COMMITTEE REPORTS

REPORT OF THE COMMITTEE ON NATIONAL FORMULARY COMMITTEE.*

BY WILBUR L. SCOVILLE, CHAIRMAN.

The outstanding work of the American Pharmaceutical Association during this year is the campaign for raising the funds for our Headquarters Building. This campaign has been conducted by two of the members of the N. F. Committee, Messrs. Dunning and Newcomb, and most of the other members have been actively engaged in assisting them. This has necessarily detracted from the work of the National Formulary revision and we are therefore a little behind our schedule. Nevertheless, most of the subcommittees have completed their work, and a considerable portion of the new text has been edited.

The last period of revision is always the most difficult. The hardest problems come last. The real constructive work is mostly reported in this period. The decision is made on tried formulas for the new elixirs, tinctures, ointments and other preparations which have been added, all of which has required considerable experimental work. Corrected formulas are finally judged and decision is rendered upon matters which call for discrimination.

Among the more important questions which have been decided recently, are the following:

Elixir Changes: The strength of all of the bromide elixirs has been changed from 10 grains of the bromide per teaspoonful to 15 grains per teaspoonful. This change was made to correspond to the average dose of the bromides as given in the Pharmacopœia, *viz.:* 15 grains. Each dose of these elixirs will now contain one average dose, as stated in the Pharmacopœia.

The vehicle of these elixirs has been changed from aromatic elixir to aqueous elixir of glycyrrhiza. The latter, being almost non-alcoholic, will dissolve more of the bromides and is also a better flavor for these salts.

Elixir of Sodium Salicylate has also been changed in strength to contain the U. S. P. average dose of sodium salicylate per teaspoonful, being increased from 5 grains to 15 grains per drachm. The vehicle in this case is not changed.

Elixir of Terpin Hydrate is another instance of change in strength, being increased from 1 grain to 4 grains per teaspoonful. In this instance, it has been necessary to increase the alcoholic strength of this elixir from 40% to 80%, to hold the terpin hydrate in solution. This stronger elixir will be the basis for the Elixir Terpin Hydrate and Codeine, and Elixir of Terpin Hydrate with Diacetylmorphine.

These changes have been made after considerable discussion and in some instances, several close votes.

Dental Preparations: After considerable correspondence, the committee of the National Dental Association offered 37 formulas for dental preparations, for our consideration. These included several tooth powders, tooth pastes and a variety of preparations that are used in the treatment of diseased teeth, sore gums and in the preparation of the teeth or gums for filling, etc. These formulas were submitted to a number of dentists and dental teachers in various sections and their opinions asked regarding the usefulness of these formulas in the N. F. The committee was especially aided in this by Prof. E. F. Kelly of Baltimore, Prof. Julius A. Koch of Pittsburgh and Prof. Wm. B. Day, of Chicago. After consideration, ten of the formulas were admitted to the N. F. These include a Pulp Capping Varnish, Local Anesthetic Solution, Pyorrhœa Astringent, Refrigerant Counter-irritant, Dental Liniment, Antiseptic Solution, Toothache Remedy, Resin Solution, and a Toothpowder. These formulas will be included in the next N. F. and the remaining formulas have been turned over to the A. Ph. A. Formulary Committee.

The addition of these dental formulas is in the nature of an experiment. If they are to become useful items in the Formulary, it is likely to be due to some marked attention to them, and to the dentists, on the part of pharmacists. They are candidates for attention in N. F. propaganda, which may lead to a closer relation between dentists and pharmacists. The National Formulary now recognizes the American Veterinary Medical Association and the National Dental Association and more cordial relations are anticipated for the future.

* Presented before Section on Practical Pharmacy and Dispensing, Buffalo meeting of American Pharmaceutical Association, 1924.

Standardization: More preparations are to be standardized in the next edition, and this requires that more assay processes shall be added. These are to conform to the methods of the U. S. P.

Fluidextracts of Aconite and of Digitalis, which have been dropped from the U. S. P. were added to the N. F. But it has since been considered unwise to establish biological assay methods in the N. F. or to recognize such potent preparations without standardizing them, so both have been dropped. The Pharmacopœia considers them unnecessary, the tinctures being generally used, and since they are not needed for any official preparations, it seems best to allow them to lapse.

Another revision may see biological assay methods introduced into the N. F. but the time does not seem ripe for it to assume the responsibilities of that work now.

Tables: Several tables are to be added. The U. S. P. table of Metric Equivalents does not meet well the needs of the pharmacists, and the N. F. will use the table of the U. S. P. VIII. This gives in concise form, the usual equivalents which the pharmacist uses, without any calculation, and it also includes the equivalents of apothecaries and avoirdupois weights.

A table of solubilities, to include the chemicals of both the U. S. P. and N. F., is to be compiled. This may prove to be a convenience to pharmacists by furnishing a ready reference to the solubilities of the substances which he handles.

A table which will show the various official preparations, into which each active medicinal agent enters, will be of service to physicians and may be helpful in propaganda work. This table will suggest the value of the N. F. formulas to the physicians especially.

A table showing the alcoholic strength of official menstrua and one of the alcoholic strength of the N. F. preparations, is being prepared.

Part III of the N. F. will therefore, more closely than heretofore, resemble Part II of the Pharmacopœia. But there will be no more duplication than will be necessary for the operations directed in Parts I and II of the N. F.

