acts that cannot be completed by the parties within a year of the making of the contracts, should also be in writing for the same reason. But the most important precaution that a buyer must take is to follow to the letter the bulk sales law that exists in most states. Briefly, this law requires that when a business is sold in other than the usual course of trade (item after item to customers over the counter), the creditors of the seller must be notified of the sale a certain time before the sale is consummated. Unless this is done by the buyer, seller, or both, as the law requires in the particular case, the unnotified creditors can consider the sale of the drug store as void, which in non-technical language means, even if the new owner has paid cash for all the goods, the creditors of the old owner not receiving legal notice of the sale can lay claims to the goods of the store as though they were still owned by the old owner.

Finally, the buyer should make sure that he is dealing with parties having complete authority to sell. This is particularly necessary when purchasing from corporations, partners, estates or court officers.

These, then, are matters that should be of heaviest concern to the investor in a drug business. Many minor matters, some too obvious, others too particular for discussion here, must also engage his attention.

THE INTERNATIONAL PHARMACOPŒIA OF 1885.*

BY EDWARD H. NILES.1

When the abbreviation P. I. appeared for the first time in the United States Pharmacopæia, IX—1916, it made American pharmacists definitely conscious of the attempt to establish world standards for many potent drugs and preparations. The abbreviation stood for Protocol Internationale, and its history can be briefly given.

In September 1902, there was held in the City of Brussels an important meeting, called The International Conference for the Unification of Potent Remedies. This conference formulated certain regulations for the strength of more than forty drugs and preparations. The delegates returned to their respective countries to urge that the various nations include in their pharmacopæias these proposed regulations. In 1906, representatives from nineteen countries, including the United States, met again in Brussels and formally signed the agreements proposed in 1902.

The above action ended a forty-year struggle to provide an international Pharmacopæia. But it is interesting and may be a surprise to some to know that at one time a complete International Pharmacopæia was prepared by an authorized commission, and a copy wholly in Latin was submitted to an international congress for ratification.

The advantages of an international pharmacopæia were long recognized, but the matter was brought to formal notice at the first meeting of the International Pharmaceutical Congress, held at Brunswick in 1865. While it was agreed that a Universal Pharmacopæia would be a good thing, no steps were taken to carry out the project.

^{*} Read before Section on Historical Pharmacy, A. Ph. A., New York meeting, 1937.

¹ Dean, Indianapolis College of Pharmacy.

At Paris, in 1869, the Congress had a definite proposition in regard to the matter, and the Paris Pharmaceutical Association was given charge of the project. Two years later, at the Vienna meeting of the Congress, a wish was expressed for the speedy completion of the work.

At St. Petersburg, in 1874, the Paris Society submitted the manuscript of a pharmacopœia. This was carefully compiled, and showed evidence of great skill and unbounded zeal. While it conformed to the order of the Congress, it included too much and aimed too high. This awakened the delegates to the difficulties of the problem. The Paris Society was thanked for its efforts, and the Congress reconsidered the whole matter and promulgated preliminary plans for a more modest attempt.

At London, in 1881, a fresh start was made and a commission appointed to study the strength of preparations containing potent drugs, as found in the various pharmacopæias. At this time (and later) the greatest disagreement was in regard to the scope of an international pharmacopæia. Some felt that it should include only those few potent preparations in which a difference in strength in various countries might have a fatal result if a prescription were dispensed according to a different formula than the physician expected. Of course some others were of the opinion that a broader list of recognized medicinal agents would be more useful in such a pharmacopæia.

Before adjournment at London, a commission representing eighteen countries was named to study the potent drugs and preparations in the various pharmacopœias, and report to the President of the commission. Thirty-five members served on the commission, each country, except Greece, having two representatives. For the United States, John M. Maisch and Charles Rice participated. The president of the commission was Anton von Waldheim of Austria.

The sixth International Pharmaceutical Congress convened at Brussels, August 31, 1885, and adjourned September 5th. The meeting was held at the Palais des Academies and was truly elaborate. It was sponsored by the King and Princes, educational dignitaries, and government officials of Belgium. Americans at the opening meeting were Messrs. F. Stearns, Geo. J. Seabury and J. L. Creuse. The American flag was conspicuously displayed in the decorations of the grand stairway leading to the hall. When a number of honorary vice-presidents were chosen, Mr. Creuse was elected to represent the United States.

Consideration of the project of an International Pharmacopœia was the order of business for Saturday afternoon, September 5th. President von Waldheim, of the International Pharmacopœia Commission, gave his report. After a prefatory history, tracing the project from 1865 to 1881, he distributed copies of the proposed International Pharmacopœia. Notes and comments were given in both French and German, but the Pharmacopœia itself was entirely in Latin.

In selecting materials, the latest editions of the following seventeen pharmacopæias had been used; United States (sixth revision, 1882), Austria, Belgium, Denmark, Germany, Great Britain, Greece, Hungary, Italy, France, Netherlands, Norway, Portugal, Russia, Sweden, Spain and Switzerland. It is curious that two of the thirty-five members of the commission were from Ireland, but no Pharmacopæia from Ireland was considered.

