

Pharmaceutical Behavior: Similar, except color. Methods of overcoming influence of this difference are suggested.

Price: Chinese Cantharides has been cheaper for years. During the past three years, the price has been only one-quarter as much as U. S. P. Cantharides.

Availability: Enjoys ready availability. Future availability is subject to the same limitations as U. S. P. Cantharides.

PHARMACEUTICAL LABORATORIES,
H. K. MULFORD COMPANY,
PHILADELPHIA, PA.

SHALL WE REORGANIZE THE AMERICAN PHARMACEUTICAL ASSOCIATION?

BY FRANCIS E. STEWART.¹

It has been suggested that the American Pharmaceutical Association be reorganized and become a delegate body governed by a House of Delegates made up of representatives of the drug trade and proprietary medicine interests; and that the fact be recognized that what we call pharmacy as now carried on is a purely commercial business and that all claims to the contrary are pretense and camouflage.

I am writing this paper to protest against the reorganization of the American Pharmaceutical Association upon any such plan for I believe that such a move would be one of retrogradation. It is, of course, true that what we call pharmacy is not a profession but a commercial business and that the teaching of the colleges of pharmacy in this respect is unwarranted by existing conditions. It is also true that pharmacy has been for centuries unsuccessfully attempting to secure recognition as a profession, and, therefore, further attempts appear to be useless. But I do not believe in giving up the attempt. What we call pharmacy can never obtain recognition as a profession. Until pharmacy becomes a profession in fact professional recognition can never be attained. One of the problems which the American Pharmaceutical Association was organized to solve is how to make pharmacy a profession. It would seem to me far more important for us to unite in a study of the subject for the purpose of solving this important problem than to throw up the sponge and acknowledge ourselves vanquished by reorganizing the A. Ph. A. and making it a commercial body.

It has always been my opinion that the reason why we have never succeeded in solving the problem is because we have never gone about it in the right way. Pharmacy is inherently and historically a branch of medical science and practice and, therefore, can never become a profession independently of the medical profession. As well cut off a man's head and expect his body to go around and attend to business as to expect pharmacy to exist as an independent profession.

We should, therefore, turn to the history of the medical profession to learn about the true professional ideal in relation to pharmacy. I am suggesting the study of the *history* of the medical profession rather than to hold up the profession as it now exists as an ideal for us to follow. The medical profession is becoming "commercialized" and is forgetting the true professional ideal. The medical pro-

¹ A Committee on Reorganization, consisting of F. E. Stewart, *Chairman*, J. A. Koch and S. L. Hilton, was appointed by President L. E. Sayre.

profession is consequently losing the high esteem it once held in the mind of the public. We can, therefore, take the later history of the medical profession as a warning.

The professions of theology, law and medicine originated in the priesthood. The priests ministered alike to the bodies, souls and estates of their parishioners. They were lawgivers and administrators of the law. They were physicians and administrators of medicines, and they were interpreters of the Divine Will, and dispensers of religious consolation.

As civilization advanced and knowledge accumulated, the several vocations practiced by the priests gradually segregated, resulting in the establishment of the three so-called "learned or liberal" professions. They were called "learned" because in ancient times most of the learning was confined to the priests. They were called "liberal" because the priests rendered their services without fees, obtaining their living from the Church. It will therefore be noticed that the service of the ancient physician was an altruistic service. The question of money-making did not enter into it. In process of time, when medicine and law were separated from the Church, it became necessary for the physician and lawyer to obtain an income from some other source. Hence, came into vogue, first the honorarium system, and then the fee system.

An honorarium, as defined by Webster's dictionary, is "An honorary payment or award, usually in recognition of gratuitous or professional services, on which custom or propriety forbids any fixed business price to be set, or for which no payment can be enforced at law, as in case of counsel in Great Britain and in some of the United States, and in case of some physicians in England."

The amount of the honorarium depended upon the gratitude of the patient and the size of his pocketbook. Consequently, the amount of money received by the practitioner was of an uncertain quantity, and the income very irregular.

