## Section on Education and Legislation

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## INTERNATIONAL COOPERATION IN PHARMACY.

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One of the most striking phenomena of our times is the ever-increasing cooperation of the nations in all matters. The improvement in the means of communication, and the development of the means to render the mutual intercourse between the nations less dependent on the distance which separates them, have in the first place contributed to advance this kind of internationalism. While in former times man had to rely on his immediate surroundings, there are now all kinds of international ties which govern our present-day society. The daily supply of food and other articles is no longer exclusively produced by the immediate surroundings, but the markets of all countries carry on a lively trade in the products of East and West. They act like communicating vessels which convey the surplus of articles produced in one place to other places where there is a want of them. The postal services which have formed the "Union Postale Universelle," promote the communication between the different nations; the railways which, owing to the uniformity of gauge, connect all countries, enable us to accomplish the longest possible distances in the shortest possible time, even without change of carriage. The telegraph service whose net of wires has a total length of twenty-five times the circumference of the earth, transmits with incredible speed the messages which very often are of vital importance to social and political situations. Money too, as an international power, for the foundation of a great number of societies is only made possible by the cooperation of the capitalists in the different countries, and a few exchange-orders may be the cause that an enterprise loses its more or less international character. There is in all matters a desire for uniformity, which gradually develops through evolution. The metric system of weights and measures was introduced years ago, and only here and there we find remnants of former systems which, in many respects, considerably hampered commercial traffic. The administration of justice is being arranged on an international basis, while life insurance, the copyright, the trademarks, and a large number of other things are protected everywhere by international arrangements. As to the public health too, the different nations are coming to an understanding in order to oppose contagious diseases and to take measures conducive to the general hygenic conditions of the people, for instance, by the founding of the Office International d'Hygiène Publique, some time ago.

In the department of science, this cooperation is gradually increasing, and its development is unlimited. The progress of our great scientific centers spreads

its light all over the world, and the greatest obstacle for this extension, the linguistic difference between the nations, is being gradually eliminated. The study of foreign languages increases among all civilized peoples, and moreover the problem of an international language which could serve as a means of communication between all nations is very much nearer a solution.

Pharmacy has also experienced something of the present tendency; not only in the commercial department but also in the scientific and social departments it experiences the consequences of this increased mutual cooperation of the nations. The influences of over-production and want on the market-prices are felt much sooner now than formerly. The sales of our principal drugs in Amsterdam, Hamburg, or London govern the prices throughout the world. The extensive chemical industry also has trusts and cartels on whose cooperation depend the prices of a great number of materials. The newest products of this industry are spread all over the world in a very short time, and the investigations of our scientific laboratoria are published by the press everywhere.

The first sign of an international cooperation in treating of these general subjects by a meeting of chemists from different countries, may be found in the first international congress which was held at Brunswick in 1865. If we look through the subjects treated there, we perceive that already at that time pharmacy was occupied by imporant problems in the different countries; how already at that time there was a desire to try and attain the required result by colloboration. Very soon after, in 1867, the next international congress was held in Paris, which was followed two years later by a congress at Vienna. The following congresses at St. Petersburg, London, Brussels and Paris, have tried in the same way to unite the pharmacists, whenever problems arose which could be solved by international arrangement or cooperation. As a result of these congresses, may be mentioned the international conference which was held in 1902 in order to bring about uniformity in the composition of strongly active medicines. At different congresses the problem of an international pharmacopoeia was frequently mentioned. A committee, of which Mr. von Waldheim was the chairman, has already, with the assistance of pharmacists of several countries, made up a scheme for such an international pharmacopoeia; and although the desired uniformity has not yet been arrived at, we are now owing to this international conference called together on the initiative of the Belgian Government-agreed on the point of those medicines which are considered strongly active preparations in general use. This problem will be studied further, when the international office for the uniformity of pharmacopoeias will have been established. The adulteration both of medicines and of food, and how to cope with this evil, has also been a subject for discussion at many international meetings. Last year the international opium conference regulated the traffic in narcotics and coca.

