albert B. Prescott, of the University of Michigan, entitled "Caffeine and the Question of Its Isomerism."

In the absence of Dr. E. L. Patch, of Boston, his paper on "Examination of Market Fluid Extracts" was read by title.

A paper on "Pharmacy at Health Resorts," by Dr. F. E. Stewart, was also read by title.

Prof. Joseph Remington, of Philadelphia, read a paper entitled "Prescription Exigencies."

SECOND DAY—JUNE 8.

The discussion on the Revision of the United States Pharmacopœia was opened by Prof. Joseph Remington, of Philadelphia, a member of the Committee on Revision. He stated that the Pharmacopœia is rapidly approaching completion and that much of it is already in type. It is believed that the work will appear before the end of this year. Some important changes have been made, the most notable being the adoption of the metric system in the formulæ. The hope was expressed that this change would be approved and supported by the members of this Section.

The following resolution offered by Dr. Prescott was unanimously adopted:

Resolved, That we desire to urge upon the medical profession the desirability of the direct use of the Pharmacopœia of the United States by the physician himself, as a handbook of reference in materia medica.