A REVIEW OF THE PRINCIPAL EVENTS IN AMERICAN MEDICINE.*

BY JOHN URI LLOYD.

INTRODUCTION.

OCCASIONALLY it becomes desirable to contrast conditions of the past with those of the present, connecting, in a comprehensive way, problems involving changes that come with the passing years. In such as this, one not actually involved, may, for certain purposes, be better qualified than an academic or collegiate authority who, without personal experience, studies a problem in a scholarly manner relying upon literature past and present.

On the other hand, a participant in the struggle may, if he permits himself to be personally involved in partisan rivalries, by reason of this very fact, labor under disadvantage because of unconscious, inbred cliquishness from which it is difficult to disentangle himself. Hence he too needs exert every effort to avoid one-sided views or self-prejudice.

The writer of this article, believes that by reason of both past and present affiliations with leaders in pharmacy and practitioners of medicine in the various sections, he should be qualified to fairly judge, at least concerning certain phases of the problem. Trusting that, although of pronounced views concerning therapeutic problems, he can reason impartially, he presumes to accept the responsibility and to present herewith a study of Domestic Medicine problems of the past and connect them with the present in a manner that he hopes may be of professional service.

He should announce, however, that the subject is not of his own selection, but is that of the late lamented Dr. Martin I. Wilbert, between whom and the writer various phases of the problem have been several times discussed, the last, and it may be added conclusive interview being at the meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION in Atlantic City, September, 1916. In the opinion of Dr. Wilbert, as advocated by himself, an article prepared by the essayist so as to bring to the medical profession, generally, and pharmacists as well, a record of the subject past, connecting it with the present duty of both the physician and the pharmacist, illustrative of their responsibility in the care of the people, is now of growing as well as of vital importance. Dr. Wilbert hoped that the article might be utilized by him to introduce to and through the American Medical Association a systematic plan he had formulated for the benefit of the people and the professions of medicine in general.

It was mutually agreed that the ultimate object of all scholarly effort in medicine, and in pharmacy as well, whether through society processes or through personal effort, is the health of the public. That the prevention of disease by the advice and personal touch of the physician, as well as the care of the family in the absence of the physician, is a duty that every member of all sections of the American medical profession owes to both the cause of medicine and to society. That if this object be accomplished, the people need gratefully grant to the professions of both medicine and pharmacy a debt of gratitude, as well as to one and all such contributors a generous living return.

^{*}Presented before Section on Historical Pharmacy, A. PH. A., Buffalo meeting, 1925. Paper was written in 1916.

Dr. Wilbert stated that he had become assured that the section of medicine (Eclectic) through which the writer of these lines had long devoted himself to the furthering of the general cause, and with whose practice as well as ideals he had for decades been in close touch, had accomplished much by reason of their original methods of home service. At the request of Dr. Wilbert particular stress should be given to the history and accomplishments of this Section of American Physicians in this connection, especially regarding their processes of procedure, a request I have endeavored to fulfil.

The unfortunate death of Dr. Wilbert disturbed his plans (this manuscript having been completed but not delivered to him) which, as has been said, had been instituted according to his directions to be presented by a committee of which he was a part, at the (then) coming meeting of the American Medical Association. In this connection it may be stated that Dr. Eggleston, of that committee, wrote me personally concerning the paper and that my reply was to the effect that inasmuch as neither of us knew the details of Dr. Wilbert's plans, it seemed to me as though, in prudence, we should let the matter rest.

JOHN URI LLOYD.

PART I.

DOMESTIC MEDICINE.

In times gone by (within a reasonable period at least), licensed physicians generally agreed that to write on medical topics for the people, was to commit a breach of medical ethics. This opinion was not, as so many believed, in order to aggrandize the physician, but in an altruistic spirit to discourage the people in indiscriminate and illogical application of methods of self-medication that might at times be harmful, sometimes perhaps criminal.

It was accepted by altruistic members of the profession that the systematic practice of therapeutics should therefore be restricted to parties qualified in anatomy, surgery, and physiology, as well as those educated especially in medicine, an accomplishment that could not be attained by the people as a whole. Consequently, many, perhaps the majority of the early professional publications concerning medicine, were prepared for the exclusive use of physicians and such were written by physicians. These necessarily employed technical terms, unintelligible to laymen as a class, concerning both remedies and diseases. Anatomical as well as other scientific definitions were necessarily out of their province. To offer such strictly professional literature to the laity, would in their opinion, have been either useless or harmful, possibly both. And yet when this very sane process of reasoning and action was conservatively applied it gave an opportunity for sinister attacks on the profession.

We find in Europe at an early date a flood of domestic publications written by more or less irresponsible persons giving well meant but yet most unbalanced advice to those who, sufficiently educated to read, were yet not qualified to comprehend the subject as a whole.

These publications became finally so numerous as to lead a few talented physicians and reputable pharmacists to prepare, directly for the people, more balanced as well as serviceable publications. Among these we need mention a few only, confining ourselves to a selection that may well be regarded as fore-runners to American therapeutic activity.¹

Possibly the most celebrated of English domestic medical publications in this field, were those of Dr. Nicholas Culpeper (1616–1654) and of Dr. Wm. Buchan (1729–1805) both of which passed through numerous editions. Let us first consider Culpeper² who, for quaint expression and neat satire possessed a most peculiar fascination.

Culpeper forcibly expresses his opinion of the "Medical Faculty," as follows: (English Physician, 1790)

As for the College of Physicians, they are too stately to learn, and too proud to continue. They say a mouse is under the dominion of the Moon, and that is the reason they feed in the night; the house of the Moon is Cancer; rats are of the same nature with mice, but they are a little bigger; Mars receives his fall in Cancer, ergo, Wormwood being an herb of Mars, is a present remedy for the biting of rats and mice.

The erratic suggestions and ill-balanced dosage, as well as the ever-present superstitions carried in this and other popular books of that date, unquestionably largely influenced Dr. Buchan, a Fellow of the Royal College of Physicians, Edinburgh, to prepare (1772) for the laity his "Domestic Medicine," whose European title, (replaced, in one of the American reprints, by "Every Man His Own Doctor"), was as follows:

"Domestic Medicine, or a Treatise on the Prevention and Cure of Disease by Regimen and Simple Medicines, by A. P. Buchan, M.D., of the Royal College of Physicians, Edinburgh, and Physician to the Westminster Hospital, to which is added a Family Herbal."

