EMMANUEL ROUGIER

ILE CHRISTMAS

SOUTH SEAS

(OCÉANIE)

COCONUTS

BIRDS, FISHES, ETC.

IMP. L. WATEL
BRIOUDE

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L'ILE DE CHRISTMAS

(CHRISTMAS ISLAND)

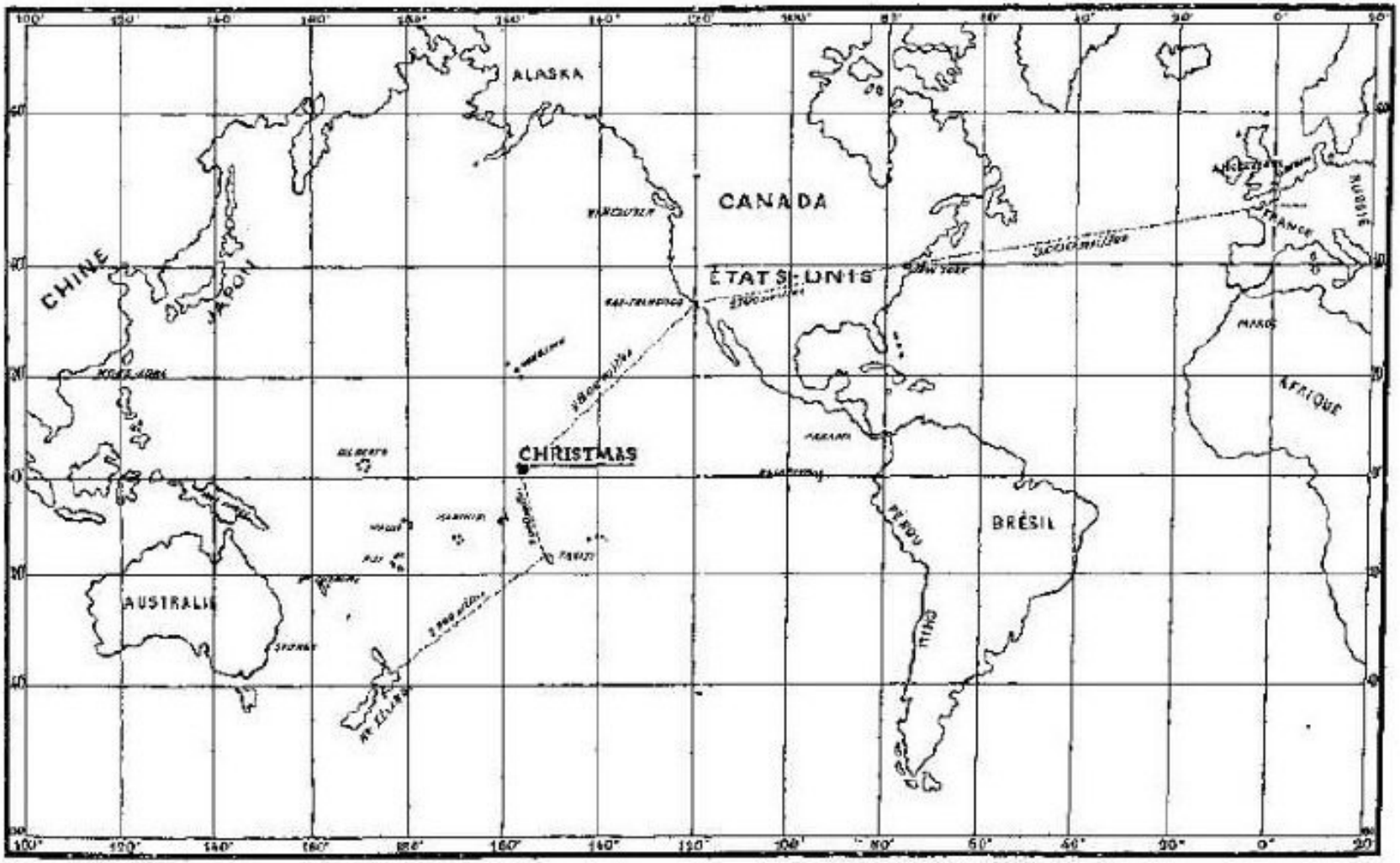
Cette île est ainsi décrite par l'Amirauté anglaise dans la quatrième édition, 3e volume, concernant les ILES DU PACIFIQUE. On y lit à la page 192, chap. V :

CHRISTMAS ISLAND

« Lat. 1° 57' N. Long. 157° 28' O. Sa carte a le n° 2867. Cette île fut découverte par l'amiral Cook dans la *Résolution*, le jour de Noël 1777, d'où son nom de Noël, en anglais *Christmas*. Cook y resta jusqu'au 2 janvier suivant. Le capitaine, sir W. Wiseman, de la *Caroline*, en prit possession au nom de l'Angleterre le 17 mars 1888. »

Aspect et étendue.

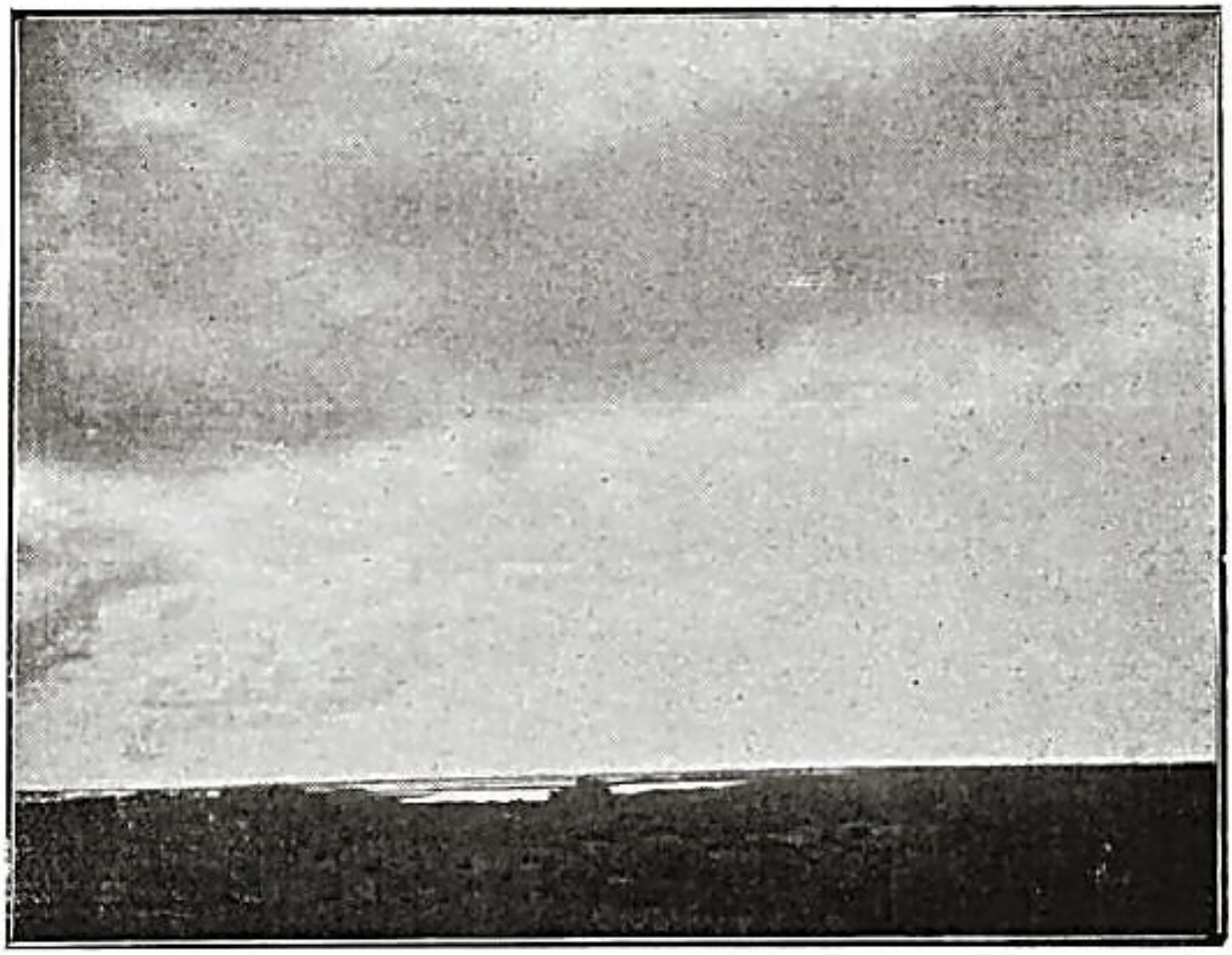
L'île est parmi les îles en corail l'une des plus grandes du Pacifique. Son littoral nord a 40 milles et le sud 35, donnant une moyenne de 35 milles, le mille anglais valant 1.609 mètres. C'est-à-dire que l'île a une moyenne en tous sens de 46 kilomètres ou une superficie de 316.000 hectares dont un bon tiers en lagoons et lacs.


ALASKA
CANADA
ÉTATS-UNIS
CHINE
JAPON
CHRISTMAS
AUSTRALIE
BRÉSIL
AFRIQUE
RUSSIE
FRANCE
PÉROU

Lagoons et lacs.

En général toutes les îles de corail ont un lagoon ou lagon. Un lagon est une mer intérieure généralement de faible profondeur, et communiquant ordinai-

Distant view of the inland lakes.



Aspect de quelques lacs de l'intérieur.

rement avec l'Océan par des passes plus ou moins larges et profondes. Christmas a un lagoon considérable puisqu'il ne couvre pas moins de 100.000 hectares.

Dans ce lagoon sont plusieurs îlots dont l'un surtout, *Motu Manu, l'île aux oiseaux*, est couvert de

cocotiers, et aussi d'oiseaux. L'aspect de ces îlots qui semblent flotter dans ce lac immense, a un charme tout particulier. L'îlot de Cook, où le grand amiral aborda, ferme l'entrée du lagoon, laissant de chaque côté deux belles passes. Les lacs intérieurs sont nombreux et de toutes grandeurs, les uns sont salés, les autres saumâtres, quelques-uns ont de l'eau potable. En général leur littoral est formé de sable blanc, de coquilles ou de détritus de corail cimentés ensemble, offrant ainsi des chemins naturellement pavés et propres.

Climat.

Le fait que l'île n'a ni collines ni montagnes permet à la brise de mer de passer et de pénétrer partout, d'où une température très agréable. A l'ombre, le thermomètre montera jusqu'à 35° et il redescendra la nuit jusqu'à 25° donnant une moyenne de 28° à 30°. Une brise fraîche y souffle continuellement et les nuits y sont délicieuses. Comme c'est un climat sec et en pleine brise maritime, les coups de soleil y sont chose inconnue et l'on est étonné d'y transpirer très peu. Le climat y est donc exceptionnellement sec, vierge de tout microbe et de toute infection, ni rhumatismes, ni influenza, ni aucune des nombreuses maladies occasionnées par le froid.

Nourriture.

Quelqu'un qui n'aimerait pas le poisson ne devrait pas s'aventurer à Christmas, il y vivrait quand même d'oiseaux, d'œufs, de tortues, etc., mais le poisson est le plat de l'île. On peut se payer du poisson frais à tous les repas. Il y a des poissons dont la tête rappelle

à s'y méprendre la tête de veau, d'autres vous donnent du beafsteak, du bouilli, du ragoût et même des tripes. Il y en a qui sont préférables cuits sous la cendre enveloppés de feuilles, mais tous sont délicieux, frits ou grillés. Enfin il y a des langoustes, des escar-

Landing place, Settlement North.

Plage du Lagoon, Camp Nord.

gots de mer, etc., etc. Pour prendre du poisson il suffit d'aller au bord de l'eau et d'avoir ou un bâton, ou un couteau, ou une ligne de quelques mètres. Si le hameçon est petit on aura du petit poisson, et s'il est énorme, d'énormes poissons, des monstres pesant de

100 à 150 kilogrammes et plus. Tout le monde est pêcheur sans avoir jamais pêché. Les poissons sont succulents, il le faut bien puisque les indigènes de ces îles de corail ne vivent que de poissons. Ni farine, ni biscuit, ni riz, ni viande, rien, rien, excepté du poisson, des coquillages et parfois quelques cocos. Chose extraordinaire, on ne se fatigue jamais de manger du poisson à cause de la variété des espèces. Cent espèces auront cent goûts différents : chair blanche ou rouge, ferme ou molle, courte ou longue. D'ailleurs, quand on veut varier, on se tourne vers les oiseaux.

Les oiseaux.

De l'avis de tous ceux qui ont goûté de l'oiseau mutton bird (oiseau mouton), il n'existe pas de plat plus succulent. On ne mange pas les parents, ce sont les jeunes moutons que l'on prend au nid et que l'on fait rôtir. Ils sont de la taille d'une belle poulette, mais plus gras ; une vraie boule de graisse qui ne répugne aucunement. Le nid est dans une galerie souterraine d'environ un mètre. C'est là que les parents couvent à tour de rôle et engraissent leur unique progéniture. Leurs œufs sont aussi délicieux et je les mets hors concours ; puis je place ceux de l'hirondelle de mer, du paille-en-queue et de la frégate. L'hirondelle de mer couvre littéralement le sol de ses œufs à certains endroits de l'île pendant la saison de la ponte. Ces oiseaux ressemblent de loin à un essaim d'abeilles. Ils sont de la taille d'un pigeon. Leurs cris empêchent toute conversation, à moins de crier à tue-tête dans l'oreille de son voisin. Il y en a des centaines de mille à la fois ; on en recherche surtout les œufs.

La frégate niche partout à portée de la main, ses

œufs et ses petits comme ceux des pélicans et des oiseaux d'amour sont un mets qui n'est pas à dédaigner même pour des gourmets.

Le paille-en-queue niche sous les arbustes et vit en colonies. Il est ainsi appelé parce qu'il semble avoir

Beach of one of the large lakes.

Bords d'un des grands lacs.

deux longues pailles rouges sous la queue, tandis que c'est vraiment sa queue. Ces deux plumes sont très étroites, d'un rouge vif et mesurent de 25 à 35 centimètres de long. C'est un oiseau merveilleusement beau, de la taille d'une poule, d'un blanc soyeux, bec

rouge cramoisi ; on se contente de lui prendre avec sa queue, soit ses œufs, soit son petit lorsqu'il est juste couvert de duvet.

Il y a aussi les oies de Christmas dont une seule ferait dîner toute une famille, mais on a tant d'autres oiseaux meilleurs qu'on se contente de les enjamber, de se garer de leurs coups de bec et de les laisser couver à leur aise. Tous ces oiseaux se prennent à la main sans bâton, on les tâte et on fait son choix.

Il n'en est pas ainsi du courlis et du canard sauvage. Le courlis n'est pas le même qu'en France quoique de la même famille, il est plus petit, gras et délicieux au goût. Le canard ne fait que passer d'octobre à mars. Ce sont les deux seuls oiseaux pour lesquels le fusil est nécessaire. Il existe aussi un autre oiseau tout petit, genre fauvette, qui ne peut voler à plus de vingt mètres, il s'appelle le *kokikokiko*, il vit d'insectes et se montre si familier qu'il vient jusque dans nos maisons.

Il serait donc impossible de mourir de faim à Christmas à moins de n'aimer ni les poissons, ni le gibier, ni les coquillages, ni les cocos, et d'ailleurs on importe de la nourriture qui s'y conserve très bien : le bœuf salé en tonneaux, les boîtes de conserve, le riz, les biscuits, le vin, la bière et même la farine, si on en prend soin, peut s'y conserver des mois.

Eau.

Dans une île si plate il ne peut y avoir de source, à moins que l'on appelle source les puits que l'on creuse à peu près n'importe où. Ce n'est point de l'eau de mer filtrée, on n'a jamais réussi jusqu'ici à filtrer l'eau de mer, mais c'est de l'eau naturelle et d'ailleurs

très fraiche pour le climat. Ces puits de quelques mètres (un ou deux) ont toujours leur même niveau d'eau, On explique cela par les pluies torrentielles qui tombent surtout la nuit et qui s'infiltrent dans le sable ou le corail.

At fishes and Mother of pearls.

Nous prenons nacres et poissons.

L'île sert de réservoir, ces pluies ne peuvent s'écouler dans la mer à travers le corail, car l'eau de mer a déjà pénétré ce corail, et se trouvant saturée de sel et par conséquent très dense, elle ne peut laisser passer l'eau de pluie, il n'y a pas de mélange, de telle

sorte que l'île elle-même est un immense réservoir d'eau douce, ce qui explique la végétation merveilleuse des cocotiers dont les racines plongent dans cette eau.

Il y a aussi près des maisons de larges citernes en fer et en ciment pour recevoir ces eaux diluviennes qui nous arrivent distillées, directement des nues, toutes fraîches et vierges de tout contact et de tout germe, comme fabriquées exprès pour l'île ; aussi sont-elles d'une limpidité et d'une saveur sans égale.

La Nacre.

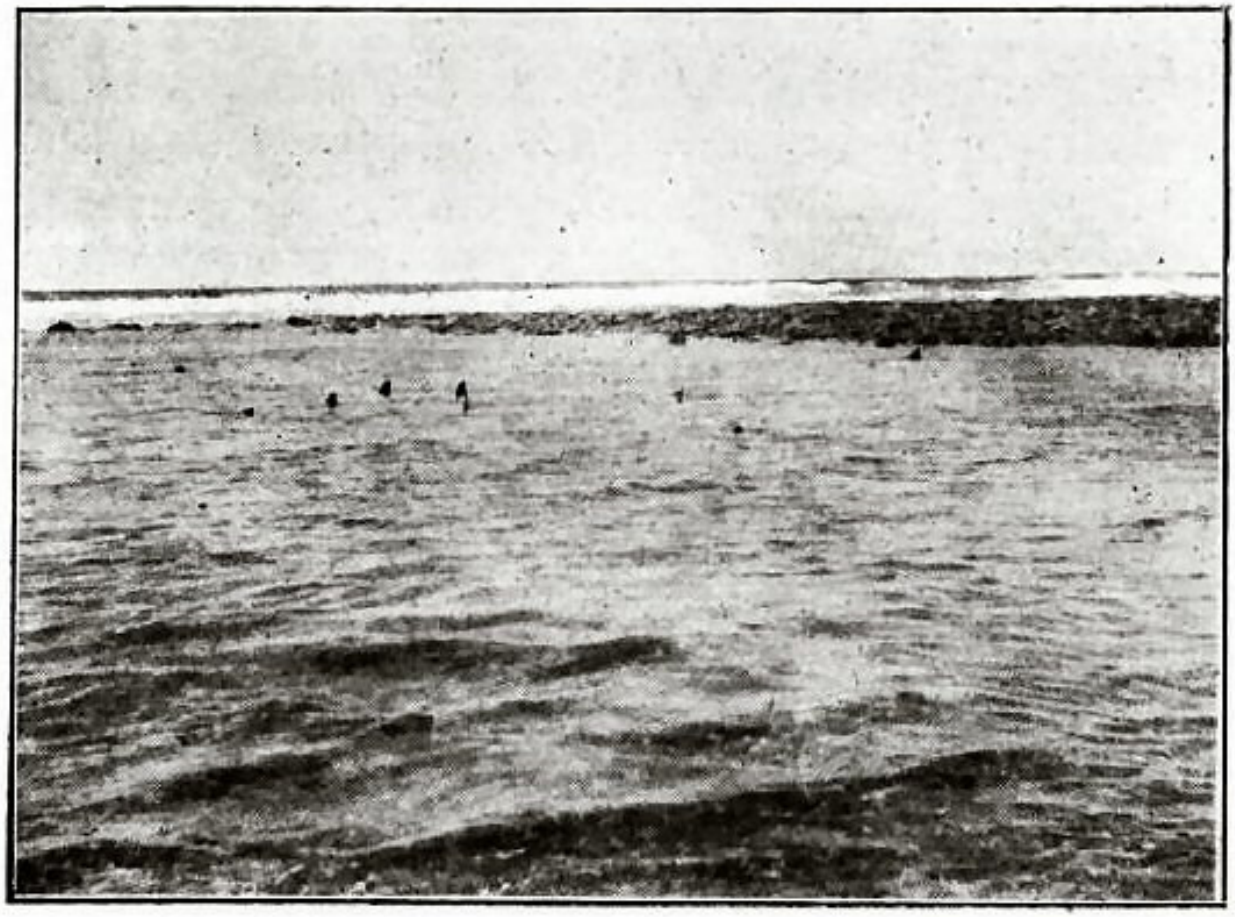
C'est dans les lagoons près de l'Equateur que se trouve la vraie nacre. L'huître qui la donne est pour cela appelée par les Anglais *Mother of pearl*, la mère des perles. En effet c'est dans cette huître que se forment les plus belles perles blanches, jaunes ou noires selon l'endroit de l'huître où la perle s'est formée, prenant ainsi la couleur de la chair du mollusque avec laquelle elle est en contact. Ces huîtres sont de la taille d'une assiette ordinaire quand elles sont pleinement développées (trois à quatre ans). Elles se tiennent toujours en eau claire et ne craignent point les courants, grâce à un paquet de filaments vert sombre qui les attache fortement aux roches. Les plongeurs ont à donner une secousse pour les détacher.