The "fee" system therefore took the place of the honorarium system. A fee is defined by Webster as "a reward or compensation for services rendered or to be rendered, especially payment for professional services, of optional amount or fixed by custom or laws, as the fees of lawyers and physicians."

You will note the words "optional amount or fixed by custom or laws." Generally speaking, the physician's fee is optional in amount, although fixed more or less by custom, and sometimes fixed by law. The "optional amount" character is, of course, inherited from the "honorarium" system, the idea being that the value of professional services cannot be measured in terms of dollars and cents.

The pharmacist to be a professional man must be in a position to render professional service, and obtain financial reward for the same over and above the charge for the medicine he has to sell as a purely commercial commodity. It does not take a pharmaceutical education to qualify a person to hand out ready-made goods to a customer and to receive pay for the same. Any unlicensed clerk can do this just as well as an educated and licensed pharmacist. But it does require pharmaceutical education of a high order to qualify a pharmacist for the vocation of selecting, preparing, compounding and dispensing of medicine to meet the demands of rational drug therapeutics as practiced by educated and competent physicians. The compounding of physicians' prescriptions is, therefore, a professional service; and the same applies to the manufacture of pharmaceutical preparations and the standardization of drugs and finished products by chemical assay and pharmacodynamic tests. For this kind of service the pharmacist should receive a professional compensation.

One of the most important of all professional services rendered to any profession is research work and the donation of the results of the same to the profession for the building up of the science upon which the profession depends. The importance of this service in relation to pharmacy becomes very clear when the following professional and scientific requirements pertaining to materia medica products and their preparations are considered.

PROFESSIONAL AND SCIENTIFIC REQUIREMENTS.

The following statement expresses what I mean in relation to professional and scientific requirements pertaining to materia medica products and their preparations.

1. Professional and scientific requirements demand that every drug or chemical used as medicine, and every preparation of the same, shall be properly identified and correctly named.

2. That the source or genesis, physical, chemical, physiological and therapeutic properties, methods of standardization, and proper dosage and usage, of all medicinal drugs, chemicals, and preparations of the same, shall be published for the benefit of medical science, so that this knowledge may be freely used by physicians and pharmacists in the practice of their respective vocations.

3. That this knowledge shall be classified in the form of science and protected by changeless nomenclature; that it shall be incorporated in scientific literature, including pharmacopoeias, dispensaries and other textbooks, and taught in professional schools and colleges and by the professional press.

4. That when a new materia medica product is invented or discovered, it shall be christened with a name by which it may be known and dealt in; that such name shall be free to the common use of all who have a right to manufacture and deal in the product; that such name shall not be exclusively controlled by any person, firm or corporation; that in case a manufacturer of the product shall decide to use a word trademark, it shall be employed to distinguish his brand of the product from other brands of the same product; and that each brand of the product shall appear on the market under a name common to all brands of the same; and, in case a patent shall be granted, the application shall strictly conform to the law which requires the same to contain the working formula, also that the monopoly shall be limited to the period of 17 years—the period named in the patent law.

5. That standards shall be devised and maintained to determine the identity, character and strength of the product, and, that such standards shall be protected and enforced by law as now illustrated by national and state pure food and drug laws in their relation to the United States Pharmacopoeia and National Formulary.

6. That persons shall be especially educated, trained and licensed to practice pharmacy and drug therapy, and that such practitioners shall be organized in medical and pharmaceutical associations, having the power to create and maintain codes of ethics for the proper control of such practice, and possessing the power to revoke by due process of law, the license to practice by persons who neglect to observe the rules laid down by the professions engaged therein and embodied in the medical and pharmacy laws.

7. That pharmacy and drug therapy shall be conducted as closely related and mutually dependent branches of medical science and practice; that the practitioners of these important vocations shall work in coöperation with a common object, namely, to prevent disease and heal the sick, each profession working in its special field of practice.

