

## COMMITTEE REPORTS

### REPORT OF THE COMMITTEE ON PHYSIOLOGIC ASSAYING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, 1921.\*

Since our meeting in Washington last summer, the Tenth Decennial Pharmacopoeial Convention has been held, the new Revision Committee elected, and the actual work of revising the Pharmacopoeia well under way.

As the members of this Committee are all actively assisting in the revision of the chapter on "Biologic Assays" of the U. S. P. and are individually and collectively studying the subject from all angles, it was thought advisable not to make an extensive report at this time.

We wish, however, to report the following:

A study of the various comments upon the U. S. P. methods for the biologic assay of aconite, cannabis, epinephrine and suprarenal extracts shows that the methods official in the U. S. P. IX, with slight modification of the standards and technique employed, will meet with almost unanimous approval.

In the past, however, there has always been a great diversity of opinion among pharmacologists as to the best biologic method for assaying the "digitalis group."

This diversity of opinion has been, to a great extent, due to the fact that each individual worker was more or less partial to the particular method with which he was most experienced. His opinions, therefore, were more or less biased by the fact that he was *more* expert, and therefore obtained better results with the method which he favored than when using methods advocated by others.

This Committee is therefore of the opinion that if properly conducted, digitalis and its allies can be satisfactorily assayed and standardized by either the "One Hour," or "M. L. D. Frog Heart Method," the "M. L. D. Guinea Pig Method," or the "Cat Method."

As a means of assisting the Revision Committee in selecting the official method or methods we felt that it would be extremely valuable to obtain as much information as possible as to the methods employed and preferred by the experts in biologic assaying throughout the country.

With this object in view, the following questionnaire was sent to twenty experts:

#### DIGITALIS.

1. What biologic method do you use in standardizing the digitalis series?
2. Give detailed outline of technique employed.
3. What do you consider the principal advantages of the method which you use as compared with other commonly used methods?
4. What method do you prefer?
5. Would you consider it a practical plan not to make any method of assay official, but simply to state the U. S. P. standard in terms of the most commonly used methods and thus permit the use of any recognized method as a means of standardization?
6. In case this scheme is favored it would be necessary to coordinate the different methods of technique so that whatever one is followed, the standard by that method would be equivalent to the standard by any other one.

#### ERGOT.

1. What method do you use in standardizing ergot?
2. What do you consider the principal advantages of the method which you use as compared with other commonly used methods?
3. What standards do you use?
4. Give detailed outline of technique employed.

The following is a compilation of the replies received:

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\* Presented in General Session A. Ph. A., New Orleans meeting 1921, and ordered to be printed.

## Questions 1 and 4.

## DIGITALIS.

*One Hour Frog Heart Method.*

No. of workers preferring this method.....	12
No. of workers using this method but preferring other methods.....	2
Total.....	14

*M. L. D. Guinea Pig Method.*

No. of workers preferring this method.....	2
No. of workers using this method but preferring other methods.....	2
Total.....	4

*M. L. D. Frog Heart Method.*

No. of workers preferring this method.....	1
No. of workers using this method but preferring other methods.....	0
Total.....	1

*Hatcher Cat Method.*

No. of workers preferring this method.....	1
No. of workers using this method but preferring other methods.....	0
Total.....	1

It will be noted from the above tables that the large majority of workers prefer the "One Hour Frog Heart Method" for assaying the "digitalis group."

## Questions 2 and 3.

Details of technique, etc., employed by the various operators will be found in the attached letters.

## Questions 5 and 6.

The consensus of opinion is that only one method should be made official and that the details of technique for carrying out this method should be clearly set forth in the U. S. P.

## ERGOT.

## Questions 1 and 4.

*Cock's Comb Method.*

No. of workers preferring this method.....	8
No. of workers using this method but preferring Blood Pressure Method.....	1
Total.....	9

*Blood Pressure Method.*

No. of workers preferring this method.....	7
No. of workers using this method but preferring the Cock's Comb Method....	1
Total.....	8

## Questions 2 and 3.

Details of the technique employed by the various operators will be found in the attached letters.

It will be noted that the Cock's Comb and Blood Pressure methods for assaying ergot are almost equally favored, nine workers using the Cock's Comb method and eight the Blood Pressure method.

It would seem advisable, therefore, to carry out a series of coöperative experiments, with the view of determining which is the more accurate before making recommendations as to which method should be made official.

In conclusion, your Committee would recommend that a copy of this report together with the attached replies to the questionnaire be forwarded to the Chairman of the U. S. P. Revision Committee for consideration in connection with preparing the chapter on "Biologic Assays."

The majority of the Committee are also of the opinion that the U. S. P. X. should make practically all of the biologic assays compulsory.

Respectfully submitted,

(Signed) P. S. PITTINGER, *Chairman*, H. C. COLSON,  
H. C. HAMILTON, W. A. PEARSON.

## PHARMACEUTICAL ETHICS.\*

A HISTORICAL REVIEW OF THE SUBJECT WITH EXAMPLES OF CODES ADOPTED OR SUGGESTED AT DIFFERENT PERIODS, TOGETHER WITH A SUGGESTED CODE FOR ADOPTION BY PRESENT-DAY ASSOCIATIONS.

BY CHARLES H. LAWALL.<sup>1</sup>

Ethics is the science of human duty. A code of ethics is a carefully formulated system of principles or rules of practice for the guidance of a particular group of individuals, such as the members of a profession.

The Mosaic law is a code of ethics in the broadest sense as applied to humanity at large.

The development of codes of ethics is an indication of the evolution and growth of moral consciousness. Ethics and morality are not always synonymous; neither are ethics and legality. "Right" and "wrong" are terms which have different meanings and interpretations at different periods.

The necessity for specific principles for the guidance of individuals having common interests, in addition to the tenets of religion and morality, has been recognized from the earliest historical periods. Probably the most ancient code of professional ethics is the Hippocratic Oath, which has been in existence for about 2500 years, and which is an eminently suitable starting point for a discussion of the subject. One of the several translations is as follows:

*"The Hippocratic Oath.*

"I swear by Apollo the physician, and Aesculapius, and Hygeia, and Panacea, and all the gods and all the goddesses—and I make them my judges—that this mine oath and this my written engagement I will fulfil as far as power and discernment shall be mine.

"Him who taught me this art I will esteem even as I do my parents; he shall partake of my livelihood, and, if in want, shall share my goods. I will regard his issue as my brothers and will teach them this art without fee or written engagement if they shall wish to learn it.

"I will give instruction by precept, by discourse, and in all other ways to my own sons, to those of him who taught me, to disciples bound by written engagements and sworn according to medical law, and to no other person. So far as power and discernment shall be mine, I will carry out regimen for the benefit of the sick and will keep them from harm and wrong. To none will I give a deadly drug, even if solicited, nor offer counsel to such an end; likewise to no woman will I give a destructive suppository; but guiltless and hallowed will I keep my life and mine art. I will cut no one whatever for the stone, but will give way to those who work at this practice.

"Into whatsoever houses I shall enter I shall go for the benefit of the sick, holding aloof from all voluntary wrong and corruption, including venereal acts upon the bodies of females and males, whether free or slaves. Whatsoever in my practice or not in my practice I shall see or hear amid the lives of men which ought not to be noised abroad—as to this I will keep silence, holding such things unfitting to be spoken.

"And now if I shall fulfil this oath and break it not, may the fruits of life and art be mine, may I be honored of all men for all time; the opposite if I shall transgress or be forsworn."

The foregoing is a splendid example of exalted idealism, couched in virile, dignified language, and applicable to present-day conditions, with minor changes.

In the twelfth century A. D. there lived a Jewish physician and teacher named Maimonides, who is ranked by medical historians as the greatest Jew after Moses. He was born at Cordova, Spain, then under Arabic domination, and his Arabic name was "Abu Amran Musa Ben Maimum Obaid Alla el Cordovi."

He contributed the next great landmark in the literature of professional ethics in the shape of a combined oath and invocation.

*"The Oath and Prayer of Maimonides.*

"Thy Eternal Providence has appointed me to watch over the life and health of Thy creatures. May the love for my art actuate me at all times; may neither avarice, nor

\* Presented before Section on Education and Legislation, A. Ph. A., New Orleans meeting, 1921.

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miserliness, nor the thirst for glory, or for a great reputation engage my mind; for the enemies of Truth and Philanthropy could easily deceive me and make me forgetful of my lofty aim of doing good to Thy children.

"May I never see in the patient anything but a fellow creature in pain.

"Grant me strength, time and opportunity always to correct what I have acquired, always to extend its domain; for knowledge is immense and the spirit of man can extend infinitely to enrich itself daily with new requirements. To-day he can discover his errors of yesterday and to-morrow he may obtain a new light on what he thinks himself sure of to-day.

"O God, Thou hast appointed me to watch over the life and death of Thy creatures; here am I ready for my vocation.

"And now I turn unto my calling:

O stand by me, my God, in this truly important task;

Grant me success! For—

Without Thy loving counsel and support,

Man can avail but naught.

Inspire me with true love for this my art

And for Thy creatures,

O, grant—

That neither greed for gain, nor thirst for fame, nor vain ambition,

May interfere with my activity.

For these I know are enemies of Truth and Love of men.