La chair de l'huître est délicieuse. Cette pêche est très intéressante. Voici en quelques mots comment elle se fait. Deux indigènes plongeurs arrivent en pirogue avec une caisse de trente centimètres carrés, ouverte d'un côté, de l'autre fermée par un verre très épais. Nos plongeurs explorent le fond du lagoon avec cette caisse-lunette qui flotte le long de leur canot. Aussitôt qu'une huître est aperçue, l'un d'eux disparait

tête première ; l'autre tient la pirogue en place, tout en suivant, dans sa lunette, les évolutions de son compère.

Christmas a de belles huitres et leur pêche devra faire l'objet de soins spéciaux de la part des indigènes de Tahiti et de Manihiki qui sont experts dans l'art

Sharks Bay. (See dorsal fins).



Remarquez les nageoires dorsales des requins (tricornes).

de plonger, puisque, sans scaphandres, ils peuvent rester plusieurs minutes sous l'eau, et avec un scaphandre leur sauvegardant la tête simplement, ils peuvent rester trois heures à des profondeurs de 18 à 25 mètres.

Les requins.

Les requins des tropiques ont bonne réputation. Pourquoi? Probablement parce qu'il y a une telle abondance de poisson qu'ils sont toujours repus et ne sont ni voraces, ni féroces. Les indigènes s'amusent souvent avec eux. Ils sont d'ailleurs un mets favori lorsqu'ils sont encore tout petits, surtout pris dans le ventre de leur mère. On voit des requins un peu partout et on finit par s'y habituer. Quand on raconte aux indigènes les méfaits du requin chez nous, ils ont peine à le croire. Ils sont d'ailleurs de petite taille, mesurant de 1 m. 50 à 3 mètres, les monstres de 7 à 8 mètres étant des exceptions.

Il y a d'ailleurs tant d'espèces de requins : l'un a comme des cornes de vache avec de gros yeux aux extrémités ; un autre est blanc, un autre noir, un autre gris, un autre est ovipare, un autre vivipare, etc.

Malgré leur bonne réputation, je ne conseillerais pas à un Européen de s'ébattre avec eux. Pour moi, je me mets en sûreté aussitôt que je vois leur triangle sortir de l'eau. En effet, leur nageoire dorsale vous fait l'effet du chapeau de Napoléon qui flotte debout et décrit des arabesques. L'huile de foie du requin vaut 0 fr. 60 le litre et remplace l'huile de foie de morue. On utilise encore leur peau et leurs dents pour les dames de la haute société.

Les tortues.

Il y a la tortue de terre qui pèse de 50 à 100 kilogs. Elle est devenue très rare et sa présence dans l'île ne s'explique guère que par un bateau

A little monster.

Raie à queue de vache.

chargé de tortues, venant des îles Galapagos et naufragé à Christmas.

La tortue de mer est la *verte* et aussi le *caret*. La tortue pond dans le sable, d'octobre à février, de 200 à 400 œufs, tous entassés les uns sur les autres et bien recouverts de sable. Le soleil les couve en quelques semaines ; puis le sable remue et les petites bestioles se dirigent vers la mer où les attendent de nombreux ennemis. Les belles tortues peuvent peser jusqu'à 400 livres. Elles broutent l'herbe du fond de la mer comme nos vaches broutent sur terre. Leurs tripes sont délicieuses et toute la bête fournit les plats les plus variés et tous exquis. Les voiliers qui passent pendant la saison en font une abondante provision.

Le cocotier.

J'ai nommé le roi des arbres. En effet, nul arbre sur terre n'égale le cocotier. Un tronc lisse et svelte qu'on entoure de ses deux bras s'élève, ainsi qu'une colonne, à 80 et 100 pieds de hauteur, couronné d'une belle chevelure de feuilles d'où pendent des grappes de cocos. Un cocotier commence à produire dès que sa tête a atteint 1 m. 50 à 2 mètres et il produira probablement jusqu'à 100 ans. Son bois est d'un grain superbe et incorruptible à l'abri. Sa sève donne de l'eau-de-vie et chaque coco contient de quoi désaltérer et nourrir. Sa fibre peut nous vêtir, ses racines nous guérir, ses feuilles nous donner nos lits, nos paniers, etc. Enfin, rien dans le cocotier n'est inutile.

A l'exposition de Bombay, M. C. Pereira montrait 83 différents produits extraits du cocotier ; et c'était en 1903, il n'y avait encore ni la végétaline ou beurre

végétal fait avec le coco, ni les divers produits de glycérine et explosifs qui depuis ont fait tripler le prix du coprah.

Trees eight years old.

Cocotiers de huit ans.

Le coprah.

Comme dans une noix ou une noisette, il y a la chair et la coque, c'est la chair desséchée de la noix de coco qui est appelée coprah. On extrait l'amande

du coco avec un couteau après avoir ouvert la noix d'un coup de hache. L'eau qui y est contenue se répand sur le sol et le faiseur de coprah, d'un coup de main spécial, sépare l'amande de la coque et la met en sac. Un homme fait en moyenne de 150 à 200 kilogs de coprah *vert* par jour, vert, c'est-à-dire non séché, tel qu'il sort de la noix de coco. Le sac est vidé sur des claies spéciales bien au soleil, et, en 3 jours, par beau temps, l'eau s'est évaporée ; il ne reste plus que l'amande desséchée, désormais appelée coprah. Elle contient, ainsi desséchée 64 % de son poids d'huile et peut rester, étant à l'abri, des mois et même des années sans se gâter.

Culture et récoltes.

Les cocotiers poussent au moins une fleur et une feuille par mois. Le fruit ou coco, pour arriver à maturité, prend douze mois, de telle sorte que chaque arbre a sur lui des fruits à tous les degrés de maturité, depuis les cocos à peine fleuris et formés et gros comme des billes, jusqu'à ceux qui sont prêts à tomber et qui tombent gros comme une tête d'homme ordinaire. Le coco pour boire est celui qui n'a que 6 mois et dont la chair est tendre ; il ne vaut rien pour le coprah. Il n'est pas rare de voir un arbre avec 5 ou 600 cocos en comptant tout. Cinquante cocos mûrs, qui tombent d'un arbre par an, donne une bonne moyenne de rendement. La récolte a donc lieu tout le long de l'année.

On ne grimpe jamais sur les cocotiers ; on attend que les cocos tombent d'eux-mêmes. Ils peuvent rester 6 mois et plus sur le sol sans se pourrir. Il suffira donc de passer au moins tous les 6 mois et d'un

coup de hache, d'ouvrir les cocos et d'en prendre la chair pour l'emporter sur les séchoirs. Six mois après, on repassera sous le même arbre.

On ne laboure pas le cocotier ; on laisse l'herbe et les arbustes pousser comme ils veulent, pourvu qu'ils

Coprah dryers.

Séchoirs pour coprah dans l'île voisine.

ne montent pas trop haut et qu'ils permettent de voir et de ramasser les cocos tombés. Pour se débarrasser d'une végétation excessive, on se sert de grands coutelas.

La végétation, sous les cocotiers, dans une île

comme Christmas, a cela de bon qu'elle y entretient l'humidité et, par conséquent, favorise la végétation de l'arbre. On a donc à s'occuper ni de chevaux, ni de bœufs, ni de machines. Le seul instrument de culture est le coutelas, encore employé bien rarement ; et les seuls instruments d'exploitation sont : la hache pour avoir le coco, un couteau ordinaire, comme un couteau de table, pour sortir le coprah et un sac pour l'emporter sur les séchoirs. Des cocotiers aux séchoirs, le transport des sacs se fait généralement en bateau par le lagoon, en attendant que cela se fasse en camion automobile.

Une plantation.

Une plantation de pommiers, poiriers, etc., ne dit rien à côté d'une plantation de cocotiers. C'est un spectacle ravissant que de voir des arbres pousser en colonnes, donnant des feuilles de six à huit mètres de long sur deux mètres de large, d'un vert magnifique et, entre deux feuilles, une grappe de cocos qui sort, tout droit d'abord, puis plie sous le poids de ses fruits qui sont tantôt verts, tantôt dorés, tantôt jaunes ou oranges. Les arbres sont à dix mètres les uns des autres, en lignes droites. Un coco mis en terre aujourd'hui sera en plein rapport dans dix ans, mais dès six ans commencera à donner quelques fruits.

Rien n'est plus facile que de planter un cocotier : on fait un trou en terre de quelques centimètres, juste pour couvrir le coco et on le place de champ. On recouvre, et c'est tout. La nature a ménagé un œil à la partie la plus large du coco, c'est par là que trois mois après sortiront, d'abord une racine, puis une

12 years old, 24 feet high.

Feuilles de 8 mètres touchant le sol.

première feuille. La racine ira profondément dans le sol chercher l'humidité et la fraîcheur pendant que la feuille se développera à raison de 30 à 50 centimètres par mois. Après un an environ les racines et les feuilles ont épuisé toute la chair du coprah qui se trouvait dans le coco planté et qui lui ont servi à se développer.

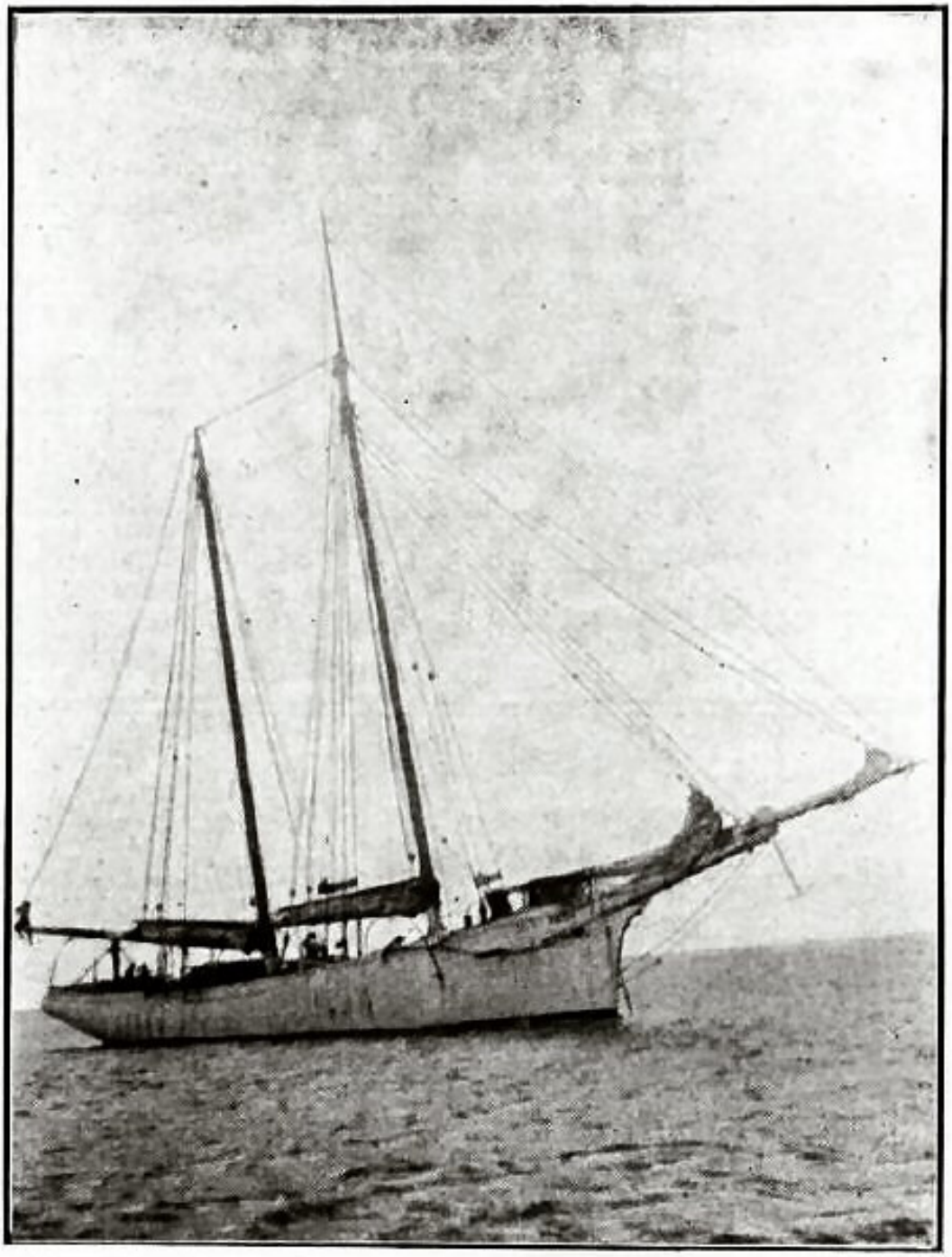
Il est très nuisible au cocotier de le déranger dans sa végétation. Si on le transplante, on lui enlève ses racines pivotantes, or, ce sont celles que la nature a destinées à s'enfoncer directement dans le sol, vers la provision d'eau qui y est en réserve. Et c'est pour cela, qu'à Christmas, comme dans toute île sous l'Equateur, et dont le sol n'est que sable, il importe de ne planter que de bons fruits et de les placer là où ils doivent être, pour ne plus les toucher. De la sorte, ils ne craignent ni chaleur, ni sécheresse, et leur production est assurée et avancée.

Un homme peut facilement planter un hectare par jour à raison de 80 cocotiers à l'hectare ou 40 à l'acre.

Communications.

Bien que Christmas soit sur la route des bateaux allant d'Australie, Nouvelle-Zélande, Chine ou Japon en Amérique, et qu'on puisse voir parfois leur fumée ou leur voilure, il est très rare qu'ils s'y arrêtent. Aussi, quand le bateau visiteur, chargé de ravitailler l'île et d'en emporter le coprah et la nacre, est en vue, c'est fête à Christmas ; c'est avec allégresse qu'on crie *Sail Ho ! Sail Ho!* à pleins poumons. En anglais, cela veut dire : Une voile, oh ! une voile, oh ! Mais cela veut dire bien d'autres choses pour les habitants de

The Aux. Sch. *LUKA* at anchor.



Yacht *LUKA* notre bateau visiteur.

Christmas ; ce sont des nouvelles du pays, c'est du tabac, c'est du vin, de la bière, de la viande, des habits, des provisions de toutes sortes ; on est comme regaillardi par la présence du bateau et tout semble s'éclipser devant lui. L'île est visitée au moins deux fois l'an, mais il y a tout lieu de croire qu'elle le sera tous les trois mois. Il est aussi question de la rattacher à l'île Fanning (qui est à 140 milles au nord) par la télégraphie sans fil. Fanning a le câble anglais qui encercle le globe, de telle sorte qu'une dépêche une fois à Fanning peut, en quelques minutes, être transmise n'importe où.

Port et abordage.

L'île a la forme d'un quadrilatère dont chaque face a un enfoncement. La face Est a le plus prononcé. C'est une immense baie dont les extrémités des deux bras sont à plus de 50 kilomètres l'une de l'autre. Sur toutes les cartes de l'Amirauté, on fait remarquer qu'un bateau pénétrant la nuit dans cette baie n'aura guère de chance d'en sortir quand il apercevra les récifs qui ne sont qu'à 50 mètres du rivage. La vague, poussée par les vents alizés et le courant, y est dure et sauvage ; rien ne lui résiste. Malheur donc aux vaisseaux imprudents qui s'aventurent dans la baie du côté Est. Les tombes des naufragés y sont nombreuses, les épaves innombrables.

J'ai marché 20 kilomètres sur des débris de toutes sortes : voiliers, bateaux en bois et en fer ; il y a des mâts de toutes grandeurs, des ancres énormes, et à certains endroits, à marée basse, on marche sur le plomb et sur le cuivre.

Le dernier naufrage en 1908 était un bateau de dix

mille tonnes, « l'Aeon », contenant pour plusieurs millions de francs de marchandises. Tout fut perdu, parce que l'île était alors inhabitée. Les passagers et les matelots, en général, se sauvent à moins de se noyer ou de se blesser en abordant au rivage : l'île les nourrit

Wrecks beach.

Ce qu'on voit sur 20 kilomètres.

jusqu'à ce qu'un bateau, passant au large, voit leurs signaux de détresse.

Les côtés Nord et Sud du quadrilatère sont moins mauvais puisqu'on n'y voit pas de débris de naufrage. Mais c'est au côté Ouest qu'il est réservé de former

un port sûr, calme comme un lac, et d'une beauté ravissante. Là, des bateaux de tout tonnage ancrent par dix et quinze brasses et sont en toute sûreté. Les embarcations pénètrent dans le lagoon et c'est sur un sable blanc comme neige qu'on débarque et qu'on embarque. Là, Cook resta huit jours avec ses deux bateaux de guerre, la « Découverte » et la « Résolution ». Là, les baleiniers, durant un siècle, sont allés chercher le repos et les provisions dont ils avaient besoin. C'est un rendez-vous bien connu de tous les marins du Pacifique.

Habitations.

Les maisons doivent être appropriées au climat d'une île dont la moyenne est de 28° à 30° centigrades et qui a une brise fraîche soufflant jour et nuit. C'est pourquoi toutes les maisons sont en bois, couvertes, ou en feuilles de cocotier, ou en fer galvanisé ; et, dans ce dernier cas, un plafond ajoute de la fraîcheur à l'habitation. Les portes sont grandes et larges et restent toujours ouvertes. On ne veut pas de matelas dans un semblable climat ; outre que ce serait trop chaud, ce serait aussi moins propre que le sommier ordinaire ou à cordes sur lequel on étend des nattes fraîches et proprettes.

Les habits sont à l'avenant et adaptés au climat. On s'habille le moins possible : un tricot marin en coton couvre le buste et des pantalons très légers complètent le costume. Même les Européens qui n'ont pas le pied trop douillet, ne portent ni bas ni souliers, vu qu'il n'y a ni épines, ni tessons de bouteilles, ni rien pour blesser, à moins qu'on aille se promener sur le corail, à la manière des indigènes qui vont

toujours pieds nus, toutefois avec quelques précautions.

Malgré les déprédations des Japonais qui jusqu'à 1911 venaient dans l'île pour y empailler des centaines de mille d'oiseaux, il reste encore, outre plusieurs

Manager's House (Settlement North).

Maison du Gérant. Camp Nord.

maisons, une citerne, un mât pour faire des signaux aux bateaux qui passent, et enfin une tour en fer, sorte de phare sans feu, qui porte une hampe de drapeau à plus de 50 pieds dans les airs, pour avertir les bateaux qu'ils approchent d'un danger et qu'ils ont

à se tenir à distance. Ce phare est à l'extrémité nord-est, et de son sommet, on a une vue magnifique sur une bonne partie de l'île.

FLORE (arbres, plantes, etc.)

Il ne faut pas s'attendre à trouver à Christmas des forêts vierges, des lianes géantes, des plantes de toutes sortes. Non, et cela pour deux raisons principales. D'abord le sol ne s'y prête pas. Quand il est meuble, c'est du sable de corail plus ou moins mélangé de guano, trop riche en phosphate et en acide phosphorique pour beaucoup de plantes. La pluie pénètre et traverse ce sol sans y séjourner assez pour permettre à nombre d'autres plantes d'y trouver l'humidité nécessaire.

Ensuite le sol serait-il tout ce qu'on peut désirer, il faudrait encore que les arbres et les plantes, ou leurs graines, y aient été apportées, soit par l'homme, soit par les courants, soit par les oiseaux. Or, l'homme n'y a guère abordé qu'en faisant naufrage ; les courants ne peuvent pas faire franchir aux graines non flottantes, sans leur faire perdre leur vertu germinatrice, une distance de 1.500 km. (Tahiti), où se trouvent les forêts les plus rapprochées. Par ailleurs les oiseaux sont tous aquatiques et ne vivent que de poissons. Il leur est donc impossible d'apporter des graines dans leur gésier ou à leurs plumes. Restent les plantes à graines flottantes, très vivaces, qui auront pu, dans le cours des siècles, s'acheminer lentement d'atoll en atoll, être rejetées par la vague sur le rivage, puis soulevées par le vent jusque sur un sable propice où la graine aura germé.

Il n'y a donc à Christmas que des arbrisseaux ou

Honey grass.