Both classes of practitioners must be guided in their practice by common rules of conduct in their relations to each other and the public at large. Such coöperation can only be secured and maintained under a professional, fraternal or coöperative system in which all concerned donate full knowledge of the results of their researches and experiences to the common fund of knowledge and share alike in the results of this coöperative work.

As before stated, pharmacy has been for centuries vainly attempting to secure recognition as a profession. It is evident from the above that pharmacy can never secure recognition as a profession until the practice of pharmacy is conducted in conformance with the professional ideal upon which the practice of medicine was originally founded. Medicine in all of its departments must be conducted as an altruistic vocation in which the making of money must be and remain a secondary object. Therefore, pharmacy can never be recognized as a profession until it adopts the altruistic ideal upon which the practice of medicine was originally based. This altruistic ideal is embodied in the Hippocratic Oath.

The following brief history of the origin and development of so-called pharmacy may prove interesting and instructive in this connection.

THE ORIGIN OF TRUE PHARMACY.

There are two conceptions extant concerning the origin of pharmacy, one being that pharmacy originated in the medical profession, being a mere development of that part of the vocation of the physician practiced in earlier times when the physician's apprentice prepared the medicines used by his master in treating the sick.

The other view is that pharmacy developed from the vocation of the old-time apothecary, who, according to the most ancient records, existed and practiced his art long before Moses led the Children of Israel out of the wilderness.

Both of these views contain a large element of truth, as a reference to the history of the development of pharmacy in England well illustrates.

In ancient times the physicians dispensed their own medicines, which were prepared for them by their apprentices. The apothecary's vocation existed separately, and the apothecary dispensed his herbs and ointments to an ignorant and credulous public, recommending them as specifics and cures for disease.

The *materia medica* in those days consisted of a collection of the most heterogeneous kind, as you all know. According to the practice of those days, the more disgusting the remedy, the more efficacious it was.

In the year 1215, the priests were forbidden by the Church to practice any surgery which involved bloodshed, on the principle that the Church abhors the shedding of blood; and about one hundred years later, all surgery was forbidden them. Thus began the division between drug therapy, medicine and surgery, which has lasted until the present day. But the physician still continued to prepare and dispense his own medicines, so that drug therapy and pharmacy were practiced by the same individual.

In the meantime, chemistry as a science had made strides and as the nature of medicines from a chemical standpoint began to be appreciated, pharmacy became more and more complex.

The apothecaries in those days were members of the Guild of Grocers, and the vocation did not partake of a professional character. The apothecary, however, commenced to perfect himself in the knowledge of chemistry, and pharmacy, because of its complexity, gradually separated itself from the practice of the physician and was relegated to the apothecary. In the reign of James I, the apothecaries separated from the grocers and received the first charter of their own.

When the monks ceased to practice surgery, the barbers, who had acted as their assistants, gradually stepped into their shoes, and a class of barber surgeons, mostly ignorant in the extreme, arose and practiced alongside of the surgeons proper. In the fourteenth century, this state of affairs existed. But, in the sixteenth century, medicine, being still largely in the hands of the ecclesiastics, Linacre, a celebrated divine and physician to Henry VIII, founded in England the present College of Physicians, which, together with Oxford and Cambridge Universities, where medical schools had been established, received authority over all three branches of medical practice.

A very significant point may be noticed here, and that is, whereas physicians were qualified for their degree by study at universities, surgeons and apothecaries obtained their qualifications by apprenticeship, so that the surgeon and apothecary were placed in the same social rank as tradesmen or members of other crafts, while physicians had the higher social standing of the learned professions.

In the seventeenth century, during the reign of James I, the Society of Apothecaries was founded. Membership in this society required seven years' apprenticeship, and under its beneficent influence, the apothecaries grew more and more important. Then, in 1666, during the great plague in England, the apothecaries distinguished themselves for their courage and humanity. There were many physicians who stood nobly at their posts and many more who fled in terror. In consequence of the courage displayed by the apothecaries and the cowardice of those physicians who proved recalcitrant, the sick fell back upon the apothecaries and summoned them from their shops to prescribe for them. In the year 1703, a legal decision in England suddenly exalted the apothecary by giving him the right to prescribe medicines in that country though he was given no right to charge any fee for his services, relying entirely on his medicines for profit.

