

and in the meantime the places and times of exposure are overlooked or forgotten.

To talk of tuberculosis arising from a cold, or from dissipated habits, or from typhoid fever, is certainly to talk nonsense in the light of modern pathology. These circumstances may either prepare a soil for the bacillus, or lessen the resisting power of the tissues against it; but in no case do they produce the bacillus, without which there can be no tuberculosis. When a child has an attack of measles, and, shortly afterwards, dies of acute phthisis, the bacilli may have been in the system at the time of invasion of the measles, or the latter may have left the respiratory organs in a fit state for the entrance of the tubercular germs.

Where sanitary conditions are bad, wherever the population is dense, where large numbers work in crowded, dusty factories, where the supply of food is defective, consumption abounds. In new countries, with sparse population, an open out-door life, and plenty of plain but nutritious food, the disease is limited in extent. All this is of great importance in determining the influence of heredity.

With every advance in the knowledge of the pathology of the disease and the life history of the bacillus, the foundations for a belief in heredity are weakened, and the grounds for a belief in direct contraction of the disease from a previous case are strengthened. All that heredity means in this disease is simply the existence of a certain chemico-vital condition of the tissues, that renders favourable to the growth and lodgment of the bacilli. What this condition of the tissues is we do not yet know. With a full knowledge of all the facts, consumption must be regarded as a preventible disease to a great extent.

If then it must be regarded as a preventible disease, wherein lies the contagion, and how can the contagion be

rendered inert? The answer is easy. The germs are in the sputum, the thorough destruction or disinfection of which is the key to the question of prevention. No matter what the family history may be, if the bacilli can be kept out of the system there cannot be tuberculosis. The sputum of a consumptive abounds in these bacilli. Destroy this sputum and a great measure of security is obtained for the other members in the family and for the public generally. Insist upon proper rules being carried out, and the death rate from this disease must diminish. "Tuberculosis is not hereditary. A predisposition can be transmitted from parent to offspring. A predisposition can be created anew by malnutrition or by anything which depresses the nervous system." The above quotation from the report of the American Public Health Association should carry great weight. The time should not be far distant, when, with strict preventative measures, "the great white plague" would possess little else than a historical interest.

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#### DISINFECTION IN CONTAGIOUS DISEASES.

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Until quite recently no one would have believed that any living being could stand prolonged exposure to a temperature of 212° F. without losing its characteristic properties. All known animals or vegetables perished when so exposed. A few years ago, however, while experimenting in bacteriological laboratories on the resistance to heat of different microbes, efforts were made to ascertain at what temperatures they perished, and it was discovered that the spores of anthrax were an exception to the general rule. The bacteria of anthrax perished at a temperature of 210.2° F.; the spores or seed of the bacteria required a temperature of 239° F. Reasoning from these data,