

was absent in 109 and 2 were doubtful—in these two the test had been positive; one showed adhesions of the lung and enlarged glands, the other pericarditis. All the 109 reacted negatively. Of the 89 cases, 60 were positive at the first test and 29 negative, but 6 of these showed signs at the site of the injection test. In several of the cases of the second group the test was negative owing to the presence of measles, this non-reacting stage has been shown to begin at the same time as the exanthem and continue a week. If the measles has not caused a generalization of the tuberculosis the regular reaction appears, but most of the other negative cases were miliary tuberculosis; this condition has not much influence where the children are very young but the more grown they are the sooner the reaction lessens in the last weeks of life. The facts thus made out are very important in diagnosing the bronchitic conditions following exanthems—possibly the stage of non-reaction gives the opportunity for the germs of tuberculosis. In cases of suspected miliary tuberculosis or meningitis a positive reaction speaks in favor of the disease but a negative does not exclude it, and a negative reaction in a case which was positive argues for a more serious condition. In Vienna the writer has noted that the majority of more grown children and nearly all adults have a reactivity due to slight infections which often do not inconvenience the patient, these give as a rule only a slight reaction and only on the second application. He sums up:—

The activity of such persons is in general a very slight one and they react only at a second application. This I call a "secondary reaction." But many of them have a greater reactivity, perhaps due to some slight reinfection, without their being in any danger. Only a very severe reaction at the first application has a significance in adults. It means that there has been some new process at work, although one can not conclude whether it is a slighter or severer one. A severe reaction in connection with a suspicious disease speaks for the tuberculous nature of the latter. On the other hand, a failure to react after repeated applications of tuberculin proves (except in measles or miliary tuberculosis, as said before) that the individual is free from tuberculosis, and makes it certain that a suspected disease is not tuberculous. In such cases, in which one wishes to exclude tuberculosis, instead of making several cutaneous applications, a quicker result is obtained if, after the first negative cutaneous reaction, one injects one mg. of old tuberculin and pays attention to the local subcutaneous reaction, as suggested by Dr. Hamburger. The cutaneous test is of especial value during the period from birth to three or five years; during these years nearly all infected children react at the first cutaneous application. A slight and mild tuberculosis is at that age more rare than in older persons, complications of infection are also rarer, and, therefore, diagnosis and prognosis by the cutaneous test can be made in nearly all cases.