APPENDIX B.

THE TREATMENT OF YAWS (FRAMBŒSIA TROPICA) IN WESTERN SAMOA. By JOHN S. ARMSTRONG, M.B., Resident Medical Officer, Apia.

HISTORICAL.

WILKES* in 1839 describes an eruptive complaint, called *ilamea*, which covers many of the children under the age of ten years and particularly attacks the face and head. He says : "The mode in which it is treated is singular : the child is rubbed with the husks of the coconut until all the scabs are removed; a soft preparation of breadfruit is then applied, after which they are washed." This has been the Samoan method of treating yaw papules until quite recent times, and may even now be practised in some of the outlying districts. The word *ilamea* was probably used in mistake, as the Samoan uses it only to describe an impetiginous condition of babies. In 1866 Pritchard[†] describes the disease called *tona* (the present Samoan word for yaws) "which attacks the Native children almost without exception." Kraemer[‡] believes that the disease has long been endemic in Samoa, because the oldest word that the Samoans have for the disease is path, which is the word used in the Sunday This would indicate that the Samoans acquired the disease when they were in Islands for yaws. contact with this race—probably before the time of their migration to the Samoan Islands. On the other hand, Pratty gives the meaning of patu as " a fatty tumour," and does not mention it in connection Königer || believed that the introduction of yaws into the Samoan Islands was quite with yaws. recent.

In trying to arrive at any decision in this matter two points seem worthy of note :-

(1.) That every description of the disease in Samoa states that it is practically entirely a disease of childhood, indicating a long period of endemicity. (2.) The Samoans certainly had an old name of *lupani* for the disease, which was used before

tona-the latter word probably came into use during the Tongan wars, the last of which occurred many years before the recorded arrival of Europeans in Samoa, and this is the only authentic record of an early contact of the Samoans with a foreign race.

On the whole, the evidence seems to point to yaws having been long endemic in Samoa, and probably the Samoans either brought the disease to these islands or acquired it soon after they arrived.

THE TREATMENT OF YAWS IN SAMOA BY EUROPEAN MEDICINES.

Davies ¶ in 1892 reports that he successfully treated the chronic ulcers of the Samoans. Kraemart in 1902 used potassium iodide and a local application of salicylate, as he states that he did not like to give mercury to children; but the effect of this treatment was reported successful merely on observations of a single case of secondary yaw rash. In 1910 Poleck** stated that he was obtaining cures in twenty days by the use of potassium iodide 0.59 gramme and calomel 0.01 gramme internally, and mercurial ointment for ulcers. The cures by these methods do not appear to have impressed the Samoans, as they continued to favour their own method of treatment. Shortly before the Great War the German doctors started to give injections of arsenical compounds of the salvarsan type. These injections were probably given to only a very small proportion of the population, but were becoming popular amongst the Samoans.

During the military occupation of Samoa by New Zealand troops army doctors were sent round the islands to give novarsenobillon injections whenever it was reported that yaws was prevalent in On these expeditions a single injection was given, and usually no charge was made. This a district. did a great deal to popularize this method of treatment. When the Civil Administration was formed in 1920 these expeditions were continued, but it was noted that the effect of the injections did not last very long in a district. In order to try and make the cures more permament each case was given three doses instead of one, but, as the cost of the drug was becoming a large item in the medical expenditure, it was decided to try and enforce the payment of fees for the injections. This caused a serious falling-off in the number of cases treated. It was then decided to do the children free, but charge the adults the cost of the drug used; but even this led to very little improvement in the number of cases treated.

The desire for this method of treatment played a great part in prompting the support of the Samoans for the passing of the Samoan medical tax, which has enabled us to give free treatment. That the passing of this tax has been of great help in combating yaws is shown by the following incidents: Two Native officials sent requests that a doctor should be sent to their villages to give injections for yaws, as the disease was very bad in the districts. The first official estimated that he had at least one hundred cases; the second did not mention any number. When the doctor arrived he found that there were eleven cases in the first village and twenty-three in the second; and on making inquiries he was told that the others had not come, as they could not pay the fee and were

^{*} Charles Wilkes: "United States Exploring Expedition" (Samoa, 1839), p. 124.
† W. T. Pritchard: "Polynesian Reminiscences" (1866), p. 424, appendix.
‡ Dr. A. Kraemer: "Die Samoa-Inseln" (1902), Anhang zu Band II, p. 14.
§ Pratt: "Pratt's Grammar and Dictionary of the Samoan Language," 4th ed., p. 236.
|| Königer: "Über Frambœsia auf Samoa," Arch. f. Path. Anat. Berlin, 1878, p. 419.
¶ Rev. S. H. Davies, Mcdical Missionary, L.M.S.: "Diseases of Samoa," from Intercolonial Medical Congress of Australia, Trans., 3rd session 1892 (Sydney), p. 606.
** Dr. Poleck: "Medizinal-Berichte Über die Deutschen Schutzgebiete," 1909/10, VII (Samoa), p. 577.