narrowest senses. In the broadest sense, pharmaceutical research would include the scientific efforts of every person interested in all types of substances used in healing disease.

Under this definition, there would be included in the Census all research workers on pharmacology, therapeutics, bacteriology (as relates to pathogenic organisms), botany of medicinal plants, pharmacognosy, medicinal organic chemicals, pharmaceutical inorganic chemicals, biology as applied to vitamins and other food accessories and physiology as applied to endocrines; a truly formidable list. It is of interest to note that distinguished organic chemists and pharmacologists have been pleased to enroll the names of themselves and of their students in our Census; no less than 50 of the 503 recorded in 1931 being included in these groups.

In the narrow sense, the term, pharmaceutical research, should be limited to those persons of pharmaceutical training or possessing pharmaceutical allegiances. In the Census of 1931, 422 of the 503 persons enrolled belong to the narrow pharmaceutical group.

As to the book on research achievements of pharmacy, that admirable volume "Fighting Disease with Drugs" and also as to Research Fund, these important undertakings will be reported upon by the appropriate committees. I will merely state that "Fighting Disease with Drugs" is a book that deserves as wide-spread circulation as the popular publications of the American Chemical Society.

As to the pharmaceutical committees within the *National Research Council*, there is an important lesson to be learned from the bare statement that of the three committees cited above, one was disintegrated through dissensions, one has been quiescent since its organization, while one (that of pharmacognosy within the division of botany) has maintained a useful existence during the past ten years.

Our experience with these three committees confirms the oft-expressed opinion that the usefulness of a committee depends upon the members thereof.

It is a matter for congratulation that the Research Conference was able to arrange this triple connection with the Research Council; it is a matter of regret that two of the links have become severed; it is a source of joy that our good friends, the pharmacognosists of this Research Conference, have been able to reflect credit upon pharmacy within the National Research Council.

And now a few words in conclusion.

As I look back over the ten years of the National Conference on Pharmaceutical Research, I am proud to have been the agent that brought our Conference into being. I am delighted to see how finely the present administration is carrying on the work inaugurated in 1922. The earnest workers of this Research Conference have caused American Pharmacy to become research-conscious. They have inspired the rank and file of pharmaceutical scientists to realize their pharmaceutical heritage; to devote more time to research; to encourage the younger men to dare to find time for research. They have made a beginning toward securing worth-while grants for pharmaceutical research from those of our calling favored with wealth; they have convinced their confrères in other sciences, that pharmaceutical research is not limited to the achievements of past centuries but is a living force of to-day making the whole world the better because of the existence of faithful and self-denying souls ready to search out the secrets of medicines; ready to apply the newer knowledge in the fight against disease.

College of Pharmacy, Columbia University, August, 1932.

THE INTERNATIONAL PHARMACEUTICAL FEDERATION.*

BY T. POTJEWIJD.

At the General Assembly of the Dutch Pharmaceutical Association, held in 1908 at Alkmaar, a proposition of the department Limburg came up for discussion which requested that the Board of the Dutch Pharmaceutical Association should confer with the professional associations of Pharmacy in Europe, with the purpose of organizing an international association of Pharmacy. The Board of Directors thought it impossible to give a favorable preliminary decision as, in the opinion of many, these preparatory activities would incur large expenses. It was the Department of Amsterdam which, through Professor P. Van der Wielen, of Amsterdam, presented an amendment that could be accepted as a practical solution of this problem.

^{*} A communication to the JOURNAL A. PH. A.

The Department of Amsterdam proposed, that at the 10th International Pharmaceutical Congress to be held in Brussels in 1910, the Dutch Association of Pharmacy should report on the desirability of organizing an international union. As a result of this resolution, there appeared on the list of speakers during the Congress of Brussels the following: J. J. Hofman and R. Schoepp, who introduced a report entitled: "De la Creation d'une Association Internationale des Societies Professionnelles de Pharmacie." As a consequence of this report some conclusions were accepted, f. i., one of the Belgian representatives, M. Gosset, that runs as follows: "De fonder une association internationale des délégués du corps pharmaceutique de tous les pays, qui aurait pour but de protéger la pharmacie par la voie internationale, comme profession et comme science exacte appliquee...."

An extension of this resolution may be found in the following decision in which the principle was laid down—that it is desirable to found an international pharmaceutical association. As the two reporters had already consulted the Dutch Government, it made possible the selection of The Hague as the seat for the International Federation, after which only the regulations had to be fixed to give the necessary judicial warrant to the Federation. A proposal was accepted to appoint a commission which in a few days should decide to undertake the work required for the foundation of the International Federation.

In the sitting of September 5th, Oscar van Schoor, secretary of the permanent Commission, reported that the 10th Congress had decided to found an international federation and The Hague was selected as the seat of the federation.

The preparations for the organization of the federation could now proceed, and as the first commission had outlined the formation of an international provisional commission, the Federation was in position to start its activities.

The commission provided for one official deputy of the Dutch Government and 34 members. The *President* was the Dutch Government-Deputy, M. L. Q. van Ledden Hulsebosch; *Vice-President*, R. Schoepp, and *Secretary*, Dr. J. J. Hofman—these two had reported to the assembly in Brussels.

