

ably reduced in size, when compared with those animals running at liberty; and so it is with the human beings who lead inactive lives. Phthisis generally begins at the apices of the lungs because these parts are more inactive, and because the bronchial tubes are so arranged that they carry the inspired air with greater facility to the bases than to the apices. During inactivity a person will ordinarily breathe about 480 cubic inches of air per minute. If he will walk at the rate of six (*sic*) miles an hour, he will breathe 3,260 cubic inches. In singing, this increases more than in walking, as singing well requires all of the capacity of the lungs. The instructor of vocal music, in addition to his musical education, should understand the anatomy and physiology of the respiratory organs.—*Virginia Medical Monthly*.

FORMULA FOR CREASOTE.

Dr. Keferstein gives some formula in the *Therapeut Monatshefte*, which have proved useful in his practice.

The following formula is for administration of the creasote in pill form: R. Creasoti, ʒ i; powd. althea root, ʒ iss; licorice juice, f ʒ iss; mucilage of acacia, q. s. ut fiant pil. No. 120; coat with gelatine. Sig. Six pills three times a day.

When there is much cough and diarrhoea, the following may be given: R. Creasote, gr. xv; acetate of lead, opium (pure) āā gr. ivss; licorice juice, f ʒ iss; mucilage of acacia, q. s. ut fiant pil. No. 50. Sig. Five pills three times a day. Five pills contain one and one-half minims of creasote.

Instead of giving the creasote in cod liver oil, Keferstein has the following emulsion made, which can be taken even by children; R. Creasoti, mxx; solve in olei amygdalæ f ʒ viiss; pulv. acaciæ, ʒ v; aq. destil. f ʒ iiiss. M. Ft. emulsio. Adde, tinct. aurant. comp. mxxv; oleosach. menth. pip. f ʒ i. M. Sig. A tablespoonful from two to five times a day.

In the case of children it will be sufficient to make up half the quantity, and give a teaspoonful of it at a time. One tablespoonful of this emulsion contains one and one-half minims of creasote. If the taste of oil is detected, black coffee may be given after it.

The following formula is suitable for giving creasote in the form of drops: R. Creasoti, m xl; tinct. cinnamomi, f ʒ viiss. M. Sig. Fifty drops three times a day, or one-half teaspoonful in a cup of warm milk, added while the milk is vigorously stirred. Twenty-five drops of this mixture contain one and one-half minims of creasote. Instead of milk, warm sugar and water may be used; but if alcoholic fluids are used they should be cold, while if non-alcoholic fluids are used—the best of which are mucilaginous—they should be warm.—*Wiener med. Presse.—Medical and Surgical Reporter*.

THE CONNECTION BETWEEN POLLUTED WATER AND TYPHOID FEVER.

The wide distribution of typhoid fever over the surface of the globe, amongst civilized nations at least, and the great mortality which it causes every year, have imparted to the question of its prevention a very general interest. As prevention depends upon a knowledge of the cause, the discovery of the potential agent and the mode of its propagation and the means of its communication are the prime objects of investigation. The germ theory of the origin of typhoid fever seems to have been established upon a substantial basis. The media by which the affection gains access to the human body are various. The digestive tract is the main avenue of entrance of the microorganism, which is frequently contained in water and food.

From the liability of water to contamination, it has been the principal subject of investigation in all attempts to discover the origin of epidemics of this disease. The well-authenticated outbreaks of typhoid fever dependent upon the use of water polluted by the dejecta of fever patients would seem to leave no room for doubt that water is a common means of conveying the pathogenic organism which incites the disease; and while our knowledge of the subject is not sufficiently precise to warrant exact deductions, there is not wanting evidence of the cumulative sort in connection with recent outbreaks of typhoid fever, which is so conclusive of the mode of infection by specifically contaminated water as to justify its acceptance even without the positive demonstration which improved methods of bacteriological investigation will some day be able to furnish.

At the International Congress for Hygiene and Demography, recently held in Vienna, the relation of the water-supply to the origin of diseases formed a prominent subject of discussion. Numerous instances were related of the influence of drinking-water in spreading infectious diseases, especially typhoid fever. Most of the epidemics described were of recent occurrence, and the evidence seemed to indicate that polluted water was the starting-point of all these outbreaks. The absence of proof of the existence of the specific bacillus in the water before the epidemic occurred, and our inability to differentiate with certainty between the typhoid bacillus and similar bacteria found in water and in the soil, were mentioned by Hueppe and Emmerich as weakening the chain of evidence. The section, however, unanimously adopted the following proposition: "In view of the demonstrated possibility of drinking-water and water used for domestic purposes giving rise to disease, the provision of good unsuspectuous waters is one of the weightiest measures of public health."

It would be well if the water purveyors of