

## SECTION ON EDUCATION AND LEGISLATION

### PHARMACOLOGY AND THE RECOGNITION OF PROFESSIONAL PHARMACY BY THE UNITED STATES GOVERNMENT.\*

BY FRANCIS EDWARD STEWART.

The failure of the Government to recognize pharmacy by providing a place for a representative on the Council of National Defense, or providing a general pharmaceutical board similar to the General Medical Board of the Council of National Defense or providing a pharmaceutical corps in the United States Army was strongly protested by the pharmaceutical and drug interests of the entire United States. The action of Professor Frederick J. Wulling, President of the American Pharmaceutical Association, in this connection is already a matter of record and is, therefore, well known to the membership of the Association. The Committee on National Defense appointed by Professor Wulling met at Washington, Wednesday, May 2, in conjunction with a similar committee appointed by the National Drug Trade Conference. Mr. Samuel L. Hilton, chairman of the A. Ph. A. Committee, presided.<sup>1</sup>

At this meeting the National Retail Drug Association was represented by its legal counsel, Eugene C. Brokmeyer, Esq., Washington, D. C., who proposed an alignment of the entire drug interests of the United States to secure recognition by presenting a bill to Congress on the subject. This suggestion was modified and incorporated in a resolution offered by Professor James H. Beal, suggesting that a plan be adopted, placing before the Government authorities a carefully studied out prospectus showing how pharmacy and the several industries represented by the chemical and drug trade could be of service to the Government during the war, and also suggesting that a representative of the drug interests should be made a member of the Advisory Commission of the Council of National Defense. This motion was seconded and unanimously carried.

Mr. Joseph W. England, secretary of the Council of the A. Ph. A., in a letter addressed to the editor of the *Journal of the American Medical Association*, published June 16, 1917, called attention to the fact that there is no provision whatever for a pharmaceutical corps in the military organization. In the same edition of the *Journal of the A. M. A.* appeared an editorial endorsing the suggestions in regard to the establishment of a pharmaceutical corps in the United States Army. A letter was published in the *Journal of the A. M. A.* June 23rd, by Dr. S. Solis Cohen of Philadelphia, endorsing the editorial and Mr. England's letter, and suggesting that the physicians write the Medical Department of the Army in support of the movement.

The Section on Pharmacology and Therapeutics of the American Medical Association at its recent annual meeting held in New York City, passed a resolution

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<sup>1</sup> Members of the A. Ph. A. Committee on National Defense: Samuel L. Hilton, Chairman, James H. Beal, J. W. England, Lewis C. Hopp, Caswell A. Mayo, Joseph P. Remington, H. H. Rusby, F. E. Stewart, Henry M. Whelpley.

in favor of establishing such corps and referred it to the House of Delegates. The House of Delegates endorsed the resolution and appointed a committee to consider the subject, of which Dr. Charles H. Mayo, president of the A. M. A., was made chairman.

President Adolph Schmidt of the Pennsylvania Pharmaceutical Association, at the last annual meeting, which was held in Pittsburgh, appointed a Committee on War Defense, of which the following is a list of the members: F. E. Stewart, Phila., Chairman; Julius A. Koch, Pittsburgh; John K. Thum, Phila.; Louis Frank, Wilkes-Barre; and Joseph W. England, Phila.

This committee was appointed in response to a resolution presented by Mr. Joseph England, offered in connection with his paper suggesting the establishment of a pharmaceutical corps in the United States Army.

