Section on Education and Legislation

Papers Presented at the Sixtieth Annual Convention

PHARMACEUTICAL DEGREES.

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In these days of ever-increasing numbers of institutions of learning, vying with each other to invent new degrees for old as well as new branches of study, there have come into use so many abbreviations for degrees, titles, names of institutions, societies, etc., that it is worth while for us to consider some of these degrees, their abbreviations, and the academic usage underlying their formation; and such a consideration seems especially called for at present among pharmacists, on account of the multiplicity of degrees conferred by the different schools of pharmacy, and the recently published idea, originating in pharmaceutical circles, that some of them are "fraudulent."

Formerly, and originally, the only degree conferred in pharmacy was that of "Graduate in Pharmacy" (Ph. G.); the noun "graduate" means: "One who has been graduated by a college or other institution of learning; hence, one who has completed a course of anything; as, a graduate in law, etc." (Standard Dictionary.) The verb "graduate" means: "To admit to an academic degree at the end of a course of instruction in a school, especially a college or university;" a popular but erroneous use of the term is: To receive a degree as from a college or university; as, he graduated in medicine." In other words, the verb graduate is an active verb when referring to the college, but passive when referring to the one who is graduated.

It follows from these definitions, that, strictly speaking, "Graduate in Pharmacy," besides not being perfectly correct in grammatical form, is not in itself a degree, in the academic sense; it means: "Graduated in Pharmacy" and merely shows that a certain course of study has been satisfactorily completed.

The word "degree" means: "One of a succession of steps, grades or stages; a measured or estimated part of upward or downward movement; as, degrees of excellence, Masonic degrees, etc."

The Academic Degrees.—The most commonly employed academic degrees are three in number: *Baccalaureus*, Bachelor; *Magister*, Master; and *Doctor*, Doctor. These degrees may be applied to any study whatever. The right to confer these degrees is usually granted in a charter given by the state to the institution that confers the degrees.

Let us consider these degrees seriatim. The Bachelor degree is an old one; but this word has nothing in common with the same word meaning an unmarried man; it may be conferred on women as well as on men. The name of the degree

was probably derived from an old French word, *bachelerie* or *bachelage*, implying apprenticeship, youth, inexperience. (See Br. Enc.); it is conferred as the "first and lowest degree in any study in which degrees are given."

When conferred in schools of pharmacy, it implies "apprenticeship" for it is conferred on students who have not yet had practical experience in the drug business.

Some claim that the word "bachelor" for an academic degree was derived from the Latin word "*baccalaris*" or "*baccalaureus*"; there is no such Latin word; it does not occur in classic or post-classic Latin; it was not used by any Latin author prior to A. D. 1450, but seems to have been "barbarously formed" in comparatively modern times, in an attempt to latinize *bachelerie* or *bachelage*, after the latter had been introduced as an academic title. The usual form for this degree in modern Latin writing or in diplomas is "*baccalaureus*," m. or "*baccalaurea*," f.

The Bachelor degree does not imply great learning; if anything, it implies the contrary, unfinished education, for many Bachelors in a science continue their university studies to secure the Doctorate in the same science. The Bachelor degree does not depend on any specified or definite length of time of study, for it is granted by universities, etc., after one, two, three or four years of study, depending on the nature of the studies.

As far as the writer knows, every college of pharmacy which confers the degree of Bachelor of Pharmacy represents it as its first and lowest degree, and no college ever made any other, or "fraudulent," claims as to its meaning.

The Doctor degree (*Doctor*) is the highest degree for which a student may apply. It means: "The highest degree, as of Divinity, Law, etc., as evidence of learning and ability to teach"; the word itself is derived from the verb *doceo*, to teach. When it is conferred in compliance with these qualifications it is a proper degree in pharmacy, but it should not be granted as the *first* and *lowest* degree, as is done by some schools of pharmacy; it is contrary to academic precedents, usages, and traditions, to cheapen the doctorate in such a manner.

The Master degree (*Magister*) was originally bestowed only as a very high honor and compliment on men who had been of signal service and were of exalted rank in their profession; something like LL. D. is now. While this high estimation of the *Magister* degree is not as strictly adhered to as formerly, the degree being now given to students for one or more years post-graduate work after having received the Bachelor degree, it is nevertheless far too high a degree to be given as the *first* degree in pharmacy, as is done by some of the colleges of pharmacy.

To certify in a diploma that a student fresh from college can be a Master of Pharmacy, in the world-wide and time-honored sense of the degree, shows a woeful lack of common sense, or a lamentable disregard for the truth.