And might beguile one in profession,

From furthering the welfare of Thy creatures.

O, strengthen me.

Grant energy unto both body and the soul

That I might e'er unhindered ready be

To mitigate the woes,

Sustain and help,

The rich and poor, the good and bad, enemy and friend,

O, let me e'er behold in the afflicted and the suffering,

Only the human being."

Both of these refer particularly to medical practice. The earliest rules for guidance of pharmacists which I have been able to find, occur in the sixteenth century. Bulleyn, a cousin of Queen Anne Bulleyn and a prominent English apothecary of that century, is authority for the following rules for the guidance of the apothecaries of his day.

"The apothecary must first serve God; forsee the end, be cleanly and pity the poor. His place of dwelling and shop must be cleanly to please the senses withall. His garden must be at hand with plenty of herbs, seeds and roots. He must read Dioscorides. He must have his mortars, stills, pots, filters, glasses, boxes, clean and sweet. He must have two places in his shop, one most clean for physic, and the base place for chirurgic stuff. He is neither to increase nor diminish the physician's prescription. He is neither to buy nor sell rotten drugs. He must be able to open well a vein, for to help pleurisy. He is to meddle only in his own vocation, and to remember that his office is only to be the physician's cook."

Some of these rules are still worthy of consideration in a modern code of ethics. It is particularly interesting to note, however, the viewpoint of that day as regards the relative importance of medicine and surgery, for in a modern store, the "chirurgic stuff" is given the cleanest place and not the one which is "base."

The 17th century saw the famous battle between the Galenists and the Paracelsists, and the development of guilds and societies of apothecaries, whose records are not easily accessible or widely copied. One item of collateral interest from this period is the oath of the journeyman apothecary of Germany, which is referred to as follows:

"Every journeyman apothecary shall take an oath that he will faithfully serve, not only his master, but also the members of the community at large. That he will prepare all medicines 'secundum artem,' and of pure drugs, whether they be such as are annually

examined by the authorities or not. That he will dispense no poison, opiate or emmenagogue without the knowledge of the master, or endanger the life of anyone by his carelessness. That he will not deliberately change a physician's prescription, and will abstain from excessive indulgence in intoxicating drinks and will at all times set a good example to the apprentice. That he will not leave the shop without the knowledge of the master, and particularly not absent himself at night. That he will be devoted to his master, to the *visitatori medico*, and to each of the doctors of the incorporated Collegio Medico. He shall swear that he will do all this according to his best ability."

The 18th century saw the rise of proprietary medicines and some of our well-known and respectable preparations of the present pharmacopoeias of the world originated as secret formulas or prescriptions of eminent physicians during this period, in which little of constructive value to the ethics of the calling seems to have come down to us.

In the early part of the 19th century, pharmaceutical education in America had its beginning in the founding of the Philadelphia College of Pharmacy in 1821.

The first code of ethics of this organization, which is the earliest code of pharmaceutical ethics that has a direct connection with and applicability to present-day practice, was adopted in 1848, and reads as follows:

"A CODE OF ETHICS ADOPTED BY THE PHILADELPHIA COLLEGE OF PHARMACY.

"Pharmacy being a profession which demands knowledge, skill, and integrity on the part of those engaged in it, and being associated with the medical profession in the responsible duties of preserving the public health, and dispensing the useful though often dangerous agents adapted to the cure of disease, its members should be united on some general principles to be observed in their several relations to each other, to the medical profession, and to the public.

"The Philadelphia College of Pharmacy being a permanent, incorporated institution, embracing amongst its members a large number of respectable and well-educated apothecaries, has erected a standard of scientific attainments, which there is a growing disposition on the part of candidates for the profession to reach; and being desirous that in relation to professional conduct and probity, there should be a corresponding disposition to advance, its members having agreed upon the following principles for the government of their conduct:

"1st. The College of Physicians of Philadelphia having declared that any connection with, or monied interest in apothecaries' stores, on the part of the physicians, should be discountenanced; we in like manner consider that an apothecary being engaged in furthering the interests of any particular physician, to the prejudice of other reputable members of the medical profession, or allowing any physician a percentage or commission on his prescriptions, as unjust toward that profession and injurious to the public.

"2nd. As the diagnosis and treatment of disease belong to the province of a distinct profession, and as a pharmaceutical education does not qualify the graduate for these responsible offices; we should, where it is practicable, refer applicants for medical aid to a regular physician.

"3d. As the practice of Pharmacy can only become uniform, by an open and candid intercourse being kept up between apothecaries, which will lead them to discountenance the use of secret formulae, and promote the general use and knowledge of good practice, and as this College considers that any discovery which is useful in alleviating human suffering, or in restoring the diseased to health, should be made public for the good of humanity and the general advancement of the healing art—no member of this College should originate or prepare a medicine, the composition of which is concealed from other members, or from regular physicians.

"Whilst the College does not at present feel authorized to require its members to abandon the sale of secret or quack medicine, they earnestly recommend the propriety of discouraging their employment, when called upon for an opinion as to their merits.

"4th. The apothecary should be remunerated by the public for his knowledge and skill, and his charges should be regulated by the time consumed in preparation, as well as by the value of the article sold; although location and other circumstances necessarily affect the rate of charges at different establishments, no apothecary should intentionally undersell his neighbors with a view to his injury.

"5th. As medical men occasionally commit errors in the phraseology of their prescriptions, which may or may not involve ill consequences to the patient if dispensed, and be injurious to the character of the practitioner; it is held to be the duty of the apothecary, in such cases, to have the

corrections made, if possible, without the knowledge of the patient, so that the physician may be screened from censure. When the errors are of such a character as not to be apparent, without the knowledge of circumstances beyond the reach of the apothecary, we hold him to be blameless in case of ill consequences, the prescription being his guarantee, the original of which should always be retained by the apothecary.

"6th. Apothecaries are likewise liable to commit errors in compounding prescriptions—first, from the imperfect handwriting of the physicians; secondly, owing to the various synonyms of drugs in use, and their imperfect abbreviations; thirdly, from the confusion which even in the best-regulated establishments may sometimes occur, arising from press of business; and fourthly, from deficient knowledge or ability of one or more of the assistants in the shop, or of the proprietor—

"We hold that in the first three instances named, it is the duty of the physician to stand between the apothecary and the patient, as far as possible; and in the last that he should be governed by the circumstances of the case—drawing a distinction between an error made by a younger assistant accidentally engaged, and a case of culpable ignorance or carelessness in the superior.

"7th. As the apothecary should be able to distinguish between good and bad drugs, in most cases, and as the substitution of a weak or inert drug for an active one, may, negatively, be productive of serious consequences—we hold that the intentional sale of impure drugs or medicines, from motives of competition, or desire of gain, when pure articles of the same kind may be obtained, is highly culpable, and that it is the duty of every honest apothecary or druggist to expose all such fraudulent acts as may come to his knowledge. But in reference to those drugs which cannot be obtained in a state of purity, he should, as occasion offers, keep physicians informed as to their quality, that they may be governed accordingly.

"8th. As there are many powerful substances that rank as poisons, which are constantly kept by apothecaries, and prescribed by physicians, and which are only safe in their hands, as arsenious acid, vegetable alkaloids, ergot, cantharides, etc.—we hold that the apothecary is not justified in vending these powerful agents indiscriminately to persons unqualified to administer them, and that a prescription should always be required, except in those cases when the poisons are intended for the destruction of animals or vermin—and in these instances only with the guarantee of a responsible person. And we hold that when there is good reason to believe that the purchaser is habitually using opiates or stimulants to excess, every conscientious apothecary should discourage such practice.

"9th. No apprentice to the business of apothecary should be taken for a less term than four years, unless he has already served a portion of that time in an establishment of good character. Apprentices should invariably be entered as matriculants in the school of pharmacy and commence attendance on its lectures at least two years before the expiration of their term of apprenticeship; and as the progress of our profession in the scale of scientific attainment must depend mainly upon those who are yet to enter it—it is recommended that those applicants who have had the advantage of a good preliminary education, including the Latin language, should be preferred.

DANIEL B. SMITH, *President.*

CHARLES ELLIS, *1st Vice-President.*

SAMUEL F. TROTH, *2nd Vice-President.*

Attest. DILLWYN PARRISH, *Secretary.*"

If the Quaker apothecaries had done nothing else of moment this code would remain as a monument to the lofty principles which actuated these men who were not simply theorists, but who carried into their daily work the idealism which they held up as a pattern to their professional brethren.

In 1900 this code of ethics was somewhat modified and it now has the following form:

"THE PHILADELPHIA COLLEGE OF PHARMACY REVISED CODE OF ETHICS.  
(Adopted December 31, 1900.)

"The Pharmaceutical profession being one which demands knowledge, skill and integrity on the part of those engaged in it, and being associated with the medical profession in the responsible duties of preserving the public health and dispensing the useful though often dangerous agents adapted to the cure of disease, its members should be united on the ethical principles to be observed in their relations to each other, to the medical profession and to the public.

"*The Philadelphia College of Pharmacy* being an incorporated institution, embracing among its members a large number of eminent pharmacists, manufacturers, chemists and scientists, has erected and consistently maintained a high standard of scientific attainment, which there is a growing disposition on the part of candidates for the profession to reach; and being desirous that, in relation to professional conduct and probity, there shall be a corresponding disposition to advance, its members have subscribed to the following fundamental principles for the government of their professional conduct:

"1st. We accept the *United States Pharmacopoeia* as our standard and guide for all official preparations.

