

ment of service would be that of preventive medicine. In May 1863, I began on a small scale, and under many discouragements from my friends, the construction of the first Turkish bath. Not having any model from which to work, the process was necessarily slow, and much time was consumed in experiments, not alone with the bath itself, but also upon myself, friends and patients, in testing its practical workings. It was not until October 6 of that year that it was opened to the public. On that day but one bather came and he had left his home, without letting his wife know where he had gone. It was not till four days after that four bathers came. One of those I had waylaid in the street and brought in by dint of persuasion. To the credit of the bath, however, it may be said that he and his whole family were frequent bathers thereafter. After an interval of six days two bathers appeared, both ladies. Two days after came one gentleman, and so on, for about a month before there was a uniformity of daily baths.

The first month we gave about 50 baths, the second 100, the third 150, the fourth nearly 200, thus gaining ground by slow degrees. The first year we gave over 2,000 baths, the second year about 4,000, the third year nearly 6,000. About the middle of the fourth year our facilities were increased and we gave over 10,000 baths, the fifth year over 15,000. At present, in spite of the many large baths that have been constructed in Brooklyn, New York and many other cities, we are giving over 20,000 baths yearly.

One naturally would suppose that the medical profession would be among the first to welcome such a powerful aid as the Turkish bath, but such has not been the fact. This profession, as a body, has never given it much encouragement. Individuals alone excepted, they have waited for the people to demonstrate its value and to commend its use. Years ago an English physician said: "The public in this matter, is far ahead of the medical profession." As none but those who had traveled abroad knew anything about the bath, or had even taken one, it was sometimes very difficult to induce a person to enter its precincts. One professor in a medical college said he would not go inside the hot room for \$50. Another on entering said he hoped he would not be incapacitated from calling on his patients the next day. Such was the nervous dread of the process by those who knew nothing of it. In fact it has been more difficult to convince the physicians than the layman of the value of the bath. With a few highly honorable exceptions, and in spite of a multitude of witnesses, those who control medical teaching and practice go on in the same old fashion, and are likely so to continue until an enlightened public opinion shall command the new and better way. To the people at large we are indebted for the success of the bath. While physicians believe too little, among the laymen there is sometimes the most unbounded faith in its power, as was shown by a man coming all the way from Chicago expecting to be cured of a severe attack of rheumatism by one bath.

The universal use of the bath during thousands of years in every part of the civilized world furnishes a stronger proof of its value than would any mere reasoning. If we would have our people powerful and progressive as a nation, we must necessarily look first to their physical welfare. We should at least in this nineteenth century be as wise as were the Romans. It is an encouraging fact that preven-

tive medicine is constantly growing in the estimation of the medical world. The prevention of disease is a thousandfold more desirable than its cure. It will need but a generation to blot out many diseases and, through sanitary science, put a new and cleaner face upon mother earth herself. The dawn of the era of cleanliness has set in. Unfortunate is the person who can not enjoy a Turkish bath, for it evidences an abnormal condition of the system. With most such cases the shortest road to restoration would be through a wise and persistent use of the bath. Daily I see persons borne down by unnecessary suffering who, by a timely use of the bath and a slight deviation in their habits, would not only be saved this suffering, but they would place themselves upon a higher plane of health. Every man, woman and child would be the better for a Turkish bath once a week during his or her entire life. The young would develop more perfectly, growing straight, strong and handsome, the middle-aged would have less sickness and suffering, and increase in years imperceptibly, while the aged would grow old gracefully, because saved many of the discomforts of advanced years. There is no more important factor in personal hygiene. With complete external cleanliness come purity and perfect circulation of the blood, and the best conditions of health follow as a natural sequence. Thus prolonged life and a larger degree of comfort during life are secured. This desirable habit should be concomitant with obedience to physiologic laws. Indulgence in stimulants and narcotics, or any form of what is called high living, can never be made compatible with a clean life. A few generations living in the better way would bring about a higher standard of health and a new order of life. Twenty-six years ago to-day, upon a similar occasion in this room, I made a short address and closed with this wish: "May Brooklyn, one of the pleasantest cities in which to live, soon have the most magnificent Turkish bath in the world." By no means shall any exertions on my part be relaxed until this is an accomplished fact.

A CASE OF PRIMARY (?) LARYNGEAL DIPHTHERIA, TREATED WITH BEHRING'S ANTITOXIN.

BY EDWIN J. KUH, M.D.

CHICAGO.

Freda H., a robust girl, aged 7 years, complained of hoarseness on November 6, and remained indoors without symptoms of fever until November 11. On that day she took to her bed, and Dr. F. W. Mercer saw her for the first time. On the same afternoon I saw her in consultation with Dr. Mercer. During the day the temperature had ranged at slightly over 102 degrees. The fauces were entirely free, with the exception of a small, white, loose deposit on both tonsils, which was easily brushed away with cotton mounted on a probe. The child was hoarse and the larynx somewhat stenotic. No retraction of chest upon inspiration. Bronchitis in larger tubes. Examination of the larynx was very unsatisfactory, because of an unusually depressed epiglottis, and the child's intolerance of laryngoscopic examination.

The next morning, November 12, she coughed up a piece of membrane two inches in length, one-half an inch in width, and one millimeter in thickness. Laryngeal respiration was but slightly improved, and shortly after became very difficult. Temperature about as before, but pulse rate as high as 165. I saw her the same afternoon with Dr. Mercer, and injected ten cubic centimeters of Behring's antitoxin No. 2. A few hours afterward Dr. W. K. Jaques intubated. Cultures taken from the larynx showed the presence of Löffler's bacilli.