Plante à miel.

arbres à graines pouvant flotter des mois dans l'eau de mer, tout en conservant leur vitalité. On les compte sur les deux mains ; la végétation n'est donc pas variée. Le plus commun des arbustes est une sorte de liane enchevêtrée, très verte, très dense que l'on appelle : « Scœvola », en indigène : Nashou ; là où cet arbuste pousse, le cocotier vient à merveille. Il y a aussi l'arbre-parapluie ou « Taounou », excellent bois de chauffage aussi et poussant sur le guano. Parmi les herbes, il y a à signaler une sorte de bruyère dont les fleurs ont une odeur de miel très accentuée. Elle couvre l'île, et je l'ai baptisée « l'herbe à miel », tant je suis convaincu que des abeilles y réussiraient.

J'ai aussi été surpris d'y rencontrer une sorte d'herbe de Para, très tendre et vivace. Elle fait les délices du bétail que l'on pourrait y élever à l'air libre, des puits peu profonds fournissant l'eau nécessaire. Il y a peu de « *Pandanus* », mais les quelques spécimens qu'on y rencontre, prouvent que si on en plantait, on obtiendrait des fruits en quantité. C'est une nourriture très recherchée des indigènes. Les quelques autres arbres introduits prouvent aussi que certaines espèces y réussiraient très bien.

Mais l'arbre qui fait l'ornement de Christmas, l'arbre qui est chez lui et y pousse à vue d'œil, c'est le cocotier. Il ne m'a été donné, ni à Fanning, ni dans aucune autre île du Pacifique, de voir des arbres chargés de cocos comme ceux que j'ai vus à Christmas. La végétation y est si forte que des arbres de huit mètres de haut ont leurs branches qui partent du sommet et viennent toucher le sol, ayant donc une longueur de près de vingt-quatre pieds. Les cocos sont gros et nombreux et Christmas justifie une fois de plus la

réputation qu'ont toutes les îles de corail, à savoir qu'elles sont sans rivales pour la production du cocotier. De plus Christmas a un grand avantage sur la plupart des autres îles et pays tropicaux, c'est que l'île est vierge de toute peste attaquant le cocotier;

Edible Pandanus.

Pandanus comestible.

ni larves, ni insectes, ni lézards, ni champignons. Aucune de toutes les maladies ruineuses des meilleures plantations de cocotiers n'a encore été apportée à Christmas, et une surveillance rigoureuse est faite de toute plante qui y est introduite.

L'île se trouve encore en dehors des cyclones et des raz-de-marée ce qui est un immense avantage et un très grand secours pour son prompt développement.

Animaux.

J'ai dit qu'il n'y avait pas de rats, mais il y a des souris, ce qui est bien différent. Le premier est une peste dans les îles qui en ont puisqu'un rat niche dans les têtes de cocotiers et perce un trou par jour pour y boire et y manger à son aise. La souris au contraire reste à terre et vit de déchets de poissons que les oiseaux lui laissent et de graines diverses. Elles sont d'ailleurs peu nombreuses à cause des quantités de chats qui sont dans l'île. Ces chats sont sauvages et presque tous noirs ; leur présence s'explique par la manie qu'ont les superstitieux capitaines d'avoir toujours à bord un chat noir comme mascotte. En tout cas, les chats noirs n'ont pas porté bonheur à ceux qui ont fait naufrage ; ces félins ont sauté à terre où ils vivent de souris, d'oiseaux et de poissons.

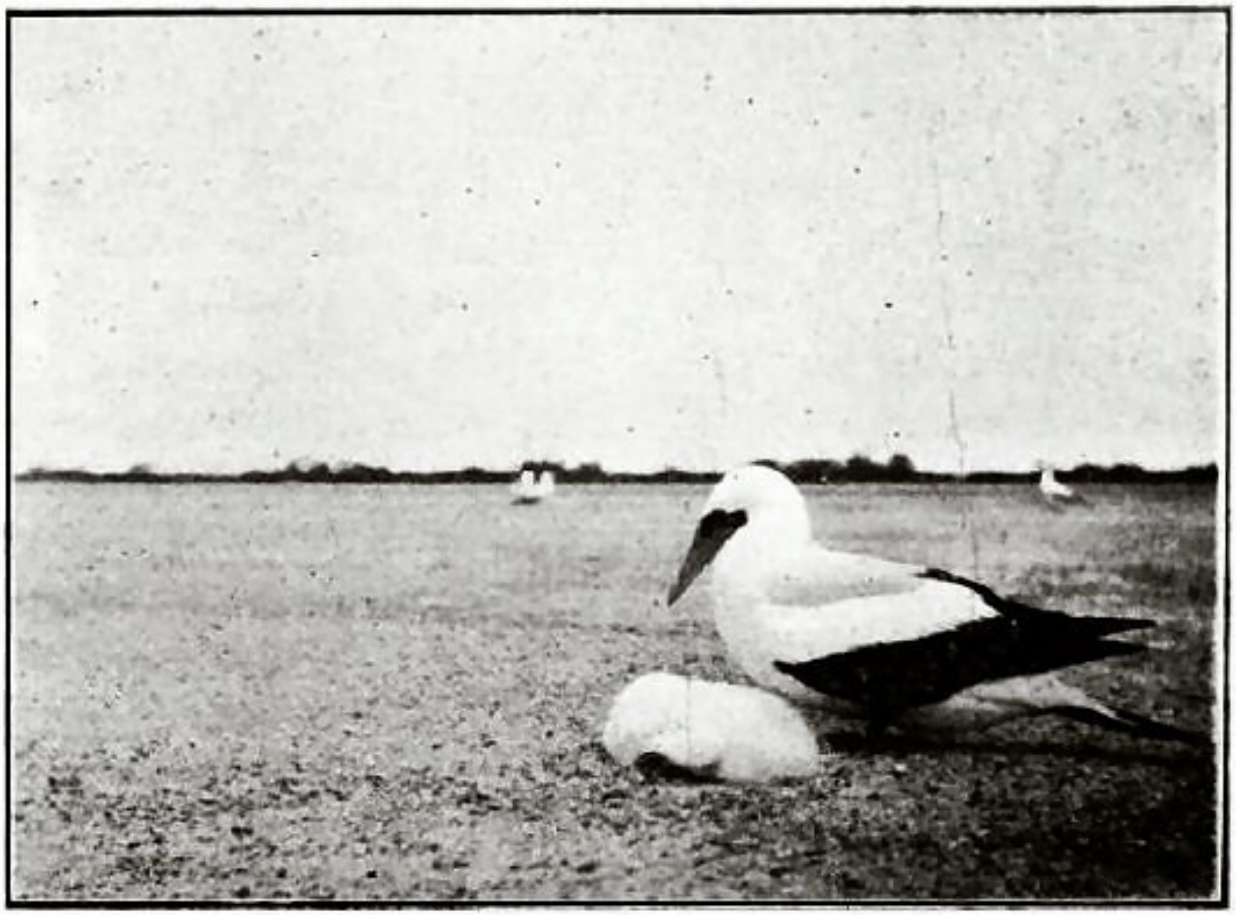
Il n'y a dans l'île ni serpents ni autres animaux venimeux. On peut passer et dormir n'importe où, un avantage que nous, Européens, savons apprécier.

Chose curieuse, il n'y a pas de mouches ordinaires. Les moustiques y sont très peu nombreux. On y voit aussi un tout petit lézard gris, et cela, avec des quantités d'insectes qui vivent sur les cocotiers et sous les feuilles, fait toute la vie terrestre de Christmas, en exceptant, bien entendu, la tortue de terre, dont j'ai parlé, et les millions d'oiseaux qui sont partout, et jour et nuit, avertissant qu'on n'est pas seul à habiter cet atoll.

Pluies, vents et marées.

Les pluies ne tombent pas comme en Europe ; on n'y voit pas de ces journées sombres et longues, parce que la pluie ne cesse jamais. Les pluies des tropiques

Sula cyanops. Christmas booby.



L'oie de Christmas et son bébé.

sont subites et tombent à torrents ; cela dure de 5 à 30 minutes, quelquefois une heure, les plus longues deux heures. Comme on est habillé d'une légère cotonnade, on est trempé jusqu'aux os ; on se délecte sous la douche : c'est si frais, et l'on sait que dans

dix minutes, au plus soixante minutes, le bon soleil va venir vous sécher en un clin d'œil.

La pluie est la désirée, toujours la bienvenue. Les orages y sont si rares que l'on n'y voit jamais d'éclairs et que l'on y entend que très rarement un bruit lointain de tonnerre. La saison des pluies est de janvier à juin. Ce n'est pas d'ailleurs très régulier et il y a des saisons très pluvieuses comme d'autres très sèches, tout comme en Europe. Chose très extraordinaire, la rosée y est très abondante, du moins en juin ; lors de ma visite, la rosée était si forte qu'à neuf heures du matin le soleil ne l'avait pas encore toute absorbée.

Les vents sont ceux que l'on appelle les vents alizés ; ils soufflent toute l'année, tantôt du Sud-Est, de l'Est ou du Nord-Est. Les autres vents sont très rares, surtout celui de l'Ouest. Les calmes y sont de courte durée, on en profite pour faire des pêches merveilleuses, car, par temps calme, on voit le fond de la mer à des profondeurs incroyables, et tous les poissons semblent fous de joie et se laissent prendre plus facilement.

Il ne faut pas croire cependant que d'habitude la mer soit mauvaise. L'Océan Pacifique, d'où son nom, est vraiment pacifique. Les alizés ont la faculté de le faire moutonner ; ce sont de petites vagues échevelées : on dirait des moutons blancs qui se poursuivent ; mais il n'y a point de ces grandes vagues ou lames qui s'élèvent en montagnes et retombent en cascades, ou du moins c'est très rare. Les alizés sont réguliers et toujours frais, soit qu'ils soufflent le jour ou la nuit. Il n'y a point de vents chauds, chose très appréciable si près de l'Equateur. Ce ne sont point non plus les montagnes qui peuvent arrêter les alizés,

Male Fregate bird. See inflated poach.

La Frégate (envergure 6 pieds) avec son ballon rouge gonflé.

puisque la plus haute colline de Christmas n'a pas plus de 30 mètres.

La marée suit la lune. Elle est pleine au lever et au coucher de la lune, et basse à son zénith ; elle ne monte et ne descend que d'un mètre environ ; c'est assez pour découvrir les récifs ordinaires et permettre de s'y aventurer pour y ramasser les escargots, les langoustes, soit de rochers, soit de sable, et les autres poissons qui se sont attardés ou sous les pierres ou dans les petites flaques d'eau. Là, sur ce récif à marée basse, tout est vie, tout intéresse, depuis l'anguille qui se plante contre vous pour se défendre, jusqu'aux oursins et aux bèches-de-mer qui gisent comme sans vie un peu partout sur le sable ou le corail.

Specimens of Mother of pearls.

Huitres à nacre et à perle.

A QUI APPARTIENT CHRISTMAS ?

L'île est sous le protectorat anglais. Elle est louée pour 99 ans (depuis 1902) à la " *CENTRAL PACIFIC COCONUT PLANTATIONS LIMITED* ", en français à la " *Compagnie des Plantations de Cocos du Pacifique Central* ", dont le siège est à Londres, mais dont les directeurs sont actuellement français.

Cette Compagnie vient de se former, en 1914, pour l'exploitation surtout des cocotiers, et pour cela, elle va coloniser Christmas avec des colons et ouvriers d'un peu toutes les nations et toutes les couleurs. Pour cela, la Compagnie va faire des dépenses considérables puisque chaque colon ou travailleur lui coûtera près de 1.500 francs de passage et autant pour le retour après cinq ans, à moins que le colon ou le travailleur ne préfère rester dans l'île de Christmas. Ceci sera le cas pour le plus grand nombre, vu les gages élevés qu'ils peuvent gagner, l'impossibilité d'y dépenser ce qu'on gagne, et le climat est tellement enchanteur qu'une fois dans ces îles on ne veut plus les quitter.

Là, tout charme : la mer, le soleil, les nuits surtout, un travail facile, pas de maladies, pas de fièvres ; on y respire de ne plus avoir cette lutte acharnée pour la vie que l'on trouve ailleurs ; en effet, ici, partout où il y a dix centimes à gagner, tout le monde

Motu Manu (Bird Island).

Ilot des Oiseaux, dans le Lagoon.

se précipite à la fois, tandis que là-bas tout ce qu'on gagne est sauvé ; les dépenses y sont peu de chose à moins d'être extravagant. Les enfants y poussent comme le coco, et c'est la joie, une joie saine et sincère, qui règne par toute l'île.

Aussi la Compagnie fera-t-elle son possible pour y introduire de jeunes ménages intelligents et travailleurs, ambitieux non seulement de bien-être, mais aussi de gagner de l'argent et de sauver ce qu'ils gagnent. Ceux donc qui lisent ces lignes et qui connaîtraient des travailleurs et colons remplissant ces conditions sont priés de les adresser à un des directeurs de la Compagnie.

Catching Mutton birds.

Cuisinières choisissant leur rôti.

TRAVAIL ET TRAVAILLEURS

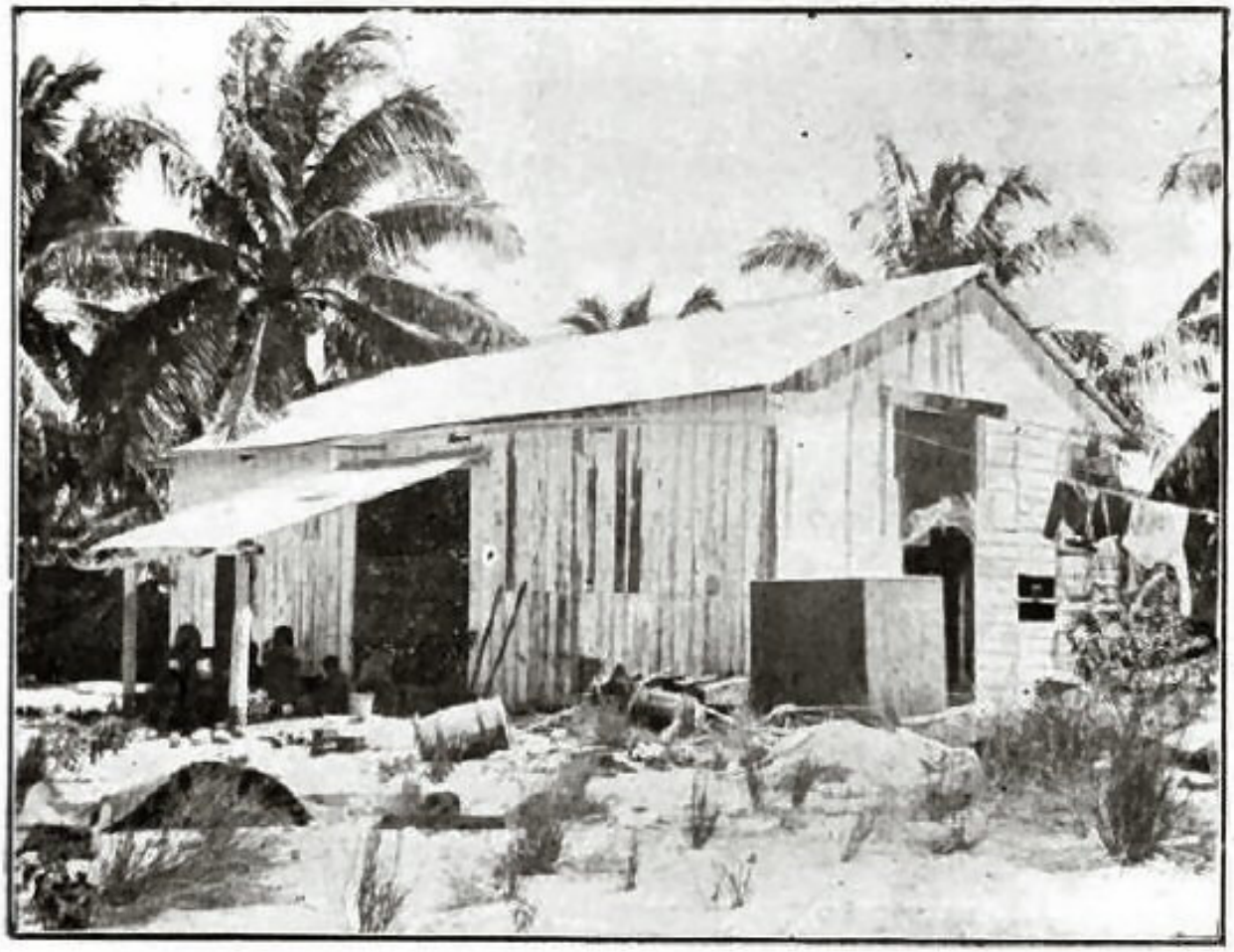
La journée commence avec le soleil et finit avec lui, et tout le long de l'année le soleil se lève à six heures et se couche à six heures. On prend généralement de deux à trois heures de repos de onze heures à deux heures, quoique souvent les indigènes préfèrent finir leur tâche et avoir ainsi tout le reste de la journée libre pour pouvoir pêcher, chasser ou s'amuser. En effet, bien que le travail puisse se faire à la journée, de neuf heures généralement, les travailleurs préfèrent une tâche à prix fait, c'est-à-dire que, après avoir fait tant de travail, ils sont libres, et que s'ils font davantage, ils recevront davantage, suivant l'échelle de payement établie ; par exemple un centime par livre de coprah apportée, s'ils doivent travailler jusqu'à ce qu'ils aient 300 livres pour gagner leur journée et être libres, s'ils font 400 livres ils auront droit à 1 franc de plus et pour 450, à 1 franc 50 de plus, etc.

On ne travaille pas le dimanche. Quant au samedi, à partir de quatorze heures du soir, on reste libre de travailler à prix fait, ou de se reposer. Les travailleurs s'arrangent pour préparer eux-mêmes leur nourriture soit avant six heures, soit de onze à deux heures, soit après six heures du soir. Ils font cuire ce qu'ils veulent et comme ils le veulent. La Compagnie leur

fournit gratis des provisions très suffisantes comme le montre la liste suivante.

En effet, outre une bouteille de vin pur par jour aux Européens, il leur est distribué tous les samedis pour la semaine suivante :

Coprah house and store.



Magasin et remise pour coprah.

7 livres de riz.
7 livres de pain ou biscuit, l'un ou l'autre.
2 livres de sucre.
1/4 de livre de savon.
1/4 de livre de sel.

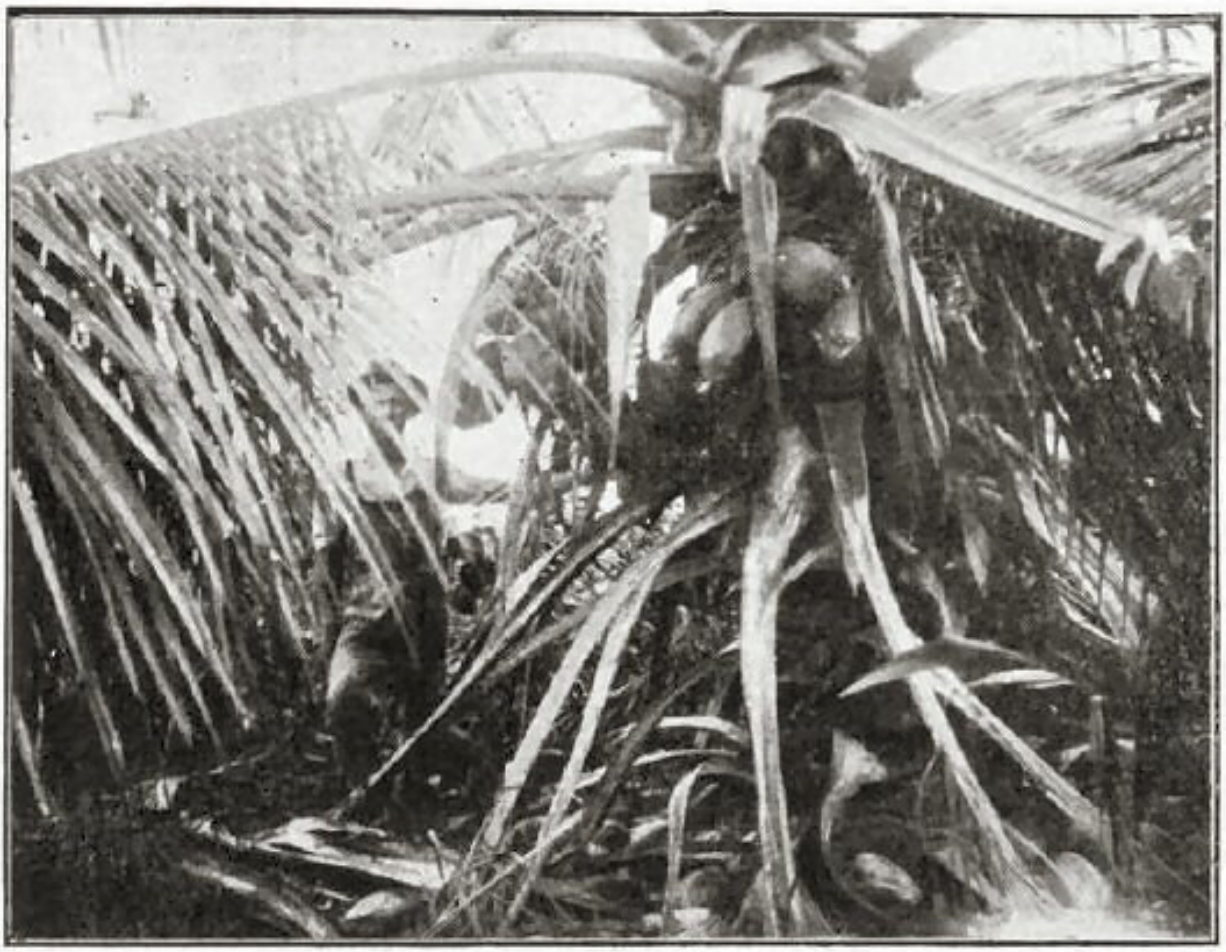
Tous les travailleurs ont tous les jours du poisson à discrétion ainsi que les oiseaux et les œufs qu'ils peuvent se procurer. Mais au cas où le poisson et les oiseaux viendraient à manquer, le premier de chaque mois il leur est donné un baril de 25 livres de bœuf salé pour une personne et pour deux un baril de 50 livres. Et si à la fin du mois ils rendent leur tonneau de bœuf intact, le prix coûtant leur en est crédité.

