

Contributed and Selected

ADVANCEMENT OF PROFESSIONAL STANDARDS THE RATIONAL MEANS FOR THE ADVANCEMENT OF THE INTERESTS OF PHAMACISTS.

G. H. MEEKER, PHAR. D., LL. D.

This paper is primarily a plea for the frank and unreserved recognition of the real conditions which confront pharmacists; and for an effort on the part of the American Pharmaceutical Association to encourage a movement to compel all young men who are about to enter the profession of pharmacy to be so thoroughly equipped in its scientific branches—especially chemic and pharmaceutical technology; general, pharmacognostic, sanitary, clinic, physiologic and research laboratory methods; drug inspection; and bacteriology—that the *laboratory of the pharmacist* shall expand from its now comparatively limited field of dispensing and minor preparations to that truly comprehensive abode of scientific pharmacy which is its legitimate and profitable goal—in which the pharmacist will be equally competent to exercise an intelligent control over the manufacturer; to act as the diagnostic as well as the dispensing adjunct of the physician; or to serve the general chemic, as well as pharmaceutical, needs of the public at large. Secondarily, there is the hope that practicing pharmacists may come to perceive the advantages of taking into their employ only those young men who have had the benefit of comprehensive professional training. Finally, the paper dwells upon certain topics which are collateral to the main issues.

Throughout the series of efforts that are being made by the well-wishers of the profession for the advancement of the material advantages of pharmacists, one observes a lack of unanimity of opinion as to the proper mode of procedure, and could well be impressed with the thought that there is a great deal of groping in the dark. If efforts were really being directed upon fundamentally correct lines, such lack of unanimity of purpose should not be observed. It is submitted here that true progress for the pharmacist is only to be found through first recognizing the pharmacist's own shortcomings and then correcting them. Such a procedure requires courage, for the pharmacist is only human, and his natural self love would indicate that he should welcome all suggestions that he himself is thoroughly praiseworthy and that the ills from which he feels he suffers come to him exclusively because of external conditions. Conversely, he resents any imputation against his own complete rectitude. The indefinite character of the work being done for the advancement of pharmacists really arises from the fact that he and his well-wishers are loath to attack the problem from the radical standpoint of unreserved self-analysis. If, however, the pharmacist but consider briefly the experience of the medical profession in this regard,

he will see how advantageous it has been to that profession to attack their professional problems from such a standpoint.

It is only a comparatively few years ago that practically anyone could lawfully practice medicine, and many of the medical practitioners had obtained their knowledge of medicine merely through having been handy men about physicians' offices. In those days the mere fact that a man was a practitioner of medicine brought him no particular public respect. Those men in the profession who were greatly respected achieved the dignity because of their own merits and not because of the fact that they belonged to a profession which in itself commanded respect. The fact that medical men have raised themselves to a position where the mere fact of being a licensed medical practitioner commands the esteem of the public, is due to the fact that in these days a man cannot become a medical practitioner except he has complied with the conditions of such a difficult series of preliminary requirements as render it impossible for an ignoramus or a gross incompetent to occupy a place in the profession. This state of affairs has been brought about primarily through the selfishness of physicians. The physicians who practiced under the former conditions, seeing how easy it was numerically to overload the profession, and suffering from the false pretensions of unworthy practitioners, sought from such selfish reasons to reduce the number and improve the quality of those practicing medicine by imposing difficult conditions upon such as were about to enter the profession. The conditions of medical licensure have been so increased that today, as a rule, a man requires about four times as much preliminary education in order to become a student of medicine, as is required from those who desire to become students of pharmacy; and the standard education in medical colleges embraces about twice as much collegiate work as is demanded of students of pharmacy. The result of all of this has been to minimize the number of those who can enter the profession of medicine; vastly to increase their efficiency; and resultantly to command public respect and increased fees for the profession generally.

The present medical standards are, however, not the final standards, as the progress is toward still more difficult standards; and there is today a large and influential element in the medical profession which is laboring to the end that only college graduates in arts and sciences shall be eligible to become students of medicine, and that the medical courses themselves shall be of five years' duration instead of four. It is asserted with no fear of successful contradiction, that pharmacists would be taking the very best course for their own advancement should they follow this example of their medical brethren. If the pharmacists of America would consult their own selfish interests—remember that they themselves are already within the folds of the profession, and would, of course, so remain—and would bend their efforts towards influencing state boards of pharmaceutical examiners notably to advance their requirements of preliminary education, of pharmaceutic education, and of state board examinations, they would at once minimize the number of men entering the profession of pharmacy; and would insure that those who do enter the profession would be of such a character as universally to deserve and command the public respect and support. The program adopted should admit only high school graduates to schools of pharmacy; and the courses of instruction in pharmaceutic colleges should at

least equal three college years of eight months full time each, which is the standard of dental colleges. State board examinations should correspond. It is very likely that any standards for entering the profession of pharmacy which would fall short of the standards thus briefly stated, would be ineffective for producing satisfactory results in the premises.