The various drug interests of Philadelphia assembled at the Philadelphia College of Pharmacy, June 26th, and organized the National Pharmaceutical Service Association, with Mr. Geo. M. Beringer president and Mr. Robert P. Fischelis secretary-treasurer. The Executive Committee appointed consists of the following members of the various associations represented: J. W. England and Walter B. Smith of the Philadelphia Drug Exchange; Ambrose Hunsberger and Eugene G. Eberle of the Philadelphia Branch of the American Pharmaceutical Association; Samuel C. Henry and J. C. Peacock of the Philadelphia Association of Retail Druggists; Henry Kraemer and Robert P. Fischelis of the Philadelphia College of Pharmacy; Dr. W. D. Robinson and Mr. George M. Beringer, ex-officio. This committee is to coöperate with the Committee on War Defense of the Pennsylvania Pharmaceutical Association, of which Dr. F. E. Stewart is chairman, and is now engaged in perfecting a bill for the establishment of a pharmaceutical corps, for presentation to the United States Congress. The title of this bill is "An Act to Increase the Efficiency of the Medical Department of the United States Army, to Provide a Pharmaceutical Corps in the Department and to Improve the Status and Efficiency of the Pharmacists in the Army."

The bill presented by the National Pharmaceutical Service Association is known as the Edmonds Bill. As this bill has been published quite extensively by the pharmaceutical press, you are all familiar with its details. As you know, the bill requires that the membership of the proposed pharmaceutical corps shall consist of graduates of reputable pharmaceutical schools and shall pass a physical and mental examination of a character to insure proper fitness for the service. Also that the proposed pharmaceutical corps shall be a part of the medical corps of the Army. Such requirements place the pharmacist in position to receive a commission in the pharmaceutical corps of the Army, to be promoted to higher rank in accordance with the regulations of the Medical Corps. In the words of the bill:

Any American citizen, graduate of a reputable school of pharmacy, of good moral character and between twenty-one years and forty-five years of age, both inclusive, who can pass the usual physical examination required for appointment in the Medical Corps and the professional examination which shall include tests of skill in practical pharmacy and of proficiency in the usual subjects of a standard school of pharmacy course, may be appointed as a pharmacist in the Pharmaceutical Corps.

An original appointment as pharmacist under this Act shall entitle the appointee to the rank and commission of second lieutenant. After the expiration of the first five years of service, with honorable discharge, the pharmacist may re-enlist at any time within six months from the date

of expiration of such prior service and he may then apply for examination for promotion, and, if his physical examination and the professional examination in subjects of advanced pharmaceutical education are satisfactory he is eligible for promotion to the rank and commission as first lieutenant, Pharmaceutical Corps. After fifteen years of service in the Pharmaceutical Corps, a pharmacist with the rank of first lieutenant Pharmaceutical Corps may apply for examination for promotion. If he successfully pass the necessary examination in post-graduate pharmaceutical studies and, if, in the opinion of the Pharmacist Director such promotion is merited, he shall be promoted to the rank and commission of Captain Pharmaceutical Corps.

The remainder of the proposed Act provides the age limit, necessary physical and educational qualifications for admission to the Corps; states that pharmacist apprentices shall act as assistants to the pharmacists and to the Hospital Corps; provides the method for advancement and promotion of pharmacist-apprentices; authorizes the Secretary of War to appoint boards of three examiners to conduct professional examination described in the Act; provides for the transfer of pharmacists and druggists now ranking as master hospital sergeant, hospital sergeant, sergeant first class and sergeant, by which they may be transferred to the Pharmaceutical Corps; and also provides for as many contract pharmacists as may be necessary for emergencies, said contract pharmacists not being permitted to carry commission or right of retirement in accordance with the Army regulations.

Sections are also included in the proposed Act to fix the rank and precedents of the members of the Pharmaceutical Corps, the same to be in all respects the same as in the case of appointees to the Medical Corps of the Army. The proposed Act also provides for fixing the pay of the members of the Pharmaceutical Corps, the pay of the pharmacist apprentice to be \$33.00 per month; that of the pharmacist apprentice first class, with rank of sergeant to be \$37.00 per month; and for each re-enlistment in this service the usual increase allowed in the Army for honorable discharge and re-enlistment. No section has yet been included to fix the pay of the pharmacist director, deputy director, captain and lieutenants, except that all officers of the Pharmaceutical Corps shall receive the same pay, awards and allowances as the officers of corresponding rank and length of service in the Medical Corps of the Army, and shall be eligible to retirement in the same manner and under the same conditions.

