ARUNDEL, JOHN

Biography of

by Aimée Bright

Part I

Copy A

Book I.- Mainly Introductory.

CHAPTER I.

~~Introductory.~~

Of British enterprises in the Central Pacific few have been more successful than that established at the birth of this century on Nauru and Ocean Islands. To-day these small islets which in 1890 were almost unknown, are world-famed, and seeing that they provide the one form of mineral wealth which the British Empire in other quarters totally lacks, they are extremely valuable.

The purchase of the phosphate resources of these islands by the governments of Britain, Australia and New Zealand, together with the terms of sale has given matter for discussion in Parliament and out of it to members of the three legislatures, and this was made a cause of concern to the taxpayer. But to-day the great public is beginning to realise that their property is even more valuable than at first was supposed.

The history of the opening of these phosphate resources has been alluded to by more than one writer as a chapter of romance. Pages of this romance, so island habitues claim, are to be found in the story of the doings of one, John Arundel who, for over a quarter of last century sailed the South Seas and explored uninhabited islands in search of fortune that for that period was extremely elusive. Meanwhile he found and worked deposits of guano on these islands and kept diaries from which the tale of the workings has now been compiled.

In those years of wandering, the diarist gained the experience which was to bring so speedily the now famous stations at Nauru and Ocean into the position they occupy as the seat of the premier enterprise of the Central Pacific. And it was in those years he learned the lessons in diplomacy which enabled him to hold these stores for Britain at a time when another world-power was keen to grasp all island treasure.

A glance at the map will show how wide an ocean itinerary was followed in the working of these guano deposits. During some thirty years the employees of the J. T. Arundel and Pacific Islands Companies successively worked the deposits on Starbuck, Caroline and Vostock Islands, Christmas Island (Pacific not Indian Ocean), Fanning, Flint, Sydney, Canton, Enderbury, Baker and Howland Island.

With the Howland Island field the known deposits of guano in the eastern and central Pacific were used up and operations were then opened on islands off the Queensland coast - Raine Island in Torres St, Rocky Id. in the Gulf of Carpantaria and Lady Elliott, Bunker and North West Islands off the South Queensland coast. Further references to the map partly show how great were the geographical difficulties to be overcome. Most of these islands were uninhabited and far from trading routes. Usually they were low lying, rising only a few feet above high-water mark, so that at night they were hardly visible and were a serious menace to any ships that drifted into their neighbourhood. Generally they were treeless and very often without water.

The day is not far distant when some of the pioneer conditions will be forgotten in the islands. Preserved foods, cold

storage and wireless telegraphy have already magically changed some of them in the more populous archipelagoes, and it is not difficult to conceive a further amelioration when airships perhaps carry island mails.

In the 'fifties', 'sixties' and 'seventies, however, the cable had not arrived, and steamships were few when the agricultural world of Britain wakened all suddenly to the discovery of the value of phosphates. England and her dependencies had no reliable supply of what was now discovered in the form of superphosphates to be the finest of all fertilisers. Up to the 'forties agriculturists throughout the world had used chiefly bones; especially was this the demand of the English farmer, and crushed bone was spread so lavishly on his fields that before the war one German writer straafed loudly, declaiming in terms that sound almost familiar against British greed. In this case bone-dust not territory was the burden of his complaint.

"England is robbing other nations of their fertility" stormed Liebeg, telling that in this search for bones, the battle fields of Leipsig, Waterloo and the Crimea had been robbed, while from the catacombs of Sicily skeletons of whole successive generations had been torn. So declared the angry Teuton savant right back in the thirties, while Bismarck was still only a roystering student at Gœttingen.

In 1840, Liebeg himself treated crushed bones with sulphuric acid to render them available for increasing the store of phosphoric acid in the soil, and in 1843 Sir John Lawes dissolved mineral phosphates, (chiefly coprolites from English counties and apatites

from Canada) for the manufacture of super-phosphates. Perhaps the German protest had its effect; more probably, the store of bones was running short, for, from this date, the manufacturers of fertilisers looked further afield for raw material. And then came into consideration the phosphate guanos of the Central and South Pacific.

To the discovery and opening up of guano deposits John Arundel, agent for a big English firm, turned his attention. His scheme was to dig out the deposits on the little known islands and to plant cocoanuts which would maintain life and render visible these rocks so nearly hidden even in daylight. Ultimately a supply of copra would be assured for commerce. Later the J. T. Arundel Co. was initiated and worked through available Pacific stores, both in mid-ocean and off the Australian coast.

While operations were being carried on on the Queensland Islands, a change of business methods becoming necessary to suit more modern conditions, the dissolution of the small company was mooted. Lady Elliot Island was not yet worked out when the Pacific Islands Co., a much bigger association, was formed to take over the business of the original firm together with other island trading concerns, cocoanut and pearl-shell properties. When work on North-West Island was finished the stores of the then known guano islands in the Pacific were practically exhausted. For a time prospecting expeditions sent out by the new

company were unsuccessful; but with the birth of the century the finest deposits of rock phosphates in the Pacific were discovered at Nauru and Ocean Islands close to the Equator.

At present these deposits give the highest percentage of pure phosphoric acid of any supply in the world, and this store, although not inexhaustable, is second only to that of Tunis and the United States. With the opening up of Nauru and Ocean Islands the Pacific Islands company gave way to the Pacific Phosphates Co.; a period of unexampled prosperity set in and the later entries in the diary tell of success that perhaps John Arundel alone of all the original company had ever foreseen.

Apart from success, however, it may be claimed that the doings in the East and Central Pacific of the firms with which the diarist was associated, not only extended South Sea commerce but developed international relationships.

The settlements on distant islands attracted trading vessels other than the craft immediately engaged in the guano trade. That the nearest ports benefited enormously by the opening of these works is proved by reference to balance-sheets of governing bodies in all the towns of the Queensland coasts and there is no doubt that the phosphate industry helped with the establishment of ~~wire~~ wireless telegraphy to link up many distant stations.

The traveller had always distrusted German aggrandisement in the Pacific and in his negotiations for the purchase of Nauru and Ocean Islands deposits his diplomacy was abundantly rewarded when it scored against Berlin. Good feeling between the islands

was fostered by the influence of a personality that strongly appealed to the native temperament, and it is generally allowed by authorities, official and other, that the private and business relations opened among the merchant magnates with whom John Arundel was associated in Japan played its part (small though it may have been) in strengthening between Britain and that country the cordial friendship that has so long existed.

Book I.

CHAPTER II.

"16th July 1870. Paris. Reached Dover about 10.45 a.m. and was soon steaming out of the harbour on board the mail packet "Wave" bound for Calais and so on to Marseilles, Suez and Colombo en route for Sydney, the South Seas and Starbuck Island.

"When we entrained yesterday everyone was talking of the war just declared between France and Prussia. Boys were shouting the news everywhere, and it was said that several special correspondents were in our train.

"No delay at Calais, luggage passed without examination. Though all Paris seems alive to-night, there is not anything that looks like war yet.

"The city is immensely improved since I was here in 1858."

So opens the journal written on the third long voyage of John T. Arundel, ex-shipping clerk in the employ of Messrs. Houlder Bros. London, and now the pleni-potentiary of that firm bound for distant archipelagoes where he was to open up new ventures for his company.

Since 1858 he had seen much - two voyages round the world had changed his point of view, and he himself was probably as little the boy who had visited France twelve years before, as was the Paris he remembered in the late fifties the Paris of the opening Franco-Prussian War.

There may be greybeards on trading stations of the far Pacific who could tell of the traveller as he appeared on that third voyage. Very few are alive who remember him on board the fine ship "Golden Horn" setting out on his first travel year in 1861. On this first voyage round the world in search of health, little record exists. (Old family letters speak of visits in Sydney, Melbourne, Bathurst, and the opening in those towns of friendships that were to be lifelong. Later diaries give memories of "Nine days rain at Dunedin in 1861" of "English roses at Hokitika" of a Maori war dance seen at Auckland, and of Captain Daldy at Cliff Cottage in that year.)

But no record exists of what to his friends he claimed as the turning point in his life, in cities - the call at the Chinchas made after rounding Cape Horn, and the interest aroused there by what he saw of the working of South American guano.

Conversation with some American fellow-passengers who were trading in Pacific Island guano stimulated this interest, although it does not seem to have revealed to the young traveller how big was the American trade at the time. Nor did anyone realise perhaps how much the discoveries of phosphates at Idaho, Florida, etc. were to modify not only the demand in America but the whole of the European trade.

However, in 1861, phosphates as fertilisers and as an agency in the re establishment of south of England industry were momentarily in immense demand. On his return to London the young traveller, hardly more than a boy then - (he was born in 1841) - in commenting on these travels, dwelt on ~~these~~ reports from the Pacific Islands,

and on the mention made by Captain Daldy of the interest he held in Starbuck Island on the fringe of the Central Pacific where guano was said to exist in quantities.

Members of the directorate of Messrs. Houlders had already considered the advisability of opening up connection with the islands, and in 1868 the valued officer, as he was in spite of his youth, was again sent round the world, this time as the agent, not the guest of his company.

This trip was made on the "Canaan" direct to Australia and New Zealand with fewer stops than on the last voyage. The outcome was the purchase of their rights in Starbuck from Captain Daldy's firm and the appointment of John Arundel as agent for Messrs. Houlder Bros. in the acquisition of any other islands, and as manager of whatever works might be opened up on Starbuck itself.

It is in the light they throw on the working of these distant islands that the diaries under consideration have interest. To-day the demand for phosphates is as keen as ever it was; public interest in the Island product of guano sand and rock phosphates was perhaps never more alive than it is in these years of intensive farming, and always the Pacific as a field for exploration and research has its own romantic setting.

Books touching Oceania are many. Life here has been painted from innumerable view-points - the missionary, the whaler, the trader, the planter, the pearl-fisher, the beachcomber are all known to readers of modern novels. Louis Becke has painted one phase of island life, O'Brien gives another. Conrad's islands, like his

characters, are essentially his own, and because they are so much his they are delightfully ours.) But most of these writers refrain from touching actual historical happenings.

The diaries are concerned with the work of forty years. It is not claimed that covering over a quarter of the last century's work in the Pacific, they will give full details or full-length portraits, but they recount the history of an enterprise carried out among a set of people, storemen, clerks, sailors, sea-captains, island labourers, and administrators of these islands who have probably never been presented before.

The white population of the islands written of may be more commonplace and therefore much less attractive than the Pacific heroes and heroines of fiction, but they had their own interests, tragedies and heroisms, and these island workings certainly reveal that what success crowns Pacific speculation is not governed by any law that touches actual merit.

For although he lived to see success beyond his dreams, for thirty years the tale of John Arundel's doings in and about the islands, is one of a prolonged struggle against odds. Neither as attorney for Messrs. Houlder, nor as head of the J.T. Arundel Co. acting as agents for the big firm, nor again as Managing directer of the Pacific Islands Company, dealing with wide-spread activities, did he experience any of that ready, smiling and unearned fortune that is in some minds associated with his career.

But always he won the regard of his fellows. Old friends who knew him in those early seventies, speak of his fine physique, his friendliness, his unfailing courtesy and his simple

faith. These never left him. In his last years of ill-health at the age of seventy-eight he was still a fine figure of a man and to the last his friendship was as ready as his sympathies were wide.

On more distant outposts of the Pacific there are those who talk of him as "Aneru" - Aneru of the pleasant smile and speech, with a voice and manner that appealed to these islanders. "It was partly his voice that managed them" explained one of his sea-captains. "A good voice goes further with natives than anything else." But it was not only the voice that endeared him to his dusky friends. On one of the Solomon Islands recently a re-cruiter of labour was reminded that if he were representing the old management there would be none of the difficulty he was at the moment experiencing "Aneru - He great man. He like a King", came the testimony, seeming to imply that for Aneru the labour problem in the Pacific, acute for less regal personages, would not exist.

If he were alive to-day Aneru or, as he was more widely known J. T. A. would be the first to point out that, flattering though the inference may be, it is not justified. Although remarkably happy in his dealings with islanders he at no time found the labour problem non-existent. Right back in the 'seventies, when his experience of these people began, on the flimsiest pretext agreements were broken, the food question became a burning one, and mutinies incipient and actual held up work on the field, as well as that at the ship's side, just at the moment when every ounce of effort was needed to fulfil the contract. Indeed his stay at many of the Islands was as full of anxiety as it was of incident.

He won through when many would have failed. Extracts from the diaries show that in some cases the period of his stay on the islands was an extremely pleasant one. But the experience was varied; and it is certain that at no period of his career in the Pacific would Aneru have claimed that the problem of island labour had no difficulties. It is not always realised in the western world that the strike is more the weapon of primitive man, than it is of the highly evolved. And there are issues, other than those of labour, which help to clog enterprise in the South Seas whenever this is bent on the discovery, the opening up, and the working of any resources that are not yet fully explored.

The Pacific in itself is only half known. Its past secrets will never be revealed; those of the future are many of them not yet formulated. But because the discovery of the resources of the Islands has sometimes come as a revelation to that world that does not go down to the sea in ships, the terms Pacific trading, Island enterprise, hold a significance for the general public that is not quite theirs. It is common knowledge out in those ocean-washed lands that there are very few Pacific enterprises that have crowned with success the pioneer. There are fewer that have brought fortune even to the favoured without the levy of a monstrous toll, a toll generally wrested from the weakest.

In New Zealand in the draining of swamps it has become an accepted law that before the advent of the man or the company

destined to succeed - three - five - or more good men and true, have "gone under", or at any rate have escaped with a sacrifice of capital, generally of health and always of hope; incidentally they are forgotten. The last to reach that frontier-line drawn in seeming failure is necessarily the one to be remembered. He may have no gifts, no energies, no enthusiasms greater than had those who preceded him, but it is certain that some special destiny is his. Either he knows his times and claims them, or all unwitting, he is claimed by them. Unless he deliberately misses time and tide it is written that he will succeed.

The writer of the diaries was in no sense a pioneer. He did not discover any island nor any famed deposit. It is not claimed that he established any industry not already in existence, but in many cases he was the third man who completed the work. It was the thoroughness with which this was done that gave him what success came in those years of his stirring manhood. "When Arundel has finished with a field, there is not much chance for anyone else" was the comment of a contemporary . This is praise. The knowledge he acquired and applied so successfully of moorings, his handling of his staff, white and brown, his own energy and endurance, were remarkable. No lesser gifts would have carried through some of his undertakings.

