

the first few days of an acute affection. At this period there is usually no desire, and often a positive disgust, for any form of food except water, and that is both a remedy and a food of the greatest value. It supplies all the pabulum needed during this period, and at the same time renders active aid to the system in getting rid of the effete and poisonous materials. A bountiful supply of pure cold water is worth more to the suffering one than all else that can be done. After a few days there is need of light, easily digested, easily assimilated diet. Carbohydrates and fats should be excluded as far as possible. On account of their great affinity for oxygen they rapidly exhaust the oxygenating capacity of the systems and thus seriously interfere with the oxidation of the proteids and of the metabolic products; the result of which would be an increase of the morbid elements within the blood.

Milk has long been a standard article of diet for the sick room and it is rarely contra-indicated. In conditions such as we are dealing with, it is often best to begin by giving whey, which being of lighter nutritive value may be given more freely; it is, too, a most excellent diuretic. It should be remembered that patients may live for months on milk alone or even whey, and not be much the worse for it. Other articles,—beef essence, beef tea, egg in small quantities, properly prepared (the white of an egg beaten up with the juice of a lemon and eaten slowly with a spoon is excellent), mutton broth (free from fat) gelatin preparations and the like, are also useful to fulfill the purpose which I have stated.

2. The best means at our command for the prevention of high temperature is undoubtedly the free use of cold water, both internally and externally. External applications of cold water are well borne in the majority of cases of rheumatism, and the relief which they afford is often most marked. If the temperature persistently keeps high, ice bags should be applied about the head and over the abdomen, one or two thicknesses of a towel being first laid over the latter. Ice bags placed over the abdomen are far more efficient in lowering temperature than when applied to any other part of the body. In scarlet fever nothing acts so efficiently as pouring cold water all over the body for ten, fifteen or thirty minutes at a time; or the child should have a cold bath at short intervals. Not quite so efficient, but often of much service, is the use of the antipyretic drugs. Great care should attend their employment in treating children on account of their toxic effects upon the heart. But wisely used they often do much good.

3. To quiet the action of the heart, and thus render it less likely to become the seat of inflammation, nothing is better than rest in bed and the use of small doses of morphia. I have met with no other remedy that can serve this purpose so well. It slows the heart, relieves pain, and quiets that disturbed state of the nervous system which is particularly prominent in febrile affections of childhood. To get the best benefit from it, the dose must be nicely adjusted to suit each case—one one-hundred-and-twentieth grain for a child five or six years of age, repeated every two hours, being generally sufficient; a smaller dose will sometimes do better; a larger one is often demanded. These prophylactic measures are of the greatest importance in preventing cardiac complications, whether the case be one of

acute rheumatism, scarlet fever or any other of the various affections in which they are liable to occur. It matters not whether the antecedent disease be due to a disturbance of the metabolic functions of which the exciting cause is cold, or whether it be due to an infection of the system with microorganisms; the indication for their use remains the same.

These measures, too, for the prevention of endocarditis are precisely what are needed in the treatment of its acute stages. Special remedies for the primary disease will be given but it is not my province to consider them in detail here. The treatment of endocarditis after the acute symptoms have subsided is much the same as the treatment of the chronic form of the disease.

THE NATIONAL FORMULARY.

Read by invitation in the Section on Materia Medica and Pharmacy at the Forty-fourth Annual Meeting of the American Medical Association.

BY PROF. C. LEWIS DIEHL.

LOUISVILLE, KY.

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

Thus, Article I of a Code of Ethics adopted by the American Pharmaceutical Association at the meeting of its organization in 1852. Forty-one years have passed, and but very few of the members who formulated and adopted this Article are now among the living, but during all this time it has been the keynote for the conduct, not alone of the members of the American Pharmaceutical Association, but for reputable pharmacists throughout our land.

But, it may be asked, if this is true, if this Article of the Code of Ethics has been upheld by the American Pharmaceutical Association, by its members individually, and by reputable pharmacists in general, why do we find the shops of pharmacists flooded with preparations, the formulas of which are wholly or in part withheld, and which pass current and are prescribed under names not known or recognized in the text-books of the medical and pharmaceutical profession? It is a question not easily answered without stepping on some one's toes, an operation which I propose to perform with as light a step as is practicable and sufficient to the purpose.

Within so short a period as thirty years ago, the manufacturers of pharmaceutical preparations for the trade in the United States could be counted upon the human digits. Their products were confined to such as could not be profitably or conveniently made in the pharmacies, or that might be required in emergencies. With the growth and development of the country, these establishments naturally extended their trade, so that from their small beginnings they soon became a power that exerted a decided influence upon the methods of the pharmacies.

The success of these pioneers in the manufacturing

business, in its turn led to the establishment of new manufactories, and consequent competition, so that the profits of the business soon were seriously contracted. What more natural, then, than to look up new channels in which to increase the volume and profits of the business? So far the efforts of manufacturers had been confined to catering to the convenience and legitimate necessities of the pharmacists; these having been met, it became evident that a more potent factor than the good will and convenience of pharmacists had to be enlisted if reasonable success in extending their business was to be assured. And in this way it came about that the pharmacist was shelved, and the manufacturer addressed his efforts directly to the physician.

