

hyperimmunized animals was intensely germicidal. Finally, rapidly-growing trypanosomes have an avidity for air, while spirochaetes appear to be indifferent to it.

On the experimental side, Neisser, with his associates (*Deutsche med. Woch.*, 1906, S. 1, 49 u. 97), has continued his studies on the transmissibility of syphilis to the lower animals. Syphilis can be communicated from man to the higher and lower apes and from one ape to another for a series of transfers. Whether the virus obtained from the higher apes is more virulent than that obtained from the lower apes was not definitely settled. The more recent the material used for inoculation, the more likely was one to get infection. The degree of infectibility appeared to depend on the amount of specific virus introduced. Only once did Neisser succeed in inoculating with material from a tertiary lesion, but even this qualified success is of great significance. By passage through animals the virus was rendered more powerful. The poison becomes generalized after 54 days. In a later communication (*Ibid.* S 493), Neisser finds that all syphilitic lesions, including the tertiary, providing that they are not necrosed or suppurating, contain the virus of syphilis and will produce typical primary effects when inoculated into apes. Syphilitic material taken from three cases of congenital syphilis, when inoculated, would reproduce the disease.

Indications are not wanting that in the near future we may be able to attain to a rational treatment of syphilis on the lines of active immunization. Spitzer (*Wiener klin. Woch.*, 1906, No. 38) inoculated twenty persons suffering with syphilis with material taken from primary sores with the idea of bringing about active immunity. In seven, secondary manifestations had not appeared after two years. The injections caused neither local nor generalized manifestations. The experience of Metchnikoff and Roux at the Institute Pasteur is also striking and suggestive. An assistant in the laboratory was accidentally infected with syphilitic virus from an infected macacus. A Javanese macacus was inoculated from the assistant and became infected, the primary sore appearing in one month. In the ulcer formed Schaudinn's organism was found in great numbers. The assistant suffered no farther inconvenience and did not develop other manifestations of syphilis. Subsequently an aged woman, at her own request, allowed herself to be inoculated with virus taken from a macacus. No lesions of syphilis had developed after six months. While so few observations are, of course, inconclusive, they at least strongly suggest that the syphilitic virus is attenuated for man by