"In compounding a prescription written in a foreign country the *Pharmacopoeia* recognized as authority in that country is to be followed. For unofficial preparations we advocate the adoption of uniform formulas in accordance with the *National Formulary* or other standard works, published by national or international agreement.

"2d. The practice of Pharmacy can become uniform only by an open and candid intercourse between apothecaries, which will lead them to discountenance the use of secret formulas in dispensing, and promote the general use and knowledge of improved methods. This College considers that any discovery which is useful in alleviating human suffering or in restoring the diseased to health, should be made public for the good of humanity and the general advancement of the healing art. We particularly deprecate the use of secret formulas between physician and pharmacist.

"While, at present, the College does not feel authorized in requiring its members to abandon the sale of proprietary medicines, it earnestly recommends the propriety of discouraging their employment.

"3d. The apothecary should be remunerated by the public for knowledge and skill, and the charges should be regulated by the time consumed in preparation, as well as by the cost of the article sold. Although location and other circumstances necessarily affect the rate of charges at different establishments, no apothecary should intentionally undersell his neighbors with a view to their injury.

"4th. No apothecary should be engaged in furthering the interests of any particular physician to the prejudice of other reputable members of the medical profession. We emphatically condemn the allowance of any percentage on prescriptions to physicians as unjust to the public and detrimental to both professions.

"5th. As the diagnosis and treatment of disease belong to the province of medicine, and as a pharmaceutical education does not qualify the pharmacist for the discharge of these responsible duties, we should, where it is practicable, refer applicants for medical aid to a regular physician. And we likewise hold that medical practitioners should recognize the value of pharmaceutical education and relegate the compounding of prescriptions and the dispensing of all medicines to pharmacists.

"6th. As medical practitioners occasionally commit errors in their prescriptions, which may or may not involve ill consequences to the patient if dispensed, and be injurious to the character of the prescriber, it is held to be the duty of the apothecary in all such cases to protect the physician and to have the corrections made, if possible, without the knowledge of the patient, so that the physician may be screened from censure. When the errors are of such a character as not to be apparent, without the knowledge of circumstances beyond the reach of the apothecary, we hold him to be blameless in case of ill consequences. As the original prescription is his guarantee, we recommend that it should always be retained by the apothecary.

"Apothecaries, likewise, are liable to commit errors in compounding prescriptions, and we hold that in all such cases it is the duty of the physician to protect the interests of the dispenser and stand between him and the patient as far as possible.

"7th. The apothecary should be able to distinguish between good and bad drugs, and as the substitution of a weak or inert drug for an active remedy may be productive of serious consequences, duty demands that he should exercise his expert knowledge and good judgment in the selection and preparation of all remedies. We hold that substitution or the sale of impure drugs or medicines, when pure articles can be obtained, is highly culpable, and that it is the duty of every apothecary or druggist to expose all such fraudulent acts as may come to his knowledge.

"8th. As there are many powerful substances that rank as poisons, which are constantly kept by apothecaries and prescribed by physicians, and which are only safe in their hands, we

hold that the apothecary is not justified in vending these powerful agents indiscriminately to persons unqualified to administer them, and that a prescription should always be required when intended for medicinal use. When the poisons are intended for technical purposes, or for the destruction of animals or vermin, the sales should only be made to responsible persons and strictly in accordance with the State law governing the sale of such poisons.

"9th. While we recognize the value of spirituous liquors as therapeutic agents and the necessity for pharmacists dispensing these legitimately in accordance with the physicians' prescriptions, we condemn as degrading and unprofessional any attempt to make such sales a prominent feature of the business.

"We discountenance any attempt to foster or increase the use of opiates or injurious drugs possessing the power of enslaving the consumer to habitual use.

"We hold that where there is good reason to believe that the purchaser is habitually using stimulants, opiates or other injurious drugs, we should discourage such practice by every means possible, and we urge upon pharmacists the duty of exercising at all times a conscientious care in dispensing drugs liable to such dangerous abuse.

"10th. As Pharmacy is a progressive profession, its followers should, by continuous study and application, keep abreast of the advances made in medicine and the sciences. It becomes our duty to encourage the elevation of our chosen profession by stimulating research, investigation and study.

"Special care should be exercised in the selection of our assistants. No apprentice to the business of apothecary should be taken for a less term than four years, unless he has already served a portion of that time in an establishment of good character. Assistants should invariably be entered as students in a College of Pharmacy and encouraged to secure a thorough education. As the progress of our profession, in the scale of scientific attainment, must depend mainly upon those who are yet to enter it, it is recommended that those applicants who have had the advantage of a good preliminary education, including the Latin language, should be preferred."

"This also needs revising after twenty years of changing practice, although no improvement can be made in the underlying principles, which are fundamentally sound and worthy of perpetuation.

"In 1852 our own American Pharmaceutical Association contributed its share toward the guiding principles of pharmacy and the code of ethics which was drafted during the first year of our organization was at first framed in the following language:

#### "CODE OF ETHICS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

"The American Pharmaceutical Association, composed of Pharmaceutists and Druggists throughout the United States, feeling a strong interest in the success and advancement of their profession in its practical and scientific relations, and also impressed with the belief that no amount of knowledge and skill will protect themselves and the public from the ill effects of an undue competition, and the temptations to gain at the expense of quality, unless they are upheld by high moral obligations in the path of duty, have subscribed to the following Code of Ethics for the government of their professional conduct.

"Art. 1. As the practice of pharmacy can only become uniform by an open and candid intercourse being kept up between apothecaries and druggists among themselves and each other, by the adoption of the National Pharmacopoeia as a guide in the preparation of official medicines, by the discontinuance of secret formulæ and the practices arising from a quackish spirit, and by an encouragement of that esprit de corps which will prevent a resort to those disreputable practices arising out of an injurious and wicked competition; Therefore, the members of this Association agree to uphold the use of the Pharmacopoeia in their practice; to cultivate brotherly feeling among the members, and to discountenance quackery and dishonorable competition in their business.

"Art. 2. As labor should have its just reward, and as the skill, knowledge and responsibility required in the practice of pharmacy are great, the remuneration of the pharmacist's services should be proportioned to these, rather than to the market value of the preparations vended. The rate of charges will necessarily vary with geographical position, municipal location, and other circumstances of a permanent character, but a resort to intentional and unnecessary reduction in the rate of charges among apothecaries, with a view to gaining at the expense of their brethren, is strongly discountenanced by this Association as productive of evil results.



"Art. 3. The first duty of the apothecary, after duly preparing himself for his profession, being to procure good drugs and preparations (for without these his skill and knowledge are of small avail), he frequently has to rely on the good faith of the druggist for their selection. Those druggists whose knowledge, skill and integrity enable them to conduct their business faithfully, should be encouraged, rather than those who base their claims of patronage on the cheapness of their articles solely. When accidentally or otherwise, a deteriorated, or adulterated drug or medicine is sent to the apothecary, he should invariably return it to the druggist, with a statement of its defects. What is too frequently considered as a mere error of trade on the part of the druggist, becomes a highly culpable act when countenanced by the apothecary; hence, when repetitions of such frauds occur, they should be exposed for the benefit of the profession. A careful but firm pursuit of this course would render well-disposed druggists more careful and deter the fraudulently inclined from a resort to their disreputable practices.

"Art. 4. As the practice of pharmacy is quite distinct from the practice of medicine, and has been found to flourish in proportion as its practitioners have confined their attention to its requirements; and as the conduction of the business of both professions by the same individual involves pecuniary temptations which are often not compatible with a conscientious discharge of duty; we consider that the members of this Association should discountenance all such professional amalgamation; and in conducting business at the counter, should avoid prescribing for diseases when practicable, referring applicants for medical advice to the physician. We hold it as unprofessional and highly reprehensible for apothecaries to allow any percentage or commission to physicians on their prescriptions, as unjust to the public, and hurtful to the independence and self-respect of both the parties concerned. We also consider that the practice of some physicians, (in places where good apothecaries are numerous), of obtaining medicines at low prices from the latter, and selling them to their patients, is not only unjust and unprofessional, but deserving the censure of all high-minded medical men.

"Art. 5. The important influence exerted on the practice of pharmacy by the large proportion of physicians who have resigned its duties and emoluments to the apothecary, are reasons why he should seek their favorable opinion and cultivate their friendship, by earnest endeavors to furnish their patients with pure and well-prepared medicines. As physicians are liable to commit errors in writing their prescriptions, involving serious consequences to health and reputation if permitted to leave the shop, the apothecary should always, when he deems an error has been made, consult the physician before proceeding; yet in the delay which must necessarily occur, it is his duty, when possible, to accomplish the interview without compromising the reputation of the physician. On the other hand, when apothecaries commit errors involving ill consequences, the physician, knowing the constant liability to error, should feel bound to screen them from undue censure, unless the result of a culpable negligence.

"Art. 6. As we owe a debt of gratitude to our predecessors for the researches and observations which have so far advanced our scientific art, we hold that every apothecary and druggist is bound to contribute his mite towards the same fund, by noting the new ideas and phenomena which may occur in the course of his business, and publishing them, when of sufficient consequence, for the benefit of the profession."

