

boration of:—1. Agglutinating antitropins. 2. Bactericidal antitropins. 3. Bacteriolytic antitropins. 4. Antitoxic antitropins. 5. Opsonic antitropins.

Regarding anti-typhoid inoculation he says:—"It would seem certain that there exists for every man a particular dose of the typhoid poison which is calculated to develop the maximum of response, and that the incorporation of a dose in excess of this is likely to be followed by a diminution instead of an increase in the bactericidal power. The man who gives the severest reaction to typhoid fever, does not always do the best. The importance of the accurate adjusting of the dose of the vaccine to the capacity of the particular patient, or in the case of large bodies of men to the capacity of the average individual, will have become manifest, and this accurate standardization is particularly necessary where a patient may be exposed to infection within a short time after inoculation for here it will obviously be important to avoid the production of a negative phase of increased susceptibility within the period immediately subsequent to inoculation."

In the case of the employment of excessive doses positive disadvantages might result from double inoculation. Re-inoculation should be resorted to after the interval of a year, more particularly in the case of men who have only been once inoculated."

In the American Yearbook of Medicine and Surgery he reports the results which he obtained in the use of anti-typhoid inoculations at Ladysmith. They seemed decidedly to protect against typhoid fever, only two percent of the 1705 men inoculated acquiring typhoid fever, while 13.25 percent of the 10,529 men not inoculated fell ill with the disease. If typhoid appeared in the inoculated the death rate was about the same as in the uninoculated. The results were thus encouraging so far as protection was concerned. From anti-typhoid inoculation in the Fifteenth Hussars in India, of those inoculated there was a morbidity of .55 percent and a mortality of .27 percent. The morbidity in the uninoculated was 6.14 percent and the mortality 3.35 percent.

In discussing the treatment of Scurvy in the American Yearbook of Medicine and Surgery for 1902, he considers the condition to be one of acid intoxication, when the dietary has been one which contains a large amount of elements producing an excess of acids, and that it is relieved or cured by many substances which contain an excess of bases over mineral acids. He states that the normal alkalinity of the blood is equal to one thirty-fifth normal saline. In his series of cases in the British Army the alkalinity of the blood was found to be very greatly decreased, only 1/70th to 1/200th normal. Treatment caused the