On the morning of November 13 the temperature reached 104½, the pulse rate was not lower, and the lungs were covered with fine crepitant râles.

This rapid inception of broncho-pneumonia led to a fatal issue at midnight of the same day. We could not observe that the injection of antitoxin had made any impression whatsoever on pulse or temperature of the child.

This unfortunate case must, however, not be considered as evidence against the efficacy of Behring's remedy, as the result was evidently clouded by the complication. The child did not die of diphtheria but of broncho-pneumonia.

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SOME OF THE CAUSES OF THERAPEUTIC UNCERTAINTY IN THE TREATMENT OF CHILDREN.

Read in the Section on Diseases of Children at the Forty-fifth Annual Meeting of the American Medical Association, held at San Francisco, June 5-8, 1894.

BY A. C. COTTON, M.D.
CHICAGO.

The limited time for the presentation of this subject prevents more than passing mention of a few of the many causes that tend to increase the uncertainty of our results in the treatment of sick children.

One frequent cause of failure, faulty diagnosis, whether due to a lack of appreciation of the physiologic peculiarities incident to this stage of development, or to insufficient care in ascertaining the pathologic condition and history, we will dismiss with the mere mention; and, although in the practice of medicine, two negatives *may* make an affirmative, we will relegate the use of wrong remedial agents to the company of wrong diagnoses.

A most common cause of therapeutic uncertainties is our forgetfulness of the difference between the actions of remedies in infant and adult organisms; or rather, shall I say, because we have never learned those physiologic actions in children. As students of materia medica we have learned some few facts and theories concerning the physiologic action of certain remedies in such and such doses in adults. As practitioners of medicine we attempt to apply this knowledge, after subjecting it to a sort of mathematical shrinking and crimping process, to the relief of diseased conditions in children. Are we not guilty of studying backwards? The age \div (age + 12) = a suit of clothes made for the man, with the pants and sleeves turned up to fit the boy. "Rules for determining dose for age," "relative toleration of drugs by adults and children," are expressions that must cause the thoughtful practitioner to blush, unless he admits that he treats a woman not as a woman but as a she man. If we must have a standard of physiologic action of drugs and remedial agents and a standard posologic table, by all means let us adopt the infant; and in accordance with the mathematical idea use the sign of multiplication rather than that of division. However, the absurdity of applying our knowledge of the action of remedies in the adult organism to a physiologic entity so totally different as that of the child, is as apparent as the practice is common. Wrong habits of thought lead to wrong methods of practice. We administer larger doses of calomel, castor oil, etc., as evacuants or eliminants, for the reason that a largely over-worked glandular system is at fault, not because the patient is a child. We recognize an unstable nervous system as easily affected by neurotics and narcotics, and exhibit strychnia, and opium, with caution, but not

because it is a child. The mydriatics as respiratory sustainers may be indicated in full doses in enfeebled respiration, not because children tolerate well belladonna, hyoscyamus and stramonium.

Rapid changes in the histologic structure of the digestive tube cause extreme susceptibility to gastrointestinal irritants, too large doses of medicine producing shock, irritation or over-stimulation followed by depression. Hence small doses at short intervals are advised, or some other route to the interstitial circulation is sought, as, by medicated inunctions, etc. "Age and weight," forsooth! It is the *condition* that should determine our posology. No "royal road" is found or "therapeutics made easy" by such attempts at classification. Let us discard all such "rule of thumb" methods and dignify, not cheapen, our great art by careful painstaking application of our treatment to the especial requirements of each individual case.

Perhaps the most prevalent cause of uncertainty in our therapeutics is the almost universal ignorance or indifference as to *what the patient actually takes in the guise of medicine*. The physician may be never so careful in his diagnosis, unremitting and self-sacrificing in his attendance upon the little sufferer, elaborately scientific in his therapy as expressed in his written order for remedial agents, and then—what? Indolence, ignorance, or habit? What strange apathy, what paresis has chained the faculties and judgment of this erstwhile astute practitioner? Like the ambitious marksman with years of training and finished weapon, who, facing the target, its center the goal of his ambition, shoots into the empty air and trusts to—luck. Is it strange that he marvels at the uncertainty of therapeutics and perhaps joins the popular throng of those who descant loudly upon the inefficacy of drugs? "Throw physic to the dogs," ay, as you throw it to your little patients and the canine mortality will be greatly increased.

What avails care in diagnosis and skill in prescribing, if the prescription is left to the druggist whose shelves are filled with preparations, respectable in name to be sure, but in fact rendered inert or positively harmful from adulteration, decomposition, degeneration, contamination or which, by chemic changes and bacteriologic cultures, produce substances totally different from the active principle of the drug from which the preparation derives its name? With this in mind enter some pharmacy (?) and interrogate the shelves, and tell me if you do not find tincture of belladonna from leaves which vary 200 per cent. in atropin, tinctures of nux vomica of uncertain strength, lactucarium absolutely inert from want of care or knowledge in the gathering or preparing, lacto-peptin which is but a poor saccharated pepsin, wines of colchicum and ipecac inert from age because unstable, cascarras adulterated with aloes, rhubarb with turmeric, santolin with boric acid, potassium bromid with sodium chlorid, aqua calcis showing film and precipitate, ergot inert, old spirits of nitre which has become something else, spirits of mindererus which absorbing ammonia from the air, has become alkaline and inert, oilum morrhue with cotton-seed oil, and old unstable emulsions of no one knows what? Do you not also find agents rendered dangerous because irritating or poisonous to the digestive tract? as, cream of tartar adulterated with gypsum, chalk or alum; ginger with cayenne pepper; bismuth sub-nitrate containing arsenic; sulphurous