In this code, which so evidently needs revising so as to make it accord more fully with present conditions and practices, we see that the term "apothecary" is used throughout to mean a pharmacist dispensing and selling at retail, while the term "druggist" refers invariably to what we now term the wholesaler or wholesale druggist.

Slight changes in phraseology were made in this code in the first year and the amended code as published in Vol. II (1853), Proc. A. Ph. A., is still in force and has not been published within recent years, except in connection with the address of Dr. Frederick Hoffmann, delivered at the semi-centennial of the American Pharmaceutical Association in Philadelphia in 1902, and published in the Proceedings for that year, and also in the JOURNAL OF THE A. PH. A., 1915, at which time a committee was appointed to revise it, which has never since reported.

Shortly after this time a very comprehensive and excellent contribution to the subject of pharmaceutical ethics was presented to the British Pharmaceutical Conference by Joseph Ince in 1866. It is well worth publishing in connection with the other data on this same subject and is particularly interesting because of the originality of some of the views and the interesting comments upon prevalent customs.

It is as follows:

“THE ETHICS OF THE SHOP.

“Pharmacy is a trade. When a man buys goods at one price to sell them at another, gaining the advantage of the difference in tariff, being further influenced by the known law of supply and demand, he is engaged in trade. When he buys in undivided bulk, to sell again in undivided bulk, he is a merchant, but still engaged in trade. When he purchases in undivided bulk to vend in large though in divided bulk, he is a wholesale tradesman. When he buys articles in a divided bulk, to sell again in small divided bulk, he is a retail tradesman; nor does it make the slightest difference whether he sells hats or Turkey rhubarb, nor whether the seller of the rhubarb be Sir Humphry Davy.

“The artist, on the other hand, is a professional man. One painter buys so many feet of canvas, together with so much paint; he places, possibly, upon that canvas something which may not increase its value. A second buys the same amount of canvas, inch by inch, on which he puts the same amount of color, ounce for ounce, and the result may be ‘The Immaculate Conception.’

“He places on the canvas that which he cannot buy—God gave it him, and without any phrase of poetry he exercises the gift divine. Neither is the true artist influenced by the necessities of competition, nor by the trade fluctuation arising from supply and demand.

“A hundred artists more or less would not alter his position; a hundred paintings on the same subject would not detract from the merit of his own, its value is intrinsic, and not relative. But the pharmacist buys his stock, whether of drugs, chemicals, or sundries, in order to sell again—he is a tradesman.

“But other influences are at work to modify the general fact—the awakening claims of universal education, the long unflinching teaching of our own Society, the actual pressure from without. Then there is the influence of locality; the West End customer will have more than shop dexterity, and in my own neighborhood the mere tradesman would find himself gazetted.

“There is the influence of individual character. The master, fortunately for himself and those around him, has higher than trade instincts, from which circumstance his trade assumes more or less a strictly professional character; but it no more ceases to be a trade than the orchid which counterfeits so strangely shapes of natural beauty ceases to be a plant.

“Never forgetting the essentially trade nature which belongs to pharmacy, we at once come to the first ethical rule of the pharmacist, namely, the necessity for the absolutely genuine character of his drugs. No drug or remedy should be admitted into his shop other than that which, in case of dangerous illness, he would not hesitate to supply to the inmates of his own family circle. He cannot be expected to keep the whole range of *Materia Medica*, nor is he to be blamed for applying for eclectic remedies elsewhere. This is an affair of means and circumstances; but in no case should any trade casuistry induce him to lower the standard of excellence of whatever he may possess.

“The pharmacist who bears this rigidly in mind will be in no danger of degrading himself by the adoption of low and ruinous prices. Whoever has committed this transparent trade mistake must not afterwards blame the public for exacting the continuance of a state of things to which he has himself voluntarily stooped. On this topic I have great pleasure in giving you the opinion of your excellent treasurer, Mr. Brady:—‘The principle which ought to guide the pharmacist in the regulation of his changes is that remuneration should increase in proportion as the class of article makes greater demand on the knowledge obtained by his professional education. If he sells articles dealt in by other classes of tradesmen, he must submit to the same rate of profit. In drugs proper, which require an educated judgment, power of testing and the like he is entitled to a much higher rate; whilst in all matters of dispensing, his charges should be professional in their character, and not calculated on the cost of employed materials at all. We cannot materially increase the quantity of medicines sold by reducing the price; hence any of us endeavoring by low charges to increase his business must recollect that he does it to the direct injury of the body, in reducing by so much the amount of money that might accrue from its legitimate practice. In large towns the responsibility of prices charged rests with one or two leading men, and if they are true to their professional instincts, the calling can scarcely fail to prosper.’

“I agree with the above, and I may add that the pharmacist saves himself an immensity of trouble, and will most probably prolong his days if he will once have the courage to adopt one uniform fixed price, else he is subjected to continual petty annoyance. Having determined to be

the master of his own business, he will be content to abide by his own regulations, and not, on the one hand, place himself at the mercy of the competing pharmacist who trims his sail to every wind that blows, or, on the other, to the caprice of the customer, who not always truthfully asserts that he has obtained articles of definite commercial value at a starvation price.

"Not only his regard to self-respect, but to his trade interest, will be his guide to a third ethical observance, *viz.*, to supply the public with the precise articles for which they ask. This point strikes me not so much as a question in ethics as in a purely business light; but I have been requested to bring it forward, and I am bound to do so.

"The rule of every well-regulated establishment is to supply faithfully and implicitly whatever in the whole range of pharmacy a customer may require—to obtain it if not in stock, whether English or foreign, and to spare no pains that it shall be the identical thing desired.

"To do otherwise seems to me not to warrant so fine a phrase as a trade error, but a pure shop mistake. Does the customer want liquor bismuthi, Schacht, he is supplied from Clifton; does he send for Brown's chlorodyne, he receives that made by Mr. Davenport; if quinine be ordered, salicine must not be substituted; and so with the list of similar preparations, whether demanded as a retail order, or as forming an ingredient in a physician's recipe. This course of action is due not to any particular keen sense of honor, but to trade expediency, precisely as a wise fisherman spreads a well-made net in order that the fish should not slip through. Any house in town or country adopting such a principle must and does gain a reputation which infinitely counterbalances the small extra remuneration to be made out of fictitious articles. Confidence brings trade, and trade puts money in the till—a more practical result than might have been anticipated from the study of pharmaceutical ethics.

"This subject may have been proposed in consequence of some of its details not having been clearly grasped. On the one hand, there is a great waste of misapplied ingenuity in the constant attempt to produce colorable imitations of preparations, secret or otherwise, which have gained reputation for some particular chemist. Against this there is no human law; but the moral law, which is the law of God, says such practices are fraudulent, and beneath the dignity of every upright man, and they betray a paucity of inventive power, and it is, moreover, certain that the same skill might find more creditable as well as more remunerative employment.

"Still, some pharmacists are in bondage to a groundless fear; they hesitate, under a strained sense of honor, to enter upon what they think preoccupied, and therefore forbidden ground. 'Why,' writes Mr. Giles, 'should there be any speciality in pharmaceutical production? The same laws will protect an invention in pharmacy as in mechanics, and when the law professes to deal with the matter, it is a question whether any other protection is needed. You may say ethics shall do what the law does not, and so it should in cases too refined for the law to deal with; but here the law does operate.'

"From the foregoing it is clear that while no one is justified in the fraudulent imitation of a patent right, either in or out of the sale of pharmacy, yet no pharmacist can claim the exclusive manufacture of any special article in perpetuity, simply because a particular mode of working originally suggested itself in his mind. There is no law in trade or ethics to prevent a man making liquor opii to the best of his ability, any more than in the case of morphia and meconic acid. The most scrupulous and conscientious chemist may get quinine and cinchonine from bark. What casuistry shall assign an arbitrary limit forbidding him to make a liquor? The whole world may make magnesia, light and heavy, calcined or carbonate, although Battley and Howard and Henry have been beforehand in the field. Let not the pharmacist shrink from the lawful use of the experience and labors of the past; which is no reason why he should shrink into a mere copyist, and should not, like Columbus, sail out of the beaten track in search of land not hitherto discovered.

"There is a major ethical consideration that can only be treated in a minor key—perfect civility to, and careful attention to the smallest wants of the poorest customer—a civility that should be expressed by words and manner. The ethics of civility to rich customers need scarcely be discussed; in that case, for ethics, read advantage.

"Our American brethren have taken the lead in drawing up a regular Code of Ethics. You will find the document in the *Pharmaceutical Journal*, Vol. XII, p. 369.

"They have also, I think, been most successful in giving directions about the last topic I have to mention in connection with shop ethics—the mutual relation between the master and the assistant.

"For general rules I refer you to a paper republished in our *Journal*, called the 'Pharmacist as a Merchant' (Vol. VI, p. 655, second series). The idea is admirable, and the literary execution quite equal to the design.

"Mr. Frederick Stearns, the author, seems to have steered most successfully between the Scylla of the high and dry, and the Charybdis of the goody-good.

"I refer you also to some excellent rules published at the end of 'Parrish's Practical Pharmacy'; it contains one difficult proposition, p. 676:

"'Second General Regulation of the Store. During business hours all hands must be on their feet.'