In this publication Dr. Buchan refers to "the impudence of those daring quacks,"³ as follows:

Any one who attends to the conditions governing secretions, will be astonished at the impudence of those daring quacks, who pretend to find out diseases and prescribe to patients from the bare inspection of their urine. These imposters, however, are very common all over Britain, and by the amazing credulity of the populace, many of them amass considerable fortunes.

How Dr. Buchan viewed the subject of enlightening the people concerning home treatment by simples, and the care of the patient as directed by the physician, and his fear of the effect his publication might have upon himself, professionally, is shown by the following:

¹ The medical literature used by the early American colonists, as well as the first American textbooks on medicine and pharmacy, in the colleges of medicine, were mainly furnished by authors in Great Britain. Consequently, although Continental Europe is rich in domestic medical publications, the present paper prepared in a specific purpose, needs consider only those of England.

² This physician was the son of Sir Thomas Culpeper, Bart. He studied in the University of Cambridge, and later became an apothecary. Tinctured with the then prevailing belief in astrology as applied to both disease and remedy, his works everywhere abound in astrological-physical discussions, as shown by the few extracts we introduce. His most popular works were "The English Physician," (1653) and "The Complete Herbal," (1653). Dr. Culpeper died in 1654.

³ This essayist remembers when "irregulars" who tasted urine to see if it was *sweet* were by physicians denominated by a very vulgar term. This antidated the "sugar test" of Fehling.

When I first signified my intention of publishing the following sheets, I was told by my friends it would draw on me the resentment of the whole Faculty. As I never could entertain such an unfavorable idea, I was resolved to make the experiment, which indeed came out pretty much as might have been expected.

Its reception is thus described:

Many, whose learning and liberality of sentiments do honor to medicine, received the book in a manner, which at once showed their indulgence, and the falsity of the opinion, that every Physician wishes to conceal his art; while the more selfish and narrow-minded, generally the most numerous in every profession, have not failed to pursue both the book and its author with every species of *persecution*.

Part I of Buchan's "Domestic Medicine," Or the General Causes of Diseases, is so admirably written, so balanced in view and expression, so temperate in its advice, as to lead us to believe that, with a few alterations, omissions and additions, it would to-day (excluding medication), if issued under representative authority, serve an excellent purpose. Surely the medical profession would not now resist giving to laymen advice such as is found here. Let us quote:

In the treatment of diseases, I have been peculiarly attentive to regimen. The generality of people lay too much stress upon Medicine and trust too little to their own endeavors. It is always in the power of the patient or of those about him, to do as much towards his recovery as can be effected by the physician. By not attending to this, the designs of medicine are often frustrated; and the patient, by pursuing a wrong plan of regimen, not only defeats the Doctor's endeavors, but renders them dangerous. I have often known patients killed by an error in regimen, when they were using very proper medicines. * * * * * To render this book more generally useful, however, as well as more aceptable to the intelligent part of mankind, I have in most diseases, besides regimen, recommended some of the most simple and approved forms of medicine, and added such cautions and directions as seemed necessary for their safe administration. It would no doubt have been more acceptable to many, had it abounded with pompous prescriptions, and promised great cures in consequence of their use, but this was not my plan; I think the administration of medicines always doubtful, and often dangerous, and would much rather teach men how to avoid the necessity of using them, than how they should be used. Several medicines, and those of considerable efficacy, may be administered with great * * * * * Poor people, when any of their family are taken ill, run freedom and safety. directly to their rich neighbors for cordials, and pour wine, spirits, etc., into the patient, who perhaps never had been accustomed to taste such liquors when in health. If there be any degree of fever, this conduct must increase it, and if there be none, this is the ready way to raise one. Stuffing the patient with sweetmeats and other delicacies is likewise very pernicious. These are always harder to digest than common food, and cannot fail to hurt.

Nothing is more desired by a patient in a fever than fresh air. It not only removes his anxiety, but cools the blood, revives the spirits, and proves every way beneficial. Many patients are in a manner stifled to death in fevers for want of fresh air; yet such is the unaccountable infatuaion of most people, that the moment they think a person is in a fever, they imagine he should be kept in a close chamber, into which not one particle of fresh air must be admitted. Instead of this, there ought to be a constant stream of fresh air into a sick person's chamber, so as to keep it moderately cool. Indeed its degree of warmth ought never to be greater than is agreeable to one in perfect health.

In his efforts (1781) in the guidance and warning of the people, Dr. Buchan was assisted by John Savory, a pharmacist and "Member of the Society of Apothecaries, London." His book, "A Compendium of Domestic Medicine: and Companion to the Medicine Chest," (4th edition, 1852), alike recognized the importance of the profession of medicine, and the rights of the people. From the Preface we select as follows:

June 1925 AMERICAN PHARMACEUTICAL ASSOCIATION

Upon its first appearance the objects of this work were avowed to be based upon the utility of enabling non-professional persons, who might be situated far from the reach of aid, in cases of necessity, obtaining in a clear, distinct and speedy manner, information regarding the effects and uses of the substances employed in medicine, and the best mode of combining them for administration in the various diseases in which they have, by long and well established experience, been found useful; as well as to distinguish such diseases as are dangerous in their nature, and rapid in their progress, in order that proper assistance may be obtained, without allowing that delay to take place which is so frequently the cause of many fatal results. These objects, it is satisfactory to find, have been realized, and they have been endeavored to be achieved by divesting the subject as much as possible of technical and scientific phraseology, and by rendering the work intelligible to those who had not in any manner made the science of medicine their study.

After the third edition of his book Savory adds:

The very favourable manner in which this little work has been received by the public, and the commendations it has met with even from members of the Medical Profession, have rendered a FOURTH edition necessary.

