

in the blood of trypanosoma fever—*T. gambiense* (Dutton)—though, as a rule, the micronucleus lies nearer the extremity, and the vacuole is apparently larger. In post-mortem examinations of 80 per cent. of the cases where the trypanosoma was found during life, the author cultivated from the blood of the heart and from the liquid of the lateral ventricles a streptococcus which he has already described. He believes that this represents a terminal infection.

As a note to this article the Secretary of the Royal Society, Prof. Foster, states that Bruce, who is now continuing these observations, has found the trypanosoma in the spinal fluid in every one of thirty-eight cases of sleeping sickness, and in the blood of twelve out of thirteen cases.

The Contagiousness of Scarlet Fever.—The old idea that contagion in scarlet fever is chiefly conveyed by the exfoliating skin has of recent years been brought into considerable doubt. Most interesting observations on this point are communicated by AASER, of Christiania (*Nord. med. Arch.*, 1903, Abt. II., Anhang 51). From 1895 up to June, 1902, Aaser had under his care 3800 cases of scarlet fever, 79 of which obtained their infection from patients who had been discharged from the hospital as well and were supposed to be free from the contagium. The average length of time during which these individuals had been under hospital treatment was nine weeks. The patients were all most carefully washed and disinfected, and the boys' heads were all shaved and scrubbed before discharge. Of these patients 40 were boys and 39 girls, so that sex apparently played no important rôle. That the hair played no part in conveying the infection would apparently be shown by the relation between the number of boys and girls in this group of cases. In 38 per cent. desquamation had entirely ceased one week before discharge, and in the rest from one and a half to four or five weeks. The author believes that too much weight had been laid upon the importance of desquamating epithelium, asserting that in many instances children freely desquamating have failed to convey the disease to susceptible individuals. He is convinced, at all events, that in these cases the transmission of the disease could not be ascribed to desquamation. On careful analysis of his observations, however, the result of which is shown in an excellent table, he has become convinced that the main source of infection was the presence of some local affection of the throat, nose, or ear, associated with discharge. In conclusion he says: "My observations show that some patients with scarlet fever may remain sources of contagion for a time far behind the usually recognized period. They show, further, that the termination of desquamation is of itself no criterion as to how long contagiousness remains. The poison can apparently remain for a considerable length of time in the nose, throat, and middle ear. Through the secretion from these mucous membranes the poison is further distributed. In this secretion, then, lies the danger of infection.

"As long as there is an abnormal secretion the patient must, therefore, remain isolated, even if the period be twice as long as is ordinarily regarded as necessary, and the patient with scarlet fever should never be discharged until the physician has convinced himself by careful examination of the throat and nose (anterior and posterior rhinoscopy) that the secretion had ceased."