"Rule XIII is beyond our present standard. 'Every apprentice will be expected to become a graduate of the College of Pharmacy, and will be furnished with tickets of the College, and every opportunity for availing himself of the honor of the degree of that Institution.' I do not feel called upon to dilate upon this question. There is such a wide difference in individual character, that special rules seem to be impossible. After all, we shall scarcely get further than the inspired direction. 'He that ruleth with diligence.' One point I am compelled to notice, that ethics concern the assistant quite as much as they do the master. I have no intention of adding to the already hard position of the former by harsh remarks, but I say deliberately that neither our current literature, nor the general tone of sentiment expressed in private, bears sufficient trace of the recognition that a code of ethics extends beyond the master. Let the assistant feel that he has a part to play, just as difficult and just as important as his employer; that on his side he must exercise consideration, and adopt the high tone of feeling which characterizes the English gentleman, and he will do more to render pharmacy enduring, and to promote its social welfare, than whole reams of essays written on the subject. It is painful to recollect that those identical assistants who complain the most bitterly about long hours, close confinement and other ills incident to pharmacy, are sometimes, when once in business on their own account, the very men to perpetuate and extend the evil and, practically, to rivet another link to that chain with which we are darkly bound. Solely for this reason, I have no faith in the efforts that have been made occasionally with regard to early closing. The ethics have been invariably on one side. Once the king of animals was asked his opinion on a work of art. The painting represented a man smiling and self-confident, who, with the most perfect equanimity, was slaying the noble beast. 'Wait till I paint,' said the lion.

"As matters stand, masters are to shut up, and assistants to improve their minds. I have never seen my way out of this question (nor has any one else); yet I believe that in an establishment where there are two or more assistants, if they would calmly set to work to see how far earlier hours could be adopted without injuring existing business; if, in so doing, they on their part would carefully weigh the master's interest, and be as ethical towards him as they wish him to be towards them; and if, instead of calling him hard names and making excited speeches at a London tavern, they would bear in mind that he is quite as much interested as they, I guarantee that he would be found a willing listener, and there would then be the first and only fair chance of which I know, of both being set at liberty at more rational hours than they are at present.

"Before leaving the shop altogether, may I press upon your consideration the desirability of calling it 'a pharmacy.' The word is English, not fanciful; it is used in the same sense throughout France, and Belgium, is highly expressive, and is on all grounds to be recommended."

Among the earliest of the State associations to formulate and adopt a code of ethics was the Pennsylvania Pharmaceutical Association, which in 1881 adopted the following.

"PENNSYLVANIA PHARMACEUTICAL ASSOCIATION CODE OF ETHICS.

"Preamble. The members of the Pennsylvania Pharmaceutical Association, considering it necessary that some mutual understanding should exist in regard to the moral principles guiding them in their profession, hereby agree upon the following code of ethics:

"1. We accept the United States Pharmacopoeia as our standard and guide for all official preparations, and recognize a variance from its rules only in exceptional cases, where sufficient authority has proven some other process more reliable to attain the same end.

"This section is not intended to interfere with the dispensing of prescriptions or medicines ordered in accordance with foreign Pharmacopoeias.

"2. Although not a legitimate part of our business, custom and the necessity of the times warrant us in keeping the proprietary medicines of the day; yet, out of regard to the medical

profession, and for the protection of the public, we earnestly recommend all pharmacists, when called upon for an opinion of their merits, to discourage their use, and neither to advertise nor permit their names to be used in advertising such medicines.

"3. Recognizing the value of alcohol as a therapeutic agent, and the propriety of its being dispensed as such by pharmacists, yet deploring the wide-spread evil resulting from its indiscriminate use in its hundred insidious forms, we condemn any attempt to make it a prominent feature of our business as unprofessional; and we denounce the loose practice of allowing it to be used on the premises, in any shape, as a beverage, as degrading, and we urge upon pharmacists the duty of exercising, at all times, a conscientious care in dispensing a drug liable to such dangerous abuse.

"4. We discountenance all secret formulas between physicians and pharmacists, and consider it our duty to communicate such to each other when requested.

"5. We distinctly repudiate the practice of allowing physicians a percentage on their prescriptions as derogatory to both professions.

"6. We will endeavor, as far as it lies in our power, to refrain from compromising the professional reputation of physicians, and we expect the same comity from them.

"7. Since the professional training of the pharmacist does not include those branches which enable the physician to diagnose and treat disease, we should, in all practicable cases, decline to give medical advice, and refer the applicant to a regular physician.

"8. The growing demands of the age require that those who follow the profession of pharmacy should be educated to a higher standard. Therefore, we consider it our duty, individually and collectively, to encourage the advancement of knowledge in our profession generally, and particularly by stimulating our assistants to attend the lectures of a college of pharmacy, and by aiding and assisting them to do so.

"9. Considering it expedient that some rule should be adopted to enforce the provisions of our code, we hereby agree, if any just cause of complaint of its violation be found against a member of this Association, to bring the case before a special, or the next general meeting of the Association, when the accused, after being heard in his own defense, may be expelled by a vote of two-thirds of all the members present."

This code is more nearly applicable to present-day conditions than any which have been thus far quoted. Section 3 is particularly interesting as showing the attitude of our professional brethren of nearly half a century ago upon the alcohol question.

In 1877 a committee of three physicians and three pharmacists of the City of Antwerp drew up interprofessional rules, which give us a starting point for medico-pharmaceutical ethics:

#### "RULES OF THE ANTWERP MEDICAL AND PHARMACEUTICAL PROFESSIONS.

"1. Each member of the two branches of the medical corps should abstain from interfering with the prerogatives of the other; the physician should not furnish any medicine to his patients, and the pharmacist should avoid giving medical advice; the pharmacist may, within the limits of the law, furnish medicines which may be asked for, such as a cough mixture, a sedative draught, a purgative, copaiba capsules, etc., without, however, advising that such or another preparation was more suitable.

"2. The physician and pharmacist should conduct themselves toward each other with the sentiments of kindness and confraternity, which unite the members of a family, and should avoid, in the presence of the client, every kind of reflection and unfair remarks; a conciliatory council should be appointed for smoothing such disputes as may arise on the subject of medical practice.

"3. Finally, physicians should, as rarely as possible, prescribe secret remedies and pharmaceutical specialties; on the other hand, pharmacists should abstain from advertising them."

Our own fellow member, the late Henry P. Hynson, formulated a code of ethics for the Maryland Pharmaceutical Association which was a distinct advance over the former codes in that it takes into account the complex relationships and interdependencies of modern pharmacy.

#### "HYNSON'S CODE OF ETHICS.

"For the guidance of members of this Association and all pharmacists of the State who may wish to follow the higher practice of their profession:

##### *"Respecting the Pharmacist Himself.*

"1. He should, by study, experimentation, investigation and practice, thoroughly qualify himself to fully meet and competently transact the daily requirements of his vocation.

"2. He should possess a good moral character, and should not be addicted to the improper

use of narcotic drugs nor the excessive use of alcoholic stimulants.

"3. He should constantly endeavor to enlarge his store of knowledge; he should, as far as possible, read current pharmaceutical literature; he should encourage all such pharmaceutical organizations as seem to be helpful to the profession, and so deport himself as not to detract from the dignity and honor of the calling which this Association, especially, is trying to elevate.

"4. He should accept the standards and requirements of the U. S. Pharmacopoeia and the National Formulary for the articles of *Materia Medica* and the preparations recognized by these publications and, as far as possible, should promote the use of these and discourage the use of proprietaries and nostrums.

*"Respecting the Pharmacist's Relations with Those from Whom He Makes Purchases.*

"1. He should deal fairly with these; all goods received in error or excess and all undercharges, should be as promptly reported as are shortages and overcharges. Containers not charged for or not included in the charge for contents should be carefully returned, or, if used, should be credited to the party to whom they belong.

"2. He should earnestly strive to follow all trade regulations and rules, promptly meet obligations, closely follow all contracts and agreements and should not encourage or sanction any division of quantity purchases not contemplated in the terms of sale.

*"Respecting the Pharmacist's Relations with His Fellow Pharmacist.*

"1. In this relationship he should, especially, 'do as he would be done by.' He should not make any comment or use any form of advertisement that will reflect upon the members of the profession, generally or specifically. Nor should he do that which will in any way discredit the standing of other pharmacists in the minds of either physicians or laymen.

"2. He should not obtain, surreptitiously, or use the private formulas of another, nor should he imitate or use another's preparations, labels or special form of advertising.

"3. He should not fill orders or prescriptions which come to him by mistake. Prescription containers with copies and labels of another pharmacist upon them may be filled by him upon request, but he must invariably replace the labels with his own, thereby assuming proper responsibility.

"4. He should never request the copy of a prescription from another pharmacist; the owner of the prescription alone being entitled to a copy, is the proper person to ask for it.

"5. He may borrow merchandise from another pharmacist, provided the practice is reciprocal and equally agreeable to both parties; but the better form is to pay a sum for the desired article equal to the cost and half the profit to be obtained.

*"Respecting the Pharmacist's Relations with Physicians.*

"1. He should positively refuse to prescribe for customers except in cases of urgent emergency.