In all the work of revision, attention has been paid to criticisms and suggestions which have been offered. Some things have been reconsidered several times on account of such criticism. The committee has not only welcomed, but has sought suggestions, and has heeded them. If all have not been followed, it is because, in the judgment of the committee, they did not harmonize with the general purpose of the book, or were unwise for other reasons.

The work should go to the printer very soon but it will, probably, be at least a year before it can be issued. The proofreading requires care, and it takes time to go through the hands of all of the Committee.

Our aim has been to keep pace with the revision of the Pharmacopœia, and we still hope to accomplish it.

ABSTRACT OF DISCUSSION.

EDITOR'S NOTE.—The remarks of Chairman Scoville, in part, are included in the report and only repeated here as far as deemed necessary. Relative to the discussion on Wines, the readers are referred to Volume XI, JOURNAL A. PH. A., pp. 973, 1033 and 1037.

Chairman Scoville explained the situation, relative to elixirs, especially those containing bromides. The amount of active constituent has been increased by 50%, so as to have a U. S. P. dose in each teaspoonful—15 grains now, formerly 10 grains. This has necessitated a change in the solvent elixir, elixir glycyrrhiza replacing the aromatic elixir. The Committee is not thoroughly satisfied with the change. The solvent elixir gives the preparations a different taste and appearance.

W. H. Glover favored the larger dose, but not the change of vehicle, as it would require explanation to patrons who were accustomed to the elixirs of the present National Formulary.

Lyman F. Kebler insisted that there should be uniformity of dosage in preparations of the National Formulary and U. S. Pharmacopœia.

Irwin A. Becker said that if a weaker elixir was desired by the physician, dilution was an easy matter.

B. E. Höckert's experience indicated that a 10-grain preparation is satisfactory.

William Gray said, if the U. S. P. dose is to be represented in a teaspoonful, aromatic elixir would have to be replaced by another, more aqueous elixir.

Lewis C. Hopp contended that the present elixir was satisfactory, a larger dose would be objected to by the patient; two teaspoonfuls could be given, if a larger dose was necessary.

Ivor Griffith pointed out the impossibility of having a U. S. P. dose of all medicinals in a teaspoonful of the corresponding preparations. There would be complaint if a change was made in the elixirs under discussion, and, in his opinion, changes should only be made in case of necessity or more general demand than seemingly apparent for the elixirs under discussion.

Redmond Mayo and Henry B. Smith spoke along the same lines as the preceding speaker.

Chairman Scoville was pleased to hear the views of the members and then referred to the increased amount of terpin hydrate in the elixir of it, which necessitated an 80% alcoholic solvent.

The question was asked whether the elixir would not then be classed among the alcoholic beverages. To this the Chairman replied that he could not anticipate the rulings of the Department.

Among those participating in the discussion were Messrs. Redmond Mayo, Kebler, Glover, Krantz, Dunning, Höckert and others. No definite conclusions were arrived at.

Chairman Scoville spoke of the cöoperation of the National Dental and Veterinary Associations—see report. He referred to the difference of the two standards—the U. S. P. and N. F.—the latter must include preparations that are not restricted in their uses to medical practice. He also referred to the tables mentioned in the report and, particularly, to that which names the preparations into which active constituents enter, thereby the physician can select the preparation which best suits the case in question.

Theodore D. Wetterstroem brought up the deletion of wines to which reference is made in the Editor's note, at the beginning.

Chairman Scoville sympathized with the Ohio pharmacists; he explained that the National Formulary Committee gives consideration to the views of pharmacists throughout the country, as far as this is possible.

MICROMETHOD FOR DETERMINATION OF SPECIFIC GRAVITY, SURFACE TENSION AND VISCOSITY OF THE BLOOD.

Van Walsem adapts a capillary pipet and a disk with saw-tooth edge to a Pravaz syringe, the whole forming his "one hand precision aspirator," of which he gives an illustrated description. With this he determines the specific gravity of the blood by forcing a droplet into small flasks containing graduated concentrations of sodium chloride solution, the specific gravity of which is known. The flask in which the blood forced into the fluid neither rises nor sinks, tells the specific gravity of the blood. To determine the surface tension, with the same precision aspirator blood is forced out from the tip of the pipet until it forms a drop and falls. The height of the column of blood left in the pipet tells the amount of blood that was required to form the drop. It thus serves as a microstalagmometer, which, he says, renders all other complicated apparatus unnecessary. Given the specific gravity and the surface tension of the blood, it is easy to calculate the viscosity from the length of time it takes for the blood to form a drop and fall.—*Nederlandsch Tijdschrift v. Geneeskumde*, August 16, Amsterdam, through *Jour. A. M. A.*, October 4, 1924.

FRENCH MEDICINAL PLANT CONGRESS.

Among those who took part in the fourth Congress of the National Office of Medicinal Plants, held at Lyons during the last week of May, were Professor Perrot, director of the office; M. Fromont, president of the syndicate of the drug and herb trades; MM. de Poumeyrol, Poizat, Jourdan, Gignoux. The first day was devoted to a visit to the plantations in the vicinity of Lyons and the experimental station of Bron. At the dinner, in replying to the toast of the Office National, Professor Perrot stated that the creation of this organization, designed to promote the cultivation and collection of indigenous medicinal plants, was really originated in Lyons, and was due to the initiative of MM. de Poumeyrol, Prothiére and others. Already the importation of medicinal plants into France has decreased by 50 per cent., and the time was near when it would be possible to begin exporting medicinal plants, either in the form of crude drugs or as manufactured preparations.—Through *Chemist and Druggist.*