convalescent stage of the disease, to watch the patient, both as to diet and muscular over-exertion. I have lost some three patients from imprudence in these particulars after they were dismissed.

One reason why I think quinin a proper remedy in the present type of typhoid fever is the fact that it occurs during the malarial season of the year. When I commenced the practice of medicine in 1845, and up to 1875 I only met with winter and spring typhoid, and did not think it necessary to give quinin. The first case of summer or fall typhoid I ever saw was in the fall of 1875, when I had an introduction to it of six cases at the same house. They fortunately all recovered. The old-time winter typhoid was generally attended with symptomatic eruption. We also expected a week or ten days of what is called the nervous stage.

In the fall and summer typhoid fever, we usually find the pulse much slower than it was in the old winter typhoid, as well as in remittent fever. This is one of the distinctive characteristics of identity between the summer or fall typhoid and the latter disease.

My reason for the use of acetanilid with quinin is that it has a soothing and quieting effect and prevents the possible irritating effects of the latter on the nervous system. It also, to some extent, acts as an antipyretic. I have not observed any depressing effects of acetanilid on the heart. It is always well to increase or diminish the dose according to amount of temperature.

MEDICATION OF THE RESPIRATORY TRACT BY ANTISEPTIC NEBULÆ.

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The antiseptic value of nebulæ in the treatment of diseases of the respiratory tract is well recognized by the profession. How to administer them in sufficient strength and quantity to control respiratory septic processes has been the problem. If administered by the stomach in suitable strength and quantity to sufficiently saturate the lungs, as a rule the stomach and lower alimentary tract is so irritated that digestive functions are greatly deranged, hence Nature's method of controlling these processes by vital resistance is much impaired; if introduced directly into the lungs by a parenchymatous injection, so much irritation is produced that an exudate is thrown out which occludes the finer air passages and prevents the introduction of the medicaments; therefore, the normal method of reaching these septic processes is by combining in a respirable form antiseptic nebulæ.

There are many mechanical methods for the introduction of antiseptic nebulæ into the respiratory passages. These vary from the single hand-bulb nebulizer on up to the elaborate mechanisms found in the efficiently equipped offices of the modern medical men. The problem in this form of treatment has been to provide an efficient mechanism for home treatment by patients. For, with the thorough measures of treatment instituted in our offices to be supplemented by the patient's home use of remedies under the guidance of the physician is to reach the most effective results from this form of treatment.

In this connection I may state that I have found a new device, Benson's Home Nebulizer, very satisfactory for the individual use of patients. The accompanying cut makes any extended description unnecessary. This apparatus is compact, portable, inexpensive, and of considerable capacity for complete lung inflation. Its practi-

cally steady current of compressed air is filtered and antiseptized before performing its nebulizing duties proper.

As to the formulæ valuable for use in antiseptic nebulæ, the experience of the physician as to the specific case must necessarily be determined largely by his own judgment.

My personal preference has been in favor of simpler rather than complex mixtures. I seldom combine more than one antiseptic in a given mixture. The best vehicle with which to combine an antiseptic is the commercial preparations of the liquid hydrocarbons. In a 4-ounce mixture of oleum petrolati I frequently add 30 drops of the chemically pure oil of wintergreen, for use in cases of slight catarrhal bronchitis. Merck's oil of cloves in the proportion of 40 drops to 4 ounces of the vehicle is very useful in cases of subacute bronchitis. One of the most delightful as well as soothing nebulæ consists of the imported chemically pure oil of pine needles in the proportion of 50 drops to 4 ounces of the vehicle where there exists acute catarrhal coryza of the respiratory tract.

The above will readily suggest to the physician the general scope and character of the large number of remedial agencies from which to choose. Formulæ contain-

ing cocain muriate with gum camphor will do much toward allaying the discomfort in tonsillitis. Mixtures can be made up containing iodine crystals, beechwood creosote and oil of tar for laryngeal and pulmonary tuberculosis, and so on through the wide range of efficient antiseptics at our command. I believe the chances of successfully coping with respiratory disease are greatly enhanced by general adoption of the inhalation method.

Trauma in the Etiology of Infectious Cerebral Affections.—Ehrnrooth of Helsingfors had occasion to treat two cases of infectious brain affections which developed consecutive to a contusion of the skull, without solution of continuity. He produced a similar contusion on the skulls of 167 rabbits, and inoculated 90 with streptococci, 16 with staphylococci and 11 with pneumococci. More than 63 per cent. of those inoculated with the pneumococci, 56 of those inoculated with staphylococci and 54 per cent. of those inoculated with streptococci died with evidences of an infectious process in the brain. Of the 50 animals infected, but without trauma, only 9 showed traces of an infectious process in the brain. The contusion therefore must have afforded a favorable place for the colonization of the bacteria in the blood, even in the absence of any lesion of the skin or meninges.—*Nord. Med. Ark.*, February 6, 1902.