In the summer of 1911, seven deputies met for the first time, and the articles of the association were presented. Finally, in September 1912, the constituent assembly of the Federation was held in one of the governmental buildings in the Hague; present were: the *Home Secretary*, M. Th. Heemskerck; Prof. L. Van Itallie, as deputy of the Dutch Government; the board of the Dutch Pharmaceutical Association; in addition a great many deputies of the European professional associations were present. In this assembly the text of the regulations were carefully studied and the articles of the association were presented. At the same time the board of the Federation was constituted: *President*, Prof. Dr. L. Van Itallie, Leyden; *Vice-Presidents*, Dr. Salzmann, Berlin; Dr. H. Martin, Paris; E. White, London, and V. Haazen, Brussels; *Secretary*, Dr. J. J. Hofman, The Hague; and *Assistant-Secretary*, Dr. Schamelhout, Brussels; and H. J. Möller, Copenhagen.

In 1913, the 11th International Pharmaceutical Congress was held at The Hague, the organization of which the Federation could not as yet undertake; though the president and the secretary of the Federation happened to be *President* and *Secretary* of the Congress as well. After the Congress was adjourned a meeting of the board of the Federation with the deputies of the affiliated associations was convened in Ghent. At this second General Assembly only matter-offact affairs were discussed and a few alterations were inserted in the Articles of the Association. It was agreed to publish a *Bulletin* about the activities of the Federation as often as was deemed necessary. The possibility of founding a "Bureau International de la Presse Pharmaceutique" and of founding a "Secretariat International des Pharmacopees" was considered. The deputy of Russia, Mr. Blumenthal, discussed the desirability of bringing more uniformity in the secondary and university education.

The invitation to cooperate with the "Swiss Apotheker-Verein" to attend the organization of an International Congress of Pharmacy, to be held in the summer of 1914, had been received. In the summer of 1914, the preparations for the Congress at Lausanne were in progress, the World War broke out and, as a result, all the international ties were snapped and, for the greater part, the work of the Federation had to be interrupted. Nevertheless, in 1915, the third Bulletin did appear, in which several reports on pharmaceutical education were inserted based on the propositions of Dr. Blumenthal. At the same time some reports were published

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by request of the old Congress, concerning the "Secretariat International des Pharmacopees," "la Nomenclature Pharmaceutique" and a plan "pour le Reglement General des Congres International de Pharmacie."

During the years of the war the work of the Federation was continued by some of its prominent members, so that in a few years after the war the work could be energetically resumed.

In 1922, the third "Assemblee Generale" took place in Brussels, where the regulations for the pharmaceutical congresses could be fixed. The commission for the study of "La Nomenclature Pharmaceutique" was appointed and at the same time received new duties, and several problems were freely discussed. As a consequence of this assembly an extensive report appeared on "La Nomenclature Pharmaceutique," and in the fourth *Bulletin* a report was included on "La Reglementation de la Vente des Specialites." Successively, general assemblies were held regularly: In 1923, in London; in 1925, in Lausanne; in 1927, at The Hague; in 1928, in Paris; in 1930, in Stockholm. Since 1926, the *Bulletin* has regularly appeared, at first four times; later, three times a year. New problems were given to the "Commission des Specialites," while reports of the existing commissions were received, *i. e.*, on pharmaceutical education and pharmaceutical nomenclature.

For some years the Federation has had a few interested members in America, among them Prof. E. Fullerton Cook, Prof. Otto Raubenheimer, Dr. Charles H. LaWall, Prof. Julius A. Koch and others. In 1925 the American Pharmaceutical Association requested to be admitted as "Membre Ordinaire" to the Federation. In the general assembly of Lausanne this request was granted and ever since this Association has been an active and esteemed member of the Federation. It is regretted that the great distance between America and Europe renders it impossible for a deputy to regularly visit the general assemblies of the Federation. However, in 1913, the American Pharmaceutical Association was represented by Prof. Joseph P. Remington and Prof. Julius A. Koch; in 1925, the Prof. Arno Viehoever represented the American Pharmaceutical Association.

Ever since the Assembly of Lausanne, a scientific meeting is part of the general assemblies of the Federation, in which problems of scientific importance are discussed; so far these are not mentioned on the program of the Assembly. In the first scientific meeting lectures were held by Prof. Eder, Prof. Wilczek, Mr. Lang and others. In the assembly of The Hague Prof. Eder, also in the name of Prof. Schoorl, Prof. Weevers, Prof. De Graaff and Dr. Meulenhoff and Dr. Van Den Berg held lectures. This attempt of holding lectures in the general assemblies proved to be an excellent undertaking. In Paris speeches were delivered by Prof. Van Itallie and Prof. Herissey; in Stockholm by Prof. R. Eder and Dr. S. Aage Schou and Dr. E. Erikson. Scientific subjects also appeared as items on the agenda of the General Assembly; reports on the unification of the methods of ascertaining melting and boiling points and the methods of preparing galenical preparations and, finally, the requirements for the purity of medicaments, such as arsenic and heavy metals. As a consequence of the second report, a commission was appointed who will endeavor to draw up a formulary on these preparations.