A no less important subject is the uniformity in nomenclature in pharmacy, and the endeavour to bring about a change in the ever-increasing confusion which threatens us not only in the official codes and in the pharmacopæia, but also in the commercial names. The American Pharmaceutical Association has appointed a special international committee for the study of this subject, and we may reasonably expect that the persons appointed to consider this very important problem will soon request the other pharmaceutical associations throughout the

world to assist them in their task, in order to come to the necessary uniformity on this point, and to make up a definite system.

The pharmaceutical press also wants concentration. International organizations which are able to obtain exact information about all that happens in the department of science, are becoming more and more a matter of necessity. At present, one periodical takes communications and other news from another, and in this way the news makes quite a journey through the whole professional press; and on this journey, some communications are shortened here, extended or joined on to other matters there, so that at last the original articles very often have assumed an entirely different form; very often also the origin is quite lost.

In 1913 there will again be held at The Hague an international congress of pharmacists from all parts of the world, and undoubtedly, many important problems will again be introduced for discussion at this eleventh congress. Meanwhile a few years ago, a federation was founded with the object to advance the pharmaceutical congress of a more permanent character in the future. The Federation Internationale Pharmaceutique, the foundations of which were laid at the tenth international congress held at Brussels, on the initiative of the Nederlandsche Maatschappij ter bevordering der Pharmacie, is the association which has to promote the international cooperation of pharmaceutical societies throughout the world. Such an international association must be conducive to all organizations, and to every feeling of fellowship; to every attempt at internationalism. As a result of a great many international affairs, there necessarily arose a permanent organ of this kind, an institution which is of universal importance in the widest sense, and which is within reach of all those working in the same direction, private persons as well as societies, in all countries of the world. Such an international federation is necessary in order to secure the regular working of the international congress; for surely, the resolutions of these congresses may be of a far greater influence than they have been up to the present. In the course of time they have become the index for the social and scientific evolution; for the countries which took part in the congresses, they have become a standard by which the development of the profession, the direction of the tuition, legislation. and so many other important affairs, might be guided into the right path. This influence will increase if there is an international institute to make the work of these congresses permanent. The establishment of this Federation Internationale Pharmaceutique which so soon obtained the full approval of a great many pharmaceutical associations throughout the world, has proved that the most important pharmaceutical societies of Holland, Germany, Austria-Hungary, France, Great Britain and Ireland, Denmark, Belgium, Russia, Roumania, Sweden, and Switzerland, in all 19 associations with 26000 members, have joined the Federation; while, moreover, several smaller societies and private persons have joined as extraordinary members.

The object of the Federation is the promotion of pharmacy both as a profession and as an applied science, along international channels; and according to the regulations, the Federation will endeavor to attain this object by:

1. Collecting data with regard to the pharmaceutical profession in all countries, and by supplying information on scientific and practical pharmacy.

- 2. By promoting uniformity in the qualifications required for education and tuition.
  - 3. By studying the laws regulating the pharmaceutical profession.
- 4. By giving advice and supplying data with regard to the laws relating to pharmacy.
  - 5. By organizing international pharmaceutical congresses.
- 6. By filing the papers of these international congresses, arranging and working out the subjects treated there, and studying fresh subjects for treatment.
- 7. By making arrangemens for taking part in congresses of interest to pharmacy and by collaboration with other international societies.
  - 8. By protecting the rights of the pharmaceutical profession.
- 9. By opposing the sale of secret remedies and the practicing of pharmacy and sale of medicines by unqualified persons.
  - 10. By promoting the prosperity of the national pharmaceutical societies.
- 11. By promoting uniformity in the form of medicines and methods of analysis.
- 13. By exercising its influence in the event of an international regulation of patents, brands and trade-marks.
  - 12. By promoting international entende regulating the drug trade.
- 14. By the publication of papers on subjects of interest to international pharmaceutics.
- 15. By doing all other things which are conducive to the attainment of the object of the Federation.