In 1852 appeared in London a volume by Spencer Thomson,¹ M.D., titled, "A Dictionary of Domestic Medicine and Household Surgery." A fragment of the Preface, as follows, clearly indicates the aim of the author:

That works professing to afford popular information on medical subjects, may thoroughly answer the purpose for which they are designed, one especial point requires ever to be kept in view-the information given must be safely usable by those who are put in possession of it. It is an objection frequently adduced against such works, that they place a little dangerous knowledge in the hands of the public, in a form so apparently simple, as to make it a source rather of evil than of benefit; and, undoubtedly, the allegation has in some respects been correct. But is it necessary, in preparing a work on domestic health, to incur this hazard? I think not. For without entering upon that difficult ground which correct professional knowledge, and educated judgment, can alone permit to be safely trodden, there is a wide and extensive field for exertion, and for usefulness, open to the unprofessional, in the kindly offices of a true Domestic Medicine; the timely help and solace of a simple Household Surgery, or better still, in the watchful care, more generally known as "Sanitary Precaution," which tends rather to preserve health than to cure disease. "The touch of a gentle hand" will not be less gentle, because guided by knowledge, nor will the safe domestic remedies be less anxiously or carefully administered. * * * * The information upon these points, given in a popular work, can scarcely be too full or too accurate. In the requirements of Household Surgery, or of sudden emergency, such as poisoning, burning, etc., the question is, "What must be done?" Generally speaking, little or no skill is requisite to determine the nature of the case, or of the injury, which is often too apparent, the anxious question "What must we do?" is that which calls for answer; and if, sometimes, it happens that the exact nature of the accident be not sufficiently evident, that is no reason why knowledge on the subject generally, aided by common sense, may not do much to relieve. Life may be saved, suffering may always be alleviated. Even to the resident in the midst of civilization, the "knowledge is power" to do good; to the settler and the emigrant, it is invaluable.

Little fault can be found with either text or advice. In order to show that Dr. Thomson comprehended the danger of indiscreet self-medication, we reproduce, as follows:

There is, however, a vast difference between the management of real disease and of ordinary ailment—between endeavouring to strike at the root, or only to relieve the symptoms. Any unprofessional man, or woman either, in this kingdom, who with all facility that there is

¹ This work as well as the author were often confused with the Samuel Thomson of lobelia fame, and his publications during the first half of the last century. J. U. L.

for procuring skilled advice, ventures to take the medical management of a case of real illness, acts most unwarrantably; but there are numbers of lesser ailments, many of the more painful incidents and symptoms, simply and easily removable by means which all may employ, and with which it is most important that all should be acquainted, while the parent may use to the child, or the pastor recommend to his parishioners, without fear.

That Dr. Thomson, as had Dr. Buchan, foresaw attacks from the medical profession, is also recorded:

I know well what is said by a few, about injuring the medical profession, by making the public their own doctors. Nothing will be so likely to make "long cases," as for the public to attempt any such folly.

That he appreciated one of the great problems yet confronting the practice of medicine, and which he thought could be controlled if the physician took the people into his confidence, is evident from the following:

People of moderate means—who, as far as medical attendance is concerned, are worse off than the pauper—will not call in and fee their medical adviser for every slight matter, and in the absence of a little knowledge, will have recourse to the prescribing druggist, or to the patent quackery which flourishes upon ignorance, and upon the mystery with which some would invest their calling.

And that he accepted "professional quackery" as being furthered by *home* ignorance is also apparent:

"And not patent quackery alone, but professional quackery also, is less likely to find footing under the roof of the intelligent man, who, to common sense and judgment, adds a little knowledge of the whys and wherefores of the treatment of himself and family."

The passages quoted (when coupled with subsequent text), show clearly why early American medicine paralleled that of England. The settlers in the New World brought with them Culpeper and Buchan and other English domestic publications. They also brought the methods of heroic medication then approved and practiced by authority, known then as "Licensed Physicians." In England, the conciliatory efforts of such as Buchan and Thomson, had largely failed. The conflict between the people and the medical profession, transplanted from abroad to primitive America, was in the New World, intensified.

PART II.

DOMESTIC AMERICAN MEDICINE.

In 1813, an itinerant preacher, Peter Smith, issued to the people a quaint publication, lacking the scholarly tone of Culpeper, titled, "The Indian Doctor's Dispensatory, being Father Smith's Advice Respecting Diseases and Their Cure." This volume, often referred to in early American literature, was widely distributed. The trend of the author's mind is pictured, even in the copyright, as follows:

"The Indian Doctor's Dispensatory, being Father Smith's advice respecting diseases and their cure, consisting of prescriptions for many complaints; and a description of medicines, simple and compound, showing their virtues and how to apply them. Designed for the benefit of his children, his friends, and the public, but more especially the citizens of the western parts of the United States of America. By Peter Smith, of the Miami country. Men seldom have wit enough to prize and take care of their health until they lose it. * * * And Doctors often know not how to get their bread deservedly until they have no teeth to chew it."

This "Dispensatory" was introduced as follows by its eccentric author:

"The author would notify the purchaser that he puts the price of one dollar on this book of advice, well knowing that 75 cents would be enough for the common price of a book of its size. He is conscious that propriety, perspicuity and brevity will be found marked on every piece—and if so, the shorter the better.

"But those who do not chuse to allow him 25 cents for his advice, may desist from the purchase. He conceives that these advices are calculated to assist every citizen in the preservation of his health, and his recovery if diseased; so that by attending to them, he may easily receive 30, 60, or an 100 fold for his dollar; by which he may also meet the wished for assistance set forth in simples and preparations, that will be in his own power."

The publication throughout was based upon the following principle:

"It stands demonstrated to me, that there are but two radical disorders (see Introduction, chap. 2) consequently there need be only two classes of medicine."

The compounds of Dr. Smith, as well as his simples, were described by him in language not less "simple," his book being evidently intended for the use of pioneer settlers, who as a rule, had but little systematic education. This is well illustrated in his formula for making "Eye-Water," as follows:

EYE-WATER.

FIRST PREPARED BY DOCTOR ELIJAH REEDER.

To make 3 gills—take a spoonful heaped up of white vitriol, and the same quantity of common salt, calcine them together on copper, or a piece of earthen, on coals, stirring it with a stick, until it becomes a grey powder; then put it into a bowl, and add to it three gills of rain water. Strain it through paper or a fine rag two or three double—then add two tablespoonfuls of white sugar and a lump of blue-stone, as big as a large grain of Indian corn, and bottle it for use. Three times the quantities will make a bottle, or quart. Remember, no iron or pewter is to be employed in the process. This eye-water will keep good for years, but beware of frost, lest you loose your bottle.¹ This eye-water cures the western country sore eyes, which are scarcely, if ever relieved by the old-eye-waters. This eye-water I have kept and used these fifteen years, with the greatest success, and without a single complaint of its doing hurt.