Among the social problems of the Federation the following may be mentioned: "The ascertainment of a concept for the pharmaceutical legislation;" "The influence of the wholesale trade on the practice of Pharmacy;" "The requirements for clinical thermometers;" "The legal qualifications for sera and vaccines;" "The trade in poisons." The legal qualifications for the sale of specialties were discussed. A commission was appointed to inquire into the possibility of determining the value of mild medicaments; and another, to study the International Nomenclature for pharmaceutical products. Following a request to make inquiry relative to the manner in which the control on the examination of medicaments on board ships is exercised, an appointment of a commission was made who should study this special subject. In 1930, this Commission has had its propositions accepted and thereafter it was charged to prepare an international formulary for ships' medicines. This Formulary will appear about the end of this year. Since the assembly of Paris in 1928, where Dr. Rising gave a lecture on the necessity of an international control of specialties, this subject has been up for discussion and a commission was appointed to study this problem more closely. The development of laboratories under the auspices of the national associations progressed with the work of the Commission and now there are among the members of the Commission and the corresponding members many prominent colleagues who are daily occupied with the examination of specialties. In the few years of its

existence, this Commission has performed a good deal of work and it has prepared a report on the methods, applied in the examination of specialties, which has been published this year. Besides this ascertainment of methods, this Commission has an extensive task in coördinating the research work of the national laboratories and in the rational distribution of the activities of these laboratories. This distribution of work and the mutual discussions of the members of the Commission are of an importance not to be underestimated. The international coöperation cannot be too intensive, because it may pave the way to the institution of an international pharmacopæia. As far back as 1926, the Federation had this subject on its agenda and in the Assembly of Lausanne a report in the name of Prof. L. Van Itallie appeared, in which the lines, along which an international pharmacopæia can be constituted, were indicated.

For the preparation of this report a commission was appointed, consisting of: Prof. Dr. R. Eder (Zürich), Prof. Dr. H. G. Greenish (London), Dr. A. Schamelhout¹ (Brussels), Prof. Dr. H. Thoms, (Berlin), Prof. Dr. Tiffeneau, (Paris), Prof. Dr. L. Van Itallie (Leyden), Dr. O. von Friedrichs (Stockholm). The report published in the Bulletin of the Federation in 1928 gives an extensive historical review of the deliberations on the International Pharmaceutical Congresses since 1867 in Paris, in Vienna, St. Petersburgh and in Chicago. In 1893, at the Congress of Chicago the plan was brought forward to establish an international codex for potent medicaments. In 1898, this proposition was taken over by Dr. Rommelaere who requested the Academie Royale de Medecine de Belgique to support a motion in which the Belgian Government was invited to take steps in this direction. This motion was supported by a resolution of the International Pharmaceutical Congress of Paris in 1910, concerning a proposition of a commission under the presidency of Prof. A. Tschirch. Finally, in September 1902, the conference of Brussels took place, resulting in a number of medicaments being codified as to their method of preparation, composition and quality of active elements. In 1905, the resolutions of this conference were signed, through which fact convential agreements on these potent medicaments were adopted. The last International Congress of The Hague in 1913 took over the proposition of the conference of Brussels to found a Secretariat International de Pharmacopees. Prof. A. Tschirch and Prof. L. Van Itallie reported on the methods in which a similar secretaryship ought to function. In 1922, the Federation resumed its activities and expressed its wish that a second conference should be held. This conference convened in Brussels in 1925. The report is continued and accepts the decision that an international pharmacopœia is becoming more and more desirable, and careful consideration should be given to the possibility of establishing an international pharmacopæia. In addition, this report indicates the lines along which, in the viewpoint of the members of the Commission, a pharmacopæia of this type can be created. In this report a survey appeared on the matter that ought to be treated in an international pharmacopæia. Next to 27 components of vegetable and animal nature, this pharmacopæia ought to contain 96 preparations derived from these sources and 159 chemicals and a few preparations. The Commission has done a splendid work in preparing this report. In conformity with the resolution of the General Assembly this report was handed to the Belgian Government and to the Hygienic Department of the League of Nations.

It may be mentioned that as president of the Dutch Pharmacopæia Commission and deputy of the Dutch Government to the international conferences in Brussels, Prof. L. Van Itallie has had a large share in the preparatory activities for the establishment of an international pharmacopæia. The Federation is pleased, that Prof. Van Itallie has declared himself willing to form part of the Commission for specialties. The report of this Commission having appeared this year in the Bulletin of the Federation gives again more certainty to the accomplishment of international agreements concerning the preparation and examination of pharmaceutical preparations. In this report the quantitative ascertainment of many important medicaments were treated and we trust that, in due time, many of the codified methods will be inserted in an international pharmacopæia.

The work of the Commission is very important and we trust that all those whose work lies within the domain of the examination of medicaments, will render it their full coöperation; through which fact the second article of the regulations of the Federation will be fulfilled. Moreover, the completion of the work will be most important in the development of the international thought, and evidence will be given thereby that an intense coöperation of the different nations is possible.

¹ Deceased.