When we consider this programme, we shall see that its realization will be of great use to pharmacy throughout the world. If, for instance, we look into the qualifications for education and tuition in the different countries, we see that they are nowhere the same, and the only reasons that can be given appear to be the wants of each nation separately, and the different degrees of civilization which the nations have attained. But for a development in the right direction, it is necessary that the demands for the profession should not be too high in one place, while in another science is not made sufficiently serviceable to the practical application of pharmacy. By collecting sufficient data concerning the demands of training and tuition in the different countries, practice will teach us what improvements should be introduced in order to make the tuition answer the interest of the community to the greatest possible extent, and in order to make a healthy development of the profession possible.

The same thing may be said about the legal provisions for our profession; for, if several drawbacks of the concessional system have come to light in countries where this system exists, other countries on the other hand have experienced the drawbacks of free establishment. The import, the sale of specialties, the providing of pharmaceutical assistance in the provinces, and a great many other things, will be regulated best, if we possess an extensive practical experience acquired in other countries.

We have said before that it is necessary that the plan of the international pharmaceutical congress should be arranged in a better way. Many important subjects treated there, have not been worked out, because when the congress was over, there was no institute which continued and arranged its work. Many international committees have been appointed which could not finish their task because the necessary guidance was wanting. The archives of these congresses are spread far and wide over the world, and it is extremely difficult to give even an incomplete description of the work executed in this way. The regulation of these congresses also depends on the initiative of the national committees which call them together without consulting the national associations first about the subjects to be treated by the congress. Generally speaking, international cooperation and the foundation of an institute where all the necessary information about pharmaceutics, etc. may be obtained, are sure to make the rights of the pharmaceutical profession manifest, and to act as a powerful ally in the fight against everything which impedes the development of the profession or encourages the practicing of pharmacy by unqualified persons. The national associations will also benefit by the foundation of such an international federation, because it is desirable and necessary that the office of the federation should keep in touch with the pharmacists in all parts of the world. Where there is no cooperation, or where only local associations exist for the interests of the chemists, it will be the duty of the international federation to promote the forming of an association or a committee which is to be the representative organ of the pharmacists of these countries. It will also be necessary to work for more uniformity in analytical methods, in the composition of galenical preparations, in the regulation of commercial contracts and of the conditions of sale of specialities and other medicines of the kind. We see that the task of this international association is very extensive, and that the work which must be done is of great importance. Much of it can only be done if a special institute is established for that purpose, an institute with a sufficient number of officials and the necessary funds. In a building to be specially constructed for this purpose, there should be a library of scientific books on pharmaceutics, where also the laws regulating the practicing of pharmaceutics and related professions in all countries may be consulted; then there should be a list of all pharmaceutical associations as well as all the publications of the educational institutions. There should be a collection of all the periodicals throughout the world, and also lists of the subjects published in those periodicals. The same course of thought which caused Wihelm Ostwald to write his "Denkschrift über die Gründung eines Interationalen Instituts für Chemie" will be followed by many others who, in trying to form international associations, are looking for the practicability of the work which is to be done by this institute: and consequently such an institute will prove to be a necessity for pharmacy too. As soon as it is possible to survey the entire scope of the work, the time will have come for the realization of the desire to possess a special "workshop" where all these thoughts are put into execution.

An international pharmaceutical institute connected with the Federation Internationale Pharmaceutique must be the "workshop" where the plans and schemes of this federation are worked out. Such an institute must be established chiefly

on an administrative basis; it need not be a scientific institute. Like a patent office, it should be able to furnish everybody with the most reliable information. All pharmaceutical periodicals, while a good administrative system must make it easy for the people to find the subjects they want. The Deutsche Pharmaceutische Gesellschaft issues every years its "Berichte über die pharmacognostische Literature aller Länder;" other "Jahresberichte" also collects the publications on different subjects. In the same way such an international institute can make a permanent archive of everything that appears in the department of pharmaceutics in all parts of the world, as for instance the names and addresses of all pharmacists, the biographies of the best known among them; information about pharmaceutical associations, etc.