Beginning with an explanation of exceptional or improved methods for producing medicinal agents, attention was soon called to new preparations, excelling, either by reason of their potency, palatability or appearance, or these combined. From a list of perhaps half a dozen "Elixirs," so-called, the formulas for which were well understood and the common property of pharmacists, there was an annual increase amounting to dozens, the formulas for which were uniformly withheld, while their composition was, at best, only partially indicated on the label. Coated pills were introduced, with particular laudation respecting the quality and character of their coating; but soon the list of pills in common use was exhausted, and new formulas were invented or constructed in concordance with the prescriptions of popular physicians, until now there is no end to them. And so in due time came about compressed pills and tablets, tablet triturates and a host of other preparations, all of them, doubtless, useful and some of them—under the present practice—indispensable, but, in all, the result of the effort of their introducer to secure for himself the lion's share of whatever profit might be gained by their manufacture.

It is but common justice to concede to an inventor proper recompense for his time, trouble and expense, and also a reward for his invention. Our patent laws secure this to him, so far as his invention may meet with popular use and demand; but under our patent laws everything must, or should, be open and above board. A knowledge of how a patented article is made is public property, while it is the patentee's property to make, or to give the right to make it. And so A, for example, if he had succeeded in obtaining a patent for gelatin-coated pills, and declined to give consent to others, would have been the only manufacturer of gelatin-coated pills. But, inasmuch as A did not secure a patent for gelatin coated pills, the process being known and easily executed by any one competent to make pills, why should the preference be given to B, when A, C and D can make and do make them just as good? The point made is simply for the sake of argument, and applies with equal force to all preparations, the formulas of which are authoritative or that are honestly offered under honest titles.

That this is the correct view is evidenced by experience and practice; for it is becoming more and more the practice of prescribers to omit the designation of the manufacturer when prescribing preparations of authoritative or well-known composition, the prescriber leaving the responsibility of quality to the dispenser. Manufacturers were not the last to

recognize this tendency; on the contrary, they found that unless resort was had to some new expedient, they would soon again be in their original position; that is to say, directly dependent upon the pharmacist for the demand for their products. And we must look for an explanation for this again to the effect of competition, for manufacturers have increased almost as fast as new preparations. Not alone that many separate manufacturing establishments have been opened; the shrinkage of profits in the wholesale drug business has prompted almost every wholesale house to open a laboratory for manufacture, in connection with their regular business. All of these, with few exceptions, have accepted and adopted the new expedient, which consists in introducing some preparation of popular drugs under a specific trade name. A palatable or presentable preparation having been secured, it suffices to give it a name, derived from its most prominent constituent, or from the specific term applicable to its medicinal use, or to prefix the manufacturer's name to a more or less abbreviated title of the preparation, and the manufacturer has a product which must be purchased from him and can not be substituted with impunity by the product of another manufacturer. To the prescriber it appears to make no difference whether the composition of the preparation is clearly indicated in the label, or not, and generally it is not; the "essential principle" of so many grains of this, that, or the other, or of a teaspoonful of codliver oil, certainly do not give us a clear conception of the preparation before us. In point of fact, many of these preparations are simply such as are commonly designated as "patent medicines," though they may by courtesy be called "pharmaceutical specialties."

I believe that I give voice to the unanimous sentiment of the reputable pharmacists of our country, when I say that it would be presumptuous for me to call attention to any single preparation, or class of preparations, that physicians do, and ought not to prescribe. It is not the concern of the pharmacist what is prescribed, so long as he is convinced that the prescriber has not made a palpable error in his prescription. But I am sure that I act within the bounds of propriety when I say that the modern tendency of prescribers to designate the product of special manufacture in their prescription, while perhaps simplifying the prescription, has complicated the business of the pharmacist to such an extent as to become a serious burden. That this burden was felt by pharmacists everywhere was shown by the adoption of formulas for various non-official preparations in common demand by a number of local pharmaceutical associations—some of which, indeed, were called into existence by this very exigency—and I could mention several localities in which the then current "pharmaceutical specialties" were knocked completely out of the field and replaced by the preparations proposed by the local associations. This success, however, was only temporary; partly because of the efforts of manufacturers to recover the ground lost, by the introduction of trade-marked preparations, and largely by the circumstance that the preparations adopted by the different local associations, though identical in name, were not identical in their formulas. And so it gradually came about that the local associations looked to the National Association to bring order out of chaos, the result