Tout ceci est donc donné gratis et si on veut quelque chose d'extraordinaire, la Compagnie a un store ou magasin où les articles extra ou de luxe, comme aussi des étoffes, etc. sont vendus aux prix ordinaires.

Les remèdes sont donnés gratis, mais chose singulière, les maladies sont inconnues dans ces îles fortunées qu'aucun germe de microbe n'a encore visitées, ainsi que les rhumatismes, les fluxions, les bronchites et toutes les maladies occasionnées par le froid.

Les indigènes ont leur camp à part. Les Européens ont chacun leur petite maisonnette et sur leur demande un jardin leur est donné gratis où ils peuvent essayer de jardiner à leur aise.

Coconut undisturbed since planted.



Arbres qui depuis huit ans n'ont été ni nettoyés ni visités.

PRÉSENT ET FUTUR

Pour le présent (1914) l'île n'a aucun habitant : le dernier travailleur en fut retiré en 1906 lorsque LEVERS FRÈRES qui en étaient alors propriétaires transportèrent tout leur matériel et personnel dans les îles Salomon pour y cultiver à la fois le caoutchouc et le cocotier, chose impossible à Christmas.

Cette Compagnie avait dépensé plus de 300,000 francs dans cette île ; mais il ne reste en fait de bâtiments que ceux dont on voit ici la photographie : et sur les 70.000 cocotiers plantés par eux, il n'en a survécu que 20.000 environ qui sont en plein rapport ; les autres deux tiers sont morts principalement par la faute des gérants qui s'obstinaient à transplanter dans ce sable sans eau des cocos ayant déjà germé depuis 12 ou 15 mois, absolument comme cela se pratique à Fiji et à Ceylan où le sol est meuble et saturé de pluie, ou encore pour avoir planté sur terrain bien sarclé et propre, au lieu de laisser les arbustes pousser avec le coco pour servir d'ombrage à celui-ci et lui procurer l'humidité nécessaire. C'est donc à peine 350 hectares de plantés à raison de 60 cocotiers à l'hectare. Il reste plus de 50.000 hectares à planter de suite, soit 3.000.000 de cocotiers à planter ; voilà le futur. Quant aux autres ressources, on doit placer en première ligne la nacre et les perles. LEVERS FRÈRES introdui-

sirent la nacre à lèvres argentées en 1905. Aura-t-elle réussi ? Quant aux autres nacres ordinaires, elles doivent abonder puisqu'un voilier de Tahiti, vers 1900, en pêcha 20.000 kgrs en quelques semaines.

Bearing at one foot high.

Tête de Cocotier commençant à rapporter à peine sortie de terre.

La position de l'île et son isolement la classent parmi les atolls qui doivent avoir du phosphate.

Quant aux oiseaux et aux revenus que l'on pourrait tirer du poisson, du bétail, etc, la Compagnie ne

s'en occupera pas avant d'avoir planté l'île en cocos, à moins qu'un expert en ces matières ne fasse l'offre de les exploiter, permettant ainsi à la Compagnie de ne s'occuper que des cocotiers.

La main-d'œuvre devra y être importée comme dans les îles voisines Fanning et Wasington qui, elles aussi, appartiennent à une compagnie et ont déjà plus de 200 travailleurs des îles Gilbert et quelques Européens. Un bateau dit visiteur et recruteur sera chargé de visiter l'île régulièrement et d'y amener des travailleurs de toutes les îles voisines. Un certain nombre d'Européens seront aussi amenés à Christmas, de préférence de jeunes ménages tirés de nos populations paysannes. Vu leurs qualités natives, ils ne pourront que réussir et bénir le jour qui les arracha aux misères physiques et morales qui trop souvent sont ici leur partage.

TABLE DES MATIÈRES

Sketch Survey of

CHRISTMAS ISLAND

Compiled from the Observations of Captn Cook in 1777
Captain J. Scott, H.M.S. "Samarang" 1842, &
Commander J.S. Skerret U.S. Ship " Portsmouth" 1874

Cook I. Lat 1°57'17" N. – Long. 157°27'46" W of Greenwich.

SOUNDINGS IN FATHOMS

Légende pour la carte de Christmas.

1. — Settlement, où sont les habitations actuelles : mât, réservoir, etc.
2. — Pointe-Sud ou South point, où est la résidence pillée par les Japs.
3. — Japs camp, ou Camp des Japonais.
4. — Motu manu, ou îlot des oiseaux.
5. — Motu e Tau, ou îlot isolé.
6. — Old Greig nuts, ou les cocos du vieux Greig.
7. — Inside Grove, ou Plantation de l'intérieur.
8. — Tombes jumelles, ou Twin tombs. Eau douce à 200 mètres dans les rocs.
9. — Vieux cimetière (old graveyard).
10. — Baie des Requins (shark's bay).
11. — Aeon wreck (épaves de l'Aéon).
12. — The 5 trees (les 5 cocotiers) avec eau douce à côté.
13. — Beach shells (rivage des clovisses) avec cocotier isolé.
14. — Jimmis' grove (plantation de jimmi).
15. — Les deux jumeaux (the twins) sont deux cocotiers isolés.
16. — The 2.000 (les deux mille) au fond d'une baie et rivière.

View of Wreks Bay from top of beacon.

Baie des Épaves vue du sommet de la tour.

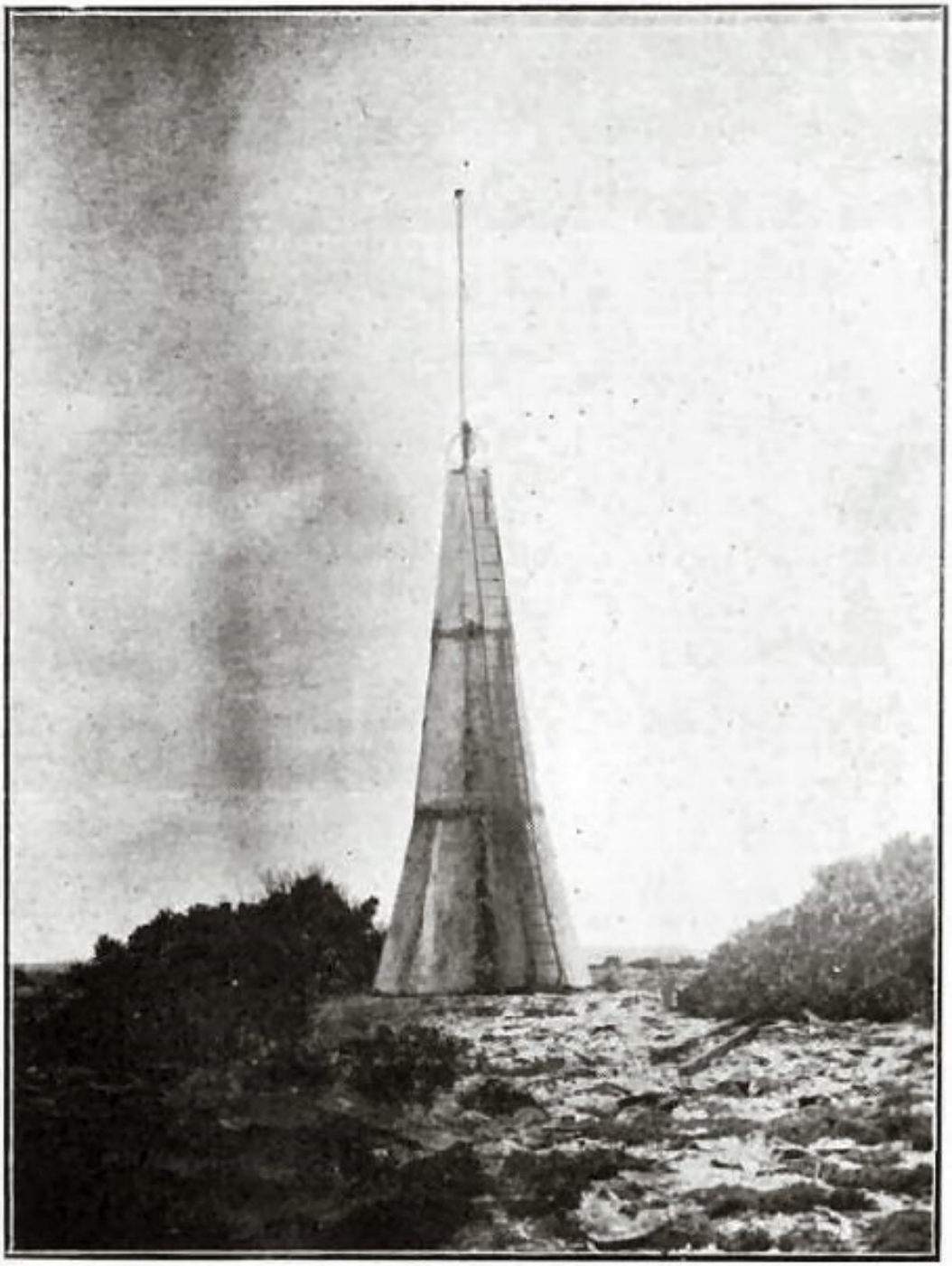
Entrée du Lagoon.

ENGLISH PART

This small book being for Britishers as well as for Frenchemen I will give now few reports to give an idea of what is expected to be seen at Christmas Island and also what an investor might expect from capital invested in the Island, if judiciously worked.

I commence by giving a description of the Island by that Master of written tableaux of the South Seas, Louis Becke, by his true name; Tom Denison. Here it is.

Beacon (iron). East Point.



Phare sans feu. Pointe Est.

A NORTH PACIFIC LAGOON ISLAND

Two degrees north of the Equator, and midway between the Hawaiian Islands and fair, green Tahiti, is the largest and most important of the many equatorial isolated lagoon islands which, from 10 deg. N. to 10 deg. S., are dispersed over 40 deg. of longitude. The original native name of this island has long been lost, and by that given to it by Captain Cook one hundred and forty years ago it is now known to Pacific navigators — Christmas Island. Cook was probably the first European to visit and examine the place, though it had very likely been sighted by the Spaniards long before his time, in the days of the voyages of the yearly galleons between the Philippines and Mexico and Peru.

On the afternoon of December 24, 1777, Cook (in the *Resolution* and *Discovery*) discovered to leeward of the former ship a long, low, sandy island, which proved to be about ninety miles in circumference. It appeared to be an exceedingly barren-looking land, save on the south-west side, where grew a luxuriant grove of coco-palms. Here he brought his ships to an anchor, and partly to recuperate his crews, who were in ill health, and partly to observe an eclipse of the sun, he remained at the island some weeks. He soon

discovered that the lagoon in the centre was of noble proportions, and that its waters teemed with an immense variety of fish and countless ' droves ' of sharks. To-day it remains the same.

Fifty years passed ere this lonely atoll was visited

Phaeton Rubricauda. Tropic Bird.

Paille-en-queue et son petit.

another ship, and then American and English whalers, or, as they were called in those days, ' South Seamen', began to touch at the island, give their crews a few days'spell amid the grateful shade of the palm grove and load their boats to the gunwales with fat green

turtle, turtle eggs, robber crabs, and sea-birds' eggs. From that time the place became well known to the three or four hundred of sperm whalers engaged in the fishery, and. later on, to the shark-catching vessels from the Hawaiian Islands. Then, sixteen years ago, Christmas Island was taken up by a London firm engaged in the South Sea Island trade under a lease from the Colonial Office; this firm at once sent there a number of native labourers from Manihiki, an island in the South Pacific. These, under the charge of a white man, were set to work planting coco-nuts and diving for pearl shell in the lagoon. At the present time, despite one or two severe droughts, the coco-nut plantations are thriving, and the lessees should in another few years reap their reward, and hold one of the richest possessions in the South Seas.

The island is of considerable extent, and though on the windward or eastern side its appearance is uninviting in the extreme, and the fierce oceanic currents that for ever sweep in mighty eddies around its shores render approach to it difficult and sometimes dangerous, it has yet afforded succour to many an exhausted and sea-worn shipwrecked crew who have reached it in boats. And, on the other hand, several fine ships, sailing quietly along at night time, unaware of the great ocean currents that are focussed about the terrible reefs encompassing the island, have crashed upon the jagged coral barrier and been smashed to pieces by the violence of the surf.

Scarcely discernible, from its extreme lowness, at a distance of more than eight miles from the ship's deck, its presence is made known hours before it is sighted by vast clouds of amphibious birds, most of which all

day long hover about the sea in its vicinity, and return to their rookeries on the island at sunset. On one occasion, when the vessel in which I was then serving was quite twenty miles from the land, we were unable to hear ourselves speak, when, just before it became

Mutton Bird and egg.

L'oiseau-mouton adulte et son œuf.

dark, the air was filled with the clamour of countless thousands of birds of aquatic habits that flew in and about our schooner's rigging. Some of these were what whalemen call ' shoal birds, ' ' wide-awakes, ' ' molly-hawks,' ' whale birds ' and ' mutton birds.' Among

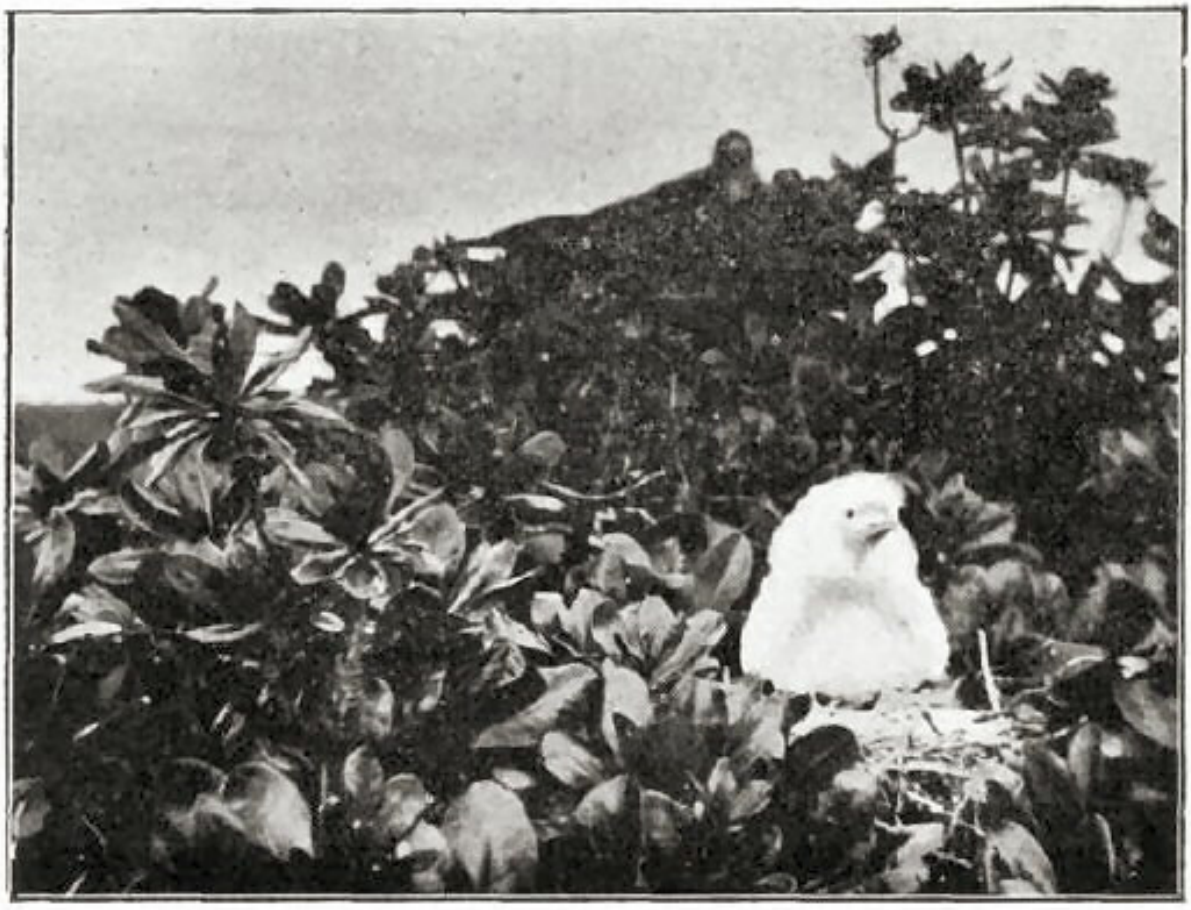
them were some hundreds of frigate birds, the *katafa* of the Ellice Islanders, ad a few magnificently plumaged fishers, called *kanapu* by the natives of Equatorial Polynesia.

Given a good breeze and plenty of daylight, the whale-ships of the olden days could stand round the western horn of the island, a projecting point rendered pleasingly conspicuous by the grove of graceful cocopalms which Cook was so glad to observe so many years before, and then enter a deep bay on the northwest coast, where they obtained good anchorage in from fifteen to twenty fathoms of water of the most wonderful transparency, and within a mile of the vast stretches of white sandy beach that trend away for miles on either hand. And then the sailors, overjoyed at the delightful prospect of running about in the few and widely-apart palm groves, and inhaling the sweet, earthy smell of the thin but fertile soil, covered with its soft, thick bed of fallen leaves, would lower away the boats, and pulling with their united strength through the sweeping eddies of the dangerous passage, effect a landing on a beach of dazzling whites and situated in the inner south-west border of the wide lagoon.

On our first visit to the island, in 1872, we had some glorious fishing ; and when we returned on board, under the rays of a moon that shone with strange, uncanny brilliancy, and revealed the coral bottom ten fathoms below, the scene presented from our decks was one of the greatest imaginable beauty, though the loneliness of the place and the absence of human life was somewhat depressing. We remained at the island for three days, and during our stay our crew of South Sea Islanders literally filled our decks

with fish, turtle and birds' eggs. Curiously enough, in our scant library on board the little trading vessel I came across portion of a narrative of a voyage in a South Seaman, written by her surgeon, a Mr Bennett, in 1838,* and our captain and myself were much

Young and old KATAFA.



Deux nids. En haut la Frégate couvant, en bas un petit en duvet.

interested in the accurate description he gave of Christmas Island and its huge rookeries of oceanic birds. This is what he says: 'Here and there

* *Narrative of a Whaling Voyage round the Glob, from* 1833 *to* 1836. By F. D. Bennett.

among the low thicket scrubs are vast rookeries of aquatic birds, whose clamour is deafening. They nest and incubate upon the ground, and show not the slightest fear of the approach of human visitors. Among the sooty terns, whose number it was impossible to estimate, were many hundreds of tropic birds and pure snow-white petrels.' (He no doubt imagined the pure snow-white petrels to be a distinct species—they were young tropic birds.) 'These latter, who flew whit a gentle, flapping motion, would actually fly up to us and scan our countenances with an almost human expression of interest and curiosity.' (Darwin, in his account of another Christmas Island in the Indian Ocean, also describes these gentle creatures as being of ethereal beauty.) 'Some, indeed, permitted themselves to be caught, and although their delicate, fragile forms quivered with fear when they came in contact with our hands, they would, when released, return to us again and again, as if seeking to solve the mystery of what strange beings were these that had invaded their retreat. In one rookery there were many varieties of these oceanic birds, and a species of booby that seems to be peculiar to Christmas Island. In size and colour they much resemble the ordinary gannet of our cold northern seas. Their plumage is of a wondrously bright snow white, with the exception of the primary and secondary feathers of the wings, and the *retrices*, or tail feathers, which are of a glossy black. The skin of the cheeks and chin is devoid of feathers, and of a jet black colour, the beak a delicate yellow blue, the legs bright blue. The solicitude of the female birds of this species for their offspring

was most interesting to witness. Their nests were of the rudest description, being merely circular heaps of sand raised in the open plain and exposed to the fury of storms. As we approached the nests the mother birds settled themselves down upon their

Nests of Terns.