In the foregoing, consideration has only been given to the interests of pharmacists. In all such programs, however, it must never be forgotten that the first interests are the public interests. But the proposed program fully conserves the public interests; and, hence, fulfills the basic condition. As a matter of fact, under present circumstances the public interests are not conserved by pharmacists. In the United States there now exist State pharmaceutical licensing acts and State and Federal pure drug laws which can only logically be interpreted to mean that when a licensed pharmacist vends drugs to a purchaser, the purchaser has the right to assume a contract between himself and the pharmacist, in which contract the pharmacist agrees to vend only such drugs as he knows *of his own knowledge* to comply with the pure drug laws. The pharmacist cannot escape this responsibility. He is licensed by the various commonwealths specifically to protect the public interests in this as in other regards, and the responsibility unquestionably rests upon him. It is sad but true to say that the pharmacist is not keeping his compact with the public. He habitually shirks his duty in this regard while hiding behind the weak defense that he purchases his drugs from manufacturers under the manufacturers' guarantee that the drugs comply with the laws. The manufacture, however, is only responsible to the pharmacist. The public knows nothing and cares nothing about the manufacturer: its dealings are exclusively with the pharmacist. The manufacturer himself has simply exploited the pharmacist in his weakness, and the pharmacist in yielding to the weak claim that he has the manufacturer's guarantee, is not only being false to the public, but also selling his birthright for a mess of pottage. Should the pharmacist continently subject the manufacturers' guarantees to analytic inspection and control, he would be astonished to find how often U. S. P. standards are violated. Such inspection would soon result in the elimination of the smug fraud which under present conditions is alas too frequent.

If we analyze the ills under which pharmacists suffer, the really potent ones may be tabulated as follows: Too many drug stores; abuses by manufacturers; dispensing by physicians; unethical competition of unworthy pharmacists; lack of due respect accorded by the medical profession and by the public to the average pharmacist; tendency on the part of students of pharmacy to regard pharmaceutical licensure rather than professional excellence as their goal; and predominance of the mercantile activities of pharmacists over their professional activities—all combining to make the pharmacist's position less profitable, less dignified and less happy than it should be.

It is submitted that should the state boards of pharmaceutical examiners demand standards such as above proposed, such action would automatically and progressively remedy the stated ills. Thus there would be an immediate reduction in the number of new drug stores established, owing to the fact that fewer licenses would be issued.

Abuses by manufacturers would be inhibited because the entry into the profession of pharmacy of men so well educated as proposed would be certain to bring to bear upon the manufacturers such a fierce light of intelligent criticism that sordid manufacturers would be compelled to reform themselves and to occupy their proper spheres as economically necessary servants of the retailers rather than to continue as their covert misleaders or masters.

With regard to subservience to manufacturers, it may be said that while manufacturers are undoubtedly necessary in the drug trade, they are not necessary to the present extent. Retailers have become so accustomed to purchasing preparations from the manufacturers, that their tendency has become to regard practically all preparations as economically necessarily purchased from the manufacturers. The truth of the matter is intermediate. Such preparations as can from the very nature of things be more economically purchased from the manufacturers, should be so purchased. But there are many preparations now purchased from the manufacturers which could be prepared to better commercial advantage in the laboratory of the apothecary—provided he arose to his opportunity and constantly maintained an active laboratory organization. The complete collegiate training in pharmacy which is advocated in this paper would be largely along the lines of chemist laboratory training. The graduates of such courses would necessarily be in a better position to begin active competition against manufacturers than students trained according to the present standards. Under advanced standards, no doubt each drug store would have its own laboratory, fully equipped to perform all of the analytic and manufacturing functions which would normally pertain to the drug store laboratory. Furthermore, intelligent criticism would no doubt result in the establishment of coöperative laboratories conducted by and devoted exclusively to the interests of the retailers; and in which all goods offered by manufacturers and wholesalers would be subjected to chemical analysis and control, so that only such goods would be recommended to the individuals thus working coöperatively, as would properly meet their established standards. The result would be that mercenary manufacturers would soon be subjected to such a black-list program as would make it impossible for them to remain in business.