being the publication of the "National Formulary," in 1888, by the American Pharmaceutical Association. The "Formulary," in its present, unrevised condition, embodies formulas and definitions for 435 preparations, covering most of the non-official preparations in popular demand, and replacing many that are now popularly prescribed under special trade names. Among these formulas may be enumerated eighty-six for elixirs, thirty-four for syrups, ten for emulsions, thirty-nine for liquors or solutions, twenty-six for powders, including fourteen salines and effervescents, seventeen for mixtures, twelve for wines, thirty-one for tinctures and thirty-three for fluid extracts. It is within my personal knowledge that many of these formulas have stood the test of time in the localities in which they had been originally introduced, and that none of them were embodied in the work until they had been subjected to the most rigorous tests; so, that, even as the work now stands it merits the confidence of physicians, the more particularly since the formulas are explicit, and are easily followed by pharmacists even of moderate ability. With the advent of a new "Pharmacopœia," it will become necessary to eliminate some of the formulas; to keep pace with the new preparations, specialties and remedial agents, it will be necessary to add others, and the "Formulary" is therefore now in the hands of a Committee of Revision, who have made a preliminary report at the last meeting of the American Pharmaceutical Association, and will probably make a final report at an early day. The result of investigation made so far by this Committee confirms the reliability of the formulas with few exceptions, and those of no importance. I would therefore earnestly ask that physicians give these formulas their favorable consideration, and that the AMERICAN MEDICAL ASSOCIATION take such action as may be conducive to the adoption and use of the "National Formulary" by practicing physicians throughout the land.

DISCUSSION.

DR. DIEHL, in answer to question by the Chairman, said that in his opinion some of the newer drugs and preparations will be introduced in the next "United States Pharmacopœia." This will include such preparations as various elixirs, and certain drugs of recent introduction, but will not include patented medicines or trade-mark preparations. There will be no radical change, except in relation to weights and measures. The metric system will be adopted. In the formulæ for making tinctures, parts by volume will be substituted for parts by weight. The preparation of the drugs opium, cinchona and nux vomica will be provided with methods of standardization.

Speaking of the "National Formulary," DR. DIEHL said that it had proved a financial success. The first edition consisted of five or six thousand, and since that time at least five thousand more have been printed. He would like to see the book adopted as a text-book by the medical colleges.

DR. WOODBURY spoke of an instance in his own knowledge where a pharmacist was using the "Pharmacopœia" of 1870 five years after the issue of 1880 had been published. Owing to the radical changes made in the last "United States Pharmacopœia" in regard to the strength of opium preparations, etc., such neglect upon the part of pharmacists was culpable. In his opinion, the use of the "Pharmacopœia" would never become general until it was introduced into the medical and pharmaceutical colleges as a text-book.

DR. STEWART said that he was taught that pharmacy was a liberal profession, the same as medicine, and the adoption of the "National Formulary" and "United States Pharmacopœia" as text-books would favor that end.

A committee was then appointed, consisting of Prof. Good and Dr. Stewart, for the purpose of drawing up a resolution recommending the adoption of the "United States Pharmacopœia" and the "National Formulary" as text-books in medical and pharmaceutical colleges. This resolution was adopted by the Section and sent to the general session, where it was well received and adopted:

Resolved, That the AMERICAN MEDICAL ASSOCIATION recommend that the new "United States Pharmacopœia" soon to be issued, be at once practically adopted by physicians in prescribing and pharmacists in compounding. It also advises the general adoption by physicians and pharmacists of the "National Formulary," issued by the American Pharmaceutical Association, and that the leading medical and pharmaceutical colleges adopt these works as text-books.

TRAUMATIC NEUROSES IN COURT.

BY L. BREMER, M.D.

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Of all the diseases which within the last ten years have preëminently engaged the attention of the medical world, there is none that deserves more interest and is of greater practical importance, than that group of nervous disorders which have been styled the traumatic neuroses. It is especially since the meeting of the Tenth International Congress held at Berlin in 1890, that this question has occupied a prominent place in medical thought and discussion the world over. The somewhat acrimonious debate on that occasion, not altogether free from personal antagonism, had as an immediate consequence, the effect of stimulating renewed study and producing a flood of literature on the subject.

Oppenheim's book on the traumatic neuroses had not only renewed or intensified the interest, but also excited widespread contradiction.

Oppenheim, in contra-distinction to Charcot, who classed all neuroses following accidents as hysteria, tried to demonstrate in his book that there is a type of disease quite peculiar in its manifestations particularly on the part of the nervous system, a type which is only met with after injuries, and railway injuries in particular.

The opponents of Oppenheim have contended that he described a disease which he called the traumatic neurosis, meaning thereby a well defined nervous disorder, characterized chiefly by concentric narrowing of the visual field, anesthesia or hyperesthesia, irritability of the heart and certain mental anomalies.

This disease as such, they claim does not exist. There are traumatic neuroses, however, resulting from injury coupled with shock, for instance, hysteria, neurasthenia, chorea, epilepsy, shaking palsy, etc. These neuroses constitute a family; they are more or less closely related to each other.

Most frequently among these traumatic neuroses are found hysteria and neurasthenia or a combination of the two, hystero-neurasthenia.

Whilst Oppenheim claims that predisposition and heredity are extremely rare and that the victims to his traumatic neurosis were ordinarily robust men, before the accident, Charcot and with him the French school, assert that the injury is only the provoking agent of a disease which exists in a state of latency. Without the accident the person might have con-