

general febrile consumption of the body; delirium; sleeplessness; and the typhoid conditions, although not altogether the result of high temperature, are largely influenced by it. Moreover, high temperature produces some of the most serious nervous symptoms, acceleration of the pulse, and favors rapid decomposition of the contents of the intestines. The secretion of gastric juice and stomach digestion are not so much influenced by the fever as the secretion of the salivary and pancreatic fluid, hence starchy foods are most likely to be carried through the intestines in an undigested condition and to produce increased irritation. Such is a brief and necessarily incomplete account of the way in which this poison affects the human organism.

Now the question arises, How is it to be combated? The various methods of treatment adopted may conveniently be considered under four heads: the expectant, the antipyretic, the antiseptic, and, lastly, the specific. By the expectant method is meant the placing of the patient in the most favorable position to withstand the ravages of the disease, and to allow the fever to run its course. To accomplish this he is placed in bed in a cool room, to which abundance of fresh air is admitted. The diet is of a liquid character, and such as to be easily digested, being restricted almost altogether to milk, when that form of nourishment is well borne. The skin is kept in a healthy condition by daily sponging with tepid water, and every deviation of the bodily function is at once looked after. Excessive diarrhoea is checked, as it would be in a healthy person; sleeplessness is overcome by the administration of opiates. At the same time the strength is kept up by nourishment, and, if necessary, stimulants are used to support the flagging energies.

This method has been many years in existence, and has still many followers. That it is a great improvement upon the heroic treatment adopted in the early part of this century, and that through it we have been able to study the natural history of the disease, will be agreed to by all. We may also safely assert that in our present state of knowledge no better treatment can be adopted for mild cases. The question however comes up: In addition to these measures, excellent in themselves, and to be adopted in all cases, cannot something further

be accomplished in the management of the more severe forms of this disease? The fact stares us in the face that, according to European statistics, under the expectant treatment there is a mortality of about 20 per cent. in all cases. Within the last twenty-five or thirty years, some physicians, recognizing the fact that many of the most deleterious effects upon the human body were the result of high fever, have by various methods attempted to reduce the temperature, and this has led to the antipyretic plan of treatment. There are two ways of carrying out this method: (1) by the application of cold to the body, and (2) by the administration of drugs which are known to have a positive effect in reducing temperature. In the latter part of the last century the method of reducing temperature by the application of cold was adopted to a limited degree by some physicians. In 1821 the Priesnitz mode of treatment was introduced into Europe by an empiric who, although not a scientific man, was largely endowed with shrewd common sense. This treatment by cold packs was for a time very fashionable, and in many forms of disease; in cases of fevers, among others, it seems to have been quite successful.

To Dr. Brand, of Stettin, belongs the honor of first adopting and actively advocating the cold bath treatment for typhoid fever. His earliest contribution upon this subject appeared in 1861, and since that time many articles have appeared from his pen. In the *Wiener Medicinisch Wochenschrift* of 1872 he made the assertion that no patient with typhoid fever will die if this mode of treatment is adopted from the very commencement of the disease, an assertion which certainly appears to be borne out by his statistics of private practice.

This system was introduced into France by Glenard, who when a prisoner in Stettin, during the Franco-Prussian war, noted the excellent results of Brand's method, and who, when he returned home to his native country, introduced it into his own practice. Recently some of the most enthusiastic followers of Brand have been French physicians.

In 1880 Dr. Cayley spoke very favorably of the cold bath treatment in the Croonian lectures of that year. Shortly after 1880 powerful antipyretic drugs were introduced, and have since that time been largely used in the reduction of