

stomach as carbonate of ammonium is apt to do; for rapid effect it may be administered hypodermically in five parts of almond oil which is milder and more convenient than ether. Strychnine may be added regularly from the beginning of failure, but mainly in cases with little increase of temperature. Its effect is more than momentarily stimulating; but the very best internal stimulant in very urgent cases is Siberian musk. I prefer to give it from a bottle in which it is simply shaken up with a thin mucilage. In urgent cases it ought to be given in sufficient doses and at short intervals. When ten or fifteen grains administered to a child one or two years old, will not, within three or four hours restore the heart's action to a more satisfactory standard, the prognosis is very bad.

Besides exhaustion at the height of the disease, we have paralysis during convalescence, or intense anaemia after apparent recovery. This anaemia may be general or is local, and then mostly cerebral.

In urging upon you these remedial measures in the dangers of diphtheria, I beg of you not to take me for a meddler and interferer. Like yourself, I see many a case of sickness, and treat many without medicine. But there must be a reason for both medication and non-medication; and there must be medication where there is an indication for it. Where there is there is also an indication for a sufficient dose. I believe in nature and in spontaneous cures, but I know also that nature destroys with the same equanimity and indifference with which it allows the getting well. I believe in the action of medicine and the responsibility of the physician. I know that when a political Nihilist commits a single murder the newspapers of the world talk loudly of it. When a therapeutical Nihilist commits a hundred homicides a quiet certificate and the silent sod cover the sins of omission.

Perhaps the most useful internal remedy is mercury. Empiricism has often praised calomel in small and large doses. My acquaintance with mercury in this connection is not at all new; more than four years ago I published a number of cases which got well under its use, at the same time that Dr. Shallen, of Brooklyn, published an article on the same subject. Since I have employed it,—I prefer the bichloride,—my conviction of the utter uselessness of internal medication in so called membranous croup is thoroughly shaken. Until about six years ago I felt certain of a mortality of 90 or 95 per cent. of all the cases not operated upon. These figures were not taken from small numbers for I compared those of others with my own. The latter are not a few either, for within the last thirty years I have tracheotomised nearly 600 times, have assisted at as many more operations, and have seen at least 1000 cases of laryngeal diphtheria, which were not operated upon at all. During the last six years I have seen no less than 2000 cases, perhaps many more; amongst them recoveries have not been rare at all, at all ages from four months upward. The uniform internal medication consisted in the administration of a dose of the bichloride every hour. The smallest daily dose ever given by me in the beginning was 15 milligrammes ($\frac{1}{4}$ grain) to a baby of four months; this was continued a few days, and the dose then somewhat diminished. Half a grain daily may be given to children of from three to five years for four or eight days or longer. The doses vary from $\frac{1}{10}$ to $\frac{1}{2}$ gr. They require a dilution of 1 in 6000 to 10,000 of water or milk. There is no stomatitis, gastric or intestinal irritation is very rare. It occurred in a few cases but then it was found that the dilution had not been sufficient, 1 in

2,000 or 3,000 only. If ever it exists small doses of opium will remedy it.

The benefit to be derived from the remedy depends greatly upon the time of its administration. Tracheotomy or intubation is required as a rule, after days only, and can often be avoided if mercury is given in time. If the operation become necessary after all, the treatment must be continued diligently. Never have I seen so many cases of tracheotomy getting well, since 1863, as when the bichloride was being used constantly in 1882, and the five subsequent years. Nor am I alone with these favourable results; there are dozens of practitioners in New York city, with whose methods and results I am well acquainted some of whom are connected with me in some capacity or other, who confirm the above statements. My experience with the bichloride is mainly gathered in cases of laryngeal and bronchial diphtheria; it is there where it has been particularly effective. Still but few of these were quite localized affections. Our cases of diphtheritic laryngitis are mostly descending and complicated with either diphtheritic pharyngitis, rhinitis or both. Not a few, mainly of the latter kind, exhibit constitutional symptoms of sepsis, many such have also got well. It has so happened that cases of nasopharyngeal diphtheria with septic symptoms have not often been treated by me with bichloride. What little I have seen, partly in my usual consultation practice, partly in the results of the Willard Parker Hospital for diphtheria and scarlatina, where Dr. Priest has acted upon my suggestion, has confirmed the teachings of Lynn and Pepper who rely on the bichloride of mercury as their sheet anchor in the very worst form. The results are enviable when compared with others, nor is the reason for its efficacy very obscure. If an antiseptic which enters the circulation without previous decomposition is required, and which at the same time is safe and efficient, it is the bichloride; if the virus be bacteria, so much the better. It is not necessary to introduce into the circulation for the purpose of counteracting the effect of bacteria solutions sufficiently strong to destroy them; for such doses would destroy blood cells first. According to T. Mitchell Prudden, a solution of $\frac{1}{8}$ of one per cent. of carbolic acid, prevents the emigration of white blood corpuscles under circumstances otherwise favourable to inflammation, and Koch found that though bacteria are not easily killed their growth is stopped by a solution of one part of carbolic acid in 850, and their activity by one in 1200. These effects are all that are required for practical purposes. If the growth and activity of the bacteria be stopped the cells will see to it that the republic suffer no harm. Now the bichloride of mercury is the most powerful of all the antiseptics. A child of from 35 to 40 pounds carries about 2 pounds of blood, equal to about 15000 grains. One sixth of a grain of bichloride floating in the circulation ought to be able to stop both the activity and the growth of parasites, if parasites there be.—*Abraham Jacobi, M. D., British Medical Journal, Sept., 1888.*

WHY HE WAS SO LEAN.—A lean, misanthropic physician, in a small hamlet, had as his only opponent a handsome robust man. The strife between the two was violent. One day a lady asked the first why he was continually in bad health, whereas the other was well all the time? "You see, madam," he replied, "the only man who can treat him I am, the only physician I can get is he."—*Jour. de Medecine, de Paris, according to The Scalpel.*