

diseases, entitled "Traité pratique des Maladies des Nouveaux-Nés et des Enfants à la Mamelle," unhesitatingly attributes to croup two of the essential characteristics of zymotic diseases,—first, that it does not ordinarily attack the same individual a second time, and secondly, that it is an epidemic disease; and, although he avoids committing himself unqualifiedly to a belief in its contagion, he considers it safer to separate children suffering under it from the healthy.

My impression, from consulting other authorities, is strong that these three traits of resemblance must all be admitted. So much, then, for the general family likeness existing between the two affections. Let us now consider the argument from therapeutics.

Prof. Fordyce Barker, of Bellevue Hospital Medical College, New York, in a communication addressed to Prof. A. Jacobi, on the "Treatment of Croup," which was published in the *American Journal of Obstetrics and Diseases of Women and Children*, vol. iii. No. 1, May, 1870, boldly takes the ground that true croup and false croup are one and the same disease, differing only in the depth to which the tissues are involved, excluding the croup of diphtheria, which he considers a totally different affection. Entertaining, as I do, in addition to the sentiment of respect which the opinions of so conscientious an observer and so skilful a therapist as Dr. Barker command in the professional mind both at home and abroad, that sense of deference which a pupil must unavoidably carry with him through life towards a revered master, I still find myself unable, after a careful perusal of his paper, to accept the position which he here assumes. He appears to found it, although not perhaps, avowedly, on the fact that the same remedy, administered at the outset, is, in his hands, equally efficacious in controlling both affections. This remedy is the "turpeth mineral," or yellow sulphate of mercury (hydrargyri sulphas flava); and the astonishing success which he has met with in its employment, never having lost a case of croup in the course of a long and intensely busy professional life, devoted in an unusual degree to the treatment of children's diseases, certainly entitles it to a most respectful trial. It must be borne in mind, however, to weigh honestly the value of this testimony, that Prof. Barker would call no case croup in which a particle of diphtheritic membrane had been observed upon the fauces. But, this aside, let us consider for a moment whether the agent which he employs does not possess properties which may render it of extreme value in both the simple spasmodic laryngitis and the diphtheritic infection. Every one knows that prompt emesis is the one thing needful (to speak in a general way) to control and usually immediately relieve the laryngeal spasm.

Dr. Barker's reasons for preferring this particular means of emesis to all others in croup are the following: "It acts more promptly and efficiently than ipecac or alum; it is tasteless, and much more easily administered than either; it does not exhaust and depress the vital power like antimony; it is equally prompt in its action with sulphate of copper

while it is much more effective as a revulsive and sedative." He adds, "I think the active emesis from the turpeth mineral accomplishes the following results much more effectively and speedily than any other agent: it depletes the mucous membrane, by an abundant secretion of mucus which is thrown up; it removes from the larynx, by the forced expiration which it causes, any albuminous or fibrinous exudation which may be there in a diffused state, and which by remaining may become subsequently pseudo-membrane; it acts as a powerful revulsive, and thus diminishes the capillary circulation in the trachea and larynx, and thus it becomes a most effective agent in arresting the inflammatory process."

But if an emetic is universally admitted to be the requisite in the spasmodic affection, not less general is the faith in its beneficial action in the diphtheritic or pseudo-membranous. And if we were called upon to sum up the characteristics of an agent of this class which would best satisfy the requirements and present the fewest objectionable features in the latter form of disease, we could not do so more forcibly and succinctly than he has done in the above description of the properties of this medicament. But do its valuable properties as regards diphtheritic croup cease with its power of inducing prompt emesis? I think we are entitled to return a negative answer to this enquiry, on two grounds. First that it is an active depurating agent in causing "so abundant a secretion of mucus, which is thrown up;" but, secondly and especially, because it is a sulphur compound, and sulphur is well known to be one of the most determined and destructive foes to the micro-zye which the Pharmacopœia can command. Its efficacy in destroying the disease-germ present in spasmodic cholera can, I think, no longer be questioned, and it may be as potent over the micrococcus of diphtheria. May not the beneficial action of sulphate of copper, of sulphate of zinc, and of alum, the sheet-anchor of the elder Meigs, aside from their emetic properties, be reasonably attributed to the same component? And if so, do we not see an explanation of the superior value of the mercurial salt in the fact that mercury appears to possess to a more striking degree than any other mineral the *open sesame* to the circulatory and absorbent systems, obtaining admittance not only for itself, but for any remedy with which it may be for the time in the intimate companionship of chemical affinity,—a prompter entrance into the vascular system, and more immediate distribution throughout the body? May we not also read in the same light the happy results which have led the younger Meigs to place such confidence in the mild chloride in the management of membranous croup? Is he not administering that subtle and admirable antizymotic, chlorine, with a directness and efficacy perhaps even exceeding that with which many of us accomplish the same result in the exhibition of the much-trusted chlorate of potassium.

If the commencement of Dr. Barker's treatment appear admirably adapted to cut short a case of diphtheritic croup, however, not less appropriate is