As a member of the Committee on National Defense of the A. Ph. A., and chairman of the Committee on War Defense of the A. Ph. A., I have had occasion to confer with prominent members of the Medical Corps of the Army and Navy and find that the suggestion in regard to the establishing of a pharmaceutical corps is meeting with considerable opposition. This opposition is caused in part by the fear that the establishment of such a corps would give dignity and prestige to the nostrum business and prove of very little benefit to professional pharmacy. The cause of the opposition is also due to the belief on the part of many that the present arrangement in relation to the supply of medicinal products and pharmaceutical service is entirely adequate and satisfactory. The objection to officially recognizing pharmacy by establishing a pharmaceutical corps or by any of the other methods suggested, because that such recognition might give dignity to the nostrum business, is well worthy of the consideration of the American Pharmaceutical Association. It is to this phase of the subject that I now beg to call attention. Let us, therefore, first consider what is meant by the nostrum business.

## WHAT IS MEANT BY THE NOSTRUM BUSINESS?

The name "nostrum" is derived from the Latin word, *noster*, ours, and is defined by Webster's Dictionary as "a medicine recommended by its preparer, especially a medicine the ingredients of which are kept secret by the individual or proprietor; a patent medicine; a quack medicine."

The following definition is generally accepted, even by the manufacturers of so-called proprietary medicine, as a correct description of what is meant by a "proprietary or patent medicine."

The expression "proprietary or patent medicine" shall be taken to mean and include every medicine or medicinal compound manufactured, prepared, or intended for the use of man or animal, the name, composition, or definition of which is not to be found in the United States Pharmacopoeia or National Formulary, or which does not bear the name of all of the ingredients to which the therapeutic effects claimed are attributed, and the names of all other ingredients except such as are physiologically inactive, conspicuously, clearly and legibly set forth, on the outside of each bottle, box, or package in which the said medicine or medicinal compound is held, offered for sale, sold, or given away.

According to the above definitions, much of what we are so fond of calling modern pharmacy is in fact the nostrum business, for it certainly partakes of its character. We all recognize under the name "patent medicines" the package goods placed on the market by manufacturing houses and advertised in the newspapers for self-medication, claiming to be specifics, cures or remedies for various diseases. But we have never fully realized the fact that every secret or semi-secret medicinal preparation advertised as a *specific* or *cure* for disease, practically belong to the same category, no matter whether prepared by the manufacturing houses, or retail druggists, or whether advertised in the newspapers, or in the medical journals, or whether advertised (recommended) by word of mouth by druggists to their customers. For when we test such products by the definition given by Webster, we find that they all possess the nostrum characteristics to a greater or less degree, *i. e.*, they are recommended by their preparers as medicines; they are secret or semi-secret in composition or in method of preparation; they are claimed by their manufacturers as proprietary medicines; they are claimed to be therapeutic inventions.

To the extent that nostrums are prescribed by physicians and recommended by pharmacists and pharmaceutical manufacturers, the medical and pharmaceutical professions are engaged in the nostrum business. There is no use for the pot to call the kettle black, and when the physicians condemn manufacturers and pharmacists for preparing, dispensing and advertising nostrums, they should remember that when they prescribe them they are *particeps criminis*. And when pharmacists charge physicians with violating their code of ethics by prescribing nostrums and using them for dispensing to their patients, they in turn should remember the command first to remove the beam from their own eye before attempting to remove the mote from their brother's eye.

## WHAT IS MEANT BY TRUE PHARMACY?

Pharmacy, as defined by the Pharmaceutical Syllabus, published by the National Committee representing the American Pharmaceutical Association, American Congress of Pharmaceutical Faculties and the National Association of Boards of Pharmacy, is a branch of pharmacology. "Pharmacy, as a branch of pharmacology, is the science and art of preparing, preserving, compounding and

dispensing medicines." Pharmacology is defined as "The science that treats of drugs and medicines; their nature, preparation, administration and effect; including pharmacognosy, pharmacodynamics, therapy dynamics, pharmaceutical chemistry and pharmacy.