The after planting of the islands with coconut palms and tea trees, and the maintenance of beacons, all helped in linking with the world of commerce, many uninhabited rocks. It must be remembered the enterprises connected with his firms, were

essentially commercial. Readers looking for first-hand pioneer or patriotic work will be disappointed. John Arundel's diary is merely a tale of the search for fortune carried on by an Englishman according to his lights. Those who would look for a super-man, will be disappointed. But the memory of the Englishman with sympathy and a sense of justice is treasured among his workpeople, and in Foreign and Colonial offices of more than one government, the perspicacity of the keen-eyed traveller, has been recognised with appreciation. That from the beginning he distrusted Berlin aims in the Pacific is somewhat remarkable, seeing that he belonged to an age in which apparently only observers such as Meredith, seemed to realise that there was danger in German diplomacy.

In the history of many of the guano workings it is almost impossible to decide who was the discoverer of the deposits. Speaking generally, those islands with which J.T.A. was associated, especially those most nearly neighbouring the two Americas, had been discovered, temporarily worked and abandoned by American explorers, who would no longer face the appalling difficulties they deemed insurmountable. From some islands afterwards worked by the J.T.A.Co guano had been previously regularly shipped; but a series of storms, of shipping disasters, of casual mutinies, probably broke up the enterprise.

In the 'sixties and 'seventies the accidental discovery of Carolinan, Californian and Floridan phosphates, turned the attention of those American firms interested in guano to the inland deposits demanding none of the almost superhuman efforts that opened the

same stores on the islands. Deposits on Baker and Jarvis islands are fully described in the early 'sixties by a writer in Harper's Magazine who had worked them when Liebeg and Johnson were analysing these new phosphates. Even on Starbuck, stark outpost as it was, the newly appointed manager was to find his predecessor. Happily for himself he was ignorant of this fact. The knowledge might have marred his enjoyment of that run from Marseilles to Port Said, of the train journey to Suez, and of his first experience of the Red Sea and of his short stay on Indian soil in that voyage to which the opening of the diary refers.

Book I.

CHAPTER III.

The voyage in the Canaan in 1868 was essentially a business one, undertaken with a view to the purchase of Starbuck Island. It is unfortunate that no record exists of the two eventful travel years. The 1870 diaries refer to the return from Australia in the early part of that year. From private letters it is known that late in 1868 Messrs. Houlder's representative had sailed by the same route as that followed by the ship Golden Horn some seven years before, and that in 1869 he not only entered into indirect negotiations with the actual owner of Starbuck - then in Australia - but in Auckland purchased from Captain Daldy the rights which his firm held in the inhospitable island. The only records of the voyage are the notes in the 1870 diaries referring to memories of Melbourne heat, of visits nine years before to Goulburn Hospital and jail and of Adelaide's schools and its bishop. It is probable that during the second voyage to Australia and New Zealand a chance meeting brought the traveller into touch with another keen enthusiast interested in Pacific enterprise, who, apparently , had a hearsay knowledge of guano islands which was wide but somewhat inaccurate. According to this authority, the Pacific and its resources were waiting to be opened up, and for the purposes of this opening John Thomas Arundel was to be the accepted agent, and his henchman, who appears in all diaries as C, would be his first lieutenant.

Unfortunately, a quite inflated value was set on the

knowledge (so claimed) possessed by this advisor, whose sources of information seem to have been extremely limited. And it is certain that neither J. T. A. in 1869 nor his friend and confidant discovered that

(a) the original license of Starbuck was held at the will of the Australian Government.

(b) that besides the firm of Coombs and Daldy, at least two companies, acting, the one in Australia the other in New Zealand, had rights in the island, and

(c) that one of these was actually digging and shipping guano from there.

Certainly the agent of the English firm, on his arrival in Australia in 1870 found that his ignorance of these facts had very much confused issues, which were already complicated through the recent death of the actual licensee of Starbuck. The discovery that other firms were at work on this guano field was as perplexing as it was unwelcome.

However, preparations were pushed ahead. It must be recognised that John Arundel's first-hand knowledge of the work that was to occupy the better part of his future life was extremely limited. On his return from Australia for the eight weeks' stay in England in the summer of 1870, he had seen all that was possible. Together with Mr. Alfred Houlder he had watched blasting experiments, had inspected machinery for crushing, digging and drying, and all this for the first time in his life. The amazing powers for assimilating detail possessed by the young Londoner stood him in good stead; but into

that eight weeks, was pressed an apprenticeship that should have covered at least a couple of years. Even then, a cursory knowledge of processes as carried out under special conditions in England by experts, is but a poor preparation for applying these processes in quite different conditions by means of unskilled labour.

However, like many another Briton unarmed for the fray, the passenger, making his third voyage by the fine ~~P & O~~ R.M.S. 'Syria', had no doubt of his ultimate victory. As always in venturing on new enterprises, it was a good thing the adventurer had no conception with what difficulties he would be faced.

By the P & O route at that time, passengers disembarked at Alexandria and entrained for Suez. The diary notes that "A special train joined the main Cairo express, and one carriage held the four of us comfortably enough, in spite of the heat." It comments on "the country, a big level plain crossed by a canal which before the railway was opened used to be the means of transit from Alexandria to the Nile, thence to Cairo and on to Suez".

Women and children on the river banks, camels and dogs, paddy fields and palm trees - all have their comment. So had the fine iron bridge over the Nile. Everwhere the coinage was arresting. "It seems to come from every part of the world - from France and England, from India and Malay, from Austria and America, with Egyptian copper money thrown in."

"At Ismailia, as the train ran past, the Canal was seen widening into a big lake, with small craft busy, a big barque-rigged steamer lying by, and what looked like two or three coal shoots with a collection of huts."

At Suez the passengers re-embarked, and early in August reached Point de Galle where a war telegram told of the defeat of the French under General Douay. Here the company transhipped to the SS. Geelong and on August 29th an entry in the diary notes Cape Otway "first sighted in December 1861." By the end of the first week in September the interests of the voyage were almost forgotten in the rush of work incident to the ratifying of rights to dig guano on one side of Starbuck, to the chartering of ships, to the problem of labour, to the provisioning of the camps and the thousand and one incidental cares that necessarily multiplied themselves as the enterprise evolved.

"This has been a busy week", is the entry on the 5th of September at Melbourne. "Last Wednesday I called with Crosby on Messrs. X. and saw B. about the vessel he has sent to Starbuck Id. which is expected daily. Eventually he promised to advise with a friend absent in Melbourne (doubtless A's brother-in-law) and let me know what transpires".

B's brother was manager at Starbuck for the firm already working there. A. was the original licensee of the island.

"It seems A's death was advised to London by the mail that broke down and there was not time for a second mail to arrive before I wrote. Later called on A's agents who say they have not any of the money and that A. died in debt. I fancy they have more to do with the island than they wished me to know."

It would be interesting to know what would have happened if that broken down mail had been delivered in England to date. In

In view of its conflicting news it seems possible that there might have been no dealings with Starbuck. Indeed seeing the ties that bound him to England it is very probable that in that case the traveller would have remained at home, and the working of many Central Pacific Islands and the opening of stores of rock phosphates on Ocean and Nauru would have been the tale of, very possibly, the agent of some German firm.

"Had a long chat with X. Brothers. Unless they get a ship a month it will not pay, in fact it will not do at all to buy for the purpose of securing consignments."

"The insurance question is the biggest difficulty. The firm doing all the Malden island risks give rates which are nett ..... A. before he died negotiated for the purchase of the 'Lady Darling'".

"It is said the leeward side of the island where he intended to load was the only safe part."

Again "At the Melbourne Meat Preserving Co. this afternoon buying stores" and so on.

"Have had a good deal of trouble about gun cotton," etc.

Although the meeting was welcome it did not expedite matters that the associate who previously advised so enthusiastically on the expedition had now arrived in Australia. The two friends were closely in touch. While the one ran up to Sydney or down to Melbourne buying apparatus for analysis, medicine, books, &c., or visited the hospitals to watch surgical operations, and the treatment of such epidemics as might be looked for, and to study the form of those diseases prevalent on islands once visited by sailors, the other remained near the wharves and picked up all information possi-

ble from the crews of island trading vessels.

8th September. "Waterlily with a cargo of island guano is reported in the morning papers as from the Fijis. Actually from Starbuck. The crew give conflicting accounts, but it seems certain there is a supply of water. Turtle appears to be plentiful and lots of fish."

With the arrival of the Waterlily and her cargo the trouble increased. The company actually at work in Starbuck was not disposed to cede rights in favour of the stranger, and most disheartening tales were brought by the watcher at the waterside of the anchorage at the island, of the quality of the guano and of prospects generally.

A further source of concern was the account given by the crew of the Waterlily of the wreck of the Eurydice, making the fourth vessel ashore since the opening of operations on the ill-reputed isle. However, nothing daunted, the modern Ulysses somewhat against the advice of his chosen Mentor pushed on preparations. The difficulty of chartering ships was accentuated by the necessity for dating them to arrive in succession, seeing that there was no certainty as to the 2,000 tons of guano said to be waiting shipment at Starbuck, nor yet as to the actual date when the new manager was to commence work.

Four vessels were ultimately chartered, and the last week of September found the traveller en route for New Zealand. The next entries in the diary are made at Cliff Cottage, the home of Capt. Daldy in Auckland, and probably the well-tried seamanship of this

pioneer and his very practical common sense had some share in the speeding up of preliminaries.

This first of his friends in the South Seas was perhaps at this juncture the one best fitted to help the newcomer. Their friendship dated from 1861. The firm of Messrs. Coombes & Daldy were agents for the Houlder boats bringing among other immigrants the majority of those yeoman farmers who settled overseas after being driven from their acres by the bad years of the middle 19th century. J. T. Arundel before the breakdown in his health, was head of the department which dealt with these would-be settlers, with whom he was a great favourite. It was perhaps this common interest that brought the friends together.

As friends, close and lifelong friends, they were strangely dissimilar. The elder, a keen business man, was practical and cautious to a degree. Although his sympathies widened after middle age up to that time his reserve amounted to aloofness, and was often mistaken for dourness. His straitlaced Puritanism cut him off from many friendships and from adopting wide interests. New undertakings were approached only after mature consideration although they were carried through with practical knowledge of men and affairs that was rarely at fault.

The newcomer on the contrary with a personality eminently attractive, was possessed of a manner that endeared him to all. No one was ever more popular with employees white and brown; no one could count more or closer friends whether at Home or in those

Pacific haunts where he was always welcome. His interests were as many, and his sympathies as wide as his friendships. Yet in the years of struggle in the 'eighties and 'nineties as well as in the few years of success in the twentieth century that the older man just lived to see, John Arundel had no closer personal friend than Capt. Daldy and no business associate whose counsels he prized more. That he recognised great qualities in his friend is one of the proofs that in the days of his prime in spite of his impulsive friendliness, which would have led many men astray, J.T.A. was a very good judge of his fellows.

With Capt. Daldy's assistance matters were pushed through in Auckland. Further purchases of stores were made. A carpenter and two other members of the white staff were engaged, while the arrangements in connection with the successive despatch of vessels were placed in the hands of Capts. Daldy and Brinsden - the latter it was arranged, would proceed later to Starbuck to act as sub-manager there. Finally the brig Moa (not 500 tons) was chartered and in two days was fitted out ready to sail on the arrival of the English mail.

"6th October 1870. Cliff Cottage. First thing this morning saw from the verandah the mail steamer lying at the wharf. A big budget on breakfast table, the morning paper with startling news from Europe. French finally defeated and Louis Napoleon a prisoner!"

"8th October. On board the brig Moa, bound for Starbuck by way of Raratonga where we take on labour." The entry tells that the little ship had not much deck room, but was a good sea boat and that the voyage so far out was pleasant enough. Then it goes into cal-

culation as to the log for the traveller was now studying navigation.

The voyage on the Moa gives the key tone to nearly thirty years work in the Islands. Brief or long halts at Melbourne, Auckland, Sydney or San Francisco, with rooms at Menzies, Petty's, Pierce's and other hotels where he was always the honoured guest, gave the impression to the uninitiated of a dilettante traveller somewhat enviably beloved of fortune. His staff knew better. White employees and brown, those who shared with him some of his wanderings, and friends who knew him intimately remember the John Arundel of those days as a worker with powers of endurance as remarkable as they were often sorely tried.

It was very often in ocean craft much smaller than the Moa, on storm-bound islands sometimes faced with food shortage, in conditions that would have appalled many physically stronger men that the mettle of this many-sided traveller made itself felt. In these conditions too was the work done, which because it was completed and not shirked (as it so easily might have been) makes it so eminently worthy of remembrance. It is true that work like it has been done by other agents and is forgotten, but such achievements were spasmodic, while John Arundel's long-drawn-out struggle against difficulties was maintained by indomitable will and pluck.

The traveller himself would claim that it was on voyages such as that made on the Moa, on islands like Starbuck and Fanning, that he knew some of his happiest moments and did his best work. Certain it was that in such conditions, in bungalow houses, surrounded by

his island servants and friends he elected to spend the better part of his short home life; and it was of this period that he carried his most treasured memories.

Book I.

CHAPTER IV.

28th October 1870. Raratonga. "Our second night ashore on this lovely coral island. At 3 a.m. yesterday Capt. Robertson reported land, but a breeze made it advisable to wait outside the reef for daylight. At six C. woke me and as the Moa could not get in we decided to pull ashore after breakfast. The boat's crew of four with myself acting as helmsman found the fourteen miles pretty stiff pulling and at first I changed places with C. every half hour. The beauty of the island, hilly and wooded to the water's edge, increased as we neared it, but we could not make out a landing place. However, at last, a fisherman in a canoe gave us a lead, and following him I steered for a break in the reef. Just outside we pulled up and had lunch, the fishermen and another native who had swum out to him, joining us with great gusto."