Nids de Terres faits d'excréments.

single egg and screamed loudly, but would permit themselves to be lifted off, yet struggled violently in our hands to get back again. Although there were thousands of these nests within a radius of an acre, a brooding hen might easily have been passed

unnoticed, for her white plumage corresponded so well with the hue of the coral sands that one was apt to kick against the nest were it not for the agonised, barking note of the poor mother. The male birds, however, of this species did not show any marital concern for their partners. They were usually seated near the nests, but at once took to flight upon our approach. Further on, among a thicket of scrubby vegetation, we found a rookery of many thousands of the superb red-tailed tropic bird *(Phaeton phœnicurus)*, also engaged in incubation. Their nests were mere circular excavations in the sand, under the shade of the bushes of the thicket. Each nest contained an egg of pure white, dotted with delicate lilac spots, and in size rather larger and rounder than that of the domestic hen. The females, as well as the males, made no attempt to escape from their nests on our approach, whether they had or had not the care of eggs, and consequently several of our crew, with innate Polynesian vanity, soon caught a number, and plucking out the two long scarlet tail feathers placed them in their hat bands.

'A hundred yards away from the rookery of the tropic birds was one of a colony of the snowy tern before mentioned. These gentle, black-eyed creatures do not even pretend to construct a nest, but simply deposit a solitary egg upon the bough of a tree (like the *gogo*, or whale bird). They select for this purpose a tree destitute of foliage, and a branch of horizontal growth. It is strange that, notwithstanding the exposed situation of these eggs, they are very difficult to find; and it was not until long after the solicitude of the parent birds informed us that their spot of in-

cubation was near that we could solve the mystery which attended their nursery. Each egg is the size of a pigeon's, and marked with either blood or chocolate-coloured splashes and spots of irregular shape. Considering the slenderness of the branches on which

Colony of Terns (Hawaiensis).

Arbres tués par les Ternes.

they are deposited, it is remarkable that the eggs (which appear to be at the mercy of every passing breeze) should yet retain their extraordinary position during incubation.' (Any Pacific Islander could easily have explained this seeming mystery. The shell, when

the egg is laid, is covered with a strong adhesive coating. I have often seen a single egg, laid upon a slender branch, swaying about in a strong trade wind, and yet remain firmly in its position,) 'What may be the habits of the newly-hatched birds we had no opportunity of learning, as none of the latter came within our observation.

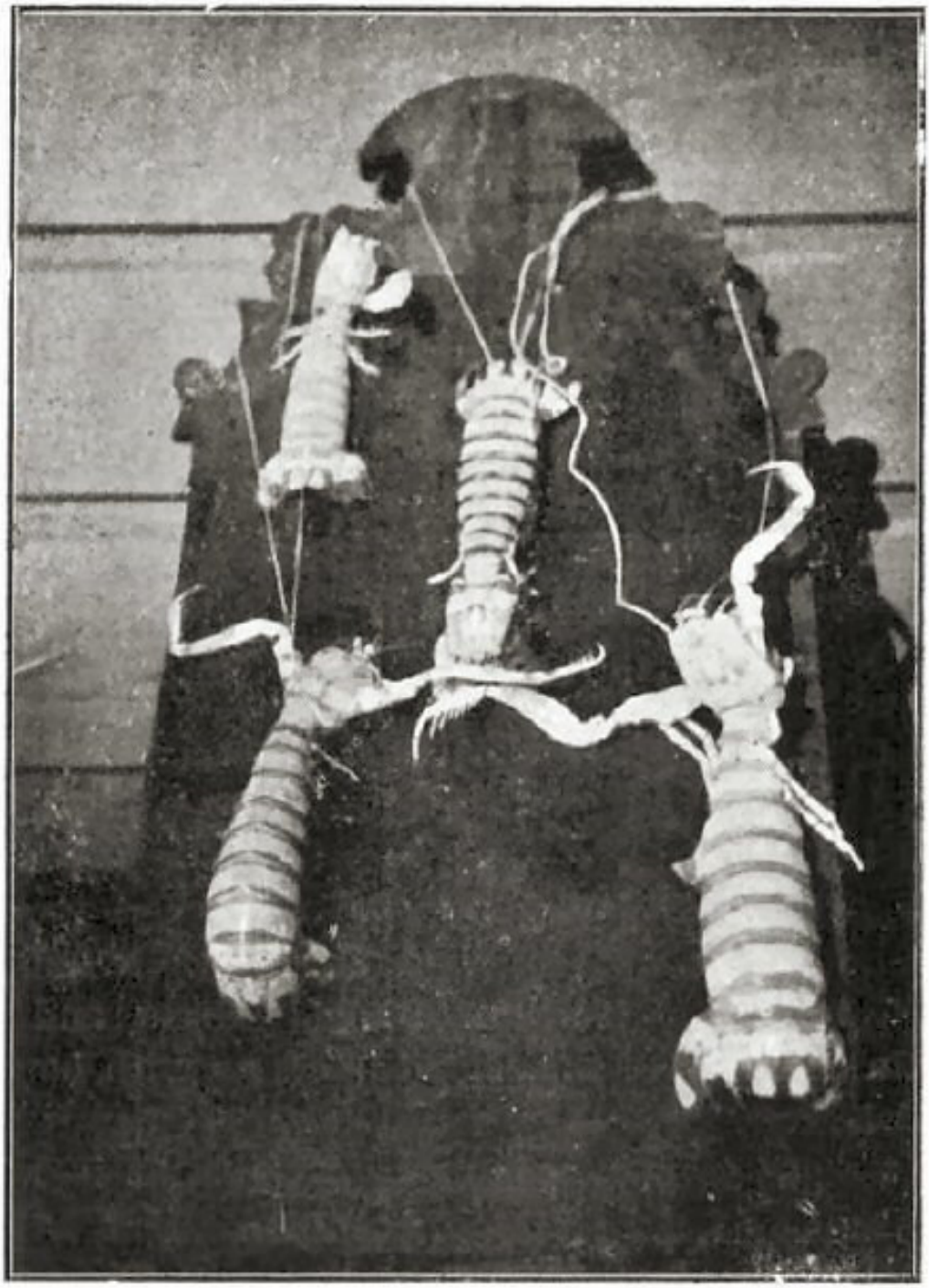
'Small reef birds (tern) were present in prodigious numbers, skimming the waters of the coast with an erratic, rapid, but yet graceful flight, like that of the stormy petrel. At night they assembled in vast numbers on an islet in the lagoon, to roost on the trees. They are about the size of an Australian snipe, and their forms are models of elegance and beauty. Their plumage is in true slate colour, the secondary wings are white, and a narrow white zone surrounds each eye; their legs and feet are a pale blue, with white webs.

'Every now and then as we, during our visit, walked along the snow-white beaches, great crowds of golden-winged plover and tiny snipe sprang skyward, and swept in graceful gyrations over the broad expanse of water, till they settled upon some sandy spit or spot of projecting reef; and, indeed, the immense concourse or frigate birds, boobies, terns, petrels and other aquatic denizens of the island filled us with boundless astonishment.

'At night time there crept out from their lairs in the loose coral shingle that lined the scrub at high-water mark, incredible numbers of huge "land lobsters"—the "robber crab" of the Pacific Islands. They all crawled to within a few feet of the placid waters of the lagoon, where they remained motionless,

as if awaiting some event—possibly to prey upon the smaller species of *crustaceæ* and turtle eggs.'

Sand Crayfishes.



La Squille de sable ; mets délicieux.

LEVER'S PACIFIC PLANTATIONS LIMITED

SUNLIGHT WORKS,

Sydney, 8th June 1909.

Father Em. ROUGIER,

KORONIVIA, FIJI.

Dear Sir,

We are in receipt of your favor of the 20th May, and in reply have to say that we are still prepared to sell our interest in Christmas Island.

The Island is held by us on a Licence of Occupation from the Imperial Government, for a period of 99 years beginning in 1902. The Licence of Occupation was based on a fixed rental for a certain period, but the rental is now based on a Royalty, payable to the Imperial Authorities, of 2/- per ton on the export of Coprah, and 15 % on the export of Pearl Shell. We would require to obtain the consent of the Authorities to a transfer of the lease, but we do not think there would be any difficulty in obtaining this.

This Island is so far away from Sydney, although it is quite adjacent to your other properties, that we are short of the details that are required on which to supply you with a report, but at the 31st December 1905, our then Manager took a census of the planted area, and reported that there were 72,863 trees, equal in all to 1.457 1/2 acres.

At the end of 1905 this Island was left to nature, and we concentraded our development in the Solomon Islands.

We ourselves, since acquiring the property, have shipped to the Island for seed purposes, 63.000 Nuts,

Kitchen pillaged by Japs.

Cuisine détruite par les pirates japonais.

so that it is quite possible that the area of 1.457 1/2 acres is approximate to the actual area planted, but we could not guarantee that this is so.

The Island is already equipped with Manager's Bungalows one on the north side of Cook Passage, and

the other at Kaihau Point on the other side of Cook Passage. These two Bungalows are partly furnished, as it was our intention to go back there later on and work the property. There is also moderate amount of plant and tools still on the island.

We think the property is one that could be very easily controlled from Fanning Island, of which you are the owner, and as it is an Island of very large area, we have no doubt that there is a considerable amount of land suitable for the growth of Cocoanuts on it.

We shall be glad to hear further from you if you have any proposition to make.

Yours faithfully,

LEVER'S PACIFIC PLANTATIONS LIMITED.

Flag staff at the landing.

Le mât des signaux au Camp.

REPORT

OF

LEVER'S PACIFIC PLANTATIONS LIMITED

ON CHRISTMAS ISLAND

8th June 1909.

The Island was discovered by Captain Cook on the 24th December 1777 and annexed by Great Britain on March 17th 1888.

Position.

1°59' N. 157° 32' W. Distant only 145 miles from Fanning Island.

Extent.

The Island extends 44 milles E. W.

Description.

It is of coral formation, rising from 15 to 20 feet above the sea level, containing a lagoon, which is navigable for small sailing craft.

Tenure.

The Island is held under a lease from His Majesty the King for a term of 99 years from June 1902. The Government Royalty on Copra is 2/- per ton, and on other produce from 3/4 to 1 % ad valorem, which payments are in lieu of rent.

Landing.

The Island may be approached on the West side without danger. There is a very good landing passage between Cook Island and the Home Station marked on the plan.

Native house at the Jap's Camp.

Case indigène au Camp japonais.

The depth of water at about 250 yards from the Home Station is 10 fathoms.

There are no inhabitants on the Island, all the labour being removed pending the development of the trees.

The Island is outside the hurricane zone.

The following is an estimate of the trees planted, as reported by the Company's Manager on 31st December 1905 :

Full Grown and Bearing.	6 Years old.	Young Trees and up to 5/6 Years.	
1,018	1,200	46,567	
		14,488	
		9,500	
1,018	1,200	70,555	= 72,863.

20 1/2 Acres. 26 Acres. 1,141 Acres. = 1,457 1/2 Acres.

It is probable that most of these trees will now be in bearing and in the course of a few years the Island should export some 700 tons of Copra.

A large and commodious dwelling House has been erected on the Island in addition to the usual Copra Store and Native Quarters.

The folloving is an extract from the most recent report on the property by one of the Company's Overseers :

« The best land lies between Motu Manu and the « 17 trees which I went to on my last visit. Mr Kissling « and Tom Mitchell have been through this part and « the latter estimates there is a stretch of at least « 10 miles by two, equal to 12,800 acres without any « bad land at all. Mr Kissling thinks there is more. « There is also good land on the S. W. point and « where there are over 2,000 nuts planted. These I « saw from the masthead when passing, but it was « too late to land.

Kaikai.

Au diner.

« I landed with Mr Kissling and found the trees « round the house looking very fine and full of fruits, « that is the older ones, and a few just beginning to « bear, Mr Kissling assures me, are not more than « 5 years old.

« Next morning we set out to Motu Manu at « daybreak. On seeing the trees round the houses « there I was much struck with their look. Nearly « all carry a large number of nuts, over 200 I counted « in some cases, and look well, in fact one could hardly « wish for a finer sight on any cocoanut estate. »

Pearl shell.

Exists in the waters and a successful fishery might be established.

Expenditure.

Over £12,000 has been spent by the Company and its predecessors, in planting and development of the property, besides obtaining an extension of the lease to 99 years from 1902 on more advantageous terms than had previously been granted.

Young tree in guano soil.

Jeune cocotier fumé par les oiseaux.

LEVER'S PACIFIC PLANTATIONS LIMITED

SUNLIGHT WORKS,

Sydney, 3rd August 1909.

Father Em. ROUGIER,
C/o Messrs de Freest and Co,
Box 240, HONOLULU.

Dear Sir,

We are favored with yours of July 17th.

Regarding the option of Christmas Island, we are agreeable to extend this option free until the end of December, that is until such time as you can communicate with us by the boat leaving Fanning Island in November. If no communication be received from you by that boat, or by cable in the meantime, then it is understood that you have the option of Christmas Island for a cash consideration of £10.000, and that you pay us £100 for the option, which is extended until the end of April 1910. If we agree to terms, this £100 becomes part of the purchase money, and if you do not exercise the option, the £100 is the cost of the option.

You will doubtless be assisted by the Messrs Greig in visiting the property, and they will know where

the houses are situated and how to reach them, and they will probably be able to direct you where the Plantations are. We enclose you a little chart, which will be of some help to you.

At the moment we could not give you the exact

Coprah store (Japs Camp).

Hangar pour coprah.

position to take to exploit the fishing grounds, we understand they are quite phenomenal. From the anchorage up to the North West point you will find excellent fishing ground, and there is any amount of fish to be had at the mouth of the lagoon.

You are doubtless already aware that we have, in various positions round Christmas Island, put down Silver Lipped Pearl Shell that we are leaving to nature for a time, and as Pearl Shell has been proved to grow well around Christmas Island, and other fish abound so thoroughly around the Island, we quite expect that this will considerably augment the value of the property in a little time.

Yours faithfully,

LEVER'S PACIFIC PLANTATIONS LIMITED.

Erythrina Indica planted by LEVERS BROTHERS.

Arbre indien introduit. Age 6 ans.

Fanning Island.

April 4th 1909.

REPORT

OF

W. GREIG,

MANAGER OF FANNING & WASHINGTON ISLANDS

Father Em. ROUGIER,

KORONIVIA, FIJI.

Dear Father,

I left Fanning Island on the Schooner « Concord » and arrived at Christmas on the 18th of March 1909. Nobody was in charge of the Island, and we landed at the settlement on the North side of the entrance, put up by Lever Brothers. There are still two houses there wooden and iron, in a good condition, also a cement cistern.

The Cocoanut trees on that part of the Island looked well and were loaded with fruit ; I had no time to go through the whole planted area, that extends miles on the North side. They are all planted in rows, and now in full bearing.

Cook Island in the middle of the passage has no cocoanuts now.

Coming to the South point of the passage, I found there a bungalow, in a still better state than the others, on the other side of the passage.

Cocoanuts are growing well too as far as I could see along the beach.

Cement cistern.

Citerne en ciment.

Pearl Shells.

I know that Pearl shells known as Silver Lip, were imported at great expense by LEVER BROTHERS, in the Stmr. " Upolu " specially fitted for that purpose, but where they were planted I do not know. Anyhow

I had a look round the lagoon, and just to try my luck, I had myself a dive in about 2 fathoms of water, and I brought up 3 large shells, but found no pearls in them. In my opinion, the place where they must be the most plentiful, must be outside the lagoon on the western side of the Island going north.

Cocoanuts.

I found it impossible for me to make an estimate of the number of trees in the Island, although they could be easily counted being all in rows.

It seems to me as if they were planted in a very dry season as many were missing. The soil being all coral or shell sand, mixed more or less with birds droppings, seems to me an ideal soil for cocoanuts and the bearing of the trees confirms my opinion.

Area to be planted.

The Island being roughly 35 milles by 35, at 640 acres per sq. mile, it gives an approximate area of 784.000 acres, but deducting swamps water or lakes, and leaving 130.000 acres only, of which 40.000 acres are not suitable land for cocoanut without improvements it leaves only 90.000 of first class soil, and giving the most liberal margin of one ton of Copra per 3 acres it will still show that 30.000 tons of Copra a year could be gathered out of that Island, of a value of £600.000 a year at £20 per ton net.

Fishes.

I had heard many times of the scheme of putting a canning plant for fishes at Christmas, but I never realized what they were, and that there could be so many fishes. It is a wonderful place for that and

making fertilizer out of fishes alone would be a payable venture.

Sharks.

No place that I know of in the Pacific could pay better if few men were Shark fishing. Fins are worth

General view of the flats.

Vue générale des plaines.

anyhow 1/- a pound, and the oil is very valuable, the flesh being turned into fertilizers.

Bêche de mer.

Our success at Fanning in Bêche de Mer, is childs

play compared with what we could get at Christmas where the lagoon is all sand, and the place for that Chinese delicacy. Ten to twenty tons a year could be gathered easy.

Turtles.

I saw Turtles sleeping leisurely on the sand at Cook's Island.

Phosphates.

The Island has never been prospected, but I have seen phosphate there, that seemed to me of good quality. Owing to its position the Island must contain very valuable deposits.

Pests.

There is no rats or any other pest to interfere with the cocoanut scheme. The Island is out of the huricane zone and shows no sign of tidal waves.

Birds.

It is a well known fact that Japanese used to go there to poach birds by hundreds of thousands, still the Islands seems swarming with birds and something could be done showing a very good business.

Lakes.

There are lakes more or less, all over the place, some brackish, some very salty, with salt on their beach.

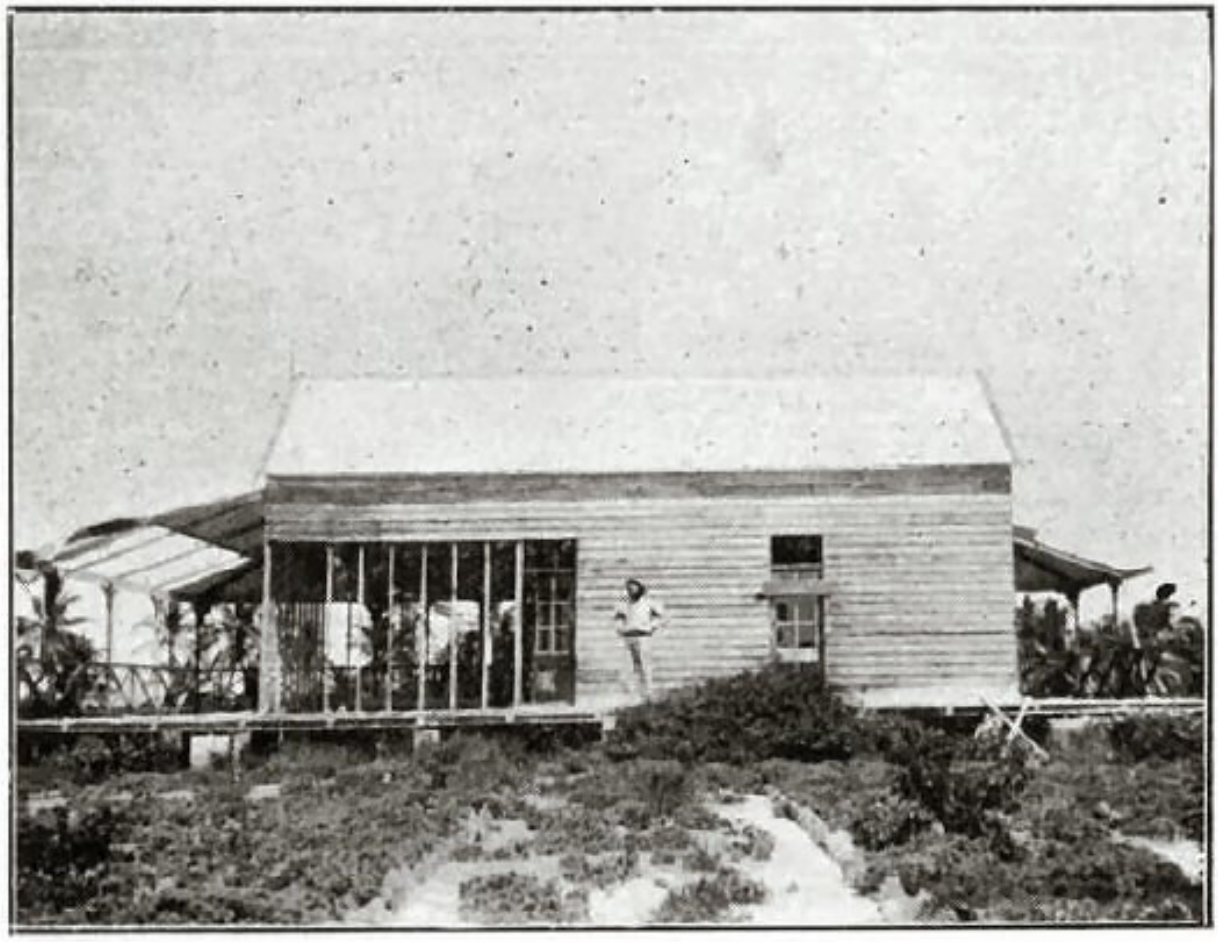
Bush.

