### FRUIT-CASE TIMBER.

A considerable quantity of the case-timber for the ends that was inspected had not been dressed, making legible marking impossible. Edges of all battens should be bevelled to prevent injury to fruit from sharp cutting edges.

#### SHIPPING IN BUNCHES.

The Delegation recommends for investigation by experts the question of shipping bananas in bunches. If this proposal is found practicable, Island bananas should arrive in New Zealand retaining the flavour which makes their consumption in the Islands so different from the consumption of the same fruit here.

# PART X.—THE LOWER COOK GROUP.

Visits were made to the Outer Islands of Aitutaki, Mauke, Atiu, and Mangaia. The usual means of transport to those Islands from Rarotonga is per schooner, but through the courtesy of the Union Steamship Co., Ltd., the new insulated motor vessel "Matua" was placed at the disposal of the Delegation, and so this part of the trip was made under much more comfortable conditions than were otherwise possible. We herewith record our appreciation of the generous action of the company.

The Delegation found that in most respects the conditions of growing and marketing in the

Outer Islands are similar to those of Rarotonga.

Practically the only crop being shipped from these Islands at present is oranges. The problem of the discoloration of the oranges caused by fungoid diseases does not exist to any extent in the Outer Islands, the trees being healthier and the fruit consequently of a brighter colour and cleaner appearance than the oranges exported from Rarotonga. The difficulties confronting the growers of these Islands may be put into four categories:—

(1) The high percentage of over-sized oranges produced. If some means can be found of increasing the crop of oranges of marketable size, whether by pruning, manuring, or

other means, the income of growers could be considerably increased.

(2) Shipping facilities: Of the four Islands visited three can be approached only by boats or canoes over reefs which under certain conditions of wind and tide are unworkable and at all times are dangerous. The reef at Mauke on the day of our visit was unworkable, and we could not get ashore. Aitutaki can be approached by boats through the reef entrance from ships lying at anchorage to a wharf. The other Islands have no wharves, nor is there any safe anchorage for ships, consequently the loss of cargo and boats is considerable, apart from the constant risk to life and limb. The Delegation does not feel competent to express an opinion on the remedy for this state of affairs, but strongly recommends that an expert investigation of the landings at these Islands be made with a view to effecting an improvement.

(3) The roads on these Islands are in urgent need of development, and their present unformed condition adds immensely to the difficulties of growers. Much damage to

the fruit is caused during its conveyance over these rough roads and tracks.

It is recommended that supplies of food be issued to the Natives working on road-construction in return for work done. The cost would be relatively small and the advantages immense.

(4) Price: We are of the opinion that if the price to the grower of Rarotonga is improved as a result of the above recommendations, the growers at the Outer Islands will also benefit from same. Any improvement in shipping and handling facilities will also assist in increasing the net return to Outer Islands growers.

Much more could be written on these four Islands, as each has its own peculiarities, but for the improvement of the fruit industry the Delegation is of the opinion that what is here set down should be of considerable assistance in overcoming some of the natural difficulties of the Outer Islands trade.

## MITIARO.

Representations from the Island of Mitiaro (twenty miles from Mauke) were made in which it was stated that no fruit-carrying ships call at this Island, which produces oranges for export.

The Delegation strongly recommends that arrangements be made for a vessel to call at Mitiaro at least once during the orange-exporting season.

## PART XI.—ORANGE-JUICE.

The manufacture of orange-juice is carried on by two firms in Rarotonga. One is on a much larger and more modern scale than the other. Orange-juice being a by-product of the fruit industry is of the greatest importance, and merits every encouragement. For the production of orange-juice, fruit which for various reasons cannot be exported is used. This class of fruit represents a high percentage of the entire orange crop of Rarotonga, and, contrary to general belief, does not consist of damaged fruit. Regulations under which Island oranges are exported to New Zealand do not permit larger sizes than 126 per case being exported, and this over-sized fruit, which is of the very best quality, and has a larger juice-content, is ideal for the production of juice. A certain amount of sound fruit which because of skin discoloration is not exported is also used for producing juice of high quality. The production of juice is the only useful method of disposing of this fruit.