The Difference Between Degrees and Abbreviations.—When an educational institution confers a degree, it confers the full degree—not its abbreviation; in most diplomas the abbreviations of the degrees are not mentioned. Any holder of any degree is entitled to use any abbreviation of it that he prefers, provided that it is sanctioned by usage or constructed in accordance with academic precedents and customs. The abbreviations are not the degrees!

Correct Abbreviations.—In a properly constructed abbreviation each word should be contracted so that it may be recognized without being misunderstood when standing alone, without context; this requirement, however, is not generally applied to the abbreviations for the academic degrees: Bachelor, B.; Doctor, D.; and Magister, M. Only, the holders of these degrees must not imagine they have any exclusive rights to the use of these abbreviations, for all these letters stand for many different meanings.

The Universal Dictionary of the English Language (1897), uses the following abbreviations, which are fairly correct, and may serve as examples of what abbreviations should be:

Agric., agriculture;	Etym., etymology;	Phil., philosophy;
Archeol., archeology;	Geol., geology;	Philol., philology;
Astrol., astrology;	Math., mathematics;	Phot., photography;
Astron., astronomy;	Mech., mechanics;	Phys., physiology;
Biol., biology;	Med., medicine;	Psychol., psychology;
Bot., botany;	Metal., metallurgy;	Surg., surgery;
Chem., chemistry;	Metaph., metaphysics;	Theol., theology;
Entom., entomology;	Phar., pharmacy;	Zoöl., zoölogy.

We also quote a few such abbreviations from the Standard Dictionary:

Arch., architect;	D. Bot., Doctor of Botany;
B. Acct., Bachelor of Accounting;	D. Nat. Phil., Doctor of Natural Philosophy.
B. Chem., Bachelor of Chemistry;	

But suppose the Bachelor of Chemistry should write B. C., as is frequently done; while it is perfectly proper that he should use this abbreviation, yet it is ambiguous for him to do so, for the same abbreviation is also used for Bachelor of Surgery (Bachelor of Chirurgy, *Chirurgiae Baccalaureus*); it is also used by some institutions for the degree of Bachelor of Commerce (B. C.). The abbreviations B. C. or C. B. may therefore be used for these three branches of study, but none of the three can claim exclusive right to the use of C. B. or B. C.; and if the holder of one of these degrees feels aggrieved at the ambiguity of it, he has the remedy in his own control—he needs only to write the correct abbreviation for his own degree: *B. Chem.*; *B. Chirurg.*; or *B. Com.*, respectively.

The disadvantage of using initial abbreviations appears, for instance, in the widely used A. C. (*Ante Christum*, before Christ); but this may also mean A. C. (*Anno Christi*, in the year of Our Lord) or A. C. (After Christ)—two exactly opposite meanings!

The Standard Dictionary in an extensive list, mentions among many others the following syllabic abbreviations, saying of them that they are “commonly used by English-speaking peoples”:

Bach., Bachelor;
 Phar., Pharm., pharmaceutical, pharmacopoeia, pharmacy;
 Pharmacol., pharmacology;
 Phil., Philos., philosopher, philosophical, philosophy;
 Phil. S., Ph. S., American Philological Society;
 Phil. Trans., Philosophical Transactions;
 Phot., Photog., photographic, photography;
 Physiol., physiological, physiology.

Most of these are correct abbreviations because they are sufficiently complete not to be easily misunderstood. But even among these few abbreviations here quoted, there are improper or ambiguous ones; “phil.” may mean philology as well as philosophy. On the editorial staff of the Standard Dictionary there were

more than a score of "Ph. D's," but in this list they use Ph. only for philology, and not for philosophy or pharmacy. Recently the idea has been advanced that "it is an unpardonable fraud" to use Ph. in connection with an academic degree for anything but philosophy! This is a purely notional assumption, devoid of even a trace of justification in academic precedents or customs; the use of Ph. or phil. for either philosophy or philology and of Ph. for Pharmacy cannot be fraudulent, for long-established usage tolerates these abbreviations for these three studies.

Ambiguity.—All abbreviations or contractions of names of degrees, titles, societies, etc., or of any words whatever, to initials only, must necessarily be ambiguous!

Ambiguity means "capable of being understood in more senses than one"; it is not even remotely associated with the idea of deception or fraud. Ambiguity in the meanings of alphabetical characters dates back to the very origin of alphabets, in fact, to even earlier times when ikonographs or ideographs conveyed ideas. Thus: Among the ideographs from which the cuneiform and hieroglyphic alphabets were developed (Assyria, Babylon, Ninevah, Egypt 2000 B. C.), the circle was a symbol meaning the *sun*; it also meant *light*, *splendor*, *day*; it furthermore stood for *God*, *Creator*, *Eternity*, *nature*, and a lot of other concepts.