As associate officers, von Waldheim had two vice-presidents and the secretary

of the commission; these were from France, Russia and Austria, respectively. In spite of language difficulties in the seventeen pharmacopæias, the president had prepared and sent to all members of his commission the draft of a proposed pharmacopæia, containing 232 articles. Of these, 188 were generally approved and 44 were struck out. In addition, the various members made their own selections until a total of nearly 500 articles was being considered. Finally, after much voting, the majority of the Commission agreed on a scheme giving a total of 293 substances and preparations.

Of these, 181 were printed in large type as being of special importance, and 112 were in smaller type. With each article was given information as to the pharmacopeias in which the article was official, and the votes for and against each article were also recorded. One of the most difficult tasks was to obtain a uniform and satisfactory Latin nomenclature. When we consider that the U. S. P. Revision Committee still changes Latin titles for some articles with each new issue, we are not surprised at the difficulty experienced in 1885.

The International Pharmacopæia gave for crude drugs the botanical and zoö-logical names, habitat, part used and sometimes the time of collection and method of preservation. For preparations there were given clearly defined manufacturing processes. For chemicals there were given the physical characteristics and constants, and a limit of impurity.

It is impossible in this short paper to give much detailed information in regard to the articles included in this Latin Pharmacopœia. Of the 181 "important articles," about half are preparations. These are considered important because they occur in the majority of the pharmacopœias, are widely known and prescribed, and are more or less potent remedies.

In the "important" list are 56 chemicals and 30 crude drugs. The chemicals are both inorganic and organic, and include nine alkaloids or their salts.

Of the 112 "less important" articles, between seventy and eighty are preparations and the rest are drugs and chemicals. The larger portion of the less important list was not desired by a majority of the commission, but was included in deference to the wishes of a few. In this list were assumed to be those remedies which were of local importance only, or of obscure potency. However, there were included among the unimportant: Fluidextract of Ipecac, Tincture of Squill and Solution of Arsenous Acid, all of which are in the U. S. P. XI.

Of all the articles in the International Pharmacopæia, only about 50 were in every one of the seventeen national pharmacopæias examined by the commission. It seems rather surprising that such items as carbolic acid, morphine or its salts, spirit of nitrous ether, or chloroform were not in some pharmacopæias.

With a perspective of more than fifty years, we can view the voting on many items with interest, amusement and tolerance. An American member of the commission voted against having chloroform, calomel, sweet spirit of nitre, iodine, solution of lead subacetate or ether in the International Pharmacopæia. Apparently the Spanish members of the Commission were in an unyielding state of mind. Only about twenty-five articles received their approval; in many instances they cast the only negative votes, even against such items as Dover's Powder. Incidentally, two Norwegians cast the only votes against including Digitalis.

It seems like an anti-climax to have to state that this International Pharmaco-

pœia was not formally ratified by the sixth International Pharmaceutical Congress, nor at any later meeting. Nevertheless, a study of this document gives the most complete knowledge of any single source on the state of pharmacy and the medicines used throughout the world fifty years ago.

The writer believes that every teacher of pharmacy and pharmaceutical history should bring this topic to the attention of his students. Teachers of Pharmaceutical Latin may find many valuable exercises by using extracts from this complete Latin work. As reference for those interested, the *Chemist and Druggist* for 1885 gives a good account of the Brussels Congress and prints the Latin pharmacopæia complete. The *Druggists Circular* for 1885 describes the meeting of the Congress and gives an English translation of the International Pharmacopæia.

MEANING----?*

BY WILBUR L. SCOVILLE.

In writing or speaking it is easier to mean what we say than to say what we mean. As Wilson Follett puts it "the use of a wrong word most often denotes a broken link in one's acquired information" and "its meaning is that which our hearers supply for themselves."

A school boy is credited with defining a synonym as "the word you use when you don't know how to spell the word you should use." In many cases it might be defined as the word we use when we neglect to discriminate as to its meaning.

In legal matters the choice of words is highly important and legal documents are filled with seemingly superfluous synonymous phrases which are used to forestall technical or ambiguous interpretations.

Teachers who mark examination papers are painfully aware of the need to interpret, kindly it is hoped, phrases by the writers who may or may not mean what they say but do not say what they mean. Such faults are not confined to students. Are any of us wholly guiltless? How often are we saved from explanations by our comprehending audiences who correctly interpret our ambiguous phrases, particularly in scientific discussions? We may think that we have stated a subject clearly but our hearers may have understood because they are sufficiently familiar with the subject to grasp our meaning in spite of faulty statements.

Herein is the difficulty of writing popular articles on technical and scientific subjects. We need for this to be careful not only to mean just what we say but to say it in words which the reader will understand. The wise speaker or writer does not assume too much technical knowledge on the part of his audience.

Even such meticulous works as the Pharmacopæia and the National Formulary may slip in some of their phrases.

For instance, both books describe certain and several acids as having "an acid taste" or "an acidulous taste." To the chemist, who knows that many acids are sour in taste, in moderate dilutions, the meaning is plain. But not all acids are sour in taste. Barbituric and picric acids are bitter; benzoic acid is pungent and biting; boric acid is not sour; salicylic acid is first sweetish, then acrid; tannic acid

^{*} Section on Education and Legislation, A. Ph. A., New York meeting, 1937.