

little patient was seven months old, the child of parents in the higher station, and in an atmosphere which could not, by possibility, have an effect in prolonging or aggravating the complaint. There was no condition of gums to warrant the opinion that teething had any influence on the disease, and the secretions were healthy. If the child presented any peculiar aspect, it was that of constitutional debility, a deficiency of power preventing the development of the teeth. The treatment pursued had been of the ordinary character in these cases—attention to the secretions, strict rules regarding diet (the child being brought up by hand), and the avoidance of all excitement. The disease, however, had continued to increase in severity, and the little patient had now as many as eight or nine attacks in a day. The nurse was warned of the approach of the convulsions by an attack of crying. Now, what would be the effect of allowing the child to inhale the vapour of ether by sprinkling a little of that agent on a towel or handkerchief, and holding it to the mouth and nose? He knew that ether had failed in trismus and tetanus, but he threw out this question for the purpose of eliciting discussion.

Dr. Chowne inquired if, in the case related, the convulsion arose from spasm of the glottis, producing difficulty of breathing, or from some other cause. When it arose from such a spasm in the air-passage, the difficulty to the admission of air would bring on convulsions, and, under these circumstances, the administration of the ether would only make the quantity of air inspired less. If, however, the ether acted as an anti-spasmodic, then the glottis would be opened by its agency, and afford the patient time to respire. It had been found that in cases of irritable larynx and trachea, there was a difficulty in administering ether. We required further experience to determine the effects of ether generally, but more particularly on infants. He should be fearful of applying it in cases similar to the one detailed.

Mr. Headland said, that in his case the convulsions evidently arose from spasm of the muscles of the larynx. What was to arrest that? It was evidently referable to some disturbance of the pneumogastric nerve; and in this extreme case all anti-spasmodics and other remedies had failed of affording relief. He was fully alive to the necessity for caution in such a proceeding, and stated his conviction that ether was at the present time too indiscriminately employed.

Dr. Chowne believed that ether did not necessarily produce congestion of the brain; a state of collapse certainly sometimes followed its use, but he had neither observed stertorous breathing nor dilated pupil, though he had heard of the presence of such effects in some cases. In one instance a man certainly did appear to suffer from fulness of blood in the head after inhaling ether.

Dr. Risdon Bennet had seen little of ether; but, from what he had observed at St. Thomas's Hospital, it would appear, in some cases at least, to resemble in its effects the nitrous oxide, at first producing excitement, followed, as was usual with these agents, by a state of collapse. We were too ignorant, he thought, of the operation of ether at present, to employ it in convulsive diseases. Could we, or could we not, with safety try its effects in convulsive diseases, knowing its tendency occasionally to produce convulsions? It was an important subject, and deserved the attention of the profession.

Dr. Chowne had recommended the inhalation of ether in a case of hooping cough, as it had been stated that it had in some instances cut short the disease. It had been inhaled by holding to the nostrils a handkerchief sprinkled with ether.

Dr. Bennett said that it would be more likely to be useful in hooping-cough than in laryngismus stridulus.

Dr. Garrod said that ether might be so exhibited as always to produce excitement. If inhaled from a bag into which ether had been put, it usually produced that state, followed soon by narcotism. Judging from the effects of alcohol on the young of animals, he thought that ether must be used to children with caution.

Mr. Bishop said, that the question before the Society was one of importance. It was difficult to say in the present case what was the source of the irritation which, acting on the pneumogastric nerve, produced the convulsions. Any particles in the atmosphere which might irritate the superior laryngeal nerve were sufficient to produce the effect. Change of air had occasionally been of benefit in these cases; and a warm moist atmosphere was undoubtedly likely to be of service, from its preventing anything irritating the mucous membrane of the larynx.

Dr. Clutterbuck considered that one of the greatest advantages

which we should derive from the use of ether would be the power we should possess of bringing our remedies more directly to the organs of respiration when in a state of disease than now. Twenty years ago there was a great disposition in the profession to the administration of remedies by inhalation. Dr. Beddoes had found great advantage from the use of carbonic acid and other agents in this way. The plan had been since neglected, though it was undoubtedly the readiest, of carrying our remedies directly to the seat of disease without first sending them through the course of the circulation. He considered that great advantage would arise from the employment of the inhalation of ether and other vapours in affections of the air-passages. He related the case of a lady who had been for years the subject of a distressing catarrhal affection, which was much influenced by weather and other causes, and the attacks of which were often obstinate, and difficult of relief. He thought this might be a case in which the inhalation of ether might be of service, and he accordingly directed her to inhale it in the simplest manner, by holding a bottle of ether to the nose, smelling it strongly, and drawing deep inspirations, until she found it affected her. She was usually under its influence in about five or ten minutes. She had pursued this treatment for several days with the greatest advantage; it acted by diminishing the sensibility of the mucous membrane.—*Lancet*.

SURGERY.

Etherization. (From a Correspondent.)—In the *Gazette des Hopitaux* of the 30th of March, Monsieur Pertusio, Surgeon of Turin, asserts that he has employed ether successfully in traumatic tetanus. Monsieur Roux has been unfortunate at Paris in an analogous case.

Extract from the Gazette des Hopitaux.—"M. Pertusio, surgeon of the hospital of SS. Maurice et Lazare, at Turin, has just obtained a successful result, by the aid of etherization, in a very marked case of traumatic tetanus.

"From Feb. 4th, some tetanic symptoms had been manifested in a young patient received into the wards of this physician, and on the 13th these had attained the greatest intensity. M. Pertusio conceived the idea of trying etherization, and instantly obtained complete resolution of the muscular retraction. In fact, the tetanic symptoms reappeared as soon as the influence of the ether had ceased; but M. Pertusio immediately renewed the inhalation, and obtained, on the whole, sufficient benefit to encourage him to return to the etherization, at first as often as six times a day.

"By degrees, the tetanic attacks becoming more feeble and less frequent, the inhalations of ether were diminished, and at the end of a week, one single etherization was sufficient.

"On the 4th of March, the patient had passed a week without experiencing the slightest tetanic symptom, although the etherization had been discontinued, and he now walked in the hall of the convalescent patients, nothing of his complaint remaining, except a slight rigidity in the abdominal muscles."—*Clinique de Marseille*.

Vapour of Ether.—M. Boullay, jun., has made several experiments on animals with the vapour of ether. Four dogs which were subjected to it gave no signs of pain under mangle of all kinds. From sixteen to eighteen grammes of ether were injected into the jugular vein of a horse, and he immediately fell into a sound sleep. MM. Malgaigne, Roux, Velpeau, &c., have experienced the most decided success from its use with their patients. Amputations of the thigh, leg, and finger, operations for hydrocele, the extirpation of tumours seated deeply among muscles, vessels, and nerves, have all been performed, not only without the patient's being in the least disturbed by what was going on, but even while under the knife without losing that internal comfort and agreeable feel so characteristic of the intoxication from ether. We give shortly one of the cases laid before the Académie de Médecine by M. Laugier. A young girl, aged 17, with white-swelling of the knee, had her thigh amputated. Having previously inspired the mixture of air and vapour of ether for three or four minutes, she fell into an extatic sleep. When the limb was removed and the vessels secured, M. L. began to dress the stump, and then the patient gave the first evidence of consciousness by complaining of being awakened, and of being brought among men, as she said, and added that she had been sleeping with God and