A half-circle or crescent meant the *moon*, or a *month*, and also *Kybele*, *Astarte*, *Diana*, and some other things. In Ancient Egypt the horizontal "pointed oval" meant a *mouth*, and later it stood for the letters l and r, the one sign for the two sounds, just as c stands for the sounds of s and k in English, and the sound th in Spanish.

In the course of time these old ideographs developed into letters, or signs for simple phonetic sounds; and from that time (about 4000 years ago) until now there has never been a time when some letters did not have more than one sound or stand for more than one meaning. It has been contended, quite recently, and for the first time as far as the writer knows, that it is "fraudulent" to use one alphabetical character for two or more meanings!

This charge was made in connection with the character Ph. used to mean pharmacy; but this charge might be applied with equal force against those who use Ph. to mean philosophy or philology, because this abbreviation has been used for many decades for all of these studies, and none of these studies can have any exclusive right to this abbreviation.

Ambiguous Abbreviations.—Under the heading "Degrees" the Standard Dictionary gives a list stating the degrees commonly granted and their current abbreviations, as they were in actual use prior to the time when this work was compiled, edited and published (the latter in 1895); compilation began many years previously, possibly now about thirty years ago.

Many of the abbreviations in this list are contractions to initials only—therefore of necessity ambiguous; but custom sanctioned (or tolerated) the use of such initial abbreviations and any institution has a right to use any initial abbreviations that fit its degrees.

There are no laws, and can be on laws, of copyright for initial abbreviations; as far as academic usage is concerned initial abbreviations are outlaws beyond the pale of protection against use by others for other purposes.

No institution can claim exclusive right to an ambiguous initial abbreviation for any particular study. Alphabetical characters, and any sequence thereof as initials, are free for the use of all. Any institution is entitled to use initial abbreviations for its own degrees, and if there are any who feel aggrieved at the resulting ambiguity, they can use correct academic syllabic abbreviations for their own degrees.

We quote the following abbreviations from the Standard Dictionary:

P. D., Ph. D., D. P., D. Phil., Doctor of Philosophy;

P. D., Ph. D., D. P., Phar. D., Pharm. D, Doctor of Pharmacy.

Ph. D. was recognized as an abbreviation for a degree in pharmacy as well as for a degree in philosophy! Dictionaries do not originate definitions or abbreviations, but simply record them when they have become firmly established in the language by usage and custom. Usage, therefore, sanctioned Ph. D. for pharmacy as well as for philosophy many years ago, so that this abbreviation had been "long established" for a degree in pharmacy long before any college commenced to confer the degree of Bachelor of Pharmacy.

Of course, the abbreviations will be different as we use the Latin or English names of the degrees:

P. D., Ph. D., *Philosophiae Doctor*;

D. P., D. Ph., D. Phil., Doctor of Philosophy;

P. D., Ph. D., Phar. D., Pharm. D., *Pharmaciae Doctor*;

D. P., D. Ph., D. Phar., D. Pharm., Doctor of Pharmacy;

The abbreviations for the bachelor degree in any study follow the construction of the Doctorate degree, by simply substituting B. for D., thus:

P. B., Ph. B., Phil. B., *Philosophiae Baccalaureus*;

B. P., B. Ph., B. Phil., Bachelor of Philosophy; and by strict analogy and strict adherence to academic precedents and usage, the abbreviations for Bachelor of Pharmacy are:

P. B., Ph. B., Phar. B., Pharm. B., *Pharmaciae Baccalaureus*;

B. P., B. Ph., B. Phar., B. Pharm., Bachelor of Pharmacy.

Duplication of Abbreviations.—Suppose we should all agree that initial abbreviations are undignified, improper, ambiguous and generally objectionable, yet, since they have been tolerated and sanctioned by academic usage for many decades they cannot at this late day be called fraudulent. Fraud means "an act of deliberate deception"; usually for gain, but in all cases deception is a necessary part of fraud! For instance: If some one claimed to be connected with the C. B. C. of St. Louis, and attempted on the strength of such connection to obtain a favor from some one connected with a C. B. C (Christian Brothers' College), without really being connected with a Christian Brothers' College himself, that would be a fraud; but to simply claim to be connected with the C. B. C. of St. Louis, without being connected with a Christian Brothers' College, is not a fraud if he is a member of the C. B. C. (Century Boat Club) of St. Louis. Unless deliberate intention to deceive can be proven in connection with the use of any ambiguous abbreviation, a charge of fraud is unwarranted by academic precedents and usage.