The requirements of true pharmacy demand that the source or genesis, physical, chemical, physiological and therapeutic properties, methods of preparation, standardization and proper dosage of all medicinal drugs and chemicals used for the prevention of disease and for the healing of the sick shall be published for the benefit of science and the use of the medical and pharmaceutical professions in conducting their respective vocations.

Professional requirements demand that this knowledge shall be classified in the forms of science and protected by changeless nomenclature; that the methods of manufacturing each *materia medica* product, and preparation of the same, shall be completely disclosed, and that the manufacture and sale of such article shall be open to free competition.

It is also required that the claims made for the therapeutic properties of the article shall be impartially discussed in the professional societies and press, and verified by competent observers using the same in treating the sick, and that the knowledge thus evolved shall be taught in the medical and pharmaceutical schools and colleges and embodied in scientific medical literature. By scientific medical literature is included pharmacopoeias, dispensatories, text books, monographs, and other literature dealing with *materia medica* products in a scientific manner.

Professional requirements also demand that the entire *materia medica* and its preparations shall be reduced to common standards and the same protected by law, as illustrated by the U. S. Pharmacopoeia and National Formulary, protected by the National and State pure food and drug laws, by which the U. S. Pharmacopoeia and National Formulary have been made legal standards.

It is, therefore, apparent that pharmacy and drug therapeutics are closely related and mutually dependent branches of medical science and practice; that co-operation between the medical and pharmaceutical professions is essential to the development of both, and that such coöperation can only be secured under a professional, fraternal, or coöperative system in which all concerned donate their researches and experiences to the common fund and share in the results of the co-operative work.

#### THE LEGITIMATE FIELD OF DOMESTIC PRACTICE.

Anyone who has the true welfare of the public at heart will not refuse to endorse the efforts of those who are endeavoring to teach the people how to live in such manner as to prevent disease. Neither would they hesitate to recommend that the public should be instructed in the use of ordinary therapeutic measures. There is, therefore, a legitimate field for domestic practice, the limits of which must be determined by the amount of knowledge possessed by the individual.

The legitimate field of domestic practice is the same as that of professional practice except that it is necessarily more limited than the field of the educated physician.

Knowledge of disease and methods of prevention and cure are still very limited even in the field of professional practice. This knowledge is not fixed but is constantly developing, so that what is accepted to-day may be rejected to-morrow for

something better because of more recent discoveries. Conditions once called diseases are now known to belong to the phenomena of resistance to disease. Cough is an example of this. When obnoxious materials, be they secretions or foreign matters, accumulate in the bronchial tubes cough is necessary for their expulsion, so that in a large proportion of cases no treatment of cough is desirable. The cough is merely an attempt on the part of the irritated mucous membranes to expel substances causing the irritation. Manifestly there are conditions in which the use of a cough remedy is undesirable.

There are two sets of cases in which cough remedies are indicated, namely, when the cough is out of all proportion to the amount of material to be expelled, or when, owing to muscular weakness and lack of irritability of the mucous membrane, the cough is not sufficient for the expelling of the secretions which gradually accumulate in the lungs, fill up the bronchial tubes, and may finally cause death by suffocation. If it were possible to give the patient a cough remedy that would instantly stop his cough, the remedy would kill the patient by permitting him to choke to death. It is evident therefore, that the treatment of cough is dependent upon three factors: First, it must be determined whether the case is one requiring a cough remedy; second, the proper cough remedy must be selected suitable to meet the condition, and third, discrimination as to dosage, frequency of repetition, time to discontinue, nature of complications that may arise (caused for example, by mixed infections), and proper care of the patient during sickness and convalescence. To the extent that the individual possesses this knowledge he is justified in treating himself or one of his family for cough. The druggist who, without this knowledge, recommends a cough medicine to a person equally as ignorant as himself, is in the position of the blind leading the blind. Proper domestic practice in such cases can only be attained when the druggist and the patron are sufficiently educated in therapeutics to make a correct diagnosis, select the right remedy and apply it in the right way.