" Presently the chief of Aorangi, the village we had struck, came off in a whaleboat, and transhipping part of his crew to our boat took C. and H. aboard his, and in this fashion we made for the opening in the reef. After sundry bumps (in spite of the expert steering) we found ourselves in smooth water and beached the boat on a stretch of soft white sand. Intensely hot; but our new friend took us through the opening in the trees to a shaded house where his wife awaited us, a stout lady dressed in crimson, seated in state on a sofa. Armchairs were produced for our host and me, and the others filled another sofa. Natives of

all sizes and ages crowded about the doorways and windows to look at us. Very sorry objects we were too - clothes soaked with perspiration, hands blistered all round and C's arms raw with sunburn. Cocoanut milk and bananas were brought and then we had a wash in the adjoining room where we found towels and scented soap. Windows still crowded with the admiring or perhaps derisive natives.

" Then we went to see the cotton press an object of pride evidently and to buy some vegetables, fruit, etc., for the boat to take to the Moa. The same pilot steered her out; and then we visited the chapel with its three graves - one of Papeiha, a native missionary who was with John Williams."

A later entry "Dinner at the chief's house was laid out in the cotton press store - A regular banquet! - boiled pig, sweet potatoes and cocoanut milk! Then these new friends brought us horses and after one of the loveliest of rides through a path bordered and arched with gay foliage, we reached Mr. Chalmers' house at Ararua."

The business of recruiting which had brought the Moa off the direct course to Starbuck was not so simple a matter as had been hoped. The "Peruvian Slavers", vessels fitted out in Peru to secure labour by fair means or foul, for what was practically slavery on the Chincha Islands had for many years brought guano contracts into bad repute among the islands. And indeed, through various causes many minds at this time were quite justly prejudiced against the employment of native labourers on the islands or on the mainland.

The late 'sixties and early 'seventies saw on the one hand legislation for the control of the employer, and on the other a distaste for the work among the islanders themselves. In spite

of this, as Mr. Chalmers explained, his settlement had been persuaded to send a fairly large contingent to Malden (a guano island neighbouring Starbuck, but of better repute) and there were very few young men left in that district.

However a four and a half mile walk to the next village brought in recruits - chiefly through Mr. Chalmer's influence - and again the kindest hospitality. A wash, scented soap, linen towels, indeed every luxury was tendered by the local queen together with the coconut milk and bananas which seemed to be the form of light refreshment that takes the place of morning and afternoon tea in these latitudes. In addition the lady regaled her guests with what she claimed was the news, - "actually a report of some Benevolent Society held upside down! We, visitors seated on the vernadah at her feet listened with due gravity to the pleasant voice reading a list of subscribers to this institution."

Ultimately from the two villages the Moa's company was increased by sixty and a promise was volunteered that if good treatment was reported Raratonga would spare "Prenty men next time." As events proved the report must have been favourable, for in after years contracts for Aneru's island were always rushed at Raratonga.

The beauty of the island, the friendliness of the natives, the hospitality and kindness that was the rule made this a memorable visit Not the least pleasant happening was the meeting with Mr. and Mrs. Chalmers in "that lovliest mission house" spoken of by the writers of South Sea Bubbles who had visited the island some six months before the arrival of the Moa. The further description by these young gentlemen of their hosts as "the warm-hearted, sensible, Highland lady and gentleman who represent the mission here" though

laudatory is somewhat inadequate in the light of after events. To-day the Rev. James Chalmers and his first wife, called as they were to New Guinea are both remembered as giving their lives to their work - The one died in Sydney on one of those visits made necessary by the climate and by the cares of the mission - the other was martyred among the New Guinea Mountains from which he dated his last letters while as he said "the heathen rage around."

Friendship with such figures is something apart. Certainly the life-long affection that grew out of the first call at Raratonga was held among John Arundel's memories as almost unique, to be set beside a friendship formed in early life in the Ragged Schools of Gravesend with the fine Christian who was to be long known as Chinese Gordon.

The meeting with Mr. and Mrs. Chalmers was renewed on the travellers' return to Raratonga a month later; and again in Australia visits to guano workings off the Queensland coast were often arranged to fit in with short calls at Thursday Island made by the missionary from New Guinea.

Interest in the mission field was hereditary in the Moa's passenger. As a young man he greatly sympathised with the work of the London Missionary Society of which body, during the 'thirties and 'forties, his grandfather was secretary. The home of the Rev. John Arundel became a centre where returning and outgoing exiles met to discuss conditions ruling their work. Probably it was in his grandfather's home that the serious-minded boy became so strongly a sympathiser with all that sums up missionary effort in any part of the world.

In his long association with the South Sea, he never lost interest in the mission field. Further impressions of his boyhood gathered from his grandfather's house very largely touched lovely coral islets with waving palm trees and sun-kissed white beaches, where every prospect charms and cares cease to exist. These impressions became modified in some latitudes, but the charm of the islands never failed to hold. Colours of sea and land and sky, those genii the land and sea breezes, the gay sub-tropical flowers and almost as gay tropical fish, the warmth (which he loved) the leisure and the freedom appealed very strongly to this busy man of affairs whose youth had been spent in London and whose special gifts made him a figure in assemblies far removed from the ranks of native workmen on coral rocks or from the companies generally gathered in mission churches.

The casual tourist never forgets the first visit made to Raratonga, Raikaea and Tahiti. For the habitual and unusually welcome visitor these islands have a special charm. This is peculiarly true of Tahiti, but the traveller did not visit Papeetee that "Paradise of the Pacific" on this voyage. It was at another of the Cook Islands much smaller than Awarua (on which, island, the capital Raratonga) that he made his next call. This was at Mangaia - more isolated but equally interesting and by some held to be the loveliest of the group. Although it is not so fertile as the other islands its splendid valleys are well watered and beautiful. Inland from the shore rises an almost perpendicular wall of coral perforated by caves. The 'Makatea' as this is called is about a mile wide 100ft. high and runs all round the island.

Mangaia was sighted on the fourteenth and not immediately

recognised. The ~~constant~~ many references to the 'Makatea' as the party made their way over its coral boulders gave the traveller the impression that he had reached the island of that name not far from Tahiti.

A row to the shore, assistance in getting through the reef, the lavish hospitality of the islanders, a garrulous lady who addressed the company for two hours, and noble views, made this landing so like that ~~of~~ at Rarotonga that the diary repeats itself. But one glorious walk was never forgotten.

"In the evening we started for the village in single file carrying torches. The way lay up almost perpendicular steps in the cliff rising to about 150 feet. The road, cut in coral, was jagged and very trying. Cannot imagine how these islanders tramp about it with their bare feet. Our hostess invited us to take our shoes off before starting to save them, but we preferred to save our feet. At the summit of the cliff the almost level road was shaded by coconut trees, bananas, guava, etc. We followed the hill till it led into a splendid gorge in the northern cliffs with a fine road - the work of the island drunkards."

Drinking was a serious offence in these islands at that time and the sentence of hard labour that was usually preferred to the calaboose kept Cook island highways in the best of repair.

On return from the village another memorable walk is noticed - at daybreak this time. Says the traveller "The road was very lovely, and from the top of the cliff we had a quite glorious view, the ocean spreading like a great mirror at our feet, the little brig close in shore and further out a schooner on the horizon."

The stay at Mangaia was short and gave little promise of future recruits, but supplied the brig with the fruit and vegetables it was needing. With the natives from Raratonga on board the voyage could not be unnecessarily prolonged. The Moa left early next morning. The ship's company was busily employed making dinghies with timber brought from Auckland and in their spare time the natives were drilled, an exercise in which they much delighted. Occasionally they fished and regularly attended the services held by the native teacher. But the trip was necessarily irksome and though islands were sighted, no more visits were paid en route.

On the 19th November Caroline island was passed without being seen but numbers of birds gave notice of its propinquity. The rain squalls peculiar to these latitudes were now constant, and the westerly equatorial current, by which Starbuck is washed, was clearly distinguished in the rain - "like a tide-ripple". Next day Flint island was sighted "a long low line of land covered with trees and heavy breakers on the N. side". Progress was made difficult by the prevalent wind, which together with the westerly current makes the navigation of the Phoenix group extremely difficult.

Later that day the Moa was hailed by a brig sighted and lost some days before. She turned out to be the Isabella, forty five days out from Melbourne bound for Malden, making no better running than the New Zealand boat. The Captain well used to these seas, shouted a warning about the current. However, even the voyage to Starbuck ends in time.

Wednesday, 23rd November, Noon. "Land visible from fore-top-gallant yard on starboard bow. And presently in an hour or two

the voyage of 46 days out from Auckland, of four months nine days from England will be ended."

The first full view of Starbuck, the goal of this long and eventful journey was not at all prepossessing. As described by the diarist in a paper read before the Geographical Society of San Francisco in 1885 it might have disheartened a Mark Tapley. "A strong white glare in the western sky painfully bright, then as the vessel rose on the waves, a long low line of white sand became visible. As we got nearer wrecks of shipping strewn along the shore could be seen with clusters of white sea birds resting on them. Then at the western end a few wooden houses revealed themselves and towering higher than any of these the remains of the French transport which had been washed ashore on her voyage from Tahiti to San Francisco 12 months before."

Altogether seven wrecks were found on that very incorrectly charteredrock.

Entries in the diary tell that the travellers were most hospitably received by Messrs. Blyth and Lennox, the latter a visitor from Auckland, the former manager for the firm working other deposits than those bought by Messrs. Houlder. A verandahed house belonging to Capt. Daldy's workings was taken over, and as had been promised the wells were found to be fair. But difficulties began to accumulate, the chief being the wrecks which made a first obstacle to the berthing of any future ships. A large English vessel which had carried lumber now strewn over the island, the German - Anna Dorothea a 1200 ton ship, the Thetis and the French transport of themselves made a quite sufficiently imposing mass of wreckage on the shore of an island only four miles long and less than two in width.

The newcomer had no difficulty in coming to temporary terms with Mr. Blyth and details of purchase of the company's properties were arranged - these to be ratified in Australia. The trollies belonging to Capt. Daldy, and the barrows were found to be in good repair. So with the six dinghies made on the voyage down from Auckland work started almost immediately, seven men of the other camp joining the new works on the same terms as the labourers from Raratonga.

In Australia possession of the anchors and cables of the transport had been granted to Messrs. Houlders' representative by the French Consul. These proved useful in berthing the brig. So satisfactorily was everything arranged that the newcomer now turned his attention to the island, and after giving details of the guano working that was going on apace, had time to notice the big population of birds, wideawakes, boobies, etc. - and the wonderful tropical fish.

"On the beach were some fellows fishing but without much success for the surf was very high. The fish caught however were most beautiful - light blue with red stripes and spots."

Then all suddenly, without warning, the Moa slipped her anchors and quietly drifted out to sea!

N'Par She had selected Sunday for this escapade. It was arranged between the representatives of the incoming and outgoing management that they should together go by the Moa to Auckland, thence to Australia to conclude the sale the newcomer then proceeding to San Francisco on the further business of moorings, stores and prospective sales, while C. left in charge at the island until Captain

Brinsdon's arrival would bend all his energies to the increasing of that store of guano which lay to the company's credit as well as to the loading of boats already chartered. For the first time the Moa's skipper had come ashore to advise as to the prospective shipping and it was while he was so engaged that the cry was raised "Brig adrift."

She was away from her anchorage only 36 hours but this became in the history of Starbuck one of the moments charged by fate. The wreck strewn rocks, the only indifferent wells, the absence of vegetation, the very strenuous work had damped the spirits of the small white staff. The psychological effect on the natives can be imagined They had abandoned the Eden that was theirs at the bidding of this stranger to sail with him in his ship. Though they were all packed like herrings in a barrel, his magic had made the time pass like a dream. They had seen his instruments working and his magic photographs. He had been a father to them and in spite of discomforts the trip had been a long picnic. The discovery that they were to be left on this rock while Aneru sailed away changed the whole outlook. The ship was the one tie between them and the home they had left. The period of her absence, long enough for the leader when measured by his watch, was to them probably a lifetime of care.

The Moa's return to a safer berthage than that she had first taken up speeded on activities ashore. Improvements were made in the quarters: shipping went on merrily, but the mischief was done. Every load of guano brought nearer the moment of sailing. The majority of the workmen refused to watch that departure; they would return to Raratonga with the Moa and with Aneru.

After all it is not in civilised states only the discovery is made that when labour seizes the helm it holds it. To leave disheartened and mutinous natives at Starbuck was not to be thought of. The best and most reliable workers were not unwilling to stay till at any rate they had money to carry home. These promised to wait his return while the chief malcontents were sent on board, and Aneru carrying Mr. Blyth and his party with him, on the 12th of December again set out to the sunny seas.

This second voyage of the Moa was much shorter than the first, but still sufficiently long to be disappointing. The boat was held by the calms which prevail at the summer equinox. Christmas Day was spent at Raratonga where the mutineers were left and on the 8th of January the Moa berthed at Auckland again.

At Auckland the prospective manager Captain Brinsdon joined his chief and took passage with him for Sydney. In the harbour as the Moa rounded the Heads lay the Galatea the flag-ship of the Duke of Edinburgh, at that time touring New Zealand, and one of the comments of the diary touches the playing of His Royal Highness at the Choral Hall in a Concert that old Aucklanders may remember as they possibly do another appearance of the royal musician when he conducted the overture to Tannhäuser, played for the first time in New Zealand in the old drill-shed. Aneru had only one evening in Auckland, but in Sydney he again notes Prince Alfred driving four splendid greys. But the diary at that time has few entries of this sort, the period of his stay being pressed with business.

In January 1871 details of the deposits on Lady Elliott's island in the Gulf of Carpentaria were brought to the sojourner at

Petty's. At Melbourne he secured samples of Baker and Howland island guano which he thought inferior to that of Starbuck, a conclusion that heartened him very sensibly. At Melbourne too, many gun-cotton experiments were made:- these he proposed to adapt to the breaking of guano rock. Here too, he concluded the purchase of all rights in Starbuck as arranged with the former manager. And every spare moment he spent at the hospitals watching operations. Finally, at Melbourne he chartered the quite imposing ship Lucibella and with first class moorings on board hoped that he might have solved the chief shipping difficulty.

