

tive in its action (Headland), will so act upon the blood and on the nervous system at the same time, as to restore the exhausted energies of the nervous centres.

"Food, mild stimulants, and quinine are all more or less employed, and quinine especially may be employed with benefit. Infusion of coffee as a medicine has been given by Dr. Parkes with the beneficial effects of relieving headache. Boecker and Lehmann have shown that the use of coffee, in health, delays the metamorphosis of tissue, and excites the nervous system. As a nerve-restorative, phosphorus merits some notice. And first, as iron is given where the blood requires nourishment and restoration, so phosphorus seems to nourish and restore the nervous system, especially in cases of fever, where much phosphoric acid has been passed by the urine. The forms in which it is given are (1) in pill,  $\frac{1}{40}$ th or  $\frac{1}{70}$ th of a grain of finely divided phosphorus, melted with fat, and the pill covered with an impermeable coating; (2) in the form of hypophosphites of potash, soda, or lime, given in camphor water, to the extent of five grains of the salt, three or four times a day. The potash salts seem to have a solvent and liquefactive action so strongly marked, that great mischief may result from its incautious administration to persons affected with tubercular deposit in the lung. For the same reason it is of great value in chronic bronchitis, with thick fetid expectoration and congestion of lungs. (Dr. Thorogood, in *Practitioner*, July, 1869, pp. 14-20). Camphor has been also found of use in the adynamic type of fevers. It acts beneficially in strengthening the pulse and reducing its frequency. At the same time it moistens the skin and subdues delirium, especially the low muttering form. Twenty grains or more every two or three hours are required for this result, and its effects must be watched (Graves). Counter-irritation by blisters has been largely employed by Graves and other physicians as a mere stimulant in fever, under the following conditions, described by Dr. Ringer as follows: "With acute diseases, such as the idiopathic fevers and inflammations, it not unfrequently happens that persons already weak and much prostrated have their dangers greatly aggravated by the following mental state—they become aphetic and unobservant, which condition increases till it even reaches partial insensibility or coma, and they can only with difficulty be roused, and then wear a stunned, stupid, and vacant look, and understand very imperfectly what is said to them. The body generally sympathizes with this depressed condition of the mind, and its functions are more and more languidly performed, till those necessary to life altogether cease. It is a condition which may not inaptly be compared to one produced by poisoning with opium, where there is partial coma, which produces a lethargy in the functions of the body whose activity grows less as the coma continues and deepens. But there is no true and refreshing sleep, while it is a condition in which sleep is most urgently needed. With patients in such a precarious state, it is of all things necessary to rouse them from their state of lethargy, and with the restoration of consciousness and activity of mind, there occurs renewed

vigor in the functions of the body, and the patient is removed from a state of imminent danger to one of comparative safety. To accomplish this, blisters of large size, in quick succession, and for a short time, should be applied to different parts of the body, for instance, to the chest, to the abdomen, and to the thighs and calves. I have seen very satisfactory results follow their application to the nape of the neck under such circumstances. Dr. Ringer considers that more good is obtained by an opiate and plenty of stimulants, carefully given to produce sleep, out of which the patient wakes strengthened and much improved. No fixed rule can be laid down; each case must stand on its merits.

"The treatment of any special febrile state depends on the disease of which it forms a part, and by which it is more or less modified—forming a special topic for consideration in the part which treats of special diseases. But it is above all necessary to guard against the habit of trying always to be doing something. As a routine system, nothing can be laid down as a rule, either in the direction of depletion, or of evacuates, or of stimulation or restoration. The febrile state is in many diseases part of the essence of the morbid condition, which cannot be cut short nor materially subdued by remedies. There is no specific remedy for the cure of any fever; and in the present state of our knowledge regarding specific febrile diseases, there can be no specific remedy for their cure.

"Every disease where fever is present, and every case of specific febrile disease, must be studied so that its management or treatment may be regulated on the merits of the individual case; and must be regulated by the state of each particular function as determined by clinical investigation daily.

"No remedial agent here mentioned can cut short a specific fever. Judiciously employed, they may render them less dangerous, and may in some cases save life."

#### MURIATE OF AMMONIA IN BRONCHITIS, CATARRHAL PNEUMONIA, Etc.

In obstinate acute bronchitis, after the first intense stage; in catarrhal pneumonia, both of children and adults; in bronchorrhœa, and also in ordinary chronic bronchitis, Dr. Wood has obtained more apparent good from the use of muriate of ammonia than any other remedy. The best formula for giving the muriate with which he is acquainted is as follows:  $\mathcal{R}$  Ammonia muriat. 3 ij; ext. glycyrrhiz. 3 j; mucil. acaciae, aquae, aa f 3 iij. M. S. Tablespoonful for an adult every two hours; teaspoonful for a child a year old every three hours.

When patients object to the mixture of sweet and salt, the following is to be preferred:  $\mathcal{R}$  Ammonia muriat. 3 ij; aquae, f 3 vj. Dose as before.

When the cough is very annoying  $\frac{1}{20}$  of a grain of sulphate of morphia, or 10 to 15 minims of tincture of hyoscyamus, may be added to each dose.

In bronchorrhœa the following may at the same time be used by inhalation twice or thrice daily. Take of Sat. solution of alum, 3 vj; tr. hyoscyamus, 3 ss. M.