In 1745, the surgeons emancipated themselves from the barber surgeons, with whom they had amalgamated in 1540, and now formed the College of Surgeons. Since that time surgery has been steadily advancing until it now ranks with medicine, and in the estimation of many practitioners, outranks it.

PHARMACY IN THE UNITED STATES.

The principal advances in the pharmaceutical field in the United States cannot be understood without reference to the work of Dr. John Morgan, of Philadelphia. Dr. Morgan was the first teacher of the theory and practice of medicine, materia medica, pharmacy and pharmaceutical chemistry in America. He founded the first Medical Society in the Province of Pennsylvania, and was one of the founders of the American Philosophical Society, was Director-General and Physician-in-Chief of the American hospitals during the Revolutionary War, and was responsible for the separation of the practice of pharmacy from that of drug therapy in this country, which occurred approximately in the year 1774.

The history of the founding of the first medical school in America by Morgan and the ultimate effect on modern pharmacy resulting from Morgan's teaching have never been given proper consideration.

Watson, in his *Annals of Philadelphia*, mentions but six drug stores existing in that city in 1750. The few that were not owned by physicians were devoted exclusively to the supplying of medicines to the medical profession and to the sale of such household remedies as the housewife could gather herself in the fields or cultivate in her own garden. Physicians invariably dispensed their own medicines, and these were usually prepared by their apprentices. These apprentices, by running errands, gathering herbs, preparing and dispensing medicines, and attending to other and at times even menial duties about the houses of their masters, were expected in the course of six or seven years of their apprenticeship, to absorb sufficient knowledge of physic to open a shop and practice for themselves.

Morgan was thoroughly imbued with the expediency of separating the dispensing of medicines from the practice of the therapeutic art, and used all of his influence to accomplish that object. The College of Physicians of Edinburgh as early as 1754 adopted an Act that prohibited their Fellows and Licentiates from taking upon themselves to use the employment of an apothecary, or to have or to keep an apothecary shop. As a Licentiate of this college, Morgan was under obligations to teach and practice in accordance with the ethics of that institution.

Morgan's argument in favor of separating the practice of medicine from pharmacy related to the commercial character of the drug business. In his estimation, professional services should consist in the rendering of advice by the physician, and the performing of surgical operations by the surgeon—services which did not require the practitioner to deal in material substances as a merchant. He argued that the primary object of the merchant was to make money, that of the physician to prevent disease and heal the sick, the making of money being a secondary consideration.

Dr. Morgan's plan did not meet with the approval of his contemporaries, even such of them as had attained a medical degree abroad. It was not until 1774 that he had even a single follower. His first follower was Dr. Abram Chovet, of Philadelphia, and he was followed by Dr. John Jones, who had received a part of his medical education in that city, and became the first professor of Surgery in the New York Medical School, and subsequently published what is probably the first comprehensive surgical work written in this country.

In Morgan's time, there was no United States Pharmacopoeia, and the condition of the materia medica supply business was most unsatisfactory. It therefore became quite necessary for the medical profession to adopt some plan for the standardization of the materia medica, so that the knowledge of materia medica, pharmacy and drug therapeutics might be properly classified and taught in the medical and pharmaceutical colleges. Morgan's pioneer work did much to promote the cause of true pharmacy, but his teaching and example were not sufficiently influential to result in the adoption of common standards for drugs and medicines.

The importance of the Pharmacopoeia in binding the medical and pharmaceutical branches of medicine together and coördinating their practice can only be

realized in the light of the above statement of professional and scientific requirements. The history of the origin and development of the United States Pharmacopoeia is one of the greatest values in this connection and, therefore, worthy of a place in this discussion.

THE U. S. PHARMACOPOEIA.

The necessity for some definite standard for prescribing was commencing to be felt in 1778, and there was published in Philadelphia a small pharmacopoeia for the use of the Military Hospital of the United States Army, located at Lititz, Lancaster County, Pennsylvania.