His recent experiences at Starbuck at this time taught him that the matter of moorings outweighed every other consideration. Throughout his lengthened stay among the islands this was always his first care. The ex-city business man became one of the experts in all that affects the safe berthage of ships. And traditions of his work make clear that no matter how ill a reputation any of his islands had originally as soon as he took them well in hand shipmasters were found commenting on the improved anchorage. Before he left Starbuck even that island held a quite honourable reputation among skippers.

While in Sydney the chief subjects of conversation among Australian trading firms seem to have touched reports of various islands supposed to have guano deposits (most of these were fictitious) and the prospects for a Pacific trade in cotton and copra. The capitulation of Paris with the peace of 1871 passed as the merest side show among these business topics. ~~It was~~ In March 1871 on board the Lucibella ~~that~~ the traveller again called at Raratonga

and in spite of experience took up more recruits. On the further voyage he sighted the North New Zealand coast and landed in the Kermadecs where Curtis Rock and Macaulay Island were visited and their sulphur deposits examined. The description of Curtis Rock is reminiscent of White Island, Bay of Plenty New Zealand.

"We found it to be perfectly hollow the cliffs all round mere shells. Through the opening between the rocks a clear passage could be seen, leading to a small beach where were a lot of hot springs with big jets of steam. On landing the sulphur fumes were almost overpowering, the level/of the surface basin being full of hot springs which bubbled up liquid brownish mud, giving off clouds of vapour.

"On the north and east the cliffs had given way, but south and west they rose almost perpendicularly to a height of about 270 feet. From the top we had a splendid view. Coarse weedy grasses grew sparsely and everywhere were birds. The harbour was full of fish of a light blue colour."

At Macaulay Island the party found "goats left by Captain Cook and parrots among the fern which grows everywhere! nothing else of any importance," But they enjoyed the day. After exploring what they took to be the main crater they clambered to the top. "The whole western side of the island", so runs the entry "seems to have slid off into the sea at an angle of 40°. I fancy this must have been the largest crater of all - just split right in two, the major part toppling into the sea. Had a good view of Sunday Island six miles away. Of caterpillars, spiders, and moths there were no end, chiefly in the bushes smelling strongly of honey as the shrubs do

in Mangaia and Raratonga. Parrots here seem to burrow on the ground. Boatswain birds just on top of the cliffs."

On the 6th of May an unknown coral island was sighted.

"As seen from the deck a long low line of land appeared with the sea beating at either end. From the foreyard the whole island with its lagoon stood out clear. The reef runs N.E. and S.W. We could hear the surf breaking heavily. The entrance to the lagoon was on the eastern side, and a kind of raised beach ran round it without any foliage between it and the sea."

A few days later a call was made at Caroline Island which is at low water, actually a group of islets. The outcome of this visit and negotiations with the part owner Capt. Brown, living on the island was the final purchase in 1872 of this property from Capt. Brothers of Borabora.

24th May, 1871. "My second arrival at Starbuck - a very much pleasanter one than the first. Found the Empress and the Mary Cuming with all bunting flying, and we were welcomed very warmly by X. (the acting manager) and the staff. Found the island greatly improved. It seems as if the working need not be such a terrible hurdle after all."

A very worrying set-back however, was the discovery that C. who had been left in charge had gone off in a visiting boat to Malden island for provisions some months before and had not returned nor been heard of since. As a matter of fact he was lost for nearly two years and lived for that period with a native on an uninhabited island.

This was bad news, but another shock was preparing for the

newly returned traveller. Truly those who adventure in the Pacific Islands must have stout hearts and nerves of steel.

The next entry.

"While at chocolate next morning we heard the cry 'Big ship ashore'! We all rushed to the lookout and there was the Lucibella rolling in the breakers. Very soon she was firmly aground close to the French wreck and the heavy surf rolling made it impossible for anything to be done."

Happily this chapter of mishaps seemed to nerve the leader to new effort and the entry closes with a declaration that he intends to make of Starbuck an ultimate success. With natives, however, only immediate success appeals, and before the week was out the untoward happening had done its work. New hands as well as those of the first recruiting, insisted on a return to the more monotonously even existence of their own placidly sunny isles.

The Mary, Capt.Agnew, just arrived, was told off to return the mutineers to their homes. This necessitated another trip in search of labour. A month later the traveller set sail for Hawaii where he hoped to find a less easily discouraged race. Early in August for the first time he landed at Honolulu where he was again to form many close friendships. Labour was immediately procured and speeded off to Starbuck. At that time Hawaii still had its king and royal family which lent to some conditions in Honolulu an assumption of court happenings that most visitors found extremely diverting. In addition John Arundel met heads of firms still interested in guano, for the American phosphates had not yet been fully developed. In Honolulu too, the traveller learned more fully details

of the work at Enderbury and other islands in which these firms had interests.

By the end of August he was established at San Francisco going through the surgical course in the hospitals, studying moorings from the most skilful mooring-masters in the world and hearing for the first time rumours of the discovery and preparation of the Carolinan phosphates. Here he began to faintly realise what might be the influence on the island market of the important discoveries talked of in Ohio, South Caroolina, etc.

In connection with the unstable rulings of the guano business he then proceeded overland to New York, Thence he made his way to England which he reached on the 3rd October, 1871, after an absence of nearly twenty months.

Book I.

CHAPTER V.

The transformation of the young Londoner into the world-wanderer John Arundel afterwards became is immediately due to the breakdown in health when he was barely out of his teens. Undoubtedly his first long voyage mightily impressed him with the joys of travel. And, as he claimed, the call at the Chinchas opened up to him potentialities connected with the guano trade. But the genesis of the Pacific enterprise in which he was chief agent goes deeper than that.

Shipping magnates in the mid-nineteenth century almost subconsciously began to fear for branches of their business. The passenger department so farwas safe. The rush to the gold-fields of adventurous spirits was associated in the years of depression with an exodus of other emigrants - mechanics, professional men and farmers in a steady stream set, so far as the last were concerned, chiefly towards New Zealand.

With the outbreak of the Maori wars a period was set to this tide of emigration. That most desirable class of settler, the British yeoman farmer, driven from his home by the ravages of the great murrain had sent back reports of the colony which brought more of his class to take up the many acres awaiting settlement. For a short time the compulsory emigration became voluntary. But a re-birth of agriculture followed the research that succeeded the Napoleonic wars and Sir John Lawes, the apostle of scientific farming, by demonstrating his theories very conclusively gave a lead his neighbours were not slow to follow. By the opening of

the 'sixties new methods following new theories had quite changed the outlook for the man on the land.

It happened to be the man on the land in whom Messrs. Houlder's shipping department was primarily interested. There was at that time no tourist traffic to consider and emigrants proper, mechanics, artisans and the like were brought generally in companies by boats specially chartered for the purpose. The Houlder boats had carried farm workers as government emigrants, and their regular business was largely concerned with passengers leaving English acres for homes to be carved in the Bush. That the Bush might perhaps cease to attract was in the years of the war a menace to be feared.

Again the carrying trade once exclusively Britain's was beginning to fit itself to other centres, and the days when cotton, tobacco and the like crossed the Atlantic in only English bottoms were almost forgotten. Cargoes for over-seas ports were still comparatively certain, but before the coming of cold storage and before the wool trade had assumed its present proportions it seemed possible that in no distant future the regular and unfluctuating demand for transport of cargo from and to Australasia might cease to exist as the need for passenger space was perhaps doing.

Clear sighted and far seeing business men realized that on the development of agriculture over-seas hung not only the future of the Colonies but the prosperity of the home land. And the new agriculture born in Europe, fostered in universities at home and abroad and still only arriving in the beginning of the last half of the nineteenth century concerned itself very largely and for a period

almost exclusively with problems connected with the soil.

These problems are not new. Since agriculture first existed fertilisers to help soil production and to improve the quality of the crop have been used. These fertilisers, generally bones, fish, seaweed and farmyard manure have been known ever since the first crops were set. But it was not always realised that in all these substances the existence of phosphorus is a noteworthy factor in their usefulness. This discovery belongs to the mid-nineteenth century. In the period of agricultural research set up after Waterloo this element, existing in both organic and inorganic substances, was revealed as a potent agent in the recovery of exhausted soils as well as in the building up of the crop.

All through the centuries phosphates to play their part in agriculture have been introduced chiefly in the form of bone. And it was known that bones were more useful when crushed or burnt. It was probably as bone the ancients introduced into the soil those phosphates that can still be traced - for the element never dissipates - in the cultivated areas of Assyria, Egypt, Greece, &c., and it was in the form of bone-dust that moderns at first looked for the newly recognised element.

The most important of the soil constituents to some extent lacking in poor lands are nitrogen, potassium, phosphorus and calcium. In itself phosphorus is not the most needed of these, but it has the invaluable property of accelerating processes set up by the other elements. Of ordinary fertile soils it appears, in terms of phosphoric acid, as 0.15. Yet its presence is essential to every class of crop and it improves with the pastures all the stock grazing on

them, evidencing its presence in the wool, skin, &c. Further, phosphates do not easily drain away as ~~the~~ do other constituents used in the making of artificial manures. Calcium carbonate, for instance with exceptional powers is subject to abnormal waste; but calcium phosphate not so potent in its action cannot be washed away by either rain or flood.

Since 1840 when through the efforts of Sir John Lawes the making of artificial fertilisers became an important South of England industry, the factories for the manufacture of super-phosphates had been fed in turn with supplies of -

(a) bones - gathered haphazard from any store at home or abroad.

(b) coprolites - from Cambridgeshire, Suffolk and Bedfordshire, the only counties where these remains of extinct fauna were found in any quantity.

(c) Crystalline apatites from Canada, Norway, France and Spain and -

(d) The guano of commerce - largely from islands fringing the Central Pacific Ocean.

Peruvian guano, giving no store of phosphorus, has its own important uses, its own markets and its own and quite separate story.

The English agriculturist, Lawes, very early applied heat to aid in the making of super-phosphates in which form phosphates become soluble in soil. In the 'fifties Scheele's theory that sulphur might be an agent even more potent than heat was elaborated by Liebig into the discovery that phosphates could be most readily treated by the use of sulphuric acid. This was in the early 'sixties and the simplicity of this process seemed to promise a re-birth of a great British industry if only supplies were assured.

In the 'fifties American firms were largely interested in guano and merchants in San Francisco as well as in New York were sending out prospecting expeditions in 1855 when the first samples of guano were taken from Jarvis' and Baker's Island. "The importance and values of guanos having once become evident" says a writer in the American Journal of Science in 1862 "the Pacific within a few degrees north and south of the Equator was carefully explored and many other islands were visited, on a few of which beds of guano of some extent were discovered."

So it would seem as if in England progressive shipping firms of the 'sixties must have been interested in those Central Pacific islands where stores of guano were being analysed by world-famed savants. The impressions of the first voyage probably lent weight to the opinions of the young official; but it seemed certain that so enterprising a firm as that of Messrs. Houlder Bros. knew quite as much of the lack of the element which was needed to revive the languishing South of England industry (with a product of large importance to the carrying trade) as did scientific agriculturists themselves. John Arundel's enthusiasm made his share of the enterprise more material than it might have been if the agent selected had been less esteemed. But John Arundel's influence alone did not either launch the enterprise nor persuade his firm to finance it. The guano trade was evidently an issue that commended itself to the consideration of such far-sighted business men as were Messrs. Alfred Houlder and Ernest Cayforth, the members of the firm who were most keenly interested in the venture.

One voyage does not reveal the Pacific. Indeed no single traveller could claim to know intimately the whole of that huge water world. But certain parts of the great sea become the itinerary of one traveller rather than another and from the beginning John Arundel found himself chiefly set to learn the mysteries of the Central Pacific. The first deposit he worked was on an outlier of the Phoenix Islands; and with that characteristic group of the Central Pacific, for some years his work was largely concerned.

The Central Pacific lies between the tropics the width of the torrid zone. Roughly it stretches from the 120th meridian E. longitude to the coast of the Americas. But its distinctive character as a huge archipelago for the islands of Oceania would make its opposite boundary the 130th meridian W. of Greenwich. Within these limits repose the sunny islands of Melanesia, Micro-nesia and Polynesia with, in the south that part of Australasia which lies parallel with the great barrier reef. On the north off Asia it embraces the Philippines and Ladrones. Within these boundaries of what might be called the Coral Zone lie most of the guano islets of the world.

The low coral islands of Oceania with reefs built (perhaps) on summits of submerged continents round their enclosed lagoons, sufficiently resemble the coral islands of the Indian Ocean for the term "atoll" to be applied to them. But not all coral islands are "atolls". Since these Pacific islands are low and based on coral reefs enclosing a small circular sea the term "lagoon island" is more aptly descriptive. The atoll of the Maldive Islands in the Indian Ocean is crowned by waving palm trees. The Pacific Lagoon

Island is often bare of vegetation.

That form of coral island that has been worked out or it still in existence as a guano island belongs to a belt extending roughly for 20° south of the Equator across the Central Pacific. North of this, close to the Equator but south of the Line are the now well known Ocean and Nauru Islands - raised coral islets with the elevation to the centre that might proclaim a volcanic origin though no trace of this is actually found. A little further south, but in the Indian Ocean Christmas Island is of the same formation. These three islands together form the only adequate source of phosphates for the British Empire. But rock phosphates are not the phosphate guano first worked in Pacific Islands. This guano of nineteenth century commerce produced by the congregating of marine birds on coral reefs that were constantly submerged was worked in the Phoenix group, on Jarvis, Malden, &c., probably a decade before the voyage of the Golden Horn. So were deposits on Fanning and the islands of guano formation north of the Equator - of which there are not many. And throughout the Coral Sea - the area of which Flinders gives as 1000 miles by 600 - there are many coral reefs and banks from which guano sand was taken as well as from islands in the Torres Straits.

That most of these rocks where guano sand exists were until recently uninhabited is certain. When it is considered that the forming of phosphate guano depends on the <u>frequent submerging of the coral reef</u> under the sea and the presence in countless numbers <u>of birds</u>, the fact admits of no debate. Inhabited islands would never have been the haunt of sea birds. Danvers Power stresses the fact

that on a lagoon island these would necessarily live exclusively on fish, since the islets were bare of all vegetation. This may account for the presence of phosphates in Pacific guano and their absence in the deposits off the Peruvian and Chilean coasts, which are rich in nitrates.

