Energetic counter-irritation by means of sinapisms to the throat, chest, back, and shoulder-blades has been suggested as a means of determining the erysipelas to the surface. Dr. Bedford Brown² gives the history of two remarkable cases, in which the free application of sinapisms was followed by immediate relief to the symptoms of laryngeal stenosis. In Case 1 there was a manifest subsidence of the inflammatory action and oedema of the pharynx; within a few hours after the application of the mustard a very extensive attack of erysipelas had been developed over the chest and a portion of the lower neck. I certainly intend to try sinapisms in future. Dr. Helbing, of Nuremberg, advocates a similar plan of treatment in phlegmonous pharyngitis. He applies three or four drops of croton oil over the skin, between the angle of the jaw and the larynx. He has found speedy benefit from this procedure. The production of eczema is the only drawback.

Ryland had a very high opinion of the good effect of blisters. "They appear, in fact, to be the external remedies on which our chief reliance should be placed, as they evince a singular power of preventing the extension of erysipelas in other parts of the body."

The application of a strong solution of nitrate of silver (80 grains to the ounce) to the inflamed mucous surface before the onset of oedema is recommended by Gibbs and Durham. Gibbs records a case of erysipelas, extending from the head and neck, in which this treatment gave marked relief. A saturated ethereal solution of iodoform has also been found useful. In view, however, of the good effect of painting cocaine over the inflamed parts I do not advise these plans.

The question of tracheotomy will, of course, have to be considered in these cases, and if death threatens from obstruction to the respiration, it is clearly the duty of the surgeon to obviate the tendency to death by opening the windpipe. In this respect I agree with Cohen, who says: "In presence of asphyxia or excessive dyspnoea, tracheotomy is recommended by Ryland, Moss, and Gibbs; but it is unhesitatingly condemned by Porter, of Dublin, and my own researches into literature have not disclosed a single record of life rescued by its agency. Be it even so, I would recommend tracheotomy, nevertheless, if not for the one chance more it offers to life, at least for the relief it affords the patient. In this case the operation changed the condition of the patient from one of restless, gasping agony to that of tranquil repose, and gave him a few peaceful hours in which to make preparations to meet his God."

The description just quoted from Cohen applies exactly to my third case, and, though the patient died, the relief from the operation was so immediate and complete that there is no necessity to say anything further in justification of the operation, except to mention that Durham states that a favourable result occurred in five out of fifteen tracheotomies performed on account of erysipelatos laryngitis in cases known to him. In view of the unsatisfactory results of tracheotomy, the adherents of intubation have put forward a claim for it in the relief of the dyspnoea. I do not believe for a moment that intubation is possible except in a very limited number of cases of laryngeal erysipelas. William Porter, however, regards intubation as preferable to tracheotomy in these cases. Merrigan records a case in which intubation was attempted and the tube retained for a time; it was, however, coughed up, and could not be replaced on account of the laryngeal swelling. In the great majority of cases the oedema comes on so rapidly that it would be impossible to introduce a tube into the larynx. In all the cases I have seen the glottis has been almost entirely obscured by the greatly swollen epiglottis. Food should be given in a liquid form, strong beef-tea, raw eggs beaten up, and milk. In one case where there was great dysphagia I fed the patient almost entirely by the bowel with excellent result. Stimulants are usually necessary. I have not seen much benefit from internal medicaments. Dr. Bedford Brown, whom I have already quoted, has for some time past used salicylate of sodium in erysipelatos affections attended with great rise of temperature, with delirium and a tendency to cerebral complications, and, more recently, with still better effects, the salicylate of ammonium. He gives it in doses of 20 grains every three hours, and he regards its action as being eminently antiseptic.

² *Journal of American Medical Association*, July 2nd, 1887.

If, as in the case with which I commenced my paper, hyperpyrexia occurs, sponging the patient or packing with iced sheets may be required.

OXYGEN AND STRYCHNINE IN RESPIRATORY TROUBLES.