Innumerable domestic "cure-all" formulas such as this, together with an awakening of the people concerning certain objectionable processes of the medical profession, culminated about the time of the death of George Washington. But as yet there seemed to be no leader capable of organizing the opposing forces. The year 1832, however, was marked by the appearance of the first edition of an American domestic publication, than which no other book in the line of medicine had ever a greater sale, or a more enthusiastic reception from the American public. This book, from the dogmatic empiricist, Samuel Thomson, was titled, "A Narrative of the Life and Medical Discoveries of Samuel Thomson." It is also frequently referred to as "Thomson's New Guide to Health, or Botanic Family Physician," as well as "Thomson's Narrative." In this, Thomson assailed everything "regular," attacking viciously the licensed physician, especially those with

¹ Very exquisite is the irony, to which be it said "Dr." Smith was not averse as shown by other passages in his book.

college training, to whom he refers as "fashionable doctors."¹ The following quotations from the Preface of his book, are typical:

In different ages of the world, the medical faculty have been very prolific in forming systems of the theory and practice of medicine. One man builds up a system, for another who comes after him to pull down, who erects one of his own; which is followed for a time, and then is supplanted by another. They have gone on in this way, almost every age producing a new system, to the present time; each one pronounces the other to be wrong, they certainly cannot all be right, and the most natural conclusion is, that they are all wrong. * * * * * It is readily admitted by the most distinguished men in the profession, that there is no art or science so little understood, and miserably conducted, as that of medicine.

The way to become a fashionable doctor at the present day, is to spend three or four years in what they call reading physic, when they receive a degree and a diploma from some medical society. * * * * * This is spent in learning the latin names of the different preparations of medicine, according to the plan adopted by the faculty, as also of the different parts of the human body, with the names, colors, and symptoms of all kinds of disease, divided and subdivided into as many classes and forms as languages can be found to express; and sufficient knowledge of the nature of medicine to know how much poison can be given without causing immediate death. With these qualifications and a little self-importance, they commence their medical career, as ignorant of what is really useful in curing disease, as though they had been shut up in a cloister all the time.

Thomson's opinion of the art of medicine, as connected with both the physician and the pharmacist, may be summed up from the Introduction to his "Guide to Health":

A sick man is often obliged to risk his life where he would not risk a dollar; and should the apothecary or his apprentice make a mistake, the sick man cannot correct it, and thus is exposed to receive an instrument of death, instead of that which would restore him to health, had he known good medicine.

Thomson in his opposition to the physicians of his day, even goes so far as to attack the Pharmacopœia of the United States, just issued (1820), as follows:

In the new Pharmacopœia, got up lately by the medical societies in this country, an entire new arrangement is made, and new names adopted, which is to be revised every ten years: this will completely keep the people in ignorance of the medicine they use, when prescribed by the faculty.

These combative processes of Thomson, coupled with the fact that he patented a method of medication, issued diplomas for practicing this patent process, to the people generally, and used, indiscriminately and indiscreetly, such energetic materials as lobelia and capsicum, finally made for Thomson a bed of thorn which, by the dogmatic old man, wrapped in his enthusiasm and antagonisms, was accepted as a couch of roses. His "patented" method of medication, which he sold freely to whomsoever had the small amount of money (fifteen dollars), required to purchase the same, and like objectionable features of his practice, instilled into the American medical profession a lasting hatred of the word "patent" in connection with medicine. Indeed, until a very recent period, no distinction has been drawn by either the people or the profession, between secret remedies

¹ One distinction between the early Thomsonians and the Eclectics was in that Thomson's followers opposed colleges of medicine, whilst the Eclectic believed in teaching all fundamentals of science. J. U. L.

and "patented" substances, many of which, are strictly professional and now in general use.

The Thomsonian practice of medicine was introduced into England, but without credit to either Thomson or his publications, by a physician named Coffin, a graduate of a medical school in London, who in 1830 came to America. During seven years' stay in America, spent mainly in Troy, New York, Dr. Coffin became a convert to Samuel Thomson's theories and an employer of his processes. Returning to England in 1837, he established himself as a "Member of the Friendly Botanic Society of Great Britain," and issued a book, "Coffin's Guide to Health," based largely on Thomsonianism, though no mention is made throughout the entire work of either Thomson, his publications or his practice. That Coffin believed in Thomson's heroic methods and his peculiar American medicines, is demonstrated by the following "certificate" published by him, from a man "cured" by the use of his remedies:

During my illness I took sixty-two emetics of lobelia inflata, four pints of tincture of lobelia, six pounds of capsicum pepper, and three hundred pints of medicine.

Coffin even out-classed Thomson in his attacks on the medical profession. For example:

Common sense would say let there be free trade in physic all over the world: let no man's health suffer, humanity would suggest; and nature cries aloud to all her children, behold the remedy you seek is here.

Suppose every man of genius required a diplom before he could be allowed to confer a benefit on society: if such had been the case, Stephenson, who was once a working collier, but whose name and fame, are destined to be immortal, would never have made a railroad, if he had only read and studied such works as adorn the shelves of colleges. Endowed with a strong mind, he gave scope to his own intellect, and not a single doctor interfered; but had their interest been periled by his discovery, he would have been dubbed a quack, and dealt with accordingly. * * * * * Why is England exalted as the asylum of the oppressed, and the hope of the world, if we dare not, as free, magnanimous, and independent people, think and act for ourselves? Let us, at least, throw off the yoke of *medical despotism*, and when the life and health of a whole people are at stake, let us nobly resolve to emancipate society from this gangrene which monopoly has cast around it.

Still another publication that should be mentioned as relating to Thomsonian literature, was one issued in America, titled, "The Experienced Botanist or Indian Physician."¹ This was the work of Dr. J. W. Cooper, whose ideals are exposed by the following extract from his Preface:

That the present privileged system of medicine, with all its modern improvements, is, in theory, still imperfect, and in practice often productive of disastrous consequences, I need not here revive the complaint of the thousands and tens of thousands who, after having suffered many things from physicians, and having spent all their living upon them, were nothing bettered, but rather grew worse. I have heard the widely extended complaints of human sufferers, smarting under the hand of systematic cruelty, wasting away by poison administered as medicine, and pining in despair, when the last penny has gone as a fee to rich practitioners. In view of such facts, did I conceive no desire to produce a reform, I should be unworthy the name of a man.