Ostwald rightly says that such an institute must serve to organize science, to divide work, and, by a systematic cooperation of several organs working separately, the better to obtain the required result. Besides a great many periodicals, the institute should possess an extensive library of pharmaceutical works, which library should be kept up to date by buying all new publications; and each writer ought to support the library by presenting it with a copy of his publications. In this way a register ought to be compiled of all the subjects on pharmaccutics. The "New Medicines," of such great importance for the dispensary, should, in my opinion, be worked out as extensively as possible by the institute, by means of the official returns of the manufacturers. Each more or less important new medicine, from whatever country, should be inserted in this cartulary, together with a record of its composition, its qualities, the maker's name, etc. Every month, copies of all the new official returns should be sent to the different associations which have assisted in founding the institute, so that in this way it is possible for every country to have a complete copy of this cartulary of new medicines. Then the always incomplete and often faulty and unreliable publications in the periodicals could be left out. A special scientifical inquiry-office should be charged with the examination of the data and information obtained in the above-mentioned way. There should also be a collection of standard samples of chemical and pharmocognostical products. In the same way this institute might furnish references for pharmaceutical publications. By doing this it might become the source from which several periodicals receive their information, which information should be as reliable as possible. An international language would be very useful for an institute of this kind. I refer those interested in the subject to "Weltsprache uns Wissenschaft" by the professors L. Couturat. D. Jespersen, R. Lorentz, W. Ostwald, and L. Pfoundler; "Sprache und Verkehr" by W. Ostwald; and other articles. But what will be above all necessary for the foundation of an institute of this kind, are ample funds and the assistance of all those interested in it.

When Ostwald acquainted Ernest Solvay at Brussels, with his ideas about an international institute for chemistry, the latter was prepared to support it, and to give a sum of a quarter of a million francs, while Ostwald himself was willing to give his important library for that purpose. If the idea of founding an international institute for pharmacy comes to be realized, I trust there will be persons ready to give support in the same way; especially because in several countries,

not the least in Germany and the United States, there are great and financially powerful industries which owe their prosperity to pharmaceutics.

The path for an international cooperation of pharmaceutical associations is now open. Next year, the Hague international congress will strengthen these international ties, and going on in this direction, we may expect that what is now only a picture of the imagination for many people, will become reality in a comparatively short time.

## FAILURE OF PHARMACY LAWS.

## S. L. HILTON.

Every state pharmacy law has been enacted for the purpose of properly protecting the public, by placing the sale of drugs and poisons in the hands of those especially trained and qualified, the licensed and educated pharmacist, they, at the same time, restrict rigidly the sale of all narcotic drugs and are consequently generally considered public health measures.

A few of the state laws regulate the wholesale drug business by requiring that wholesale druggists must be licensed or keep in their employ at least one person who is so licensed. District of Columbia, Delaware and Virginia have this requirement.

When the law in the District of Columbia was enacted by Congress, we believed we had obtained one of the best laws regulating the practice of pharmacy, the sale of poisons and narcotics, enacted in this country, we also believed it impossible for anyone to handle or sell drugs, poisons or narcotics, except under the supervision of a licensed pharmacist. The law, however, does except dealers who sell poisons for use in the arts or as insecticides; provided, however, they have obtained a permit from the Board of Pharmacy and that such sale be recorded the same as is required of licensed pharmacists. The law further permits the sale by others than licensed pharmacists of what is commonly known as "patented" or "proprietary" preparations, provided they contain nothing that is classed by the law as narcotics or poisons.

Since the enactment of the law there has been a decided improvement in the conditions in the District of Columbia, the number of deaths by poison and the number of cases coming into the hospitals for treatment for drug addiction has been greatly reduced. Recently, however, it came to the attention of the Board of Pharmacy that sales of narcotics and poisons were being made by dental supply houses without apparently complying with the provisions of the wholesale section of the law, that is, by employing a licensed pharmacist, keeping a record of each sale, etc., as required by law.

Sales of narcotics were being made to dentists on demand; likewise were sales made to their assistants and office attendants and possibly others, without question, so that in other words, they were not respecting or complying with the