According to this authority as the islands have been submerged "the precipitates of insoluble from soluble phosphates and the gradual extraction of calcium carbonate by solution may account for the displacement of coral rock by phosphates."

John Arundel notes more than once that the cries of the sea birds are one of the signals that the voyager is approaching a guano island. This especially refers to Starbuck and the four islands of the Phoenix group. He also speaks of the two classes of islet, "the one very scantily supplied with or totally devoid of vegetation and not an atoll, because it does not enclose a lagoon, and the other an atoll proper covered with vegetation and encircling a lagoon, either enclosed from the sea by a tide-washed reef or with one or more passages leading into it."

Stevenson also speaks of atolls with vegetation and the bare rocks without in terms somewhat unflattering to the latter.

Of "solid" islands without a lagoon Arundel cites Malden, the headquarters, when he was working Starbuck, of a flourishing Guano Company - one of the most interesting of islands in every way - and Jarvis, Baker and Howland Islands. Atolls proper, which he worked are Sydney, Hull and Gardner, Fanning, Washington, Palmyra and Christmas (Pacific). Most of the Paumotus too are atolls and so are the Caroline, Gilbert and Marshall islands. And in the Indian Ocean he cites the

Maldive, Laccadive and Chagos groups as reminding him of his beloved Pacific atolls both in formation and vegetation. "It was delightful to find trees and shrubs I have been familiar with on Pacific islands growing here in profusion" he writes of Diego Garcia, the southernmost of the Chagos Archipelago, when he visited that group in 1882.

In the American Journal of Science and Art September 1862 was an article written by J. D. Hague who from 1859 to 1861 was engaged in studying deposits of guano on Baker's, Howland's and Jarvis' island. His description of these islands (afterwards worked out and planted in cocoanut trees by the J. T. Arundel company) shows that at that date American business men knew almost as much of their subject as the experts of to-day. Liebig's analysis of Baker and Jarvis guanos appeared earlier in 1860. Howland, one of these, was among the last worked in the Central Pacific by the J. T. Arundel Co.

It is interesting to find Mr. Hague speaking of Starbuck island as "Starve or Hero Island", both of which names seem extremely appropriate. He decided that it contained a large deposit of gypsum with about 12% of phosphate of lime and he adds "so far as my observation extends all elevated lagoons have similar deposits of gypsum." He further considers that "as regards the distribution of these phosphatic guano deposits I believe them in this part of the Pacific to be confined to latitudes very near the Equator where rain is comparatively a rare occurrence." He was probably right, but it is strange how incessent rain can prevail over certain of these islands, notably Fanning.

Another interesting conclusion of Mr. Hague's is that in latitudes more remote than 4° or 5° from the Equator heavy rains are

frequent and this circumstance is not only directly unfavourable to the formation of guano deposits but it encourages vegetation, "which," he points out, in this conclusion anticipating Mr. Power, "is quite fatal to the accumulation of guano deposits."

Copy a.

Book II.
The Enterprise

CHAPTER I.

~~The Enterprise.~~

After a stay of barely seven weeks in England the voyager left again for America on the 9th November 1871.

This briefest of visits to the Homeland still allowed for a lightning trip to the continent to interview firms in Antwerp, Hamburg, Berlin and Paris interested in guano. The traveller learned of a hopeful market in Flanders and of possible ones in China. In Antwerp according to the directory six big houses were concerned with Pacific guano, so there was no opening for Starbuck ~~quotations~~ quotations, but definite offers were received for pearl-shell. At that time the value of the South Carolinan deposit only just opened, was not remotely realised on either side of the Atlantic.

On his return crossing America in twelve days he saw for the first time Hamilton, Niagara, Detroit and Chicago; Boston he had visited on the eastward run. Near Wyoming station cattle congregated in the centre of the rails to shelter from the immense fall of snow caused an accident to the engine which held the train for some days in the very heart of country with deposits that were to make their mark on Pacific trade. However, again the traveller did not realise this.

On December 9th came the news of Bishop Patterson's death at the islands he loved so well. With the grief felt by all who realise the work that high-minded missionary was doing in the South Seas, came

the fear of possible mistakes in dealing with the outrage which would add to the difficulties of those merchants who were striving to establish the tenets of just dealing among ~~the~~ Island traders.

Two days sped at San Francisco; and at Honolulu a little longer stay was made to arrange for boats running from Fanning Island (then being worked for guano in a small way) to call at Starbuck. The holiday season held up work but Christmas day was spent very pleasantly, and the traveller notes in his diary his impression of the Nebraska (one of the new twin-paddle steamers) entering the harbour after its ~~trip~~ voyage in the Pacific.

The Nebraska and Nevada had been seen in Australian waters on their first trip not two years before. They were quite the ugliest vessels afloat. To see one of these great paddle-steamers rounding the North Head at Auckland or floundering past the lovely bays of Port Jackson, ~~after watching~~ with the memory of the regular mail-packet with all sails set making her splendid way into those harbours, came in the nature of a shock, - and as such the entry of this Caliban among the craft in the harbour of Honolulu was noted in the diary.

No one but artists, not even the watcher on the shore would wish to have back those sailing ships with their spreading canvas. But how beautiful they were!

At Honolulu the barque Ingertha from the Amur River was looking for a fare to pay her expenses. She had been bound for Baker Island but, too late to complete her contract, was free. Just after signing for Starbuck the Norwegian captain engaged himself to go to Howland Island - "a run" he explained "that pleased him better." This was of course a case for immediate settlement, and the breaker of contracts

speedily found himself under arrest. The case went overwhelmingly against him but the whole matter was settled very amicably; and finally the pleasantest of relations ruled between the charterer of the boat and his skipper for the period in which they were associated.

It was perhaps a fortunate happening. John Arundel's dealings with his employees up to this time had been so humane that he may perhaps have been mistaken for one who would always give way. Certainly his whole career shows that he preferred persuasion to force, but on occasion it was well that it should be seen that the hand in the velvet glove could be a firm one.

He was a man of rapid decisions and very long vision, with immense powers of organisation. His handling of deposits that had been worked before must have come as a revelation to any member of the old staffs who signed on with him. For instance, Starbuck for the company which was in possession on his arrival, was leisurely making way with a staff of seven natives and a manager. Boats were touching the island at irregular and extremely wide intervals; and no system of laying moorings was even under consideration.

Barely thirteen months after his first brief appearance at Starbuck he was on his way back again. Within that period, he had made a second stay on the island of some weeks after visiting New Zealand, Australia and Raratonga twice. He had done business in all these places and had crossed the American Continent to headquarters in England. And when he was not travelling he had settled the question of markets and moorings, of drying guano; had planted on Starbuck a coloured staff of generally over sixty men; had sent a resident doctor to

the Island during his absence; had arranged a regular mail-service from boats passing to Fanning; and he had succeeded in chartering a succession of vessels to take cargoes regularly from what everyone has acknowledged to be one of the most difficult islands in all the Pacific for navigation.

The Ingertha, with mooring gear as well as her temporary owner on board, with forty-nine Hawaiian natives and three more members for the white staff proceeded to Starbuck just after the New Year. The voyage lasted a month, although it is possible to cover the trip from Honolulu in a much shorter time.

Ships, like men, seem to be the sport of destiny - some from their trial trip drop into lined-out routes and follow an even, not to say humdrum course, as long as they are afloat. Others, from the day they are launched are able to crowd experience on incident.

The Ingertha was one of these. She had come from Kronstadt to the Amur River. Four days out from Castries Bay (Amur River) she put into Imperatoski (port on Gulf of Tartary) for more ballast. As she passed Kakodadi Russian war vessels were at anchor there. Then, too late to carry out her contract for Baker Island, she made for Honolulu - and so back to Starbuck - a run as little monotonous as it well could be. She was seeing life, in short. That this is not always the fortune that befalls craft engaged in the guano trade many a skipper can tell.

Always difficult of approach, on this trip Starbuck was found to be extremely elusive. In all her long run from Kronstadt the Ingertha had adapted herself to wind and tide, but the ocean currents - those

currents that washed Starbuck's coral strands, were quite another matter.

The Line was crossed on the 22nd January, 1872: the island was close at hand on Jan. 25th. After a voyage out from Honolulu of over three weeks, on the 26th, the barque was borne by wind and current to the south of her goal. Extracts from the diary give a week that would have tried the patience of any traveller - even one not bent on pressing business.

"January 21st 1872." No improvement. Course has been E. by S. - E.S.E. - then E.b.S. Early this morning some smart squalls did not alter the wind. We are windward by eastward of the island now, so all ready if we get a chance."

Later. "A heavy roll and west wind to contend with."

Later. "Packing for shore - the last for some time - with a feeling of relief too. Rest even at Starbuck after forty months of incessant travelling is not to be despised..... Certainly a pleasant voyage on the whole."

This conclusion is a high tribute to the Norwegian barque and her skipper. Packed with Hawaiian labour and her deck space claimed by these for drill, etc., she cannot have reserved much of herself for the cabin passenger. But the whole company were in very good spirits indeed on that last day of January 1872. It was four days later. however, before the island - nine miles away - was sighted again, four points on the starboard bow. Signals from shore gave warning that some trouble was awaiting settlement. A further signal located mutiny among the staff. This the traveller quite light-heartedly hastened

to meet - rowing ashore in his own whale-boat and "fetching up", as he tells with some pride "in fine style."

In the days of his triumphs the personage John Arundel became spoke little of Starbuck which no one ever recognised among his successes. But the diaries make of this first enterprise a high adventure - far surpassing in every way any of those of his later years. He was so extraordinarily patient under the series of blows that met him (for the first time in his life) on that inhospitable rock; he was so keenly intent on his work, so full of resource, of concern for his fellows; so hopeful and high-minded and at times so simple that he suggests a knight of romance rather than a mid-Victorian Englishman intent on making his fortune.

His feeling for this island of his dreams, as it almost seems to have become, was mixed. In the initial stages of the enterprise, like Sancho Panza, he was naively pleased with his prospects of governing an island. Then, when it revealed itself the wreck-strewn waste it was, it might have been an Ulysses armed by Minerva to withstand misfortune, who carried out all his far-seeing aims. And now settling down to life in this anything but enchanted isle, he becomes almost Shakespearean in the spirit in which he attends the moods of what may be regarded as some erratic mistress. When he writes "I can't help liking this island with all the ill-fortune it brings me", he suggests a Petruchio speaking in derision.

"Say that she frown,
I'll own that she prevail".

But John Arundel never spoke in derision, and endowed with many gifts he yet lacked but never actually missed a fine sense of humour.

Book II.

CHAPTER II.

The embryo mutiny was easily handled. A white storeman transferred from his position to one he was better suited for, was the cause of the trouble. For a few days by intimidating the natives, he had been able to hold up work, but the arrival of the Ingertha with Hawaiian labour, changed the situation at the quarters, while press reports of the lawsuit in Honolulu and the respect in which his employer was evidently held by the Norwegian captain speedily brought the ringleader to his senses. The incident would have been more serious if John Arundel had been the weakling his extraordinary kindness had led some of his employees to believe. Three companies of disillusioned islanders had been returned to their homes without protest. This was perhaps misunderstood by the white staff, rather than by the natives themselves. It was felt that so lenient a master would always yield to pressure if grievances were loudly enough proclaimed. In the future there was no trouble of this kind.

But the natives kindness had not been misunderstood. Starbuck and its stark conditions, quite accounted for the earlier troubles. Aneru's sympathy gave him an insight into the working of the childish minds of his coloured labour, ~~which~~ and this probably helped as much as any of his gifts in the maintaining of the fine relations which for the next thirty years ruled on his islands.

"The men don't seem to be working quite so readily as they did but seeing the heavy conditions this is not to be wondered at."

"The day's shipment passed off well. No accident of any kind". - this was on Starbuck where canoes, cargoes, buoys and anchors were constantly in trouble. "Everyone in a high state of good humour. I knocked the boys off early, they fully understanding that while we are shipping this will not happen, but that when a boat is finished there will be a day's holiday and easier hours."

"Toba has come in to show me the men's allowance of poi - a good 2½ lbs. I certainly should not care to eat a quarter of it. But I fancy some of the men must get more than their share. They do not grumble if there is not something wrong." It was found that favourites at the cookhouse were getting a large allowance, the less popular coming off with the bare ration.

Some insight into the strenuous work is given in the earlier extracts of 1872.

"March 5th." Very heavy surf and low water which makes it worse - A hard morning spent principally on the reef where we have been soused three times. At 4.30 p.m. heavy rain made work impossible, but up to that time the men worked well under great difficulties. One canoe was completely capsized this afternoon but they swam with it to the buoy and there righted it splendidly. Of course the guano was lost, but the canoe was uninjured."

"March 23rd. 9 a.m." We filled two boats before breakfast - men in excellent spirits."

2 p.m." Have got off three boats since breakfast. Now we are doing bravely. The crushing gang knocked off at noon. Screening about finished now. Trollying gang rested before lunch, so are at work still."

"8 p.m. Have got off three more boats this afternoon. Now all gangs knocked off, but Capt. C. is going to work his crew till midnight with steam-winch to discharge ballast."

The gangs leave off at the expiry of their working day, but apparently the chief is on duty from before breakfast till 8 p.m.

"March 28th. Have loaded two boats and put the surf-line buoy right which got adrift in the night. Yesterday had a sharp attack of fever which made the work only 39 ton - very small. However, am better this morning. Drastic treatment helped a quick recovery."

Finally splendid conditions rule on the island with mutual goodwill between employer and staff and very high efficiency began to be felt all round. The doctor's health forced him to take a trip to Malden; then another one to Tahiti. After some months of illness and cruises in search of health he was finally compelled to return to San Francisco and through this time and until the arrival of his successor all patients were treated at 'Government House'. At the same time the bookkeeper's leave was due, so with the duties of both these absentees and his own work on the field and at the ship's side it is little wonder that the Chief himself went down. An attack of fever made an invalid of him for some weeks, putting a period to all heavy reef work, though he soon resumed that of supervision.

During the actual illness the natives much distressed, worked if possible more energetically than ever - immensely pleasing the object of their solicitude who was even more heartened by a pastoral visit from the native missionary. The invalid could not talk Hawaiian - his spiritual adviser did not know a word of English, but doubtless

the two Christians prayed together to their mutual profit. A large simplicity in both and a dignity which in the brown man was as marked as in this member of his flock, made the friendship as pleasant as it was inarticulate.