"2. He should not, under any circumstances, substitute one article for another, or one make of an article for another, in a physician's prescription, without the physician's consent.

"3. He should refuse to refill prescriptions or give copies of them when so instructed by the physician.

"4. He should not place copies of prescriptions upon containers unless ordered to do so by the prescriber, even though the patient should request it. Nor should he use any word or label like 'For external use,' 'Poison,' 'Caution,' etc., without due regard for the wishes of the prescriber, provided the safety of the patient and family is not jeopardized.

"5. Whenever there is a doubt as to the correctness of the physician's prescription or directions, he should invariably confer with the physician in order to avoid possible mistakes or unpleasantness; changes in prescriptions should not be made without such conference.

"6. He should never discuss physicians' prescriptions with customers, nor disclose to them their composition.

*"Respecting the Pharmacist's Relations with his Patrons.*

"1. He should seek to enlist and merit the confidence of his customers, which, when won, should be jealously guarded and never abused by extortion or misrepresentation.

"2. He should supply products of standard quality only to patrons, excepting when something inferior is specified and paid for by them.

"3. He should charge no more than fair, equitable prices for merchandise, and prescriptions; the time required for the proper preparation of prescriptions should be duly considered and paid for.

"4. He should hold the safety and health of his patrons to be of first consideration; he should make no attempt to treat diseases nor strive to sell nostrums or specifics simply for the sake of profit.

"5. He should consider the reckless or continued sale of drugs to habitues, the illicit sale of abortive medicines or poisons, to be practices unbecoming a gentleman, a pharmacist or a member of this Association."

In this code we see the constructive thought of a high-minded pharmacist, who evolved something which is essentially different in both form and scope from those which have been previously quoted. His model seems to have been The Principle of Medical Ethics of the American Medical Association, the present form of which was adopted in 1912, and which, like the foregoing is divided into chapters and sections.

At this time it might be appropriate to quote from the Code of Ethics of the American Medical Association in so far as it pertains to pharmacy.

*"Chapter III. Section 4.*

*"Pharmacists.*

"By legitimate patronage physicians should recognize and promote the profession of pharmacy; but any pharmacist, unless he be qualified as a physician, who assumes to prescribe for the sick, should be denied such countenance and support.

"Moreover, whenever a druggist or pharmacist dispenses deteriorated or adulterated drugs, or substitutes one remedy for another designated in a prescription, he thereby forfeits all claims to the favorable consideration of the public and physicians."

This is sound and correct as far as it goes, but it leaves something to be desired as to completeness.

Mr. P. A. Mandebach, the late head of the National Association of Drug Clerks, suggested a code of ethics four or five years ago, which is well worth repeating here:

*"Mandebach's Code.*

"The — — —, recognizing that mutual understanding must exist regarding the ethical and moral principles guiding its members in their personal, professional, and commercial activities, hereby adopts the following code of ethics:

"Section 1. Members of this Association shall regard themselves as being engaged in a business in which there is a well-defined legal and moral duty and obligation toward public health and life, and shall apply all honorable means in upholding the dignity and honor of the business and profession.

"Section 2. The United States Pharmacopoeia shall be accepted as the standard and guide for all official preparations, and a variance from its rules be recognized only in exceptional cases where sufficient authority has proved some other process more reliable in attaining the same end. Nothing herein, however, shall interfere with the filing of prescriptions or the selling of medicines ordered in accordance with foreign pharmacopoeias, officially recognized textbooks, and formularies.

"Section 3. The value of alcohol as a therapeutic agent, and the legal dispensing thereof as such an agent only, is recognized. The sale of alcohol as a beverage and of unlawful abortives or habit-forming drugs shall be considered sufficient grounds for expulsion of the offender from membership in the association. The secretary of the association shall then so report this action to the secretary of the State Board of Pharmacy recommending the revocation of the certificate of registration, as provided for by the State Pharmacy Law.

"Section 4. Members shall not be a party to the practice of the commission system or secret formulae between physicians and pharmacists.

"Section 5. Members of this association shall not falsely or maliciously, directly or indirectly, injure the personal or business reputation of a fellow member. Members shall at all times uphold the professional reputation of physicians, in return expecting the same consideration from the medical profession.

"Section 6. In view of the fact that the professional training of the pharmacist does not qualify him intelligently to diagnose and treat diseases, members shall decline to give medical advice, and refer the general public seeking such advice to a regular practicing physician.

"Section 7. Recognizing the dignity of the profession and believing that those who wish to follow commercial and professional pharmacy successfully must be educated to a higher degree,

the association declares itself in favor of prerequisite laws tending to higher standards of pharmaceutical education, and calls upon all members to assist apprentices and assistants in securing adequate collegiate pharmaceutical education.

"Section 8. Members shall be governed in the sale and merchandising to the general public of all patent and proprietary remedies and medicines by all State and national laws relating thereto,

"Section 9. Members shall expose without fear or favor, all corrupt work, methods, and practices found to exist in the business. They shall bring to the attention of the proper authorities all known violations of State and federal laws as applied to pharmacy, public life and health.

Section 10. In order that the provisions of this code be enforced, each member shall report to the executive board of this association all infractions of this code by any member. If the charges be sustained, after a fair and impartial trial, the accused being heard in his defense, the secretary shall by order of the executive board, expel such person from membership."

The National Association of Retail Druggists have no Code of Ethics as such, but the Preamble and objects as stated in their constitution are practically equivalent as will be seen from the following:

"WHEREAS, the best interests of the people require a high degree of scientific training and professional standing on the part of retail druggists, and

"WHEREAS, it is the duty of our profession to champion all measures which conserve the health of the individual and the community, and

"WHEREAS, the professional and commercial interests of druggists require for their protection united action, we do form a national organization of retail druggists. To effect the purpose of the organization the following Constitution and By-Laws are adopted:

"Article I—Name.

"The name of this organization shall be 'The National Association of Retail Druggists.'

"Article II—Objects.

"The objects of the Association shall be:

"1. To insist upon such training for our professional work as is commensurate with the demands made upon us and is called for by the close relation of our profession to the health and welfare of the community.

"2. To devise ways and means for maintaining a high standard of professional work.

"3. To promote by every means in our power all measures and all legislation honestly intended to prevent the adulteration of foodstuffs and substances used in the preparation of medicines."

The remainder concerns the commercial phases of the organization.

The most recent contribution to the subject which I have seen and the last which I shall quote, comes to us from far across the seven seas. It is taken from the *Journal of the American Medical Association*, September 22, 1917, with the accompanying favorable introduction:

*"Medicopharmaceutic Ethics.*

"At a conference held in Melbourne between representatives of the Victoria Branch of the British Medical Association and representatives of the Pharmaceutical Society of Australasia, the Pharmacy Board and Pharmaceutical Defense Ltd., the following rules of practice, among others, were adopted. The rules are so common-sense that they are worthy of consideration in this country.

"1. *Prescriptions—Doubtful Interpretations.*—In cases where there is some doubt regarding the interpretation of any prescription, it shall be the duty of the pharmacist dispensing the same to communicate with the prescriber if possible. It is preferable that such communication should be in writing. In cases where it is necessary to telephone to the prescriber, care should be taken to see that the conversation is as private as possible.

"2. *Correction by Prescriber.*—The prescriber in such a case will recognize that the pharmacist is simply performing what is an important part of his professional duty, and will at once cooperate with him in the interests of his patient. He will correct or confirm the prescription. If a correction is necessary, he may request the pharmacist to retain the prescription, and will forward to him the corrected one. As far as possible, verbal corrections should be confirmed in writing.

"3. *The Attitude of Prescriber and Dispenser* should be one of mutual respect and coöperation.

"4. *Unusual Characteristics.*—In cases where a prescription contains (a) an incompatibility, (b) an unusually large dose, (c) a dangerous dose, or possesses some other characteristic of an



unusual nature, the prescriber shall indicate that such peculiarity is intended, and is not inadvertent, by underlining that particular part of the prescription, and initialing the same in the margin.

"5. *Where Prescriber Cannot Be Consulted.*—Where a pharmacist is doubtful of the interpretation of a prescription, and it is not possible to consult the prescriber, he shall, after careful consideration, modify the prescription in accordance with what he believes to be the intention of the prescriber. He should, if possible, subsequently communicate with the prescriber by letter, and inform him of what he has done. Care should be taken to see that such discretion, when exercised, does not interfere with the therapeutic value of the medicine.

"6. *Modifications to Be Noted.*—Where a pharmacist finds it necessary to modify a prescription, under paragraph 5, he should make a marginal note on the prescription indicating the course he has adopted in dispensing the prescription. The marginal note should be as brief as possible.

"7. *Prescribing by Telephone.*—When prescriptions are dictated by telephone, the following rule should be observed: The prescriber should first write out the prescription, and then read it through the telephone to the dispenser. He should request the dispenser to read to him the prescription as taken down, and should, as soon as possible, forward the original prescription to the pharmacist either by post or by the patient.

"8. *Criticism Deprecated.*—It is undesirable that a prescriber should adversely criticize a pharmacist unless he is guilty of some offense in his calling. The pharmacist on his part should refrain from discussing with the patient the prescriber or the merits of his prescription. Matters relating to professional fees or the prices charged for medicines should not be discussed with patients.