Indicative of the fact that American domestic medical literature was occasionally favored even by the learned, we have "The Family Adviser" (1833), by

¹ This book was published in Lancaster, Pennsylvania, in 1840. Here, too, was published, during the Revolution, the first American Pharmacopœia. Henry Wilkins, M.D., "One of the Trustees of the University of Maryland." A brief quotation from this is sufficient:

We find our old books filled with inspissants, attenuants, and concoctants, to alter the state of the fluids; anti-spasmodic and sedative medicines, stenic and astenic diseases, indirect and direct debility, the former of these terms used (viz., indirect debility) to express an inundation as from an overflowing tide, prostrating all before it. If with all this jargon we take into consideration, that the theory and language of chemistry was altered full as often, we shall have some idea of a medical consultation when pupils of each school met together: for there were always some who retained their old theories and language too; and should this babel-like language continue, it may be necessary to give physicians a course of instruction at a deaf and dumb school, or at the university of Lagado, that they may understand each other (when they come together) by signs at least.

We should not neglect to state that in the height of Thomson's fame, as well as later, appeared in America a number of "Thomsonian" family recipe books. Among these may be named "A Book of Health," or "Thomson's Theory and Practice of Medicine," by F. B. Robertson, T. P. (Thomsonian Practitioner) and Silas Wilcox, T. P. From this we extract:

TO THE FARMER, THE MECHANIC, AND THE NON-PROFESSIONAL READER IN GENERAL. This work is designed for you. It has been taught, and believed that common people—nature's real nobility—have not a proper right to study medicine. That is utterly false. Would you be slaves? No! Arouse, then, to your sense of reason and humanity, and take the charge of your own bodies. Your abilities are equal, yea, better, for the task, than the faculty. Dr. Rush says "to suppose the talents of those who can learn to *preserve health*, by the cultivation of grain, and the baking of bread, are not equal to the task of *restoring health*, is to question the goodness of the DEITY." Yourselves do know that rejecting the physician has sometimes saved life and limb. We know it has hundreds. Be your own physician! No one can supply your place.

Many other publications were of like import, and need not be considered in detail, or even mentioned by title. And yet we cannot forbear quoting from "The Planter's and Mariner's Medical Companion," by James Ewell, M.D., issued about the date of "Peter Smith's Dispensatory," 1813:

A PUBLICATION, like this, cannot but be exceedingly useful to all, and especially to those who live in the country, or who go to sea, where regular and timely assistance cannot always be obtained.

Among the many and great services, which may be rendered by such a book, we may fairly state its tendency to prevent that dangerous officiousness of ignorant persons, as also, that equally pernicious neglect of the patient, at the onset of the disease, whereby so many lives are lost. * * * * *

How many fond mothers have hung distracted over their children, strangling under the *croup* or swollen with the poison of *serpents*, when the former might so easily have been cured by an emetic, and the latter by caustic volatile alkali.¹ But it were an endless task to enumerate all the heart breaking tragedies, that have taken place in families, merely for the want of the appropriate remedies, of sudden and alarming disease. It were therefore a god-like act in all persons, in tolerable circumstances, to keep a medicine chest, not only for the benefit of their own families, but also of their sick and indigent neighbours, who often suffer, and sometimes perish, for want of proper medicines seasonably administered.

In 1835, American domestic medicine was enriched in Philadelphia by a publication titled "Carpenter's Family Medicine Chest Dispensatory." The author was a Philadelphia pharmacist, and very intimate with physicians in good

¹ Ammonia. J. U. L.

standing in his home city. His object was to furnish to the people medicine chests for domestic use. These he offered in five different degrees of completeness. Carpenter, as had John Savory, of England, already mentioned, considered himself both an ally of the physician, and a friend of the people, arguing therefor in a more balanced way than had before prevailed, as shown by the following:

It is of essential use to every man, to make himself acquainted, as far as practicable, with the diseases to which he is liable, and the most simple means of guarding against and checking the progress of disease. It is not expected that he should become proficient in the arduous and profound science of medicine, or to treat with success the diversified and complicated diseases to which the human frame is liable. This would require years of study, and an unremitting application to the subject. It is, however, of essential importance, and within the reach of all who are disposed, to acquire at least some acquaintance with the symptoms of the diseases of common occurrence, and of the structure and functions of the human body; and to become familiar with the properties and doses of the various remedies which are made use of to preserve and restore health. * * * * * A physician should on all occasions be preferred and consulted where it is practicable; but there are occasions of very frequent occurrence, where the knowledge of individuals could be called into immediate and successful operation before a physi-* * * * When it is for a moment considered our liability to cian could be reached. * accidents from the most trifling causes, how suddenly disease sometimes occurs, and moreover the difficulty often experienced in procuring MEDICAL AID at the instant it may be required, it becomes, no doubt, a matter of surprise how so important an article as a Medicine Chest, with a proper assortment of MEDICINES, should have been overlooked, when other articles, far less useful, are considered as indispensables.

Carpenter refers to the Faculty of the University of Pennsylvania as commending his preparations. This allusion was not resisted, so far as we know, and his processes may be considered as having been recognized by "Authority." He was a competent apothecary, and devised many useful compounds of that period. Indeed, he claimed to have perfected, under the general direction of Dr. Jackson, a celebrated physician of Philadelphia, the once-famous "Jackson's Cough Syrup."

* * * * * * *

To SUM UP.—Few will deny that, up to the middle of the last century, medicine, both domestic and professional, whether in Europe or America, was in an exceedingly unsatisfactory condition. It is furthermore evident that neither the profession nor the people seemed able to overlook personal differences, and to accept that the cause of each was the common cause of humanity. Let us next consider the epoch in American therapeutics wherein the "Eclectic" physician became a factor, and to which the writer of these brief researches is asked by Dr. Wilbert to devote particular care. The ideals and history of this typical "American School of Medicine" seem now to be of increasing importance to the professions of medicine and pharmacy as a whole.