The 24th April was a great day at Starbuck for on that morning before breakfast Captain B. successfully laid the moorings - to be afterwards reported by visiting captains as "the best in the islands". And later on in the holiday, as it was proclaimed, while digging about a newly discovered water-hole the explorers struck the best guano rock yet discovered on Starbuck.

The following entries speak for themselves:

"May 16th 1872. (Monday 10 a.m.) "Surf gone down wonderfully and we are shipping well. Got boats off by 9 o'clock. Three trolly loads ready now".

"The docter still very ill as he was all day yesterday."

"After the usual services yesterday had Toba and Kaila up and did a little practising with them. Toba is learning the Old Hundredth. Am lending him the music book, which he has learned to read".

"1.45. p.m. Have got off four boats. By loading at the surf-line-buoy we get on much faster."

"7.30 p.m. Good day's work. Did not get home to dinner till 6.45 as on my way Pohena asked me to go down to the men's quarters. He was having trouble with those leaving by next boat. Wish one would turn up. The poi is getting short."

The poi shortage amongst natives is rather worse than a potato shortage among Irish workers. The ground root of an island plant,

it is made into a sticky sort of porridge, which the islanders find extremely palateable. The men on Starbuck would accept nothing in its place. The discovery that a whole tank of flour was unfit for use was also disturbing, so by the next ship leaving with guano Capt. B. went as far as Tahiti for provisions. The doctor went too.

Between the doctor's patients and the dispensing of trade in the absence of the storeman there was not much leisure for the single occupant of "Government House". When he was not on the reef with his men he was exploring new beds or analysing samples. And when work went well, at odd moments he taught the natives to sing hymns and Toba and his mate to play them. At one time when a poi shortage was heralded by ~~the~~ continued grumbling at the native quarters, a spell of "weather" got on the nerves of the only two members of the white staff left on the island. The resultant situation brought an entry in a vein not often indulged in.

"My little cats are the most cheerful company on the island. B. and G. are so downhearted at no ship coming that they can talk only when they are quarrelling between themselves. I begin to feel anxious, for I cannot account for the very long delay. Our poi will be out in three days - but the boys seem to take to the prospect of Starbuck Island poi which we are trying to make, so we may get through all right."

However, next day the arrival of a boat relieved the situation. Natives delighted; stores, mails, poi - all that was looked for; but news from home told of illness in his family, and experience was showing that Starbuck, success as it was, was only paying its way and that very soon it would be worked out. It was actually in '68 that

the young Londoner had set out to make his fortune, although the enterprise is always dated from his third voyage in 1870. Nearly four years later fortune is as far away as ever. The undertaking well under way now, showed that islands worked as Starbuck was, would never return big profits. The occupant of Government House would have been quite as well off if he had stayed at home working in his office, helping in the Ragged Schools at Gravesend, and banking his savings. Other islands to be opened, if the interests of the employees were to be considered would have the same big initial expenses and possibly no bigger returns.

Probably a letter received at this time from his friend in New Zealand, Bishop Suter, inviting him to go into training for the church had some weight in the deliberations of those days. But it was impossible to abandon the guano enterprise at this stage of its development. An entry made without comment expresses the uncertainty that very seldom dogged this man of constant mood, who in these years of his prime rarely showed vacillation in either plan or performance.

"So I go on not knowing,
I would not if I might
I would rather walk in the dark with God
Than walk alone by sight
I would rather walk with Him by faith
Than walk alone by sight".
(From Watcher & Reflector)

A missive from the men under date June 7th is amusing.

"Mr. Arundel,
Dear Sir,

If we have found favour is thy sight and if it pleaseth to perform our request to give to us one more bag of Irish potatoes because we are fond of that kind of vegetable. We do not know this letter is all right in English for we cannot express ourselves well

in English.

Your obedient fifty nine servants,
Etc."

In July arrived the brig "Wahine" with visitors - Capt. & Mrs. Brown and their children, returning the call made on them some months before at Carolines Island. A horse for riding was also welcome. From this time work takes a regular form the entries running as - "For tomorrow - 6 screening in guano bed
4 raking " "
6 picking " "
1 surveying " "
38 heaping guano.

And the next day's comment "Work done as arranged".

Such an entry as "Home from my ride in glorious moonlight" shows there was now no longer overwork. Pigs, fowls, pigeons, young kids, were now part of the stock on Starbuck and the next grumbling in the native quarters was soon brought to an end, and followed by this effusion:

31st August 1872.
Mr. J. T. Arundel

Dear Sir,

I have to speak to you for this time because I have found fault. I repent now and am sorry too. I open my ears to the bad. If you please give me a forgiveness.

Your obedient servant"

Grumbling among the Polynesians is a safety valve. The native is either in hilarious spirits or else in the depths of woe. The one mood expresses itself in delighted squeals, in gesticulation, in smiles and gleaming teeth; the other in the longest of long faces, in

a
the lagging gait and incessant grumbling. The first makes work a game - the other clogs it hopelessly. But actually there is little real resentment. In this respect the dusky labourer is not unlike the British workman. Though when the brown man is silent he may be dangerous.

A further testimony to the change worked in the first seven months is given in an entry of the 12th September.

"The schooner Daisy loaded in ten days. Left to-day. All much pleased with the island". And the Hawaiian Gazette in its shipping contents of August gives further kudos to Starbuck.

> "Capt. Weekes of the Lunalilo reports the Norwegian barque Ingvartha and the British clipper ship,Golden Horn from Melbourne, had excellent dispatch, loading at Starbuck for England".

On the authority of Capt. Weekes the same paper states -

> "The anchorage is situated on the ~~N.W.~~ north west of the island and is easy of approach. There are two large mooring buoys with heavy anchors attached to each, capable of holding vessels of any size, ships of 1313 and 1275 tons having been loaded here in the last half year."

Improved moorings speeded up the work wonderfully. The George Thompson loaded in nine days, the Isabella in eleven without any pressure whatever. Work generally is commented on as "Good".

Another communication from the quarters heralds the approach of Christmastide.

"Starbuck Island, November 27th 1872.

Dear Sir,

And the Hawaiians mem'ring (remembering) Day was nigh at hand" (presumably Christmas Day) "with good will doing service. Now we exhort of you if we have found favour in your sight

Please give to us 7 little big (pig) for our remember to

the Fatherland.

That is all,

Your 67 obedient servants."

Early December brought the schooner Fitluko and close after the France Cherie - both from Tahiti. The schooner was sent on to Caroline with mails and the France Cherie was not dispatched till the 27th. So it was not till then that the sixty-seven obedient servants enjoyed their day.

This Christmas of 1872 was distinctly a festival and on the first day of 1873 the entry acknowledges better prospects brought about by what must be considered a successful twelvemonths.

The years had quelled all inclination to a mutiny; had brought method into the work and had given first-class anchorage to visiting ships. In the twelve months Messrs. Houlders, through their attorney, had almost concluded negotiations for the purchase of Caroline and other islands and guano depends on distant atolls as well as from every part of Starbuck. Every bed had been explored and every hummock thoroughly examined. Single-handed the Chief had put down more than one incipient unpleasantness, although in the first case he found he had been followed quietly to the quarters by his white staff and in the other by a dozen or more worried native workers - to see he was not in danger. He had, in short, as he had promised, made of Starbuck a success. It is characteristic of the man that such disappointments and worries as came in connection with the white staff are never told. Occasionally they crop up in letters and more than once mention is made of them in cuttings from American papers with a comment in J.T.A's handwriting - "Incorrect - poor fellow".

Such incidents were few. In thirty years of close association with a larger or smaller white staff, disappointments of this kind do not number half a dozen, while the regard evidenced for his foremen and managers was only equalled by the loyal attachment returned by them. In his camps for the next quarter of a century certain lieutenants are held in particularly high esteem and at Starbuck the earlier of these staunch henchmen are mentioned very often. One of the first of these is Stephen Gale, one of the brothers Gale, whose loyalty to his chief and initiative in dealing with difficult situations, whether with work or men, made association with him, one of the pleasures of island life. Other officers of the same calibre coming into work in Starbuck and Caroline were notably Messrs. Thompson and Flockton. But all the white officials were valued friends.

Together with the riding horse, pigs and goats, chickens and domestic pets, Starbuck had other denizens which must have been mightily amazed by the changed appearance of the island with its hundred inhabitants (counting visitors) its quarters for the men and its berthage, where ships rode easily instead of strewing the shore with wrecks. These were the myriads of birds that in some cases periodically, in others permanently, made the island their headquarters.

"My first night ashore" J.T.A. writes in a letter of those days "was not a restful one for I could not sleep on account of the noise the birds kept up. A small tern, the wideawake, has a tremendous voice. The name, so the sailors say, is taken from the cry which sounds like "Wideawake, Wideawake", but it gives a good description of the bird as well as of the state of any listener within reach of the piercing notes. It seems to be most wideawake.

at night, but in the daytime it makes itself heard very well indeed."

Wideawakes visit uninhabited islands twice a year to lay their eggs. They are among the most gregarious of birds, for they not only live together, but seem to lay together at the same hour every day for three weeks. - There are no nests, the egg is deposited on the ground and the parent bird sits on it. It is speckled and about an inch long and makes uncommonly good eating.

"The noise made by the wideawakes" runs another entry, "on my first trip into the island was deafening. They were laying in a company that covered the western end where we were looking for water. As our path lay right through them, they were very much disturbed, rising in hundreds and swooping round and down on us. This tern is about the size of a dove, so its anger does not do much harm, but it is very brave, and as its power of expression is as great as its courage it was impossible to speak or to be heard until we were clear of the encampment".

Further up the island other birds had their quarters, never trespassing on the domains of the others - man o war hawks, or pirate birds, gannets and bo'sun or tropic birds living in separate districts. The man-o-war hawk manages to closely neighbour the gannet or booby, - but each lives peaceably enough in his separate camping-ground so long as he is ashore.

On the wing however, the man-o-war hawk is the most persistent of pirates. He is quite a good fisher if need drives him to work, but he prefers to prey on his neighbour for food. The booby is among the most virtuous of feathered folk. Like the human fisher his

day cannot be too long. Out at sea with the morning sun, he spends the hours swooping down on fish deep in the water, and the coming of sunset finds him returning to his family literally laden with spoil.

The man-o-war hawks have spent their day leisurely sailing in the air high above the fishes, but as evening falls they gather in regular patrols waiting for the boobies to come home. Then, in couples, they intercept a single bird, swooping down on him with harsh cries, pecking him and making it impossible to fly. The booby cries too, plunges round or darts hither and thither, but always the struggle ends in his disgorging part of his well earned meal while his enemy darts down and catches the fish before it reaches the water.

"It is curious" so runs another entry "that the booby does not fly away when humans approach its nest. It utters harsh cries and pecks at the intruders with its long sharp beak, but it soon disgorges evidently taking the enemy for some form of man-o-war hawk parading the land."

Among island birds Darwin in his Journal of Researches referring to the birds on Keeling Island: says: "The gannets sitting on their rude nests gaze on one with a stupid yet angry air. The noddies as their name expresses are silly little creatures. But there is one charming bird; it is a small snow-white tern, which smoothly hovers at the distance of a few feet above one's head, its large black eyes scanning with quiet curiosity your expression. Little imagination is required to fancy that so light and delicate a body must be tenanted by some wandering fairy spirit."

A writer in the Century Magazine mentions the same white bird. "Almost every visitor who saw these birds", says this authority "was

impressed by their remarkable beauty and curious behaviour.

"Even sailors who came ashore for a Sunday's liberty, rough fellows whose path across the island could too often be traced by the dead bodies of booby-birds, wantonly slain, were impressed by them.

"What kind of bird is that little white one over there to windward?" one of these men asked, returning from his tramp.

"Don't know any special name for it. Why?"

"Danged if I don't believe it's a spirit of some kind," he replied.

In the account of a voyage in the 'thirties F.D.Bennett notes a white bird that lays its eggs for safety on the forked branches of trees. He expresses his surprise that the wind does not blow them away but Louis Becke comments that any South Sea Islander could show him that a glutinous substance covers the egg which consequently firmly adheres to its niche.

The natives live on excellent terms with the feathered denizens of the islands which are extremely tame and can be trained to act as decoys in fishing. White men generally find them a source of amusement. But the birds ~~of these islands~~ must not be viewed only as the incurious visitor sees them. They are the descendants of the countless numbers of marine birds which watched the building of the atolls. These saw the first coral reef rising above the waves. They waited while their rocky homes were submerged again and again. They were agents in the forming of those deposits that brought the human biped with all his strange appurtenances to the conquest of the islands and the destruction of stores of sand and rock It would seem that in their keeping and in their keeping alone are all those secrets and unsolved riddles of the great ocean.

What sights have they seen out in the watery solitude! What dawns have wakened them in days of ocean stress! What winds have driven them out to sea: What storms have they not been swept before! What swelling seas!

Out in that wide Pacific there is no peaceful home even for the birds. Upheavals and subsidences have followed each other for centuries and

when they cease there are still the equatorial tides to carry all before them.

At certain seasons generally between October and March there are periods lasting several days when very high seas sweep the reefs.

"Then," says J.T.Hague," the sea rolling in from the vast expanse of ocean moves in long swelling billows with smooth, almost unruffled surface, until they break on the outer shore, gathering in overwhelming masses like uplifted walls of water, often higher than the highest point on the island. These fall precipitously upon the reef with a body and violence which threaten with destruction everything in their way."

At such periods the sea ~~is~~ must be superb. Waves mountain-high break on the reef, while outside the whole ocean seems to have gathered in the advancing mass of water.

"I have seen from the shore", says Hague", a whale-boat twenty eight feet long caught in the surf and lifted endwise like a chip, the whole length projected vertically against the face of the wall of white foam. Wave after wave comes pouring in..... sweeping across the reef with combing, curling, wind-blown crests, washing the beach to its summit and then receding, moving before it with noisy attrition a shifting mass of pebbles, sand and fragments of coral."