Dispensing by physicians can only be eliminated through the concerted moral influence exerted by an enlightened pharmaceutic profession upon manufacturers, public and physicians. This influence would be exerted by demands upon the manufacturers; by a propaganda of education of the public; and by the observance of a correct code of ethics between two mutually esteemed professions—obedient to which code of ethics the pharmacist would refrain from counter prescribing as rigidly as the physician from office dispensing.

Unethical competition is always fostered by low professional standards. It never thrives when the professional standards are high and when the light of an intelligent public and professional sentiment is directed upon it.

Since the present lack of suitable respect for pharmacists is due simply to the low professional standards, as soon as the public shall learn of the elevation of the standards to a high level, on a parity with the professions of law and medicine, it will not be slow to give its recognition to the same. Indeed, so quick is

the public to recognize real merit, that an examination into the advances that have been made by pharmacists will show how hearty has been the reciprocation of the public in the past efforts of pharmacists for advancement. It need only be cited that the public has cheerfully agreed to the principle of licensure by state examining boards; and it has cheerfully given its moral support to all of the efforts that have been made by the pharmacist for the suppression of illegal traffic in drugs and for the adoption of legal standards to which the drugs must comply. These standards, be it noted, are the standards set by the pharmaceutic profession for itself in the United States Pharmacopœia and the National Formulary, both of which were recognized by the Federal Government in connection with the present Federal Pure Food and Drugs Act. Indeed, the public has in this way given to the United States Pharmacopœia and to the National Formulary a legal position which they can scarcely be deemed properly to occupy, for the reason that the effect of this legal recognition is to delegate the legislative powers of the people to the unofficial committees who set the standards established by the Pharmacopœia and Formulary. With simply casual exceptions, even the profession is forced to remain in the dark with regard to the standards of the United States Pharmacopœia. The Revision Committee in publishing the Pharmacopœia merely specifies the standards and publishes no volume in which it informs the profession and the public as to the reasons for the adopted standards. There is a crying need for a supplement to the Pharmacopœia in which with respect to each standard set in the Pharmacopœia the reason for that standard should be clearly stated. Unless this is done, the conclusions reached by the Revision Committee are in the nature of star chamber proceedings, the results of which proceedings must be blindly accepted by the general profession and public. Under such circumstances the profession must be justified in feeling that an insult is offered to its intelligence, in that it must perforce accept, arbitrarily, scientific conclusions in the absence of the scientific premises upon which they are based. Further, there remains the danger that individuals of the Revision Committee might consciously or unconsciously be subject to the machinations of designing manufacturers such that standards might be set high or low according to certain selfish interests. Such danger would be at once eliminated if the reasons for the standards were officially set forth for the information and free criticism of the whole profession.

There is no doubt that all colleges of pharmacy are today suffering from the fact that the student fixes his attention upon the securing of his license to practice pharmacy; that he pursues instruction in various scientific branches—notably in analytic chemistry, pharmacognosy, and chemic and pharmaceutic technology—because he realizes that he must possess a certain amount of information in these scientific subjects in order to be able to pass the state board examinations. As soon as the candidate becomes a licentiate he too commonly devotes himself to the merely mercantile aspect of his profession, and relies upon the manufacturer to furnish the really scientific knowledge which he himself should have acquired and professionally applied. The trouble is that the preliminary educational requirement and the college training received by being adjusted to the inadequate established state board standards fail to carry the student to that excellence in scientific knowledge which would cause him to feel entirely competent himself to

handle the immense scientific problems of the drug trade of today. If, instead of stopping short of this standard of excellence, the preliminary education and pharmaceutical collegiate training were extended sufficiently, the graduate would no longer consider himself a mere tyro in the scientific aspects of the profession, but would feel fully competent to stand upon his own qualifications.

The unfortunate predominance of the mercantile side of the retail drug trade over the professional side, is due again to this same difficulty of insufficient training. The business of the drug store laboratory, if it fully perform its mission, requires such an extraordinarily complete scientific training that, with the usual training of the present day, those who must confront these problems are appalled by their immensity, weakly submit to the domination of the manufacturer, and if they ever were competent to make a beginning along independent lines and to progress from that beginning to its full fruition, their initial possibilities wither and die from inanition. There is no remedy for this condition except to prohibit the entrance into the profession of all except those who are so reasonably well qualified that they are in the best sense competent to begin and continue the attack upon their great problems.