"9. *Unsigned Prescriptions.*—When a prescription is received with the 'usual signature,' the pharmacist should ascertain from the patient the name of the prescriber, and, if possible, submit the prescription for his signature before dispensing it so as to relieve the prescriber as well as himself from the risk of penalty. The use of a rubber stamp in lieu of the prescriber's written signature should be avoided.

"10. *Repetition of Prescriptions.*—When it is desired that a prescription should not be repeated, the prescriber should write on the prescription, 'Not to Be Repeated,' or 'To Be Repeated Twice Only,' or any specified number of times. In cases where such directions are given, the pharmacist who dispenses the prescription should indorse the prescription as follows: Supplied (here insert date and pharmacist's signature).

"11. *Spoonfuls—to Be Abandoned.*—With the object of securing greater accuracy in dosage, the use of the words '*teaspoon, dessertspoon, and tablespoon*' in the directions on a prescription should be discouraged. Prescribers should write the dosage in drams or ounces, and patients should be advised to measure the doses in a measure-glass."

An interesting contribution to the subject was made in 1910 when the Delegates from the Medical Society of New Jersey to the U. S. Pharmacopoeial Convention, presented to that body for consideration the following:

*"Ethical Rules for the Guidance of Physicians and Pharmacists in Their Relations with Each Other and with the Public.*

*"Propositions.*—1. Ethical principles or standards of right conduct exist irrespective of their formulation or codification.

"2. Ethical rules are calculated to elevate standards of moral conduct and foster a spirit of harmony between professional men.

"3. A code of ethics is designed not only for the restraint of those who are actuated by unworthy motives, but for the guidance of those, also, who seek to be governed in their actions by high and true principles.

*"The Duties of the Physician to the Pharmacist.*—1. The physician has no moral right to discriminate in favor of one pharmacist to the detriment of another, except for dishonesty, incompetency or unscientific methods of work.

"2. The physician is never justified in receiving from a pharmacist gratuities in return for patronage; in depositing secret formulas with an individual pharmacist, or by word or deed to jeopardize his professional reputation.

"3. The physician may sometimes find it an advantage to the patient to dispense medicine. Yet, in the main it must be regarded as a subterfuge and a hindrance to all interests involved.

The physician should, if practicable, avail himself of the superior technical skill of a trained pharmacist in the preparation and dispensing of medicines.

"4. The pharmacist who recommends drugs or medicines for specific remedial purposes either directly or through the avenues of advertisement thereby exceeds the limits of his profession and commits an act unworthy of his calling.

"5. The pharmacist who consents to diagnose disease or prescribe for patients except where emergencies arise, without a proper medical training, assumes responsibilities for which he is not qualified and justly incurs the disapproval of physicians.

"6. The pharmacist transgresses his true province when for commercial purposes he issues to physicians printed matter setting forth the therapeutic indications for the use of drugs or medicinal preparations. The constituents of a drug or compound together with its chemical and physical properties should be a sufficient guarantee of its utility.

"*The Duties of the Physician and the Pharmacist to the Public.*—7. The combined efforts of the physician and the pharmacist are required to protect the public from the nostrum maker, the pseudo scientific pharmacist, the sectarian physician and drug vendor, and the two should be in continual alliance to demand the extermination of these commercial and mercenary institutions.

"8. The physician and the pharmacist should, as far as possible, limit the multiplication of manufactured proprietary compounds. It must be regarded as reprehensible to encourage the use of these remedies to the exclusion of those which are official in the pharmacopoeias. It is also their plain duty to discourage the use and sale of all medicines which lead to baneful drug habits.

"9. The best interests of the patient are undoubtedly conserved by the custom of physicians to practice rational therapeutics to the exclusion of those methods which tend to the use of many remedies or those of unknown composition; and the supreme effort of the dispensing pharmacist should be to complete the circle of therapeutics by supplying the demands of experimental and chemical teaching with eligible and trustworthy preparations."

This brings some features of present-day practice of both pharmacy and medicine into merited prominence.

In the illustrations that have been given, covering all periods and the practice of many countries, we certainly should have sufficient data for the drafting of a modern code of ethics applicable to present-day pharmacy in its broadest and most complex sense. Many other examples might be quoted for state pharmaceutical associations, etc., but in none of them is there anything essentially new and they are all founded upon one or more of the foregoing examples.

Simplification and conciseness is a desirable quality for which to strive, but beyond a certain point we lose more than we gain when we attempt to condense the material at hand. We must not forget the well-known example of Dr. Oliver Wendell Holmes, to illustrate the complexity of a dialogue between John and Henry, in which he convinces his readers that there are six persons taking part in such a conversation, *viz.*, first, John as Henry knows him; second, John as he knows himself; third, John as his Maker knows him; fourth, Henry as John knows him; fifth, Henry as he knows himself; sixth, Henry as his Maker knows him.

The fundamental data can be simplified no further than:

1. The relation of the pharmacist to the public.
2. The relation of the pharmacist to the physician.
3. The relation of the pharmacist to his fellow pharmacist.

In analyzing the codes studied, from this viewpoint, we find that some are top-heavy in one direction and entirely lacking in another. It is doubtful if any code can be formulated which would not need revision at the end of a decade.

It should be the aim of every pharmaceutical organization to adopt and use as a working guide a code of ethics founded upon sound fundamental principles. This should be freely circulated and kept before the membership by having it printed on each application for membership or upon a separate sheet to be used in connection therewith and it should also be printed in each copy of the Proceedings along with the constitution and by-laws. There are many associations, I know, including our own, where the majority of the members not only have never seen the code of ethics, but would not be able to find it unless they happened to own a complete set of the Proceedings of the organization, and even then only after some difficulty.

(To be continued.)

3 Bloomingdale Ave., Saranac Lake, N. Y.; B. H. Berning, 180 Main St., Port Washington, N. Y.; Louis B. Decker, 373 Main St., Catskill, N. Y.; Ephraim Freedman, 172 St. John's Place, Brooklyn, N. Y.; Harry Glick, Central Valley, N. Y.; Samuel A. Goldstin, 200 Audubon Ave., New York City; Ernest Molwitz, 2709-8th Ave., New York City; Joseph L. Weil, 235 Greenwich St., New York City; Joseph Wolfson, 835 Columbus Ave., New York City.

*Education & Legislation.*—C. L. Eddy brought in a lengthy report, which after some discussion was received with the thanks of the Association.

*Member of the Council.*—Dr. Hostmann reported upon several problems before the Council.

At this time Professor and Mrs. LaWall entered the meeting room and the chairman extended to them the privilege of the floor. Professor LaWall responded with a few words.

*Communications.*—A letter of resignation was read from Mr. David Westheimer which was ordered accepted.

#### NEW BUSINESS.

Dr. Diner announced that the New York Retail Druggists proposed erecting a building, the Academy of Pharmacy, to be the home of organized pharmacy of New York City and that it was hoped that the Branch would appoint a committee to work with committees from other local associations to devise ways and means for eventually accomplishing such an object. It was moved, seconded and carried that a committee be appointed for this purpose.

President Anderson thereupon appointed Drs. Diner, Fischelis and Mayer.

It was moved, seconded and carried that the Secretary be empowered to send to the members of the Branch a list of proposed additions and deletions of the new Pharmacopoeia along with such a list referring to the National Formulary.

Dr. Lascoff now reminded the members that this was Red Cross Week and hoped that all would join in the work.

HUGO H. SCHAEFER, *Secretary.*

## PHARMACEUTICAL ETHICS.

(Continued from p. 910, November issue.)

A HISTORICAL REVIEW OF THE SUBJECT WITH EXAMPLES OF CODES ADOPTED OR SUGGESTED AT DIFFERENT PERIODS, TOGETHER WITH A SUGGESTED CODE FOR ADOPTION BY PRESENT-DAY ASSOCIATIONS.

BY CHARLES H. LAWALL.

A great part of the advance which medicine has made in the past century has been undoubtedly due to the development of a professional class consciousness through the medium of medical ethics, a subject which is instilled into every member of the profession from the time when he first becomes a student, and which he meets at every turn during his active years of practice.

We have much to gain, therefore, in prosecuting diligently the effort to make pharmaceutical ethics mean something vital to the every-day welfare and the ultimate advantage of every member of the pharmaceutical profession. With this object in view I hereby suggest the following as a basis for discussion, in the hope that it will result in the prompt adoption of a code of pharmaceutical ethics that will meet the requirements of present-day conditions, for our association and any others which care to take advantage of it and adapt it to their particular needs.

### PRINCIPLES OF PHARMACEUTICAL ETHICS.

#### CHAPTER I.

##### *The Duties of the Pharmacist in Connection with his Services to the Public.*

Pharmacy has for its primary object the service which it can render to the public in safeguarding the handling, sale, compounding and dispensing of medicinal substances.

The Practice of Pharmacy demands knowledge, skill and integrity on the part of those engaged in it. Pharmacists are required to pass certain educational tests in order to qualify for registration under the laws of most of our states. These various states restrict the practice of Pharmacy to those qualifying according to the regulatory requirements thereby granting to them a special privilege which is denied other citizens.

In return the States expect the Pharmacist to recognize his responsibility to the community and to fulfil his professional obligations honorably and with due regard for the physical well being of society.