The Island has a very poor floras; Umbrella trees, Ngasus, and the Honey grass, with 3 or 4 other kinds are the only bushes or trees imported so far in the Island. It means *no expense* for planting or clearing.

Water.

I went to the wreck of the *Aeon* and found the well dug there by the Chinese ; the water was fresh, in fact excellent, and we took some on board of the Concord, this proving that as at Fanning, fresh water

Manager W. GREIG before pillaged bungalow.



Manager W. GREIG constatant un pillage.

can be obtained from wells, this would explain also why cocoanuts are doing so well there.

Climate.

It seemed to me to be the same as at Fanning, the

breeze was blowing day and night and although situated 2° N. of the Equator the heat was nothing extraordinary and sunstroke are unknown.

Shipping facilities.

Ships of fair size can come inside of the lagoon, but the anchorage outside the lagoon is very good and anything could be shipped safely and quickly. The beach is all sand and there is no breakers on the west side.

Labour.

The Island is well known by the natives of the Pacific, and has a good name. I feel confident that I could get any amount of labour from Manihiki or Cook Islands or the Gilberts to work at Christmas.

Correspondence.

In the case you would entertain the idea to buy the Island, I would advise you to buy an auxiliary schooner to connect with Fanning Island, 140 miles north, where there is a Cable and Steamers every 2 months.

After few days exploring and fishing we came back to Fanning where I loaded the *Concord* with cocoanuts for Honolulu.

Trusting that I give you all the information that you want, and that my visit there will be of some use to you.

I remain,

Yours respectfully,

(Signed) W. H. C. GREIG.

Old trees planted by the Greigs 1870.

Au pied des vieux cocotiers les jeunes poussent.

Fanning Island.

December 6th 1912.

REPORT

OF

HUGHES GREIG,

OPERATOR PACIFIC CABLE BOARD, FANNING ISLAND

Father EMMANUEL ROUGIER,

English Harbour,

FANNING ISLAND.

Dear Father,

At your request I herewith report on what I saw and did at Christmas Island during the three months I was stranded there with my Uncles, DAVID and JAMES.

We arrived there in June 1901 in the S. S. BRUNNER chartered by LEVER BROTHERS then owners of the Island.

Management.

The Manager, the only European on the Island, was Mr. BENSLEY, and he had with him eight Nuie Boys.

Houses.

They were living in two bungalows of wood and

iron on the North side of the Passage. There was also two other houses and a large and deep cement reservoir.

Fregate on its young.

L'Aigle de la mer sur son petit.

Rain and Water.

The Reservoir was full, and we had rain in quantity and often. Some of the Wells in the Island were brakish, some quite fresh water.

Work.

The 8 Nuie boys were occupied at planting and clearing only. I saw their work. Cocoanuts were planted in rows of about 30 feet X 30, and in holes 2 feet X 1, the cocoanuts being still buried one foot deep in the centre of that hole.

Cocoanuts.

All cocoanuts growing on the Island are planted trees; and most of them were the best trees I have ever seen. It seemed to me as if it was a mistake to plant cocoanuts from nursery, as many were suffering on account of their suckling roots being cut before planting.

Number of Trees.

It would be very hard to estimate the number of trees, Mr. WERNHEIM, Plantation Manager for LEVER BROS, alone could tell, as all trees there are planted. I saw miles of planted cocoanuts looking very well indeed, also on a small Island in the lagoon.

Soil.

The soil is sandy, being all detritus or fragments of shells and coral, but in places, on account I suppose of the millions of Birds resting there, that sand is blackish and seems to be an ideal soil for Cocoanuts.

Phosphates.

I saw traces of Guano in many places, and walked on phosphate rocks too, but as to the quantity and quality, the Island, I believe, has never been yet prospected.

Birds.

They are there by millions. Fanning and Washington Islands have no birds compared to Christmas.

A view from top of the Sand Hills.

Lagoon très loin à droite, vu du sommet des collines de sable.

The Mutton Bird so valuable in New Zealand and Australia, is one of the most conspicuous.

Turtles.

They come there specially at the breeding season

to lay their eggs in the sandy beach of Christmas. Many were turned in a night by the Nuie Boys, especially at Cook Island.

Fishes.

I cannot describe the amount of fishes I have seen there. It is a puzzle to me how they can live. The quality is good, and the quantity is phenomenal, and they are caught by anything, and anywhere.

Mother-of-Pearl.

That the Pearl shells do well there, is so well known that LEVER BROS chartered the S. S. Upolu at big expense, with a Professor on board to plant there the silver lip shells from Thursday Island. I have seen quantity of old shells after a heavy swell turned on the beach, this proving that they must be plentiful all along the coast.

Bèche-de-Mer.

The sandy lagoon is the place for that valuable article, and a good revenue could be obtained by few women at that work.

Inland.

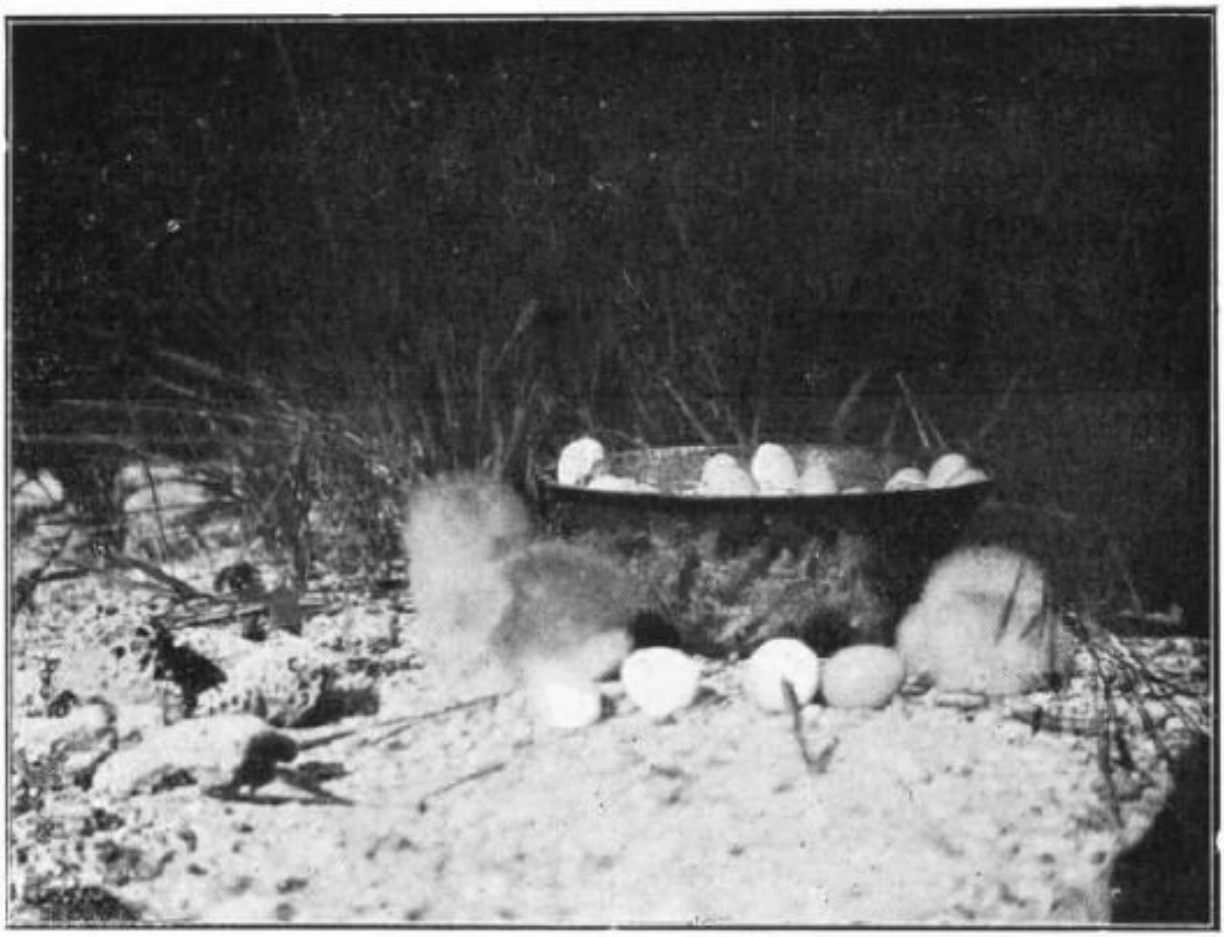
I did not cross the Island to the South, but went to the North beach, and saw there portion of an old wreck, we were walking amongst birds. There are many lakes not marked on the chart. Some of them are full of fishes and have nearly fresh water, some others are so salty, that fishes dead at the bottom will keep as well as in brine.

Shipping Facilities.

I never saw a swell or breakers coming from the West, and the anchorage for 3 months I was there,

was as smooth as the inside of the lagoon. The landing is perfect, and all the shipping can be done quickly and safely.

Sea birds eggs.



Notre provision d'œufs de Moutons, Frégates, etc.

Climate.

It is the same as in Fanning Island, a most desirable climate, free from fever, and any disease. Ducks, Fowls, Turkeys, seemed to enjoy the place as

well as the horses and cattle imported for the Manager's use.

We returned home by the 4 mast Schooner *Alphina*.

My private opinion as a man born and grown up amongst cocoanuts is that if the Island was properly planted some 5 to 6.000 tons of Copra a year could be gathered before 10 years from date.

I have the honour to be.

Yours truly,

(Signed) H. GREIG.

Operator Pacific Cable Board Fanning Island.

What we see in the bush.

Ce qu'on voit en promenade.

Funning Island,

June, 20th 1912.

REPORT

ON THE VISIT TO

CHRISTMAS ISLAND

OF

FATHER EMMANUEL ROUGIER

FORMER OWNER OF FANNING AND WASHINGTON ISLANDS

June 1st, to June 18th 1912.

I left Fanning Island on the Auxiliary Schooner *Luka* 70 tons, on June 1st, Saturday, 5 p. m., and arrived at Christmas Island on the 4th, Tuesday, noon.

Position.

Christmas is 140 miles South-east Fanning, lat. 1° 57' N., long. 157° 27' W. (Admiralty chart n° 2867. United States n° 1839).

Climate.

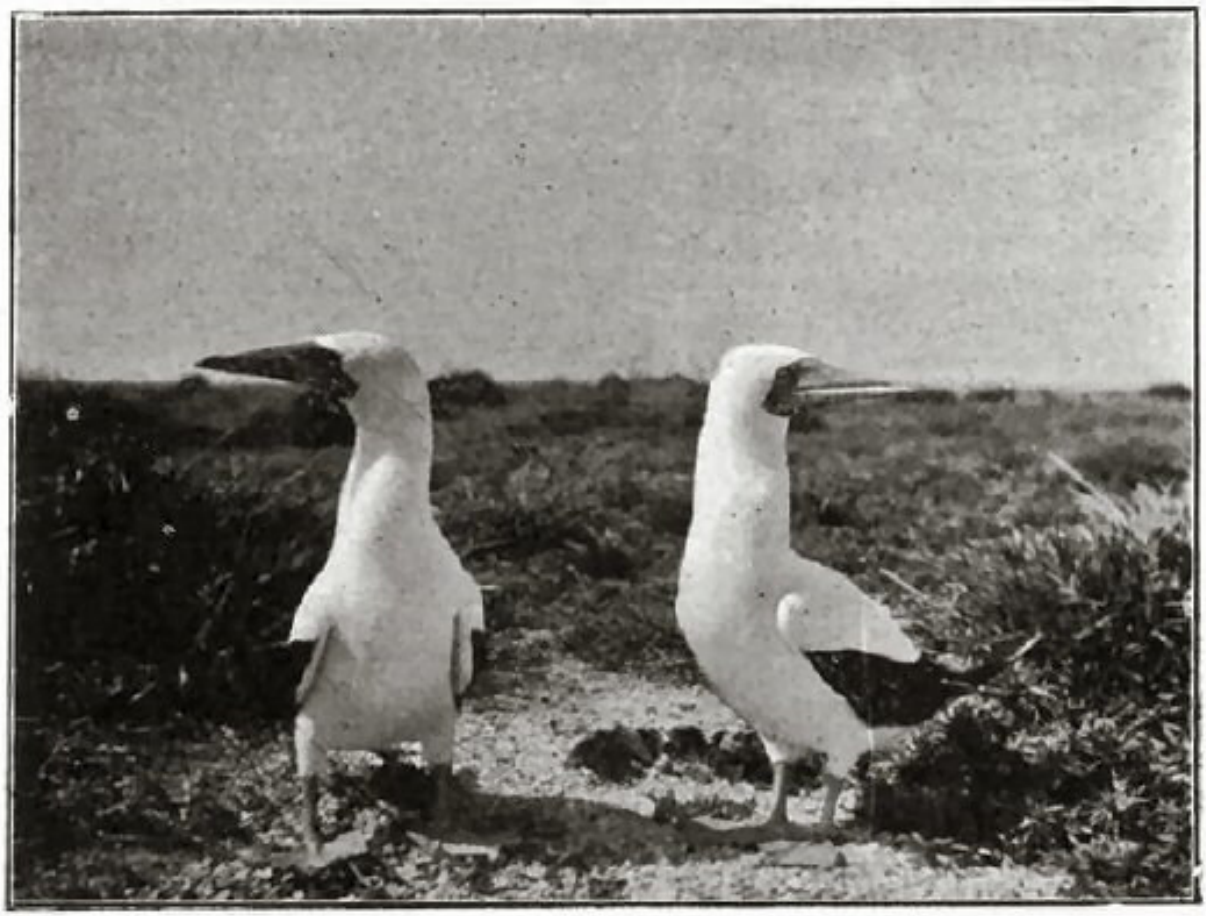
The thermometer I had in the shade, went up to 94° and as low as 74°. Nights were cold at 74. Dew abondant. We all felt very healthy. Air dry. Walked 32 miles one day without being exhausted, nor did I

perspire much. I give the note of *perfect* to the climate, being so near to the Equator.

Rain and Water.

We had rain one night only, for few hours it came

A common sight at Christmas.



Prêts à se défendre.

by torrents. The fact that I found fresh lakes or ponds all over the Island proves that the Rainfall must be very abundant sometimes. All tanks were overflowing and the vegetation throughout the Island is luxuriant. Many of the old cocoanuts on the ground

were sprouting, a thing impossible without rain. I did a special study of the rain and water conditions, as the reputation of Christmas is that there is very little rain and water. The old cocoanut trees show two droughts, their trunks being smaller for 6 to 8 inches when suffering, they come again to their normal size with the rain. LEVER BROS, report having planted 70.000 trees. Of those, fully 75% died on account of having been planted during a drought. I had no difficulty in getting fresh water for drinking in any place. We never had to dig more than 12 inches, picking of course the lowest places. I found rain water in holes and caves on the eastern side, where there is a vast plateau of coral rocks. All that proves that large tanks or reservoirs could be filled and meet any drought that might come. As for cocoanuts, as soon as they are 2 or 3 years old they can stand easy 12 to 18 months drought, but they will have less fruits, and the nuts will have no water, they will not sprout of course and their copra will dry inside the shell. The looking of the trees now bearing or nearly to bear at Christmas are a full guarantee to me that the droughts there are not worse than at Fanning and that the average rainfall, taking an average for 10 years, must be about 70 inches.

Area.

The Island says the official marine book, Pacific Islands, Eastern Group, p. 193, is one of the largest of the coral Islands being 40 miles long on its Northern side and 35 miles long on its Southern side with average width of 35 miles. At 640 miles to the sq.

mile it covers 740.000 acres, but more than half is swamps or water, lagoon and lakes : Howewer it is estimated that there is more than 200.000 acres of land of which half could be planted almost immediatly.

Youg trees on coral stones.

Cocotiers transplantés dans du gravier de corail.

Soil.

A great part of the Island is of rich deep reddish sand covered with grass or low bush (the assay with muriatic acid on that sand showed that it contained a

fairly good proportion of phosphates), or the soil is shell-sand or coarse coral sand or darkish soil and stones or pebbles of coral. The hills are of fine sand piled there by the winds at a time when the Island was nude of vegetation. Sometimes the land is covered with half-an-inch to one-inch of a kind of sandstone crackled nearly every foot, the subsoil being rich sand for cocoanuts and containing plenty of water.

In other places the soil is rich guano under big trees as in the coral plateau at the East end, where cocoanuts ought to be planted in each crack of that coral, now covered by *Nashu (Scœvola Kœnigii)* where it grows luxuriantly, and it is a fact that no better soil for cocoanuts can be found than the soil where the *Nashu* does well. Also many thousands acres of fairly good soil consists of swamps, or flats, or sandstone covered by 3 or 4 feet of sand, the roots of the cocoanuts being unable to reach the subsoil for fresh water, so that they have to thrive on the surface, being more exposed to droughts than the others.

Flora.

The Flora of Christmas Island is very poor owing to its position. Only the long floating seeds could obtain a footing or chance to grow on the Island and they had to be sand plants. Probably centuries passed before any seed was washed on shore, except a few grass seeds that might have been imported by birds, not as food (all birds there living on fish) but in their feathers. This accounts for the long and high hills all round the Islands, fully 20 to 30 feet higher than Fanning. To day the grass and shrub have taken possession of the soil and hills have ceased to increase

or to move about. The grasses are : 1° A high tough grass, also found at Fanning, and no good for cattle or sheep ; 2° Para-grass, tender and green, most precious grass for cattle ; it grows on sand hills were the sand is coarse, especially the east end of Christmas.

Female Fregate on nest.

Frégate couvant sur un Nashou. (Scœvola Kœnigii).

Both creep on the soil. Another grass is called by me the Honey Grass, as the flower smells of honey, a very fragrant odour ; the flowers are small white things with yellow centre, there are millions all over Christmas. It is the most common grass, about

12-inches high, and keeps the soil wonderfully moist and cool. These, with another low dark-green creeper, not common at all, are the only grasses of Christmas.

Shrubs. — The most common is the *Kurima* or *Ogea* not known in Fiji, plenty at Fanning. Cattle is very found of it. It grows 6 to 8 feet high and very thick, then dies out and others come out, and their rotting, of course enriching the soil. When exposed to the sea breeze they branch out and creep on the soil; when inland they grow straight up; they are always a good sign of fertile soil. The *Gia* or Ironwood, not found at Fanning, grows only on the beach. Its roots are in brackish water, no cocoanuts would do where the *Gia* grows. Its name is Pemphis Acidula. Its height is not more than five feet. The next shrub is the *Scævola Kœnigii* or Nashu, a thick growing one, and where they grow you should not hesitate to plant cocoanuts. Many trees planted by LEVERS were saved by the shade of the Nashu. It grows about 10 to 15 feet high, more like a vine than a tree. The only tree growing there is the *Tauinu* or Roro ni bebe, known as the *Tournefortia argentea*. It grows Umbrellas shape. The wood when old is a good firewood as well as the Gia. It perishes when flooded by fresh or rain water. There is always a certain amount of phosphate where it grows.

Four trees of *drala Erythina indica* have been planted by LEVERS and do very well. Also a few screw pines *Pandanus odoratissimus*, have been planted, and our natives were chewing their fruit for the 18 days we were there.

This, with a small shrub 2 feet high, dark green, and red cherries (very few of them), are the only

plants on the Island, and all have long floating seeds, with two or sometimes three floaters.

Cocoanuts.

The Cocoanut, of course, is the King of Christmas

Six years old. Left to Nature.

Arbre de six ans laissé à la Nature.

Island flora. When I landed I was not a little surprised to see the soil covered with cocoanuts, and all trees with leaves bending to the soil, covered with fruit. We have nothing like that at Fanning. I thought I was back in the New Hebrides. My photos will give

an idea of what it is. There we see trees 2 or 3 feet high bearing nicely. No better sight can be seen anywhere than some parts of the 7 years planted trees by LEVER BROS. Those which lived through the drought could not be better. I found and saw trees in eight different parts and soils in the Island, and everywhere they do well, so that *it is proved* that Christmas Island has immense possibilities as a cocoanut plantation, *it is an absolute evidence,* and there is no necessity for me to go any farther in the matter.

Planted and producing trees.

