afresh, this being probably the result of the marked diminution of mental pain while awake, and of the sound sleep produced at night. There was practically no habituation, the dose merely having to be increased or diminished as the disease progressed, and no cumulative effect was produced, even by repeated doses of 40 grains. This case may also be of value as showing the safety with which sulphonal may be given in suitable cases for prolonged periods. —Dr. C. J. Morton (Edinburg) in the *British Medical Journal*, Dec. 14th, 1889.

THE ANTISEPTIC ACTION OF AMMONIA.

One of the facts now becoming abundantly sustained with regard to the effect of organisms on the organic bodies on which they live (albuminoids, etc.) is that the products of bacterial activity tend to limit and finally to destroy the vitality of the growing organisms. Not only is this so with bacteria, but it is well known, and can be readily demonstrated by experiment, that the products formed by digestive ferments from albuminoids or carbohydrates tend to "choke" ferment activity, which indeed revives when the products are removed, as, for example, by dialysis. Ammonia is one of the commonest products of putrefaction. It is formed not only by the action of putrefactive bacteria on albuminoids, but is a result of the decomposition of urea, which occurs from the action of the bacillus urea. Gottbrecht has lately tested the anti-fermentative action of ammonia. In his experiments he did not use the gas itself, but carbonate of ammonium, which, although less volatile than the gas, readily develops ammonia. It was found that a two per cent. solution of this salt delayed the decomposition of portions of fresh organs for nine days, a five per cent. solution for nineteen days, while a ten per cent. solution delayed it for thirty days. In mixtures in which decomposition had already occurred ammonium carbonate added to the amount of five per cent. after a time killed the organisms; while a two and one-half per cent. admixture of the salt diminished their activity. On the other hand, it was found that smaller proportions of ammonium carbonate, one-fourth to one per cent. not only did not diminish, but actually increased the activity of the organisms, so that putrefaction became more rapid. This is only another example of a very large class of substances, which in small doses increase activity, in large doses diminish it; many of the drugs which act on the heart have this action. It might be considered that the action of carbonate of ammonium on putrefactive changes was due to the state of alkalinity produced in the liquid; but that this is not so is shown by the fact that sodium carbonate added to the same degree of alkalinity does not possess any anti-putrefactive action.—*British Med. Journal.*

METHOD OF REDUCING DISLOCATION OF THE JAW.

Dr. Gerin, in a case of unilateral dislocation of the jaw, employed the following method. The patient, being seated, the physician stands behind him, and with the left hand placed on the patient's forehead, he fixes the head firmly against his chest. A compress folded to several thicknesses is placed over the lower teeth on the affected side. The surgeon then introduces his thumb between the dental arcades in such manner that the palmar surface of the thumb rests upon the molar teeth, while the other fingers grasp the horizontal portion of the lower jaw. Then bending a little forward over the patient he presses on the maxilla, combining with this downward pressure a slight backward movement. Almost immediately the bone is returned to its articular cavity.—*Bulletin Général de Thérapeutique*, March 30, 1889.

TREATMENT OF ASTHMA.

Within a recent period we have noticed in our exchanges many articles on the treatment of asthma. As to the remedies recommended for this disease, there is no end. With no intention of deprecating the value of several old and well-tried remedies, we shall only refer to agents which have recently forced themselves to the foreground. Of these, perhaps, citrate of caffeine stands first. The dose is 1 to 5 grains dissolved in warm water. It does not appear to be a very dangerous agent, since, in one instance, a patient took 60 grains by mistake, without fatal consequences. Caffeine is said to afford very prompt relief. Arsenic, in the form of 2 or 3 minims of Fowler's solution, is reported as making striking cures in appropriate cases. Arsenic has the peculiar property of supporting respiration, as, for example, in making ascents. Its beneficial effect in asthma is no doubt due to this property. Iodide of potassium is sometimes combined with Fowler's solution. A valuable combination in the bronchitic form is iodide of potassium and carbonate of ammonia. Chloral hydrate, either alone or in combination with bromide of potassium, is also followed by excellent results in certain cases. Cocaine in doses of $\frac{1}{6}$ of a grain of the muriate, given in the form of tablets, has been very highly recommended for the relief of the spasm. In the form of stagnant respiration, with congested lips and nose, and cold extremities, strychnia has been found highly useful. The liquor may be given in doses of from 3 to 5 drops, with dilute phosphoric acid. When defluction from the mucous surface is very profuse, belladonna probably answers best. Medium doses should be given every four hours. Grindelia robusta a short time ago was largely used, but failed to come up to expectations, and is now much less used. Quebracho is also a remedy in much repute.