The same necessity for common standards for fixing the character and quality of medicines impressed the medical profession of Massachusetts, and on October 3, 1805, the Councilors of the Massachusetts Medical Society appointed a committee to draft a pharmacopoeia, adapted to the special wants of their section of this country. An attempt was made to make this work National, without success.

In 1815, the physicians and surgeons of the New York Hospital appointed Dr. Samuel L. Mitchell and Dr. Valentine Seaman a committee to prepare a pharmacopoeia for the use of that institution. This was issued in 1816 and enjoyed for some years authority of more than local character.

In January, 1817, Dr. Lyman Spalding, of New York City, submitted to the Medical Society of the County of New York, a project for the formation of a National Pharmacopoeia; the plan provided that a convention should be called in each of four districts into which the country was to be divided, the same to be composed of delegates from all the medical societies and schools situated within each of them. Each District Convention was to frame a Pharmacopoeia and to appoint delegates to a General Convention to be held in Washington. To this General Convention, the four district Pharmacopoeias were to be taken and from the material thus brought together a National Pharmacopoeia was to be compiled.

Dr. Spalding's plan was approved by the Committee to which it was referred and subsequently through the agency of the Medical Society of the State of New York it was carried into effect.

After various vicissitudes, the two Pharmacopoeias prepared in the Northern and Middle Districts were submitted to examination, compared in detail and their contents with such additions as were thought necessary, consolidated into one work, which after full revision was adopted by the General Convention, and ordered to be published by a Committee appointed for that purpose, of which Dr. Lyman Spalding was chairman. It was published in Boston, Dec. 15, 1820, in both the Latin and English languages, a second edition appearing in 1828.

It will be noted that the United States Pharmacopoeia was founded by the medical profession. The first revision was published in 1831, and also was exclusively a physicians' pharmacopoeia. Previous to adjournment of the Convention of 1831, arrangements were made for another convention to occur in 1840, which convened at Washington, D. C., on the first Monday in January of that year. This convention authorized the Committee of Revision to request the coöperation of the Colleges of Pharmacy in the United States. Valuable assistance was rendered the Committee by the Colleges of Pharmacy of Philadelphia, Boston and New York. The following revisions of the Pharmacopoeia came more and more under the control of the so-called pharmaceutical profession and the Pharmacopoeia largely developed along pharmaceutical lines.

The limits allowed for my paper have already been exceeded. However, before bringing the paper to a conclusion, permit me to refer to the influence of colleges of pharmacy upon the development of the professional ideal, and also to the influence of pharmaceutical legislation.

INFLUENCE OF COLLEGES OF PHARMACY IN DEVELOPING THE PROFESSIONAL IDEAL.

In 1821, the friends of pharmacy organized and established the Philadelphia College of Pharmacy, which became an important factor in pharmaceutical education. The medical profession took much interest in this institution and some of the most prominent physicians connected with the educational interests in America

are to be found in the list of the members of its faculty. The practice of pharmacy, under the influence of the Philadelphia College of Pharmacy, became more and more professional in character. Graduates of this institution established themselves in various parts of the United States and founded similar institutions.

The influence of the colleges of pharmacy of the United States upon pharmacy has, of course, been most excellent. But the graduates of these institutions have never been classed as members of the learned professions. This is doubtless due in part to want of proper standardization of pharmaceutical education, and in part due to the character of the vocation itself.

First, in regard to the standardization of pharmaceutical education. Several years ago I had an interesting interview with a Commissioner of Education of one of the greatest States of the Union. He told me that the pharmacists of his state had asked to be recognized as a profession. To this he replied:

Pharmacy should be recognized as a profession, but it cannot be so recognized until it becomes a profession in fact. To obtain recognition it is necessary for the educational system of pharmacy to conform with University requirements pertaining to education in the other recognized professions. The University degrees, bachelor, master and doctor, must represent the same degrees of education in pharmacy as in medicine and the other professions. Then, the profession itself must be conducted in a professional manner, that is, the vocation must conform to the rules adopted by the profession for its practice, and these rules must be of the same character in relation to the practice which distinguishes the other professional vocations.