7.000 bearing trees were counted by my direction, and 10.000 non-bearing trees of which 5.000 will bear soon this year or next, balance in 4 or 5 years or more. It gives, at 50 trees to the acre, 300 acres of planted trees in rows, or 125 acres in full bearing, with some 50 to 60 tons of copra a year increasing immediately till 120 to 150 tons a year and no more copra can be expected from the trees now planted. A very good year might show 160 tons, but it will be reduced to half of it, at least, on account of the planting of all good nuts.

Prospects.

Try to figure 90,000 acres only, bearing and giving not less than one ton per 3 acres or 30.000 tons, worth £20 net profit or £600.000 a year! Is it too much? - then cut it to one-half.

Pearl shells.

I found only few. This will be a by-product and will not, for the present, figure on any estimate of mine.

Guano or phosphates.

A by-product also. I found very little, although by its position and its millions of birds the Island must have some.

East shore at low tide.

Vagues déferlant dans la baie de l'Est.

Birds.

The are millions and millions and that something can be done in that line is clear by the fact that Japanese used to come from time to time to poach

birds at Christmas Island. The sand covered with wing bones testifies to the immense slaughter they did.

Fishes.

We caught many of all kinds, especially *Cod*. Tons could be hooked every day. A trial shipment of salted Cod is taken by the "*Luka*" to Honolulu. Sharks are plentiful and would come to a nice figure in the fish industry. This ought to be one of the best by-products. No estimate or figure can be put on paper before a serious systematical trial has been done.

Bees.

Bees ought to turn out to be a good by-product. The Island is covered and fragrant with flowers and they would have no enemies there.

Cattle and Sheep.

I would not advise any Cattle or Sheep before 25 to 30 years, as leaves of trees 20 years old still touch the soil.

Fowls, etc.

Ought to do as well as at Fanning.

Pests.

I saw mice but no rats, nor any sign of rats in the cocoanuts or elsewhere. No large lizards or *mokos*, no snakes, no mosquitos, no flies except the large green kind and they seem checked by the dragon-flies. Cocoanuts look the picture of health.

Anchorage and Landing.

The anchorages (they are many) are close enough to the shore to render shipping quick and easy. They

are good and safe, as can be seen by a look at the Chart n° 2.867. The beach is all sand on the West and North parts of the Island and landing is an easy task.

Sleeping house built by Japanese.

Dortoir japonais.

Houses S. W. Point of entrance of the Lagoon.

One Dwelling House. — T. g. white pine, double sides, 38 X 12 X 14. 6 with verandah 10 X 8. Posts in blue gum 3 X 2 and 4 X 2. Floor 4 X 1 T. g. Oregon covered

with corr. iron galv. House spoiled by Japanese pirates who took three-quarters of the verandah, all flooring and ceiling of one-third of the house, all railing, tank, etc., so that it looks a wreck, doors opened or stolen and house exposed to rain and sun.

Two Native Houses — flat on the sand, few blue gum 3 X 2 and 4 X 2 - may be saved yet.

Houses N. W. Point of entrance of the Lagoon.

This is truly the Settlement.

One Dwelling House — 28 X 14 X 8.6, Verandah W. 10 X 6, Verandah East, 6 X 6, all Oregon T. G. Covered with thatch (pandanus) all rotten, house exposed to weather and rotten in places. 2 feet high on Oregon piles 6 X 2 or 4 X 3.

One Store and Carpenter's House — 35 X 20 X 10, half floored, roughly built, covered with C. G. Iron. Two good tanks, two inferior tanks.

One Kitchen — 18 X 16 X 7, bad, roof taken by Japanese, no sides, no flooring, two brick ovens inside.

Two Labour Houses, flat on the ground, with few Oregon 3 X 2 that could be saved yet.

Japanese camp opposite motu manu Island.

One House, rough timbers, floored - iron covered - 20 X 12 X 7, containing about 100 Jap. mats, arsenic, 1 cwt., stuffing for birds, etc.

One Boat House, 12 X 9 X 5, with a white pulling boat in a good state 18 X 5 X 2, four cars and rowlocks left there by Japanese when surprised by H. M. S. "*Algerine*" March 1910.

One Sleeping House - covered with iron - badly done. 19 × 16 × 6.

Four native houses on the ground, with few Oregon

3 × 2, still good. Also for about £100 worth of other improvements and material, tools, implements, etc.

Mutton bird disturbed.

L'oiseau-mouton sur son œuf.

FROM MY DIARY

The first four days, with a gasolene launch towing two punts tied together, I explored the lagoon inside and outside. I had a diving glass box to look at the bottom of the sea and after going in zig-zag everywhere I was convinced that there was not that amount of shells the rumour had said they were. In fact I saw few, except in two places. No sign of the silver lip shells planted by LEVERS. I could see clearly at 4 and 5 fathoms. There are some *Beche-de-Mer* of the good kind, but nothing extra. Still I may have missed the richest spot, although we were zig-zagging systematically from 7 a/m to 5 p/m by calm and scorching sun but clear water. It is a fact that a few years ago (15 or 20) 20 tons were taken in a few weeks from the lagoon, by a pearl fishing captain from Tahiti.

8th of June.

I was deposited by the launch on the back of Motu Manu Islet (see Chart.) a small Island of 20 acres, covered with rich cocoanuts bearing 2 or 300 nuts each, the soil all bored by Mutton birds (a reason why the cocoanuts bear so well) and I proceeded to trees planted by late W. GREIG in 1880. It was 9 a/m and the grass was still full of dew. The flat I crossed to

arrive at those trees is covered with low *Nashu* and *Kurimas*, each one crowned by a nest or two of the Frigate Bird, the Eagle of the sea. The soil is sandy or covered with half-inch of sand stone crackled, with

The lonely tombs.

Deux tombes de naufragés sur le rivage.

honey grass in the cracks, and here and there a few Umbrella trees.

The cocoanuts planted by old Mr. GREIG are not planted in rows, but all along the side of a sandhill and

in *Nashus*. No cocoanuts can look better than the trees we saw there. From there to the sea beach, north side, there are one to two miles of sand covered with grass, para and Fanning grass, also honey grass. It is high ground, fully 30 feet above sea and extends as a back bone all round the Island, but it becomes more coarse sand and rocks when approaching the east end. The beach was all sand, white as snow.

We came back crossing those large flats ready to plant, no clearing needed. At the end of GREIG's grove commences LEVERS last planted trees. The first looked very poor on account, I believe, of a bed of sandstone just under the sand, but a few hundred yards farther on, the trees all planted in rows, looked magnificent.

I took a photo of one whose fruit touched the ground. They are in a kind of jungle of Nashu and Kurima 5 to 6 feet high. This accounts for their pulling through the drought. Trees planted on *nude soil* perished. The mistake too, was that some were planted when their sprouts were too old, their first suckers being cut out and nuts having no more water to push new roots through the soil down to fresh water underneath. Soon we found ourselves entangled in a cattle fence, all rusted but still solid and standing on hundreds of iron posts 4 ft. 6 in. high by 2 in. x 3/4 in. thick.

The iron gate is still there and also a well in brick 4×4 full of green fresh water. From there to the Japs Camp all trees are beautiful, all coming to bearing. The Japs had their camp there on account of the Sea Swallow or Sterna Fulginosa, called also Sooty Terns, nesting there by millions on the N. W. of the Island.

Tartare Arundeli nest.

Nid de Kokikokiko.

Their eggs are laid on the sand, they are all over, no nest, the birds fly like a swarm of bees and their number accounts for the fertility of the soil.

From this Camp to the Settlement I walked through cocoanuts all looking more or less healthy according to the place where they had been planted. Those planted on *bare stone* were suffering, also those on nude sand, while the others in shrubs and loose sand were beauties. There are four groves of a few acres each, planted by the PACIFIC ISLAND Co., the owners before LEVER BROS. The trees are now 25 years old and bear well when not overgrown by the sprouting young nuts all around them.

9th of June, Sunday

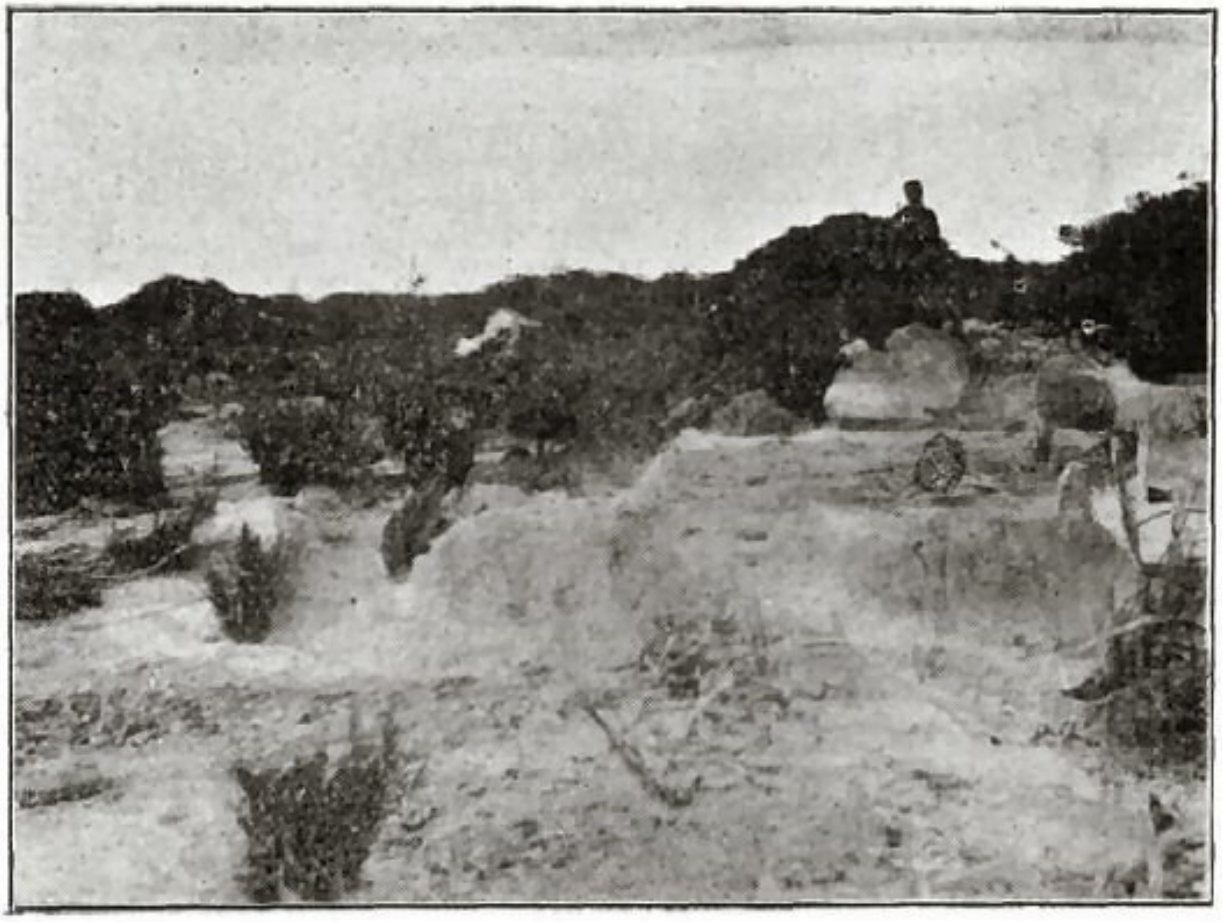
I made a chart of Christmas Island on canvas, scale one-and-a-half inches to the mile.

10th of June.

We went direction S. E. for two hours in the launch landing at two cocoanut trees called *twins* by me, no other trees there. These two were bearing well. Soft sand — very low — any amount of that kind. From there to the beach S. W. side it took us 30 minutes amongst grass and nashu, first class soil. But the best seemed to me 6 miles West, in the corner of the bay on the S. W. side of the Lagoon at the grove I have marked on the chart " the 2000 trees ". (see p. 56).

On the left and right of those trees are immense areas of extra good soil with *Kurimas* 8 and 10 feet high. The soil is quite red and shows a good percentage of guano. Birds are there also by millions, in fact they seem to be a cloud on the Island from a

A graveyard inland.



Cimetière à l'intérieur.

distance. We were not at the S. W. point of the Lagoon before 6 p/m passing through all good land except the last mile where the soil seems wanting of moisture.

11th of June.

Going at 8 a/m on an E. by S. direction, the grove of cocoanuts marked on chart "Jimmie's grove" were visited. They are about 4 to 6 feet high and all ready to bear, some in fact bearing, and will furnish seeds for all the S. E. part of the Island. An entrance to the back lagoons was found and the launch returned towing a full punt of fishes. Cods take the hook at trawling without any bait at all, they are as voracious as sharks but how nice to eat.

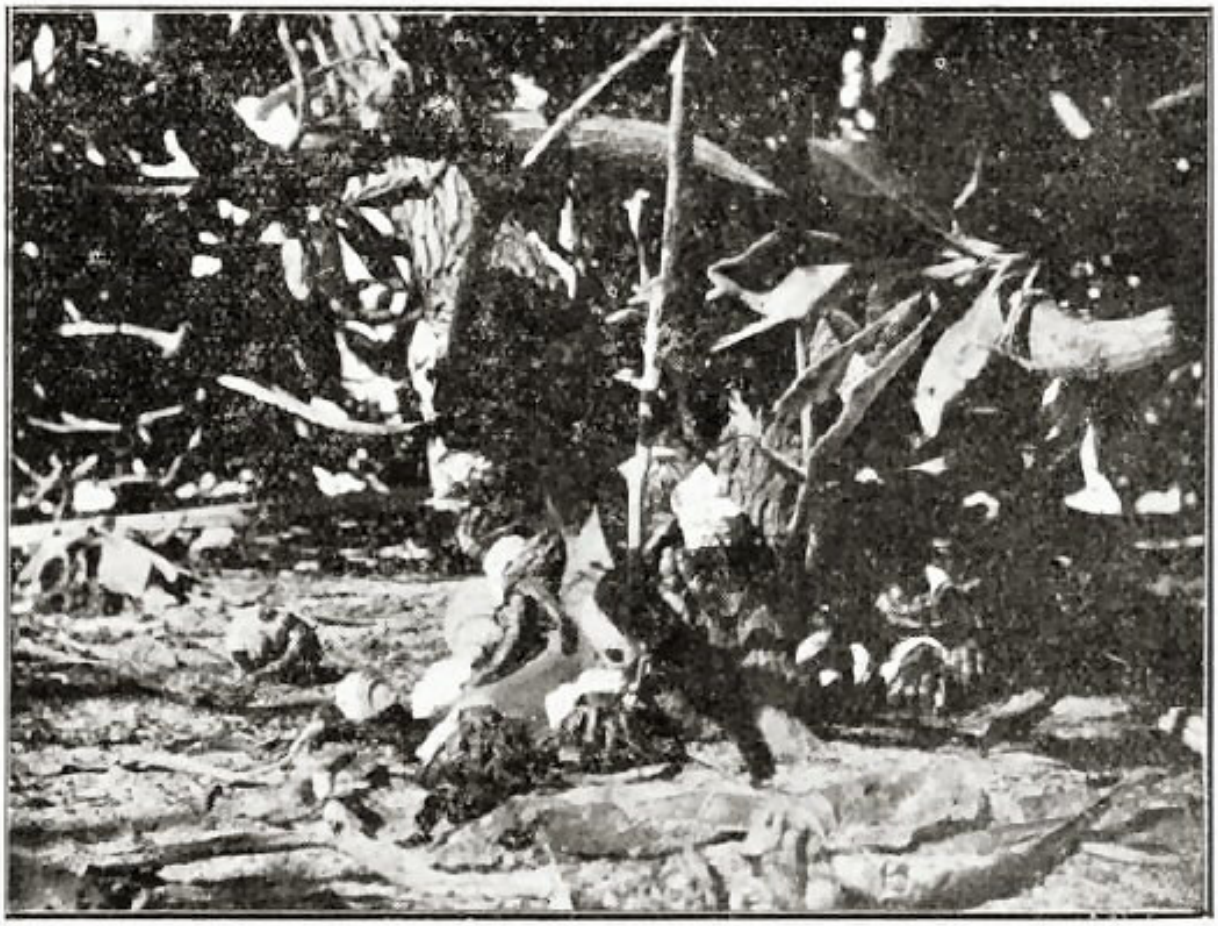
12th of June.

Leaving *Motu e tau*, a small islet full of birds of all descriptions, with few trees bearing, and umbrella trees literally dying, killed by the droppings of the birds, we landed on the N. E. side of the Lagoon. I took one Japanese and one Manihiki (Mahuta) with me and we left to explore the unknown parts of the Islands. The boys carried water, coffee and biscuits, also a blanket for the chilling night.

We soon found ourselves amongst birds as usual leaving on our left the high sand hills and on our right the beach of the Lagoon. After two hours walk near a bay of the Lagoon we found six large tombs; that graveyard was on the flat, 50 yards from the water, no trees there, the soil all covered with one inch thick sandstone. Each tomb was 16×6 or 14×5 all well fenced with stones 10 to 18-in. high.

At 10 a/m we arrived at the trees marked "inside Grove", all old trees planted about 1880 with names on them. The inside Lagoon there seems an immense lake, you cannot see the end of it, it is swarming with fishes. I left the boys to make our night camp and

Attacked by soldiers crabs.



Mobilisation des crabes soldats.

went alone to explore the east end. The flats I crossed were covered with same sandstone, honey grass and cuscute, also nashus and few umbrella trees.

From time to time I climbed the tallest of these trees and took a better view of the lakes, lagoon and

land. Lakes were more and more numerous at the end of the Island. Large lakes with deep blue water were salty. Small lakes of 2 to 50 acres were fresh lakes.

I saw the *Beacon* at 1 p/m and reached it at 3 p/m, taking photos from the top. The Beacon is 12 yards at the base, conical, 45 feet, all iron, with ladder, and painted white. The last mile of the Island is one block or plateau of massive coral, big large stones, covered with nashus.

I had great difficulty to reach the Beacon, but in fighting for a way I had the good fortune to find fresh water in a deep cave under the rocks. I finished then the cocoanut I was carrying with me and filled it with cool rain water.

Coming back I followed the north side of the beach, walking on sharp stones then coarse and fine sand covered with Para grass about 12-in long. There I met colonies of the *Sula Cyanops* or *Pelicana Sulasula*, the largest of the Boobies. That end of the Island has not so many birds. The breakers are constant and very large.

About one mile from the Beacon, along the beach there is one tomb 14 feet x 3, divided in the middle by a stone to indicate that two are buried there. Before arriving at the tomb there is a rest of stone-wall or shelter with a path made of flat stone, also old ship-wrecks on the stones.

Leaving that high part of the Island that goes all round and descending to the flat inland, I found that there is an edge of coral, with deep holes, full of fresh water, it seems as if an inland sea had formerly beaten those rocks and made those caves and holes.

At 6 p/m I was back at the camp with 28 miles in my legs. The Jap had cooked for me a braised fish and Mahuta two young boobies and a Mutton bird. To my taste there is no bird in the world like the young mutton bird.

Where the S. S. *Aeon* was wrecked.

Rivage de sable où s'échoua l'*Aeon* en 1909.

13th of June.

At 5 a/m the coffee was served in a cocoanut shell. The night had been full of disturbances. No

mosquitos, but crabs were attacking my toes, pulling my beard and pinching my nose. They were legions. Tired as I was I could not stand it any longer, the more I killed them the more they came, when I had an ingenious idea. I ordered the Jap to bring me what was left of his fish. He brought me about 20-lbs of fish. This I distributed all around my grass bed, and laid down for good. When taking my coffee, a few hundred crabs were still busy finishing the generous dinner I had given them.

We soon were walking in the morning dew, leaving the Lagoon on our right arm and going zig-zagging on that vast plain. Near a fresh water lake, two black cats were disturbed. They were the first of many others. All *blacks*, except one quite white.

I explain the presence of these black cats by the superstitious belief of the seamen that a black cat is the best mascot, so that probably many ships wrecked in the Islands had black cats. We managed to reach the S. E. beach without wading a lake, but it took us to a distance of about 5 miles from the Beacon.

The distance from the lagoon to the beach is one mile only at that place. We walked on sandstone, then sand, then nude coral stone, then it is the stony beach. The surf beats the shore all the time and there is no sand in sight, all smooth large coral white stone moving with the waves with a noise of broken plates.

A few hundred yards east, I saw a schooner mast planted in stones. I thought I should see it and went to find near that mast two large tombs a few fathoms from the high water mark. I took a photo and was

coming back to my boys when a few yards from the tombs I remarked a hole with a *Nashu* in it growing luxuriantly. It looked extraordinary to me that a *Nashu* should grow so well so near the beach.

Anchor buried in coral stones.

Une ancre ensevelie dans le corail.

I pulled out the *Nashu*, and there were human bones and ashes, the rest of a human being who after having buried his relatives had digged his own grave, but nobody was there to bury him, he had died in his grave and Nature had planted a *Nashu* to cover the

poor boy - a boy he was or a woman because the bones were not those of a man.