(To be continued in July Issue)

DISCOVERY OF THE VALUE OF IODINE FOR GOITER DUE TO ERROR IN PRESCRIBING.

Dr. Armand Trousseau is said to have prescribed iodine in error for a goiter patient. He reported the error and also the success of the treatment. Although Trousseau gave his discovery to the world, little if any use of the treatment was made until after sixty years. Dr. Trousseau was well and favorably known as practitioner, professor and author—he wrote "Traite de thérapeutique et de matière médicale."

THE NEW U. S. PHARMACOPŒIA, TENTH REVISION (U. S. P. X).

CHANGES AND LISTS OF NEW ADMISSIONS AND NEW NAMES.*

Compiled by Horatio C. Wood, Jr., M.D.

NEW ADMISSIONS TO THE U. S. PHARMACOPŒIA.

A word as to the method used in selecting the drugs which are described in the Pharmacopœia may be of interest to the members of the medical profession. The procedure adopted in the Tenth Revision, which differed somewhat from that of earlier editions, was briefly as follows: Each drug and preparation was first carefully considered by the Sub-committee on Scope who reported their findings to the General Committee of Revision. The principle governing the deliberations of the Sub-committee was to admit only those substances for which there was at least a reasonable amount of evidence of therapeutic value—except such agents as are used for pharmaceutical or flavoring purposes. Any objections to the findings of the Sub-committee on Scope were referred to a special committee of all the medical members of the Committee of Revision. The decision of this special committee was final. It was hoped by this method of selection to make the U. S. Pharmacopœia not only a book of legal standards for substances used in the treatment of the sick, but one which reflects the best practice of the American Medical Profession.

LIST OF NEW ADMISSIONS.

Acidum Acetylsalicylicum—Acetylsalicylic Acid. Synonyms and Brand Names—Aspirin, Empyrin, etc. Uses—Analgesic, antirheumatic. Dose—Five grains (0.3 Gm.).

Acidum Acetyltannicum—Acetyltannic Acid. Synonyms and Brand Names—Acetannin; Diacetyltannic Acid; Tannigen. Uses—Astringent for diarrhœa. Dose—Ten grains (0.6 Gm.).

Æthylis Aminobenzoas—Ethyl Aminobenzoate. Synonyms and Brand Names—Benzocaine; Anesthesin. Uses—Local Anesthetic (insoluble). Dose—Five grains (0.3 Gm.) for gastric ulcer.

Æthylis Chaulmoogras—Ethyl Chaulmoograte. Synonyms and Brand Names—Chaulmoogra Oil Esters; Chaulmestrol. Uses—Leprosy. Dose—Fifteen minims (1 cc.).

Albumini Tannas—Albumin Tannate. Synonyms and Brand Names—Albutannin; Tannalbin. Uses—Astringent for diarrhœa. Dose—Thirty grains (2 Gm.).

Amidopyrina—Amidopyrine. Synonyms and Brand Names—Pyramidon. Uses—Analgesic and Antipyretic. Dose—Five grains (0.3 Gm.).

Argento-Proteinum Fortius—Strong Silver-Protein. Synonyms and Brand Names— Protargin Strong; Protargol; Proganol; Protargentum; etc. Uses—Antiseptic. Although containing less silver it is a more active germicide, and more irritant locally, than the following.

Argento-Proteinum Mite—Mild Silver-Protein. Synonyms and Brand Names—Protargin Mild; Argyrol; Argyro; Cargentos; Silvol; Solargentum; etc. Uses—Antiseptic. Less irritant but less potent than Arg.-Prot. Fort. Dose—Used locally.

* A pamphlet form of this contribution was prepared for distribution at the Educational Exhibition of Drugs and Preparations of the new U. S. Pharmacopœia, Tenth Revision, held at the annual meeting of the American Medical Association, Atlantic City, N. J., May 25 to 29, 1925, under the auspices of The Philadelphia Branch of the American Pharmaceutical Association.

Committee in Charge: Horatio C. Wood, Jr., M.D., Ivor Griffith, Charles H. LaWall, John K. Thum, Ambrose Hunsberger, Arno Viehoever, William J. Stoneback, Adley B. Nichols, Joseph W. E. Harrisson, Ralph L. Calvert, Ralph R. Foran, Harvey P. Frank, Ellen Cawley, Morris Beck, and E. Fullerton Cook, Chairman. Arsphenamina—Arsphenamine. Synonyms and Brand Names—Arsenobenzol; Diarsenol; Salvarsan; 606; etc. Uses—Antisyphilitic. Dose—Six grains (0.4 Gm.).

Barbitalum—Barbital. Synonyms and Brand Names—Diethylbarbituric Acid; Veronal. Uses—Somnifacient. Dose—Eight grains (0.5 Gm.).

Barbitalum Solubile—Soluble Barbital. Synonyms and Brand Names—Sodium Diethylbarbiturate; Veronal-Sodium; Barbital Sodium; Medinal. Uses—Somnifacient. Dose—Eight grains (0.5 Gm.).

Barii Sulphas—Barium Sulphate. Never abbreviate this title! Uses—For making X-ray pictures of alimentary canal.

Calcii Iodobehenas—Calcium Iodobehenate. Synonyms and Brand Names—Calioben; Sajodin. Uses—Same as potassium iodide. Dose—Eight grains (0.5 Gm.).

Carbonei Tetrachloridum—Carbon Tetrachloride. Synonym—Tetrachlormethane. Uses —Anthelmintic. Dose—Forty minims (2.5 cc.). Not to be repeated within three weeks.

Carbromalum—Carbromal. Synonym and Brand Name—Adalin. Uses—Nerve sedative, anodyne and hypnotic. Dose—Eight grains (0.5 Gm.).

Chloramina—Chloramine. Synonyms and Brand Names—Chloramine-T., Chlorazene. Uses—Surgical disinfectant—Its aqueous solution is not identical with Dakin's Solution. Dose—Used locally.

Dextrosum—Dextrose. Synonyms—Crystallized Glucose; Saccharum Amylaceum. Uses —For intravenous injection in shock, hemorrhage, etc.