The Pharmacist should uphold the accepted standards of the United States Pharmacopoeia and the National Formulary for articles which are official in either of these works and should, as far as possible, encourage the use of these official drugs and preparations and discourage the use of proprietaries and nostrums. He should use only pure drugs and chemicals of the best quality obtainable for prescription filling and for sale when the articles are to be used for medicinal purposes.

He should neither buy, sell nor use substandard drugs except for uses which are not in any way connected with medicinal purposes. When a substance is sold for technical use the quality furnished should be governed by the grade required for the stated purpose.

The Pharmacist should be properly remunerated by the public for his knowledge and skill when used in its behalf in compounding prescriptions, and his fee for such professional work should take into account the time consumed as well as the cost of the ingredients.

The Pharmacist should not sell or dispense powerful drugs and poisons indiscriminately to persons not properly qualified to administer or use them, and should use every proper precaution to safeguard the public from poisons and from all habit-forming medicines.

The Pharmacist, being legally entrusted with the dispensing and sale of narcotic drugs and alcoholic liquors, should merit this responsibility by upholding and conforming to the laws and regulations governing the distribution of these substances.

The Pharmacist should seek to enlist and merit the confidence of his patrons and when this confidence is won it should be jealously guarded and never abused by extortion or misrepresentation or in any other manner.

The Pharmacist should consider the knowledge which he gains of their ailments, and the confidences of his patrons regarding these matters, as entrusted to his honor, and he should never divulge such facts unless compelled to do so by law.

The Pharmacist should hold the health and safety of his patrons to be of first consideration; he should make no attempt to prescribe or to treat diseases or strive to sell nostrums or specifics simply for the sake of profit. When an epidemic prevails, the Pharmacist should continue his labors for the alleviation of suffering without regard to risk of his own health and without consideration of emolument.

He should keep his store clean, neat and sanitary in all its departments and should be well supplied with accurate measuring and weighing devices and other suitable apparatus for the proper performance of his professional duties.

It is considered inimical to public welfare for the Pharmacist to have any clandestine arrangement with any physician in which fees are divided or in which secret prescriptions are concerned.

Pharmacists should primarily be good citizens, should uphold and defend the laws of the State and nation. They should inform themselves concerning the laws, particularly those relating to food and drug adulteration and those pertaining to health and sanitation and should always be ready to cooperate with the proper authorities having charge of the enforcement of the laws.

The Pharmacist should be willing to join in any constructive effort to promote the public welfare and he should share his public and private conduct and deeds so as to entitle him to the respect and confidence of the community in which he practices.

#### CHAPTER II.

##### *The Duties of the Pharmacist in His Relations to the Physician.*

The Pharmacist even when urgently requested so to do should always refuse to prescribe or attempt diagnoses. He should, under such circumstances, refer applicants for medical aid to a reputable legally qualified physician. In cases of extreme emergency as in accident or sudden illness on the street in which persons are brought to him pending the arrival of a physician such prompt action should be taken to prevent suffering as is dictated by humanitarian impulses and guided by scientific knowledge and common sense.

The Pharmacist should not, under any circumstances, substitute one article for another, or one make of an article for another in a prescription, without the consent of the physician who wrote it. No essential change should be made in a physician's prescription except such as is warranted by correct pharmaceutical procedure, nor any that will interfere with the obvious intent of the prescriber, as regards therapeutic action.

He should follow the Physician's directions explicitly in the matter of refilling prescriptions, copying the formula upon the label or giving a copy of the prescription to the patient. He should not add any extra directions or caution or poison labels without due regard for the wishes of the prescriber, providing the safety of the patient is not jeopardized.

Whenever there is doubt as to the interpretation of the physician's prescription or directions, he should invariably confer with the physician in order to avoid a possible mistake or an unpleasant situation.

He should never discuss the therapeutic effect of a physician's prescription with a patron or disclose details of composition which the physician has withheld, suggesting to the patient that such details can be properly discussed with the prescriber only.

Where an obvious error or omission in a prescription is detected by the Pharmacist, he should protect the interests of his patron and also the reputation of the physician by conferring confidentially upon the subject, using the utmost caution and delicacy in handling such an important matter.

### CHAPTER III.

#### *The Duties of Pharmacists to Each Other and to the Profession at Large.*

The Pharmacist should strive to perfect and enlarge his professional knowledge. He should contribute his share toward the scientific progress of his profession and encourage and participate in research, investigation and study.

He should associate himself with pharmaceutical organizations whose aims are compatible with this code of ethics and to whose membership he may be eligible. He should contribute his share of time and energy to carrying on the work of these organizations and promoting their welfare. He should keep himself informed upon professional matters by reading current pharmaceutical and medical literature.

He should perform no act, nor should he be a party to any transaction which will bring discredit to his profession or in any way bring criticism upon it, nor should he unwarrantedly criticise a fellow pharmacist or do anything to diminish the trust reposed in the practitioners of pharmacy.

The Pharmacist should expose any corrupt or dishonest conduct of any member of his profession which comes to his certain knowledge, through those accredited processes provided by the civil laws or the rules and regulations of pharmaceutical organizations, and he should aid in driving the unworthy out of the calling.

He should not allow his name to be used in connection with advertisements or correspondence for furthering the sale of nostrums or accept agencies for such.

He should courteously aid a fellow pharmacist who in an emergency needs supplies. Such transactions had better be made in the form of a sale rather than by borrowing, as is often the custom.

He should not aid any person to evade legal requirements regarding time and experience by carelessly or improperly endorsing or approving statements to which he would not be willing to make affidavit.

He should not undersell a fellow pharmacist for the sake of commercial advantage.

He should not imitate the labels of his competitors or take any other unfair advantage of merited professional or commercial success. When a bottle or package of a medicine is brought to him to be refilled, he should remove all other labels and place his own thereon unless the patron requests otherwise.

He should not fill orders which come to him by mistake, being originally intended for a competitor.

He should never request a copy of a prescription from another pharmacist. It is the patient's duty to attend to this if he wishes to make a change in pharmacists.

He should deal fairly with manufacturers and wholesale druggists from whom he purchases his supplies; all goods received in error or excess and all undercharges should be as promptly reported as are shortages and overcharges.

He should earnestly strive to follow all trade regulations and rules, promptly meet all obligations and closely adhere to all contracts and agreements.

It is a question to be decided by each association adopting a code of ethics whether to add a penalizing clause, recommending expulsion for violation. It is doubtful whether such action

is advisable. The adoption of a code of ethics or rather the complete fulfilment of all its requirements is a matter which requires time to bring about. Certain sections of the Medical Code of Ethics are openly and continuously violated by physicians in communities where conformity to local custom causes deviation. This, however, does not interfere with the fact that medical ethics as a whole are lived up to by the great majority of practicing physicians and constitute a powerful factor in maintaining the high standing of the members of the profession and the esteem in which they are regarded by the public.

When American pharmacists shall have subscribed to such a code as is outlined above it is believed that the medical societies will cooperate in the formulation of a code of medico-pharmaceutical ethics along the lines of the draft quoted from the Australian association, and both professions, as well as the public, will be benefited by the development of an *entente cordiale* which already exists between thousands of individual members of the two professions, but which has never shown itself in the actions of the organized bodies representing medicine and pharmacy.

There are those in pharmacy who misunderstand what is meant by ethics and think it is something visionary and unattainable and incompatible with business success. To such I would refer the subject for more earnest and thorough study, and particularly would I ask them to read the following quotation from the address of a prominent medical man discussing the subject at one of our own meetings some years ago.

"I have no reproach to cast upon trade. Trade is necessary; trade has built up the country, and will continue to build up the country. Trade has given to the physician and the pharmacist the products of distant lands, which the individual could not get and gather for himself, and trade and pharmacy are often, on the part of the individual, necessarily associated. But I do quarrel—I have an intense and professional and unending quarrel with those who wish to say that pharmacy is only a trade, and a still more bitter quarrel with those who reply to all questions of justice and progress and truth and honor: 'Oh! that is a matter of ethics and this is a matter of business.'

"Now, my father was a man of business, and I take it as a personal insult to his memory when anybody says that business and ethics cannot be carried on hand in hand; that there is anything whatever in trade and commerce which necessarily imposes falsehood and lying and dishonesty upon man. It is not true, and the men who should resent it most are the men of pure business themselves. The profession of pharmacy and the business of pharmacy and the trade of pharmacy can go along altogether upon the most noble principles and upon the strictest ethics; and unless there is a stringent standard of ethics held by all such associations as this and its branches, and unless that standard is strictly enforced upon all its members, upon the manufacturing firms and upon the individual pharmacists and upon the pharmacists' clerks, upon the professors in the colleges and the authors of textbooks, and the students and all—I say, unless this standard is held up and its rules enforced, then pharmacy as a science is doomed to disappear, and the trade of furnishing drugs will fall to the level of the patent medicine business, and I know of no lower one."

Those who have acted in the spirit of ethical practice have been the greatest contributors to pharmaceutical progress. That spirit can be multiplied many fold if a common ideal of professional and trade procedure is adopted.

The foregoing study has been made in the hope of starting a discussion of the subject that will lead to the adoption, by our own and other associations, of some practical, comprehensive code which will have the support of pharmacists everywhere and which will be a vital factor in the association work of the future.