From there on all our way for twenty miles we walked on old wrecks, native canoes, schooners, barquantines, steamers, all kinds of wood, and in all stages of deterioration.

The Hawaians used to sail to Tahiti and Samoa and vice-versa, the Maoris, the Fijians, Tongans, in old times were caught by the most dangerous blight known in all the Pacific ; if large vessels and steamers like the *Aeon* with all their modern instruments fall victims of this Island, what about those native navigators? I do not know if there is any shore in the world showing so many signs of struggle for life and proofs that the Death did win.

I took photos of many derelicts, large anchors, lifeboats on the beach, immense spars on shore, old camps left by survivors, everywhere you feel that this has been the theatre of intense sufferings.

The Island had no cocoanuts or very few, 40 years ago, and those who are there now are at least 20 miles away, from the beach an awful distance for an exhausted being. No other food than birds and fishes. Sometimes no water available in time of drought, and at any time the water is available only by those who know where to dig a well or where to go to find it.

We had no difficulty ourselves to renew our provision of water in a hole, 6 to 8 feet deep in stone ; the hole was just large enough to let Mahuta disappear in it and fill our cask.

At one of the wrecks I found large pieces of brass and lead embedded in the coral.

Mahuta saw the cut I had done in the lead and thought it was silver. The poor boy could not make up his mind to leave it behind. Here and there were fine pieces of Oregon as good as new, having been

Life-Boat of the S. S. *Aeon*, Melbourne.

Bateau de sauvetage jeté sur le rivage.

taken clean on the stone by the first waves, but millions of feet are chafed and spoiled.

The *Aeon* had about a million feet of lumbers wrecked there in February 1909. Of the *Aeon* there

is no sign. She is at the bottom of the sea, and pirates have taken away everything that was valuable and still worth a few pence. I slept at the place of the wreck, under an umbrella tree, my bed made of limbers from the wreck. We had a well 12-in. deep, dug in-land and we lived on fish and biscuits. We enjoyed a full day's rest there, the 14th of June and started on our way home on the

15th of June.

Leaving on our right the Sand Hills marked on the Chart and which are truly mountains in such an Island, about 80 to 100 feet high, we went in a S. W. direction, carrying my compass with me to avoid the unpleasantness of getting lost in such a labyrinth of lakes and flats, I went straight for a cocoanut head I had seen from the summit of a sand hill. I thought it was one of the *Jimmie's Grove* but what was my surprise to see five trees alongside of a lake, no names on them, not marked on any chart, not reported by any previous owner, five trees quite lost inland and amongst them I found a rotten trunk of cocoanut probably 100 years old.

Were not those five trees the remnant of the plantations of the Christmas Island natives? Near them was a *source* of fresh water in the rocks, the lake full of fishes, a fine place for natives to come and live at a time when all blacks were tracked by South American blackbirder ships. Those trees too, although

old, bear well and corroborate the evidence that all through the Islands cocoanuts will do well.

We still walked for three hours before reaching the first cocoanut of *Jimmie's Grove*, and isolated

My camp at the Wrecks-Beach.

Mon lit sur le sable.

tree, with 7 young ones around him, about one mile and-a-half from the planted trees in rows. This tree is along of a beach built of shells only and no better tree can be seen in the Island.

I would say that there is there few thousands acres of similar soil that can be planted by the seeds furnished by Jimmie's Grove.

The oil launch was waiting for me and after a feed on birds and birds' eggs I left for the settlement crossing the Lagoon in less than two hours.

The Lagoon.

The Lagoon of Christmas Island is quite different of the lagoon sketched on the Chart. Although exploring it for three days or more it is still quite a labyrinth to me. You will be surprised to hear that the centre of the Lagoon is deep blue sea colour, the depth must be not less than 20 to 50 fathoms. The entrances (two) are shallow, 14 to 20 feet only.

The current is very small compared to Fanning. The deep part is about one mile from the entrances. That depth, of course, makes a harbour far larger than Fanning Harbour but there would be one channel one mile long to cut in hard coral.

I can hardly finish this report without giving a page to

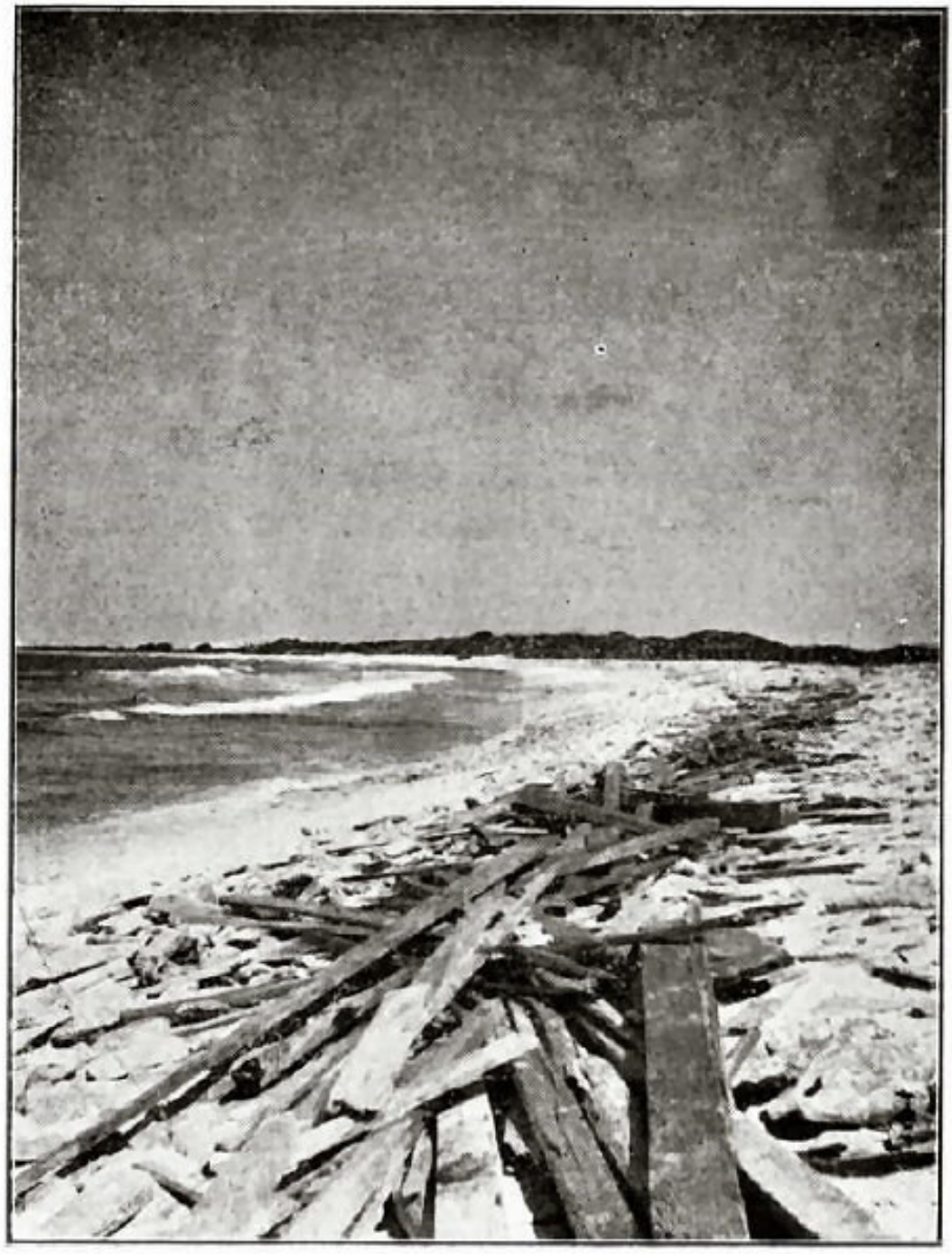
Birds.

These are the birds I found on the Island.

The Frigate Birds (*Fregata aquila*), very conspicuous all over the Island, the male showing its inflated red pouch when the female sits on their single egg.

The Sooty Tern (*Sterna Fulginosa*). They live in colonies. The principal are : 1° On Cook Island (middle of the entrance), 2° North West point, 3° South West Point. They are so numerous that when you are amongst them they make a cloud on your head

Sand Hills in the distance and miles of timbers like this.



Kilomètres de planches et solives sur le rivage.

and you are unable to talk, you must sing out what you have to say. They were not nesting yet, but I think were mating.

The *Sterna Lunata*, or Grey Back Tern, I saw few of them, I suppose it was not their season yet.

The Necker Island Tern, or *Procela Terna Saxatilis* or may be *Cinerea*, especially on Motu e tau. This is the smallest of all terns and used to swear at you when you approached, saying *Rav rav*.

The Noddy Tern, or *Anous Stolidus*, is plentiful only at Motu e tau and Motu manu and other small islets. Sometimes there are a few hundred together, sitting on the beach at low tide, motionless and noiseless.

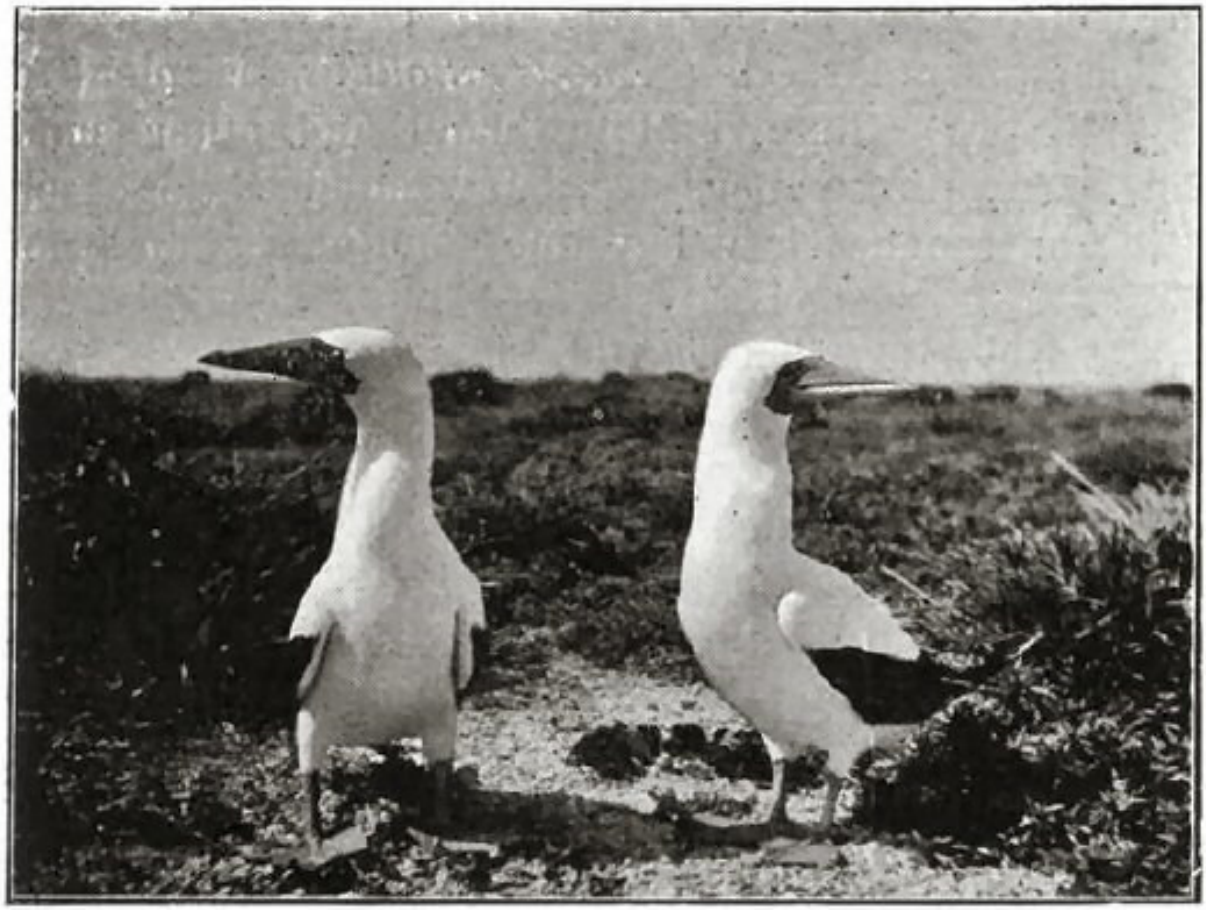
The Noio Hawaian Tern, or *Micronous Hawaiensis*. This small black tern is conspicuous in every small islet with bush. They build a nest with leaves, especially on umbrella trees. They are so numerous at Motu e tau that they have litterally killed all trees. I took photos of trees looking like a bunch of birds. The same nest seems to be used for generations and is a mass of leaves and excrements.

The White Tern, Love Bird or *Gygis Alba Kittlitzi*. It is a lovely little tern, dove like, immaculate white with black large eyes, its egg is so large and its legs so short that he stands on the egg. That egg is laid anywhere on a branch, no nest at all. They are also on the islets of the Lagoon, but not very numerous.

The Mutton Bird or Christmas Island Shearwater (*Puffinus Nativitatis*) is found in large colonies where the sand is soft, still hard enough to be tunnelled. They nest in holes they dig, 2 or 3 feet deep more or less, although I have found many, nesting on the

ground, under cocoanut leaves. The young after a few weeks are so fat that they are larger than the parents. They seemed to be fed at night only, and it was puzzling me, my first night, to hear a cry in the air like a child or a woman in great trouble or pain

Blue faced Booby *(Sula Cyanops)*



L'oie ou boubé à face bleue.

and asking for help. Involuntarily you think of a ghost flying over your head. Parents stand by their nests. Both young and eggs (size and colour of a duck's egg) are delicacies.

Red Tail Tropic Bird or *Phaelon Rubricauda*. This

is the most precious bird of the Island and you can hardly dream of a better looking one, with its silk white plumage, its red beak, its two single scarlet feathers 12 to 16 inches long when only one-quarter of an inch broad. I pulled some 200 feathers from the tails of the birds when sitting on their eggs. They never fly away although they object to your plucking their ornaments. A few months after they will have two new ones. The egg is on the ground, under a *nashu* in the shade, sometimes there are 2 or 3 in the same *nashu*. The bird is plentiful and the fact that it is worth 8 to 10 francs a piece shows the value of the bird.

Blue faced Booby *(Sula cyanops)*. You find that solitary bird all over Christmas, it is the largest bird of the Island, looking like a goose. They have two eggs, but only one young, I suppose that the bird is too lazy to feed too so they kill one.

Red Footed Booby or *Sula Piscator*. They are found all over the place, but especially at Booby's Town, a name I gave to the place on account of the extraordinary number of those birds there, it is near the 2.000 cocoanuts grove. This booby is very pretty when young and looking as a snow puff. The parents with their angry face and red feet are very striking. The adult booby is white. The true Black Booby is not so numerous, except on the stony parts where few can be seen.

Like the Cyanops he nests on the ground, and lays two eggs but one only is raised, my experience is that the parents do not themselves kill the other one. I have watched a nest with two birds for hours at Fanning and I saw that the stronger young was

pecking his brother all the time, nor had this one a chance to get food from the parents, with the result that one was getting stronger every day and the other weaker until death surely put an end to the struggle, the fittest only surviving.

The plan is to multiply trees like this.

Le but est de multiplier des arbres comme celui-ci.

The Kokikokiko, probably *Tartare Arundeli*. This is a warbler, a very small bird, which lives on insects and flies. The little creature cannot fly more than a few yards. The nest is attached to the fork of a tree and well done and deep, with 3 to 4 eggs marked or

spotted black on white. The bird is very inquisitive and will approach a few feet from your hand. Same bird is at Fanning and Washington and is the only land bird known there.

This closes the list of birds that came to my observation at Christmas Island.

PLAN OR SCHEME.

There is only one open for meditation and execution : to buy the Island and plant it the soonest possible. No money invested in any other investment can bring an interest equal or approaching to the money invested in planting Christmas. As to the ways, how and when, etc., it must be left to the circumstances and opportunities that will come to my reach.

Fanning, 20th June 1912.

PLANS

It is the intention of the Directors to develop the Island as quick as possible and for that purpose labour will be imported from anywhere obtainable, being as much as possible free labourers so that they could leave or stay at their option ; the aim of the Company being to make them feel happy and content, to induce them to stay there for ever in such an ideal climate and place.

The fact that one man can easily plant one acre per day in cocoanuts, or 300 acres a year, makes it possible to plant large areas with a reduced number of labour and still be able to give large dividends to shareholders, as any man who knows something in cocoanuts and copra can figure out in few minutes.

Anybody wishing to be interested in the Island in a way or another should write to the Registered Office, or to the writer of this book at Brioude.

ACTUAL TENURE

EMMANUEL ROUGIER acquired the rights of LEVERS BROTHERS by an agreement of sale signed 17 of December 1913.

The CENTRAL PACIFIC COCOANUT PLANTATIONS LTD acquired EMM. ROUGIER's rights and obtained from the Colonial office a new Licence to expire 31 December A. D. 2001. The Licence is similar to the one given before to LEVERS BROTHERS (see their report herewith given) with the exception that a minimum Royalty of £100 per annum be paid to his Majesty the King.

Some extracts of the articles of Association will be given now for general information. More particulars can be obtained in applying to the Registered Office 101, Leadenhall, London E. C.

No. 125801.

CERTIFICATE OF INCORPORATION

I hereby Certify that CENTRAL PACIFIC COCOANUT PLANTATIONS LIMITED, is this day Incorporated under the Companies Acts, 1908 and 1913, and that the Company is LIMITED.

Given under my hand at London this Fourteenth day of May, One thousand nine hundred and fourteen.

GEO. J. SARGENT,

Assistant Registrar of Joint Stock Companies.

Fees and Deed Stamps : £10 5 0.

Stamp Duty on Capital : £50 0 0.

EXTRACTS

OF THE

MEMORANDUM OF ASSOCIATION

OF

Central Pacific Cocoanut Plantations

LIMITED

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1. The name of the Company is "CENTRAL PACIFIC COCOANUT PLANTATIONS LIMITED."

2. The Registered Office of the Company will be situated in England.

3. The objects for which the Company is established are :—

To carry on the business of planters, growers, manufacturers, dealers in and

importers, of copra, cocoanut fibre, celluloid, cellulose, guano, phosphates, fertilizers, pearls, mother-of-pearl, fish, etc.

The Company is a Private Company in accordance with Section 121 of The Companies (Consolidation) Act, 1908, and Section 1 of The Companies Act, 1913, and accordingly :

No invitation shall be issued to the public to subscribe for any shares or debentures or debenture stock of the Company.

The number of Members of the Company (exclusive of persons in the employment of the Company, and of persons who having been formerly in the employment of the Company, were while in such employment and have continued after the determination of such employment to be Members of the Company) shall be limited to fifty : Provided that for the purposes of this provision where two or more persons hold one or more shares in the Company jointly they shall be treated as a single Member.

The right to transfer the shares of the Company is restricted in the manner hereinafter provided.

The liability of the Members, is limited.

The capital of the Company is £20,000, divided into 15,000 Cumulative Preference Shares of £1 each, and 100,000 Ordinary Shares of 1s. each; and such Preference Shares shall confer the right to a fixed cumulative preferential dividend at the rate of 8 per cent. per annum on the capital for the time being paid up thereon, and shall rank as regards return of capital in priority to the Ordinary Shares, but shall not confer the right to any further participation in profits or assets. And upon any increase of capital the Company is at liberty to issue any new Shares with any preferential, deferred, qualified or special rights, privileges or conditions attached thereto. The rights for the time being attached to the Preference Shares in the initial capital may be altered or dealt with in accordance with Articles 69 and 70 of the accompanying Articles of Association, but not otherwise.

The 15,000 shares of £1 each of the original capital numbered 1 to 15,000 inclusive shall be preference shares, and the 100,000 shares of 1s. each numbered 15,001 to 115,000 inclusive shall be ordinary shares. In the event of the winding-up of the Company the holders of the preference shares shall be entitled to receive in full out of the assets of the Company the amounts paid up on such shares and the arrears (if any) of the cumulative preferential dividend at the rate of eight per cent. per annum to which they are entitled in respect thereof up to the commencement of the

winding-up, in priority to the claims of the holders of the ordinary shares to be paid any amount in respect of such shares, but they shall not be entitled to any further right to participate in the assets of the Company, and for the purpose of these Articles arrears of preferential dividend shall be computed as if the preferential dividend were fixed interest payable irrespective of profits. In the event of capital being written off on a reduction of capital amounts paid up on the ordinary shares shall be written off before the amounts paid up on the preference shares. Each class of shares shall respectively be entitled to rank for the purposes of dividend in the manner hereinafter declared, etc., etc.

The landing at the Settlement.

Ce qu'on voit en abordant.

TABLE OF MATIERES

PHOTOS

GRAVURES

Imprimerie WATEL, à Brioude