Dichloramina—Dichloramine. Synonym and Brand Name—Dichloramine-T. Uses—Surgical disinfectant. Dose—Used locally.

Epinephrina—Epinephrine. Synonyms and Brand Names—Adrenalin; Suprarenalin, etc. Uses—Asthma. Local vaso-constrictor. Dose—1/120 grain (0.0005 Gm.).

Fluidextractum Belladonnæ Foliorum—Fluidextract of Belladonna Leaves. Uses—Same as Belladonna. Dose—One minim (0.06 cc.).

Fluidextractum Rhois Glabræ—Fluidextract of Rhus Glabra. Synonym—Fluidextract of Sumac Berries. Uses—Astringent for diarrhœa and sore throat. Dose—Fifteen minims (1 cc.).

Ipomœa—Ipomea. Synonyms and Brand Names—Male Jalap, Orizaba Jalap; Mexican Scammony. Uses—Purgative. Used only for making Resin of Ipomea.

Krameria-Krameria. Synonym-Rhatany. Uses-Astringent. Dose-Fifteen grains (1 Gm.).

Liquor Epinephrinæ Hydrochloridi-Solution of Epinephrine Hydrochloride. Synonyms and Brand Names-Adrenalin Solution, Suprarenalin Solution; etc. Uses-Local vaso-constrictor. Dose-Eight minims (0.5 cc.).

Liquor Sodæ Chlorinatæ Chirurgicalis—Surgical Solution of Chlorinated Soda. Synonyms and Brand Names—Dakin's Solution; Sodium Hypochlorite Solution. Uses—Surgical disinfectant. Dose—Used locally.

Neoarsphenamina—Neoarsphenamine. Synonyms and Brand Names—Novarsenobenzol; Neosalvarsan, etc. Uses—Antisyphilitic. Dose—Nine grains (0.6 Gm.).

Oleum Chaulmoogræ—Chaulmoogra Oil. Uses—Leprosy. Dose—Fifteen minims (1 cc.).

Paraffinum Chlorinatum—Chlorinated Paraffin. Synonym and Brand Name—Chlorcosane. Uses—For making Dichloramine Solutions.

Phenobarbitalum—Phenobarbital. Synonym and Brand Name—Luminal. Uses—In epilepsy and as somnifacient. Dose—One-half grain (0.03 Gm.).

Phenylsulphonphthaleinum—Phenolsulphonphthalein. Synonym—Phenol Red. Uses— Test for kidney function. Dose—One-tenth grain (0.006 Gm.).

Procainæ Hydrochloridum—Procaine Hydrochloride. Synonym and Brand Name— Novocaine. Uses—Local Anesthetic.

Quinidinæ Sulphas—Quinidine Sulphate. Uses—In auricular fibrillation. Dose—Five grains (0.3 Gm.) Caution!

Quininæ Aethylcarbonas—Quinine Ethylcarbonate. Synonym and Brand Name— Euquinine. Uses—Tasteless form of quinine. Dose—Tonic, one and a half grains (0.1 Gm.); antimalarial, fifteen grains (1 Gm.). Resina Ipomææ—Resin of Ipomea. Synonym—Resin of Mexican Scammony. Uses— Purgative—Replaces Scammony Resin. Dose—Three grains (0.2 Gm.).

Rhus Glabra—Rhus Glabra. Synonym—Sumac Berries. Uses—Astringent. Dose—Fifteen grains (1 Gm.).

Sodii Biphosphas—Sodium Biphosphate. Synonyms—Acid Phosphate of Sodium; Sodium Acid Phosphate; Monobasic Sodium Phosphate. Uses—To increase acidity of urine. Dose— Ten grains (0.6 Gm.).

Spiritus Frumenti-Whisky.

Spiritus Vini Vitis-Brandy. Synonyms-Spiritus Vini Gallici-Cognac.

Thyroxinum—Thyroxin. Active principle of Thyroid Gland. Uses—Same as Thyroid. Dose—One hundred and twentieth grain (0.0005 Gm.).

Tincturæ Krameriæ—Tincture of Krameria. Synonym—Tincture of Rhatany. Uses—Astringent. Dose—One fluidrachm (4 cc.).

NEW NAMES.

In the past, objection has been made to some of the Pharmacopœial names, especially those of synthetic drugs, because of their undue length. The present Committee of Revision has made an effort to overcome this obstacle to the more universal use of official names by the introduction of coined words. Some of the substances described are familiar to the medical profession under trade names; these names, however, cannot be used in an official book because they are the trademark property of certain manufacturers.

There are several reasons why physicians should employ official names, even when these are more cumbersome and less familiar. The most important of these reasons is the protection which the use of official terms affords both the doctor and the patient. When a drug is prescribed by a brand or trade-marked name, there is no assurance of quality of the proprietary form of the drug which must be dispensed, except the commercial honesty of the manufacturer. Instances are not lacking where makers of proprietary medicines have altered materially the composition of their remedy without notification to the medical profession. On the other hand, when a drug is sold under an official name, the Federal Food and Drugs Act as well as the laws of many states, requires that the drug must conform to the standards set forth in the Pharmacopœia. The law spreads its aegis of protection over Pharmacopœial names but not over trade-marked names.

In the list of changes given below, attention may be called especially to the ointments of mercury. Formerly the 50 per cent ointment of mercury, employed as a means of systemic administration of this drug by inunction, was known as Unguentum Hydrargyri and a 33 per cent ointment, intended to be used as a local remedy in parasitic conditions of the skin, was known as Unguentum Hydrargyri Dilutum. In order to bring the U. S. Pharmacopœia into harmony with the International Protocol, the name of this latter has been changed to Unguentum Hydrargyri, while the form intended for absorption is called Unguentum Hydrargyri Fortius. The new ointment of mercury, therefore, is made with a base not intended for easy absorption through the skin, but for its immediate local action, and where the physician desires the constitutional action of mercury he should prescribe Ung. Hydrarg. Fort.

Only one preparation has been seriously altered in strength. The Ointment of Yellow Mercuric Oxide (Unguentum Hydrargyri Oxidi Flavi) has been reduced from 10 per cent to 1 per cent in conformity with the customary practice of to-day. **June 1925**

539

CHANGES IN TITLES.

Old Titles U. S. P. IX.