INFLUENCE OF PHARMACEUTICAL LEGISLATION.

In 1852, the first attempt to regulate the practice of pharmacy by law in England, was made. History tells us that at this time the pharmacist was an "object of scorn by the public authorities of the day and of deep suspicion by the medical profession," therefore a Pharmaceutical Society was organized "for the purpose of protecting the permanent interests and *increasing the respectability* of chemists and druggists."

In 1868, further legislation was inaugurated. The legislation of 1852 and 1868 carried into law the aim of the founders of the Pharmaceutical Society in relation to the "educational fitness" of the pharmacist, and thus did much to raise the social standing of the vocation. But the vocation never reached the dignity of a liberal profession like law, theology and medicine.

CONCLUSIONS.

Centuries of honest endeavor have not been sufficient to raise pharmacy to the dignity of a profession, either in Great Britain or this country. The founding of pharmacopoeias in Great Britain and in the United States, while a move in the right direction, did not accomplish the purpose. The good work of the pharmaceutical societies, and the colleges of pharmacy, have not yet accomplished it. Legislation has not been equal to the task.

As we have already learned, surgery was relegated to the barbers and thus degraded. But surgery was redeemed by the medical profession and became one of the most important branches of medical practice. Pharmacy was relegated to the apothecaries, who at that time recommended and dispensed their headache cures, cough cures, kidney cures, and the like, to a wondering and credulous public. When printing was invented and utilized for obtaining publicity by advertising,

the retail nostrum business of the apothecary developed into the great patent and "proprietary" medicine business of to-day.

Surgery finally became a profession by separating itself from the barbers and becoming a part of the medical profession. Is not this a lesson for us to learn? The only way for pharmacy to ever become a profession, is to separate itself from the nostrum business and become affiliated with the medical profession as a branch of medical science and practice.

It has been proposed that the American Pharmaceutical Association be reorganized as a delegate body, controlled by a house of delegates. The precedent of the American Medical Association is pointed out as an illustration in favor of this. It is pointed out that for many years the A. M. A. was a small body with very little influence. After its reorganization it became very powerful, having a decided influence upon medical legislation.

The reorganization of the A. Ph. A. as a delegate body, controlled by delegates from state pharmaceutical associations, all the affiliated bodies working together under a code of ethics containing rules for the guidance of pharmacists in their relations to each other, to the medical profession, and to the public, might indeed accomplish great things for legitimate pharmacy. But a house of delegates, made up of delegates from druggists' associations, representing the commercial drug business and the manufacturers of nostrums medicines, would degrade pharmaceutical practice still further. Believing as we do, that this matter is of great importance and should be thoroughly discussed before any serious attempt is made to reorganize the A. Ph. A., I would suggest the advisability of appointing a committee to take the entire subject of reorganization under consideration at this time.

ESSENTIALS OF ACCOUNTANCY FOR PHARMACISTS.*

BY CHARLES B. COUCHMAN.

Of the many things with which a man may be concerned, one of the greatest importance is "making a living."

To accomplish this feat a man has but two implements, two producing factors—property and effort. In the latter term is included the physical or the mental labor—the special skill or knowledge which a man may have and exert.

Since the making of a living seems at the best more or less precarious, a man should exert as efficiently as possible every quality he may possess which will aid in the desired result. He endeavors to make his effort as productive as possible. If he chooses Pharmacy as his profession, that is, as the channel through which his efforts will pass to reach the desired result, then by long study and practice he endeavors to make his skill and knowledge such that his efforts will be as remunerative as possible.

If, in addition to his effort, he possesses some property to aid him in the struggle, or, if from the returns from his efforts he thriftily accumulates a surplus so that his efforts may be supplemented by at least some wealth, it evidently becomes his next concern to see that this property also becomes as productive as possible.

* Read before Section on Commercial Interests, A. Ph. A., New York meeting, 1919.