In conclusion, it may be said that there are numerous opportunities (now neglected) for the employment of the talents of thoroughly scientific pharmacists. One of the most attractive of these avenues has already been suggested to the profession in the field of clinic analysis. It has been proposed to have a joint examining committee designated by the American Medical Association and the American Pharmaceutical Association. The duty of this committee would be to examine and issue certificates to those who have passed special examinations and have so become entitled to call themselves *certified clinic analysts*. Men who had run the gauntlet of these examinations would at once receive the confidence of the medical profession, which would soon learn to submit to them, for chemic and microscopic examination, urine, sputum, etc., analyses of which are so essential to the practice of medicine; which analyses the physicians are too busy or too unpracticed to perform; and which analyses should properly be made in the drug store laboratories. The respect and good feeling between the professions of medicine and pharmacy which would be engendered by this favorable relationship, cannot be overestimated.

A great change is at present imminent in the materia medica. Owing to the facility with which those schooled in synthetic organic chemistry are able to turn out new synthetic drugs, the drug market has been flooded with a whole host of so-called remedies, many of which, after a brief vogue (secured perhaps through clinic reports influenced by purchase) disappear wholly or completely from view. The pharmacist is thus compelled to carry an immense line of unprofitable goods, while the public health is exploited and jeopardized in wholesale therapeutic experimentation. Many of these synthetics are also the subject of unjust product patents issued to citizens of foreign countries which do not grant equal patent rights to American citizens. The intelligent criticism of a great body of scientifically trained pharmacists would undoubtedly aid in narrowing the materia medica to rational lines, and would be potent in influencing Congress so to amend the patent laws that aliens would be denied greater patent rights in the United

States than would be granted to the citizens of the United States in the aliens' native lands.

In view of all of the foregoing, it is recommended that the American Pharmaceutical Association adopt the following resolutions:

Resolved, That the Committee on Education and Legislation is instructed to conduct a campaign having as its purpose the adoption of a uniform standard for pharmaceutic licensure throughout the United States: and that this standard shall, as a minimum, be a preliminary education equivalent to graduation from a standard high school, a pharmaceutic collegiate education of three years of eight months each, and correspondingly searching state board examinations.

Resolved, That the Committee on Education and Legislation of the American Pharmaceutical Association is instructed to conduct a campaign having as its end the establishment of a joint committee of the American Pharmaceutical Association and the American Medical Association, to examine applicants who desire to have the right to publish themselves and do business as certified analysts.

Resolved, That the Committee on Education and Legislation of the American Pharmaceutical Association is instructed to conduct a campaign having as its end the establishment of patent reciprocity between the United States and foreign countries, so that citizens of foreign countries shall be denied by the United States greater patent rights than the citizens of the United States would be granted by the respective foreign countries.

Resolved, That the American Pharmaceutical Association recommends to the Committee on Revision of the United States Pharmacopœia, that they shall issue a supplement to the Pharmacopœia, in which supplement there shall be set forth intelligibly the reason for each requirement of the Pharmacopœia, especially for the standards of purity and strength of the substances of the Pharmacopœia.

Resolved, That it is the sense of the American Pharmaceutical Association that in the traffic in drugs between the public and the retail druggists, the retail druggists are responsible to the public for the adherence of their vended Pharmacopœia and Formulary preparations to the established standards, and that the American Pharmaceutical Association recommends that pharmacists should individually or co-operatively subject all articles so vended to analytic inspection and control.

MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA.

THE PHARMACOPŒIA, THE PHARMACIST AND THE PHYSICIAN.

E. GOODMAN, PH. G., M. D.

The experience of a lifetime in the field of pharmacy and medicine, convinces me that in the last decades, we have pursued a mistaken policy. The aim of pharmacists has been to haul the public in the same wagon with the physician, whereas each should have been carried in a separate vehicle.

The present relation of physicians and pharmacists is an anachronism. The inception of the Pharmacopœia was due to the needs of physicians, who at that time had little or no knowledge of chemistry, materia medica, pharmacognosy and therapeutics, but depended implicitly on the special training and learning of the pharmacists for the means of medication.

The outcome of this status was that the physicians and pharmacists got together, the physicians naming the remedies of their choice and the pharmacists elaborating ways and means to produce the most potent and palatable preparations from the crude drugs. The selected list of remedies was then assembled into a work and