By COUPER CRIPPS, M.D., M.S., M.R.C.S.

In view of the importance of the subject to which notice has been lately directed by Dr. Brunton and others, I would like to draw attention to an abstract of my M.D. thesis published in the *Liverpool Medico-Chirurgical Journal* for July, 1888. In this I advocated the use of oxygen for the respiratory trouble of coma in all cases, and, amongst others, related a case of opium poisoning which occurred in July, 1885, and which I treated successfully with the inhalation of oxygen, after artificial respiration had been previously maintained for over six hours without, apparently, any permanent benefit to the patient.

As regards the case of pneumonia related by Drs. Brunton and Prickett in the *BRITISH MEDICAL JOURNAL* for January 23rd, in which venesection and the hypodermic injection of strychnine (apparently afterwards employed) failed to produce any marked effect, I may mention that in the case of opium poisoning referred to, dry cupping was resorted to over the chest and back, in order to relieve the extreme congestion of the head and neck, but it appeared to render the respiration more defective, and this was attributed to the withdrawal of blood from the circulation, diminishing its capacity for absorbing and carrying oxygen when presented to it in a dilute form.

It is thus possible that in Drs. Brunton and Prickett's case the venesection was the cause of the respiratory centre failing to respond to the hypodermic injection of strychnine, for in the following case of pneumonia a similar administration of this drug was followed by recovery.

M. B., a gentleman, aged about 42, had been going about suffering from symptoms resembling a mild attack of influenza for five days, and when first seen on December 15th, 1890, presented signs of pneumonia, limited to a small area outside the right nipple; this gradually extended until December 22nd, when the entire upper lobe had become involved. The temperature, with slight remissions, had been about 104° F., and there had been almost constant delirium since the evening of December 15th. The mouth and fauces were inflamed and thickly dotted over with an aphthous exudation, and on account of this and the dryness of the tongue swallowing was extremely difficult, and for the last three days nutrient enemata had been employed. The patient being thus in a critical condition, Dr. T. D. Acland kindly saw the case with me in the evening of December 22nd, and gave a very gloomy prognosis. Dr. Sedgwick Saunders, who was attending from time to time in a friendly capacity, took a similar view of the case, although he was not able to be present at the consultation.

On December 24th I was called early to the patient, as it was supposed he was dying. On my arrival I found the friends firmly persuaded that the end was near at hand, one of the trained nurses having left with the impression that, such being the case, her services were no longer required. The condition of the patient was certainly alarming, for there had been several involuntary evacuations, enemata were no longer retained, there was retention of urine, and it seemed almost impossible to get him to swallow. He was quite unconscious, with teeth tightly clenched and face very dusky, constant twitching about the mouth, and convulsive movements of all the limbs. The respirations were slow and of a marked "Cheyne Stokes" character, with long pauses at intervals, during which the patient became much cyanosed, and was on several occasions supposed, by the friends, to have breathed his last. There being no time to obtain a supply of oxygen, which I have successfully used on other and somewhat similar occasions, I concluded the best thing to do was to stimulate, if possible, the respiratory centre, to the exhaustion of which the urgency of the symptoms appeared to be mainly due. I therefore obtained a solution of strychnine, and gave a hypodermic injection of one-fiftieth grain; a slight improvement soon took place in the breathing, and I was encouraged to repeat the injection after a short time, and at intervals of a few hours, until I had given the tenth of a grain; by this time the respiration had become quite regular, and consciousness had returned. The patient subsequently made a complete recovery.

I should mention that the case was complicated by a severe burn on the chest, caused by the application of a poultice on December 17th. This was an additional indication for the use of oxygen, could it have been obtained in time, for the gas has been shown to be of marked utility in cases of extensive burns.

THE TEMPERANCE MOVEMENT IN JAPAN.—Mr. S. Tsuda has presented a petition, signed by more than 3,000 members of the Temperance Society of Japan, to the Japanese House of Representatives, praying for increased taxation of alcoholic liquors with the object of lessening the consumption of them.