Acidum Phenylcinchoninicum Aqua Aurantii Florum Fortior Balsamum Tolutanum Benzosulphinidum Betaeucainæ Hydrochloridum Chloralum Hydratum Cinchona Rubra Cinnamomum Saigonicum Cotarninæ Hydrochloridum Emplastrum Elasticum

Emplastrum Plumbi Extractum Belladonnæ Foliorum Extractum Colchici Cormi Ferri Phosphas Fluidextractum Colchici Seminis Hexamethylenamina Hypophysis Sicca Liquor Calcis Liquor Hypophysis Mel Depuratum Oleum Cassiæ Oleum Picis Liquidæ Rectificatum Pilulæ Catharticæ Compositæ Pix Liquida Plumbi Oxidum

Rosa Gallica Saccharum Saccharum Lactis Serum Antidiphthericum Purificatum Serum Antitetanicum

Serum Antitetanicum Purification Sodii Benzosulphinidum Spiritus Ætheris Nitrosi Syrupus Picis Liquidæ Syrupus Tolutanus Thyroideum Siccum Tinctura Belladonnæ Foliorum Tinctura Colchici Seminis Tinctura Limonis Corticis Tinctura Opii Deodorati

Tinctura Tolutana Unguentum Diachylon Unguentum Hydrargyri

New titles U. S. P. X.

Cinchophenum Aqua Aurantii Florum Tolu Glusidum Eucainæ Hydrochloridum Chloralum Hydras Cinchona Cinnamomum Cotarninæ Chloridum Emplastrum Adhæsivum

Emplastrum Plumbi Oleatis Extractum Belladonnæ

Extractum Colchici Ferri Phosphas Solubilis Fluidextractum Colchici

Methenamina Pituitarium Liquor Calcii Hydroxidi Liquor Pituitarii Mel Oleum Cinnamomi Oleum Picis Rectificatum

Pilulæ Hydrargyri Chloridi Mitis Compositæ Pix Pini Plumbi Monoxidum

Rosa Sucrosum Lactosum Antitoxinum Diphthericum

Antitoxinum Tetanicum Crudum Antitoxinum Tetanicum Tetanus Glusidum Solubile Spiritus Æthylis Nitritis Syrupus Picis Pini Syrupus Tolu Thyroideum Tinctura Belladonnæ Tinctura Belladonnæ Tinctura Limonis Tinctura Opii

Tinctura Tolu Tincture of Tolu Unguentum Plumbi Oleatis Diachylon Ointment Unguentum Hydrargyri Fortius Stronger Mercurial Ointment

Popular and English Names.

Atophan Orange Flower Water Tolu Saccharin Eucaine Chloral Hydrate Cinchona Bark Cinnamon Sypticin Adhesive Plaster; Sticking Plaster Diachylon Plaster; Lead Plaster Extract of Belladonna

Extract of Colchicum Iron Phosphate Fluidextract of Colchicum

Formin, Urotropin, etc. Pituitary Lime Water Pituitary Solution Honey Oil of Cinnamon Oil of Tar

Compound Cathartic Pills Tar; Pine Tar Lead Oxide; Lead Monoxide; Yellow Oxide of Lead Rose Leaves Cane Sugar Milk Sugar Diphtheria Antitoxin

Crude Tetanus Antitoxin

Antitoxinum

Soluble Saccharin Sweet Spirit of Nitre Syrup of Tar Syrup of Tolu Thyroid Tincture of Belladonna Tincture of Colchicum Tincture of Lemon Peel Tincture of Deodorized Opium Tincture of Deodorized Opium Tincture of Tolu Diachylon Ointment Stronger Mercurial Ointment Unguentum Hydrargyri Dilutum Unguentum Picis Liquidæ Virus Vaccinicum

Unguentum Hydrargyri

Unguentum Picis Pini Vaccinum Variolæ Mercurial Ointment; Blue Ointment Tar Ointment Vaccine Virus; Smallpox Vaccine

THOMAS HENRY HUXLEY.

Biologists, medical men, and other scientists, rightfully claim Thomas H. Huxley as one of their illustrious number. However, as in so many other instances, pharmacy can also lay claim to this distinguished scientist.



THOMAS HUXLEY.

He was born May 4, 1825, at the village of Ealing, near London, and received part of his education at Ealing School, where his father was a master. He said of himself that he was the seventh child, born on the seventh day of the week, on a seventh floor back. All through his life he was intent that nothing should be said of him that would credit him with a preferment to which he was not entitled. His genius for good work, a biographer states, came from his mother, a tireless, ambitious woman, who got things done while others were discussing them.

The earlier years of young Huxley did not portend that he would be the great scholar, the centenary of whose birth is celebrated this year. For the family in modest circumstances the first thing was to provide a living, and practically all the school education that was given young Huxley in his early teens was a good drilling in the three R's. At an early age he was apprenticed to a pharmacist, who paid him six shillings a week, a sum that the boy regularly gave to his mother.

His success can be ascribed to a great thirst for knowledge; he always wanted to know, and his thoroughness in the drug store won the admiration of the doctors who dealt there. Several of them loaned him books, and took him to clinics, and at the age of 17 he had gained a free scholarship to Charing Cross Hospital, where he served as nurse and assistant surgeon. After that he was appointed assistant surgeon in the Navy on H. M. S. "Rattlesnake." Whatever may have been the value in other respects, of the voyage of the "Rattlesnake," it was assuredly of immense importance to her assistant surgeon as a training school, not only in science, but in practical life, and from here on; in fact, even from the earlier years, his progress to distinction was continuous. In his mind life was a sequence,-the happenings of to-day were possible because of that which was done yesterday, and tomorrow will be the result of to-day. He dared to utter that which he felt was true, and the strongest desire of his soul was that he might never compromise with error for the sake of mental ease, or accept a belief simply because it was pleasant.

Thomas Huxley visited in the United States during the Centennial year (1876). He died June 29, 1895.

THERAPEUTIC VALUE OF DRUGS.

The ultimate proof of the value of any remedy can be established only at the bedside. This is a fact which we are apt to forget. Hypothetical considerations and the results obtained by the laboratory worker are invaluable because of the possibilities and indications they suggest, but the clinician is responsible for the final evidence.—Edwin Bramwell, *Lancet*, February 7, 1925.