some provision in the by-laws as to the style of buildings, as I think that is the most important for a start. We have the plans submitted to us.

The Chairman.] What is your opinion as to the sanitation in the pas ?—There are no septic tanks. Sanitation is undoubtedly bad. I have not had much time to devote to inspection of the villages. There will be difficulty in getting in a comprehensive system of sewerage owing to the nature of the ground. There is not much trouble in regard to the water-supply.

Is the water-supply ample for a sewerage system ?-The pressure is strong enough. Speaking of roofing, corrugated iron lasts no time, but malthoid seems all right. We put up some public telephoneboxes recently and roofed them with Pabco tiles. These are a kind of malthoid tile. They look fairly well, and might be tried with houses.

You certainly think that a sewerage scheme should be installed if possible ?---If possible, yes. Failing that, it might be possible to have a scheme of septic tanks where the effluent could be run into some of the hot holes.

About the roading, Mr. Bunyard: do you think that any of these roads should be widened ?---We are up against trouble if we widen them, on account of extending on to private property.

Mr. Mitchell.] Have you had a look at Taupopoki's place? There is a large hole near his house? -But they are trying to fill it up.

Have you any idea of the mileage of the roads at Ohinemutu ?-- No idea.

Mr. Mair.] Can you suggest any suitable roofing-material ?--Shingle is good, except that the metal fixings do not last. Galvanized-iron nails, however, last very well.

How about copper ?--Copper lasts no time. Galvanized nails are better than copper. A sewerage system could be carried out better at Ohinemutu, but it could not be comprehensive owing to the lack of fall. It would have to be a number of group systems. Dr. Buck.] What about Whakarewarewa ?—There is too much sulphur there.

The Chairman: I suggest that it would take some time to survey it. No contour survey has yet been made of the villages.

Mr. Mair.] Had you a system of septic tanks at Whakarewarewa ?---We were to put in a septic tank, but the Health Department objected. There is a septic tank at the Lake House Hotel at Ohinemutu.

Mr. Mitchell.] Could you give us a fair idea of what the cost will be to bituminize the road from the Catholic Church to the pa?-I should say it would be about 5s. a yard. We are experimenting in that line now. We are putting the process through, and if it is successful we could use it for that class of road.

Mr. Hammond.] Have you studied the question of traffic in the villages ?--- No, I have not.

Do you think a road around the lake-front would be possible round Ohinemutu ?---We do not have the same trouble around Ohinemutu as we do at Whakarewarewa as to loads. I think it would be very desirable if a road could be formed along the lake from the Marine Parade.

## MR. CLINKARD, Mayor of Rotorua, examined.

Witness: One suggestion in my mind is the question of roading. No doubt these were planned with the idea they should be used for Native footpaths, but from day to day we found that we have been faced with the question of providing for motor-traffic roads into the pa. What I thought might be possible is to widen one or two of the main roads, so as to give access to carry the traffic and leave the other roads for pedestrians. In Whakarewarewa I would say under no conditions should street transit be permitted, on account of subsidences. We should not contemplate heavy traffic in Whakarewarewa, as it is not safe.

The Chairman.] The officials have stated to us that there are no by-laws for traffic within the pa: do you think any are necessary ?-I do not think any are necessary. Our desire was to create civic interest within the pa, by giving them some power of government in the pas. Under the Municipal Corpo ations Act we had no jurisdiction for the type of building. Every borough and city should have control of architecture.

Mr. Hammond.] That would be incorporated in the Town-planning Act ?--- There is another suggestion I would like to make, that is the following of Maori architecture. It might be possible to have boards corrugated so as to give the effect of a raupo-thatched roofing. I would suggest that you get as far as possible away from the reproduction of the European dwellings. The inner walls I would prefer to see in the reeded timber.

Mr. Mitchell.] Mr. McLean says that the average expenditure of the two villages is £200. Is there any hope of extending this expenditure ?—The Council has not been parsimonious with regard to any scheme of an urgent nature. I am very pleased that you have met here for the purpose of improving these villages. My only regret is that it has not been done sooner. We have evidence before us as to what has to be done, and we ought to be guided by it.

The Chairman.] Have you any suggestion regarding sanitation? No definite idea has been given us, because it has not been surveyed ?—I think the system of sanitation should be localized to small groups of dwellings. Any comprehensive sewerage system is out of the question, to my mind. A dry-pan system is very difficult. Small septic tanks, in my experience, are very suitable.

## WHAKAREWAREWA, TUESDAY, 29TH JUNE, 1926 (10 a.m.).

## Present : The same.

Mita Taupopoki: I wish to limit my greetings to the European members of the Commission. I want to express my greetings on behalf of the whole tribe. Welcome to the Arawa Tribe, who