Any man has a right to use his own initials, no matter how many thousand other persons in the world may have the same initials; the same is true of any society, college, university, etc., or for any name, title, degree, phrase or word whatever.

Initials as abbreviations are proper and lawful under any and all circumstances. They are used for religious, scientific, social and business purposes: I. H. S.,* D. D., Y. M. C. A., W. C. T. U., A. M. A., A. Ph. A., N. A. R. D., R. S. V. P., C. O. D., F. O. B., etc.; even for slang: N. G., T. W. P. D. Q., D. B., and G. B.; and under all conditions they are O. K. if they are the initials for the name, title, degree, word or phrase to which they apply.

Let us consider the letter B.; while it is used for the Bachelor degree it is also used for the following:

B.—Baptist, Baron, Baseball, Bath, Bay, *Beatus* or *Beata*, Before, *Bene*, *Benedictus*, Benevolent, Board, Bible, -bodied, Book, Botanical, Bounty; Brethren, Britain, Britannica, British, Brotherhood, etc.

The letter P. has been suggested as an abbreviation for pharmacy—"to prevent ambiguity," we suppose; but it stands for many other words:

P.—Pacific, Patent, Paternity, Patriarch, Paulus, Peace, Peoples, Petrus, Pharmaceutical, Pharmacopœia, Philological, Philosophical, Plea, Pontifex, *post* (after), Post (mail service), Presbyterian, President, Prevention, Probate, Procedure, Promotion, Propagation, Protective, Protestant, Publishing, etc.

And we might go on through the alphabet with similar results for many other letters. Nor are single letters only used for several meanings; the following combinations of initials are in use:

C. B. or B. C.—Bachelor of Commerce; Bachelor of Chirurgy or Surgery; Bachelor of Chemistry; B. C., Before Christ;
 A. B.—Able-bodied seaman (in the navy); Bachelor of Arts; at bat (in baseball);
 B. A.—Bachelor of Arts; British Association for the Advancement of Science;
 D. F.—Defender of the Faith; Dean of Faculty; D—Fool;
 F. B.—Fenian Brotherhood; Free Baptists;
 F. E. S.—Fellow Entomological Society; Fellow Ethnological Society;
 P. D.—Doctor of Pharmacy; Doctor of Philosophy; Printer's Devil;
 U. S. M.—United States Mail; United States Marine;
 U. S. S.—United States Senator; United States Ship; United States Steamer;
 U. S. A.—United States of America; United States of Africa; United States Army;
 F. M.—Field Marshall; Foreign Missions;
 F. R. A. S.—Fellow Royal Asiatic Society; Fellow Royal Astronomical Society;
 F. R. H. S.—Fellow Royal Horticultural Society; Fellow Royal Historical Society;
 M. P. S.—Member Pharmaceutical Society; Member Philological Society;
 B. P.—Primitive Baptists; *Beatus Paulus*; *Beatus Petrus*; Bachelor of Painting; Bachelor of Philosophy; Bachelor of Pharmacy;

*Even this is ambiguous: *In hoc signo*, or "*Iesus Hominum Salvator*"; who will claim that either of these interpretations is a "fraud," or determine which one is so!

M. B.—Bachelor of Medicine; Bachelor of Music;
 D. M. or M. D.—Doctor of Medicine; Doctor of Music; Doctor of Mathematics;
 M. E.—Master of Elements; Mechanical Engineer;
 L. M.—Licentiate in Medicine; Licentiate in Midwifery;
 B. L.—Bachelor of Laws; Bachelor of Literature;
 B. E.—Bachelor of Elements; Bachelor of Elocution; Bachelor of Engineering;
 A. P. A.—American Pharmaceutical Association (formerly); American Poultry Association; American Protective Association; American Protestant Association; American Photographic Association; and several other A. P. A's.

Evidently, classic usage ignores the question of ambiguity and duplication in initial abbreviations altogether.

What Does Ph. Mean?—"Ph." is an alphabetical sign used to represent the Greek letter "phi"; *it is not two letters, but one*; the initial for pharmacy, philosophy, philology, pharology, and other words of Greek origin beginning with ph is not the letter p, but "phi," which on account of lack of a single type character, is conventionally expressed in Latin, English, German, French, and some other languages by the compound consonant sign ph (pronounced f); in Spanish it is written f., as in *filosofia*, *filologia*, and *farmacia* (pronounced *farmathia*).