It is needless to say that at such a season a period is generally put to the shipping of cargo on the islands. One such surf tries any system of moorings, and it is only by a mishap that ~~regular~~ chartered or visiting craft are caught among the atolls at the periods when regular storms are sweeping them.

Unfortunately there are years sometimes in succession when Pacific storms are not regular and when it is as difficult for charterers of island boats to decide as to the date when these high seas may be expected, as it is to judge of the period of their duration.

Book II.

CHAPTER III.

If moderns should judge of achievements as the ancients did, then within the next ten years, John Arundel made the triumphs of his life. Unfortunately, to-day, success is estimated largely by the balance sheet - a measuring rod which treats only of profit and loss. Under this Ulysses with his battered harness makes a poor figure - his years of wandering merely wasted time. And it is doubtful whether any gain could have outweighed the loss of his thirteen stout ships if Aeneas has sought his princess at the hands of a modern father. Indeed none of the Argonauts finally had much to show of actual profit, and judged by the standards of to-day, some of them would have been written bankrupt. However, that they had done what they set out to do brought them the acclaim of the gods.

To-day a life of enterprise, no matter how strenuous, that can show no more than this, is judged by the looker-on as wasted effort. But by the ancient measures John Arundel's claim to his laurels, centres in the Starbuck sailings of 1872 quoted in the Shipping Intelligence of most Pacific ports and some European ones; in the successful completion of workings on far distant islands that had been abandoned by other enterprises, and in his own life, as it was led after many years of voyaging in southern archipelagoes - that glamour-haunted world so fatal to many good men and brave ones. However, neither the 'seventies nor 'eighties brought monetary success and so according to present day standards they were years of effort

certainly but not to be remembered with those of his later life crowned with success.

The entries in the later diaries, however, are not nearly so interesting as the tale of the 'seventies, when, as one task after another was completed, a greater labour took its place. But like the ancients he carried through all he had undertaken - at what cost to himself only the years in their passing were to reveal.

By January 1873 work on Starbuck was so organised that it was no longer necessary to employ a big staff there. The supply of guano was working out and orders due months ahead must be disposed of from other stores. Negotiations for Caroline Island entered into with Capt. Brown, were at the stage when documents must be signed by principals. In February the contract under which most of the southern labour had been engaged, expired, and it was decided to take these as far as Tahiti whence the Raratongans could be transhipped to their own islands the Chief meanwhile visiting Borabora to conclude the purchase of Caroline from Capt. Brothers.

On March 4th Starbuck was left in the charge of Mr. Thompson with only men enough to keep the work in hand. The main body of labour recruited at Tahiti in 1871 by Capt. Brown took up their quarters on the brig; some Hawaiians were landed at Caroline under Mr. Flockton and after twenty hours spent here in determining the site for buildings, the direction of the tramway, the position of moorings, etc., etc., John Arundel set off again on a somewhat tedious run south. A boat crowded with returning island labour is not one to promise a pleasure trip.

The voyage, however, was not so trying as it might have been, seeing that the equinox followed the southern solstice. But it was

with relief doubtless, some ten days later the entry is made "Land in sight at last."

14th March 10 p.m. Off Tahiti:

"The island this morning had a splendid appearance looming out of the clouds - at a distance of about 45 miles. The day has been wonderful, and these nights (full moon yesterday) make these islands surpassingly lovely."

The wind carried the brig down to Tetiaroa (noted as being "not unlike Caroline but lower") and it was nearly twenty hours later before a landing was made at Papeete.

Although the diary does not say so it seems certain that Tahiti had been visited in one of the voyages of the 'sixties. Families here are already personal friends, and the voyager is surprised that no notice is taken of a houseflag which "B. will certainly recognise." He knows his way about Papeete, and is disappointed to find that his friends are away for the summer, though this explains the neglect of any notice of the houseflag. And though all through his life he held these islands the loveliest in the South Seas, there is nothing in the diary of March 1873 that expresses the wonder and delight felt by every visitor on his first view of "the Paradise of the Pacific."

Every writer who has visited them extols the Society Islands. Capt. Cook thought of Otaheite that "scarcely a spot in the universe affords a more luxuriant prospect." According to the latest guide-books Tahiti has a circumference of from 110 to 130 miles. It is formed by two high and distinct mountains connected by an isthmus. It is covered with vegetation and is as picturesque as it is fertile.

According to the older authority

"The hills are high, steep and craggy, but covered to the very summit with trees and shrubs in such a manner that the spectator can scarcely help thinking the very rocks possess the property of producing and supporting their verdant covering. The flat land ..... and the interjacent valleys teem with various productions which grow with a most exuberant vigour and fill the mind of the beholder with the conviction that no place on earth can outdo this in the strength and beauty of its vegetation."

So writes Capt. Cook in the style he affected, and indeed most people abandon restraint when they elect to describe Tahiti, its soft sunshine, its fragrance, which, according to Domett "Steeped the noon," and its exquisite contours and colouring.

The stay here was very short. The absence of the Brandrés was much regretted and there is difficulty in keeping the returning islanders sober in this most hospitable of havens. The men for Raratonga are transhipped, the Tahitians return to their homes, and new labour is taken on board without delay. And within a week the brig is on her way to Borabora.

The Leeward Islands Huahine, Raiatea and Borobora are extremely prosperous with a population to-day numbering some 6,000. With its fine harbours it is quite probable that this group in the future may rival the Windward Islands. But the diary tells little of any of the trees. Indeed after this first visit not many calls are made and very little business is done in this group, which, however, with its climate and fertility, becomes yearly better known

by the world outside. The islands are high and wooded and Bora-bora's harbour and noble cone 2380 feet in height make it worthy of remembrance.

Here the purchase of Caroline was concluded and valuable information as to other islands acquired, and with all necessary documents and some new charts on board, after the shortest possible halt the voyager set sail again, reaching Caroline early in April.

Mr. Flockton in charge here, took over the new recruits and in less than a week the entries in the diary enumerate the charts samples and documents selected to pack for a longer voyage. There is a little suppressed home-sickness hidden in the brief entry-

"9th April. On board the brig en route for Honolulu and - please God - for Home."

The many lightning trips made in this and succeeding years would have given matter to Jules Verne whose tales at this time were just coming into vogue. To-day a cinema presentment of John Arundel's cruises in the Pacific on ocean craft of the 'seventies, in conditions that then ruled would make a most instructive film, full of movement and colour. Even on the less frequented South Sea Islands the twentieth century sweeps away primitive conditions and successfully plants in the midst of these ameliorations of which the 'seventies never dreamed.

Of these there is no greater boon than the daily and hourly communication with the world outside made possible by Wireless and Electric Telegraphy. The whole system plays a part on distant outposts that can never be understood by dwellers in towns. Out

on lonely stations the lighthouse keeper or border shepherd who was once cut off completely from his kind, can now hear friendly voices telling the current news; at his telephone he feels his fellows hears them whisper, if need be, and can laugh at daily happenings. Through wireless those even more isolated - the Polar explorer, the dweller on distant islands are miraculously linked up with the world pulsing close at hand even though it lies immeasurably parted across the spaces that once could not be bridged.

In the early 'seventies, though telegraph lines threaded most of the lands of Australasia the latest news here came by mail from America which it reached by two cable routes across the Atlantic, the second laid in 1866. It was the imperative need of direct communication with London that sent John Arundel on that 1873 trip to San Francisco, returning Hawaiian labour en route. The stay at Honolulu was short and at dawn of the 13th May the entry in the diary debates as to whether it will be possible to find a telegraph office open that night. At midnight there is another note - written at San Francisco.

"Entered the Golden Gates about 7: moored alongside wharf at 9 p.m. Found the office still open and got off my message to London. Shall soon know my immediate future now, but I do not see the way clear for going home. There is a busy enough time before me here."

The principal business here of course, was the despatching of cablegrams and mails and the waiting for replies. But other pressing matters concerned a mail service via Tahiti to link up Caroline, Vostok and such other islands as might be working, the chartering of boats for the shipping of guano, and the establishment of

relations with American firms interested in the Pacific. A first meeting with the head of the big German firm of Godeffroy and Co. calls for notice later. This great enterprise in its activities might almost claim to have given a lead to Berlin in schemes for German aggrandisement in the Pacific.

Moments of leisure (so called) were occupied with Professor Price in his laboratory analysing samples and working with new apparatus. A course of medicine was also taken under the experts at the University. So the entries run - "With Professor Price at the Labororatory" "At Lab. with Dr. Brigham who went through the Franco-German war and has the Cross of the Legion of Honour. Advises the latest Handbook of surgical operations - used in the war a good deal."

Again he is at the Laboratory every spare moment, and from the 4th June varies these visits with attendance at Lectures by Dr. Lane and Professor Barkson on surgery, on anatomy, on the Nose, on Ophthalmology. For the rest of his time here he attended as many operations as could be seen at the hospitals and clinics. A short entry appears quite frequently. "The case this morning made me feel very queer indeed."

The work at the laboratory helped in the necessary analysis of samples, and a letter from a relative explains all the intense interest in surgery and medicine.

"When J.T. A. was in port he went the rounds of the hospitals to watch operations, until his islands supported their own institutions this was made necessary by the very frequent absence of doctors engaged on the staff when it became imperative for him to be prepared to treat patients and even to operate. In San Francisco

lessees under seal of Her Majesty of this & other uninhabited islands round about the Phoenix Group.

he attended the lectures of the famous surgeon Lane, after whom the big hospital there is named. Although this work tried him very much in emergencies he was able to deal with accidents that befell his native workmen and to perform operations - once successfully removing a shattered arm."

July found the traveller on the high seas again. On the voyage from Honolulu to Starbuck a landing was made on Christmas Island (Pacific Ocean) to take possession of that largest atoll on the South Seas on behalf of his principals who were now the lessees of this and other uninhabited islands round about the Phoenix Group under seal of Queen Victoria. — Vide above

Christmas Island lying just south of the Line was not actually annexed by Great Britain until March 1889, so it is evident that the Colonial Office of the 'seventies, so often charged by its own supporters with neglect of existing inhabited trading Colonies, was not undeserving of the charges made against it by the American Press, and elaborated into indictments by some writers who cannot be ignored. These claim that islets discovered by American sailors and worked by enterprising citizens of the United States "passed by sale or license or abandonment by American occupants into the possession of an English firm," and that it was after this that H.M.S. "Cormorant" took possession of Jarvis, Christmas, Fanning, Baker and Palmyra Islands. "The only atolls not indicated on the map as British" writes J. D. Hague in 1902 "were Baker and Howland, and both of these" he continues, "are now actually occupied by the aforementioned English company which recently was engaged in the shipment of guano therefrom under license of the Colonial Office of the British Government and under the

protection of the British flag."

The statement is true enough, and certainly sounds as if it were ground for a grievance. What nobody at the time seemed to realise however, was that the United States had stores of rock phosphates within its own territories which made the guano workings on the 'Line Islands' as they were then called, absolutely insignificent and worthless. If the stores at Ocean and Nauru had been discovered in 1873, no firm, no matter how enterprising, would have taken the enormous risks incidental to the successful working of such poor stores as lay hidden within and about the coral islets of the Eastern Pacific.

Neither Arundel of Starbuck as he might be called nor his principals were prepared to abandon their adventure, because their first island would soon be worked out, so Caroline, Vostok, the Phoenix Group, Christmas and Fanning, became the theatre of their operations for the next ten years.

At Christmas Island a notice was found pasted on to the walls of a rude shanty evidently lately inhabited declaring the atoll to be the property of the American Guano Co. And on the inside wall of the hut was a further declaration written in English and in Hawaiian announcing that "There is no Guano on this Island." This was true enough; the statement had been made long before on better authority than that of the two gentlemen who apparently constituted the American Guano Co.

There is little doubt that the mistakes as to the existence of guano on the Pacific Christmas Island have arisen through reports on the wealth of that other Christmas Island in the Indian Ocean.

which shares with the two equatorial islands in the Central Pacific the distinction of having the only reliable supply of phosphates in the British Empire.

But Christmas Island just North of the Equator is not without interest or value. It is the largest atoll in the Pacific and its central lagoon is of noble proportions. For many years it was a favourite haunt of South Sea whalers. To-day it has one of the finest of coconut plantations and its settled fertility is partly due to the early planting of small companies. Later a big British firm bought it and native workers from Manahiki were employed to plant the coconuts for which this once barren land is now noted. The barrenness is only in seeming for Christmas Island is actually one of the most fertile atolls in the Pacific.

John Arundel speaks of the plantings here more than once, but the present halt was only a call for the gathering of samples and to ensure against trespass.

Aug. 12th found the Conqueror of Starbuck back on that island, superintending the removal of the buildings to Caroline Island. There are no entries as to the arrival - a tame one after some of the landings on these shores, but "Found all island affairs A.I." is the summing up of the stay here.

A fortnight later all the buildings were on board and the party re-embarked leaving only three tried natives to guard what guano was still unshipped.

The tale of these islands is only one of the many stories that could be told. To-day both Starbuck and Caroline are distant atolls, not often visited. The record of the doings of the guano seekers

is only vaguely remembered. It is told by skippers generally as hearsay. Not even the old employees remember the days when the names of these ~~islands~~ atolls cropped up constantly in shipping intelligence and harbour reports. That once the fine Norwegian barque Ingvartha, the English clipper ship Golden Horn-out from Melbourne, the Isabella and the France Cherie-from Tahiti, the Lunalilo, the Augusta, etc., etc., followed each other in and out of Starbuck moorings as they might have done in and out of Sydney harbour, and then sailed - a succession of argosies - direct for England with cargoes to be watched and quoted in trade reports - is a fact that even J.T.A. himself seems to have forgotten to take pride in.

Book II.

CHAPTER IV.

The year 1874 saw a change in the method of working which speaks of very pronounced powers of administration brought to bear on the island enterprise. In September 1873, after a run to Tahiti, had come the entry "Good guano from Fanning. We are now interested in Fanning and Washington with Mr. Grieg. Alone in Palmyra", But within another half year three other atolls were added to the list held by the English company, whose proclamation of their rights was now guarded on Starbuck, Vostok, Caroline, Flint, Christmas, Washington, Fanning and Palmyra by a working party, in some cases, of only two men. At Bellinghausen the custodians stayed only a few weeks conditions evidently justifying an abandonment of their trust, since they all found employment on Flint on their arrival there.