The pharmacist is constantly called upon to supply cough remedies and information concerning them. He is supposed to be an expert in drugs, that is, expert in the knowledge of drugs and their uses, not an expert in the knowledge of diseases and their treatment. But he must acquire a certain amount of knowledge of the latter to be sufficiently proficient in the former. Unfortunately, he is not taught this knowledge in the pharmaceutical schools.

Wise public policy demands that the practice of medicine and pharmacy shall be conducted by persons who have been properly educated, trained, and licensed by boards of examiners, and that unlicensed practitioners shall not be permitted to invade the field of the physician and pharmacist. Owing to a strange anomaly of law, any person, no matter how ignorant or venal, is permitted to invade the field of the physician and pharmacist and practice both medicine and pharmacy at wholesale and without license. All that is required is the use of a sign "Manufacturing Pharmacist" or "Manufacturing Chemist" and to go into the nostrum business, limiting sales to wholesale transactions. The reason for this anomaly is, the nostrum manufacturers have been sufficiently influential to secure exemption from the medical and pharmacy laws.

What did the so-called pharmaceutical profession do to protect the public against this nostrum invasion? Unfortunately with few exceptions the pharmacists

instead of defending professional pharmaceutical practice and protecting the public from unlicensed practitioners who invaded the field, commercialized their calling and aided in converting the vocation into the nostrum business until it became practically impossible for the medical profession and the lay public and even the pharmacists themselves to recognize the difference between true pharmacy and the so-called "patent," "proprietary" or "quack" medicine business. Will someone please tell me where the line exists that separates true pharmacy from the nostrum business? Where does true pharmacy end and the nostrum business commence?

It has been truly said that the drug business differs from every other business on earth in that the druggist cannot recommend or advertise his wares without becoming a quack and a pretender. The very fact that this is true clearly shows that pharmacy cannot be practiced as a commercial business employing commercial methods of advertising, without ceasing to be pharmacy and becoming a menace to public health. It is not surprising, therefore, that the Surgeon General of the Army and his advisors regard so-called pharmacy as unworthy of recognition by the establishment of a pharmaceutical corps in the Army. The Surgeon General has doubtless conferred with his advisors on the subject and finds that physicians, sanitarians, political economists, philanthropists and the educated lay public quite generally share the opinion that much of what is now called pharmacy is nothing more nor less than the nostrum business.

We believe that the establishment of a pharmaceutical corps in the Army, the same to be conducted in the manner described in the Edmonds Bill, would not only increase the efficiency of the Medical Corps, but also exert a salutary influence on pharmaceutical practice in civil life. We believe that it would aid in separating the pharmaceutical sheep from the nostrum goats that are bleating everywhere. We believe that it would give prestige and influence to the practitioners of true pharmacy in the entire United States. We believe that it would excite interest in pharmaceutical education and thus promote the welfare of our educational institutions. We believe that it would aid in restoring the confidence of the medical profession and the public generally in drugs as remedial agents, and thus materially promote the public health. Therefore, we favor the Edmonds bill as a step toward the separation of true pharmacy from the nostrum business and restoring it to its position as a branch of medical science and practice.

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#### MILITARY RECOGNITION OF PHARMACISTS.\*

BY L. E. SAYRE.

So much has been said upon the proper recognition of the pharmacist in military service that it would seem rather rash for one to use this title for a paper at this time without some apology.

However, the importance of national service which our profession is capable of rendering in this hour of our country's need will excuse the use of over-used titles and material.

In the report of the Committee on Drug Reform, presented in this Section, the statement is made that the problem of the proper representation of the pharma-

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