This initial ph cannot properly be divided, although this is often done by people who are either careless or who do not know any better. It is regrettable that this is so often done by pharmacists, as it shows that Pharmacy has not yet attained to the full dignity of a learned profession, although we may take courage from this, that many pharmaceutical associations are changing their former initial P. to Ph.; as: A. Ph. A., Mo. Ph. A., etc.

Ph. is the *only correct initial abbreviation for pharmacy*; it has been used for over a century in our country—for about ninety years in Ph. G. In fact, it was used for pharmacy before philosophers adopted it for their use; when the writer first became interested in College affairs and degrees the Doctors of Philosophy generally wrote "Phil. D." as they do now in European countries. If priority in the use of an ambiguous abbreviation had any weight (as it has not, and cannot have) then pharmacy would have first claim to the abbreviation Ph.; if usage or general opinion determined the matter, there are probably a hundred people in our country to whom Ph. means pharmacy for every dozen to whom it means philosophy; there are probably a hundred people who belong to some Ph. A. (pharmaceutical association) for every one person belonging to a Ph. A. (philosophical association).

But considerations of this kind have no bearing on the question of right or wrong in using the abbreviation.

Abbreviations of Pharmaceutical Degrees.—The following are only some of the variant abbreviations which are tolerated by academic usage, for degrees now granted in pharmacy: Ph. D., P. D., Phar. D., Pharm. D., D. Ph., D. P., D. Phar., D. Pharm., Ph. B., P. B., Phar. B., Pharm. B., B. Ph., B. P., B. Phar., B. Pharm., Ph. G., P. G., Phar. G., Pharm. G., G. Ph., G. P., G. Phar., G. Pharm., Ph. C., P. C., Phar. C., Pharm. C., C. Ph., C. P., C. Phar., C. Pharm., Ph. M., P. M., Phar. M., Pharm. M., M. Ph., M. P., M. Phar., M. Pharm., B. Sc.

Ph., B. Sc. P., B. Sc. Phar., B. Sc. Pharm., Sc. Ph. B., Sc. P. B., Sc. Phar. B., Sc. Pharm. B., Ph. S. B., Ph. B. S., P. S. B., B. P. S., Phar. S. B., Phar. B. S., Pharm. S. B., and Pharm. B. S.

To add to the multiplicity of allowable abbreviations, there are also other methods of abbreviating besides the syllabic and initial. Some are purely arbitrary, as Mo., for Missouri; Phm., or Phr., for pharmacy; others consist of the first and last phonetic signs, or letters, of the words; Me., for Maine; Vt., for Vermont; Ky., for Kentucky; etc.; only two of this latter kind are of interest to us here—Phy., for pharmacy; Dr., for Doctor.

When we add to the above list the many additional forms produced by using the abbreviations: Phm., Phr., and Phy., for pharmacy, Dr., for Doctor, and Ch., for Chemist, the list of abbreviations for degrees in pharmacy becomes quite appalling.

These abbreviations are all properly constructed according to time-honored academic precedents and custom; need we wonder that with the multiplicity of degrees in the many sciences and studies, there should be ambiguity?

What Remedy is There for Ambiguity?—Since the increasing habit of using initial abbreviations is mainly responsible for the present confusion and ambiguity in the use of abbreviations, the only successful remedy would be to discard initial abbreviations and return to the use of proper syllabic abbreviations. There is very little prospect, however, that this will ever be done, as every one will wait for the "other fellow" to do it first, after which there would be no further necessity to do it one's self. It would mean that all our schools would use only such abbreviations as "philol.," "philos.," "pharm.," etc., and even then the graduates would be under no obligation whatever to use such syllabic abbreviations.

The writer believes that initial abbreviations will continue to be used to the end of time, and that efforts to do away with them would be but like Quixotic charges against wind-mills. Let those whose tender souls are torn with anguish to see some one else use an initial abbreviation which they erroneously thought to be their own monopoly, or those who wish to be exact, or who take special pride in their own degrees, use correct syllabic abbreviations and quit worrying about others who prefer to use the ambiguous initial abbreviations.

Meanwhile, no argument or explanation is necessary to convince fair-minded and unprejudiced persons that the use of ambiguous initial abbreviations is not prohibited, but tolerated, if not sanctioned, by academic usage, and that the charge of fraud for using such abbreviations is unjustifiable and unwarranted by and contrary to academic precedents, customs, and traditions.