In extending the field of operations the enterprise now dealt with consignments other than guano. Toa-wood, pearl-shell, cocoanut oil and, later, copra helped to freight the fleet of island craft now generally chartered from Tahiti since after the move to Caroline the most convenient labour market was naturally found at or near Raratonga.

On his last hurried visit to England the administrator of this ever widening business had realised how constant was the demand for pearl-shell and how easily it could be met from the islands. At Flint Island too, the discovery in the principal tree of that wooded atoll of the Toa was probably one of the circumstances which determined the immediate landing of a working party and the opening of what was actually a never looked for branch of trade. Toa wood

is in great demand in California for the making of furniture and the very handsome doors of the Stock Exchange in San Francisco are made of it. It was categoried by some merchants as Italian walnut.

But before this development of Flint the Starbuck workings were in the hands of a party of three who cleared what remained of the guano and carried out the conditions which, according to the diary, "Her Majesty imposes on those of her subjects to whom she graciously grants leases of these low islands. These require that a beacon about 60 feet in height be erected or else coconuts or other conspicuous trees should be planted in commanding position."

These conditions of lease have probably prevented some wrecks on Starbuck where the planting had to yield to the beacon. On Flint, Palmyra, Caroline and other islands the continued and increasing production of copra, in itself more valuable than the original deposit of guano, had its beginning in the plantings of those early 'seventies when John Arundel made his headquarters at Caroline, but spent the better part of the year inspecting the different works, or when on tough little barquentines and such craft he sailed the high seas prospecting for new islands or recruiting labour.

The opening up of Caroline in the end of '73 made a contrast to those early struggles on Starbuck. All hands realised how vastly improved were conditions and work was pushed ahead with great vigour. Entries in the diary follow each other almost gaily: "Gale laying moorings." "Laboratory up and fitted." "Native quarters and tramways finished." "House for the manager begun." "Good progress made with stables," etc.

On Caroline Island the trolly was drawn by ponies at a time when in a New Zealand bush-settlement the first equine to appear there caused a stampede among the children returning from school who could not have been more frightened if they had been meeting a tiger.

Christmas 1873 found everyone in the best of spirits. By the New Year the guano and boat-houses were completed and the drying floor on the field - an innovation here - was in regular use.

At the end of 1873 the first landings were made at Flint and at Vostok, where the natives swam through the surf to find the opening into the reef. "This" comments the diarist "is always found on the side of the island protected from the prevailing wind. Prospects of guano looked promising, on both islets but conditions did not favour immediate work on Vostok, where was "Bad landing - high surf." Within a year, however, work was taken up here, while two natives were in charge at Flint with a notice posted that "This island is held under lease from the British Government, etc.,"

1st of January 1874. On Caroline. "A squally day. About four p.m. the cry of Sail Ho, showed a vessel well to the leeward, but it passed without calling. We rebuilt the boathouse blown down this morning. Owing to the weather work has been changed about, but a lot of guano has been brought down."

Up to '74 labour was brought simultaneously for Caroline and Starbuck from Honolulu and Tahiti, and both these ports sent supplies to the islands, while the Chief made his lightning inspection visits by alternate runs north and south.

However, in the Hawaiian Gazette of March 1874 it is recorded -

"The brig Augusta with Mr. Arundel and some natives sailed for Starbuck on Monday. Hereafter it is proposed to employ Raratongans instead of Hawaiians as labourers, owing to Raratonga being so near to Caroline. Its natives too are credited as being among the best of workers and sailors. Those Hawaiians who have enlisted in this guano service and who are deeply attached to Mr. Arundel, regret very much the proposed change."

An April entry in this year tells that on Caroline "a great deal of sickness prevails - principally sore throats and headache." "The men say it was brought by the last boat. More than half the quarters are down with it, and I have not been exempt. It is like severe bronchitis and some of the patients seem very ill. I am coming to the conclusion that a small living without this perpetual care would be better than any fortune with mind and body worn out."

But the mood passed. The arrival of the new island yacht - the Lilian - built to order - and the recovery of all hands brightened things up again, It would be interesting to know if this 1874 visitation was one of the first appearances on the islands of influenza, which is usually accredited with coming to the lands of Australasia in the 'eighties, although in the old world, Ben Jonson seemed to know it well.

April 6th gives the entry "There is barely four days food left." The expected Nautilus with supplies did not arrive till the 13th. Work had to be knocked off before this to husband food and the last pig on the island was killed. However, after the Nautilus two other boats came with provisions and it was safe for the Chief to leave

in his yacht for the Vostok, Flint and Starbuck visits. At Vostok the staff of four was doing wonders. On Flint all was "first rate", and on Caroline after a month's absence the work had so far advanced that it was evident that guano stores would soon be running short.

It must be allowed that these cruises made a very delightful break in the monotony of the life. Even without these Caroline was a great improvement on Starbuck. "The atoll is about 400 miles from Tahiti" says the diarist, "and 420 from Starbuck. I first saw it when the moon was shining, lighting up the lagoon and touching the different islands that studded the outer reef. These were covered with trees of different kinds and the land-breeze blowing off the island brought that same indescribable fragrance that is met at Tahiti."

"Daylight," he says again, "showed an island entirely different from the one we have left. Starbuck is a barren, burnt-up, glaring sand-bank. Caroline a perfect gem of bright green, waving foliage, varied by the darker leaves of coconut palms."

"The entire island-mass as it is set in the blue Pacific is about seven miles long by one wide. It consists of a lagoon encircled by a coral reef, studded with what are islets at high water, but when the tide is low the whole is dry land. Caroline is a true "atoll", and the lagoon with its shelves of growing coral is most beautiful at low tide, when it is possible to look through a water glass into the depths of this gigantic aquarium. The coral looks like forests of petrified trees with great branches to which at intervals cling half opened shells of every colour - green, blue,

orange, etc. Darting in and out, instead of gaily coloured birds are fishes quite gorgeously tinted and of every shape and size."

Another traveller speaking of these glories gives a depth of fifty or more fathoms to the lagoon. "The appearance", says this authority, "is extraordinarily beautiful.... The water exhibits so surprising a transparency that an object the size of a man's hand may be seen at a depth of ten fathoms. At the bottom is a wilderness of marine vegetation of the most gorgeous colours, in some places seeming to be spread over the surface of sloping hills, in others to be growing out from the sides of tall pillars or rocks or towers pierced with vast caves in which the refracted beams of sunshine cause the water to glow like opals."

"Amongst all this are to be seen great multitudes of fishes of the most extraordinary shapes and hues - gold and purple and violet and scarlet, jet-black, mottled and every shade of green." That these fish are poisonous at some seasons and quite good eating at others is explained by the natives as being due to the ruling of the heavenly bodies. Seeing what effect moonlight has on fish this seems a feasible solution, but white authorities claim that the phenomenon is caused by phases of coral growth.

An entry of this year touching the soundings at Flint and Caroline is underlined with the comment, "The result surprises me."

"Within the buoy - forty fathoms deep.

"Thirty fathoms off buoy - twenty five fathoms deep.

"Ninety fathoms off buoy - One hundred fathoms deep!"

Soundings about the Pacific Islands are invariably noted as

unlooked for and unusual, by widely differing authorities. After commenting on Starbuck soundings which show that "the island may be compared to a dish sloping from the outer edge to a very great depth" John Arundel says "I have often thought that it would be interesting to see the sea-bed in and around the archipelagoes, especially the Phoenix Group. One would expect that between these islands the sea would be very shallow, but the reverse is the case. The American ship Tuscarora quotes soundings between Sydney and Birnie Islands only 55 miles apart that send the line down to 3000 fathoms or 3.66 miles. Between Birnie and Enderbury - over 48 miles distant, the depth is 2835 fathoms (3.33 miles). Three miles south west of Enderbury Island the soundings give 880 fathoms - over a mile; and 45 miles south of Hull Island the depth is 311 fathoms.

Other writers discussing soundings in the Pacific agree that it is not surprising to find the shores of isolated coral reefs descending precipitously from the sea level to a great depth, but when islands are part of an archipelago, it is quite unexpected that their soundings should follow the same rule. However the depths of the Pacific are surprising in other soundings. Says an authority "It is interesting to note that if Mt. Everest were sunk in the "Planet Deep" its summit would be 3,000 ft. below the surface of the sea. In 1899 the greatest ocean depth known then was the "Penguin Deep" 30,928 feet, not many miles south of the Kermadec Islands. Then the "Nero Deep" was found, 31,614 ft. In 1912 the German ship "Planet" discovered not far from the Philippines the "Planet Deep" which with 32,113 ft. is now the record ocean depth. The "Planet" found that the island of Ponapa rests on a solid coral rock base, extending to a depth of 6,900 ft."

"At Jarvis and Baker and similar islands" writes J. D. Hague, in his admirable article of 1902, "the water deepens slowly from the outer edge of the reef yet at hardly a ship's length from the shore a hundred-fathom line could not reach bottom", a fact that vastly impressed the writer of the diary on other islands in 1874.

The tale of any one of these islands is not even a page in its history - at the most it is a sentence that writes itself quickly, but most impermanently. To-day the guano workings at Caroline are

almost forgotten; the island enjoys a more permanent prosperity assured by its 30,000 coconut trees than any that came with the guano seekers.

Nine years after it had settled into middle age as a guano island, the atoll sheltered distinguished guests. It was the spot on the earth's surface from which the eclipse of the sun on May 6th 1883 was visible. Expeditions sent by the Governments of the United States and France carried among others, Professor Holden of Washburn Observatory and M.M. Janssen, Trouvelot and Pasteur. Signor Cacchini, director of the Observatory of the Roman College accompanied the party, and so did Sig. Palisa, astronomer to the Imperial Observatory at Vienna. Messrs. Lawrence & Woods were sent by the Royal Society of London.

The tufted little atoll still green and beautiful as the diary describes it, has little to tell of all this fine company, who apparently did not discover the significance of what John Arundel thinks are old native remains on the north-west. "Whether these are places of burial or sacrifice I cannot determine" says the diarist. "We opened one of them but could find nothing to guide me to any conclusion."

There is probably no possible solution of most of the many different riddles of these island sands. That of Caroline atoll is insignificant beside the other problem of the far distant Caroline Islands where is stored so much that makes their secrets the more tantalising. Excepting only Easter Island these remains of an ancient and wonderful civilisation are the most interesting of all the islands in the Pacific. At Ponape and little Lele this "enchanted region of

archaeology" piles its evidence as to the existence of a great Empire, but by whom built up, at what period, how long pre-eminent, and when destroyed, it is impossible to make any surmise. The most that the monstrous ruins of the Ponape Venice tell is that this mystery is - and so far is impenetrable.

So the tiny remains of the so far lesser Caroline call for little more than comment.

"There are no poisonous reptiles on the atolls" says the diarist "and it would be possible to lie down and sleep in the tropical forests of such islands as are wooded without fear of anything more harmful than rats."

Stevenson speaks of these island forests of bread-fruit and coconut palms and he tells of stumbling over the taro roots while he is eating bananas. No one would stumble about the Australian bush eating a banana or anything else. As for sleeping in its tinted shade! - it is well to move warily there and as quickly as possible.

As always, the managers of the 'seventies, Messrs. Thompson, the Flockton Brothers and Aaron and Stephen Gale are valued friends, and entries in the diary frequently tell of the trust and appreciation their work merited and received. By the end of 1874 preparations are under weigh for another removal of headquarters, this time to Flint, which is described in Stewart's Handbook as "a remarkably flat atoll built of coral on volcanic rock, which must have subsequently burst up in the middle.... Landing is very difficult; the island is almost completely enclosed by coral reefs." According to this authority Flint has now some 26,000 coconut trees "most of which

were planted by the original holders, John T. Arundel & Co."

But the move was not made for the planting of coconuts. There was once guano at Flint though the fact is almost forgotten.

In May 1875 came a visit to San Francisco where a growing demand for toa from Flint is much more pressing than any for guano. Yet again this indifference to phosphates is not yet attributed to the budding trade in Belgian deposits nor yet to the rise of those stores in America which actually give the key to that mystery as to why islands first discovered by American enterprise and originally worked by American capital should have been so readily left for her British Majesty to lease to her subjects.

From Flint Island now the shipments of Toa are very considerable. An August entry credits the Iona with carrying 59,000 feet of this wood.

In March 1876 the Chief arrived at Caroline from Flint on an inspection visit just before the George Thompson, a big vessel full of stores was wrecked as it drew up to moorings.

"I am thankful to say there is no loss of life, but the delay and monetary loss and upset to plans generally is most disheartening."

The wreck postponed the hoped for visit to England, already delayed from 1875.

The difficulty of bringing ships under full sail from the open sea to moorings was very great. The westerly current increased this. Says an authority: "Too much way meant forging ahead to fatal disaster on the reef a ship's length beyond the buoy. Too little way

meant failure to make fast, with all the unhappy consequences of drifting to leeward in the strong westerly current and beating to windward perhaps for many days before returning for another attempt."

This disaster at Caroline was the first of such wrecks since 1871, a wonderful record, telling of exceptional skill in the choosing and laying of moorings. Together with this the gifts of the mooring-master must be taken into account. On the early islands, as on succeeding ones, a very capable figure filled this important post. The first of the three expert mooring-masters whose gifts are even extolled by the natives and constantly recorded in the diaries, Mr. Stephen Gale, like Captain Theet and Mr. G. W. Cozens, (now Marine Superintendent at Ocean Island) made very few mistakes.

After the wreck entries that do not touch essentials are few. In times of keen disappointment it is noticeable that this man, extremely inarticulate when deep feeling moves him, turns to dumb friends - his favourite cat, the little terrier with a waiting welcome at Flint Island and the now well-tried riding hack, Charlie. That somewhat pampered steed, an institution on Starbuck and Caroline, is now on Flint and very frequent mention is made of expeditions when the association of man and his dumb friend is evidently helpful in time of stress.

In the January of 1877 the first visit was paid to Fanning where Mr. Grieg and his family lived on one side of the island, employing his own staff in the preparation of cocoanut oil and drying a little guano. J. T. A. was quite satisfied with his share of the deposit, and left full of hope for the enterprise.

The 15th of February 1877 ends his last inspection visit from Flint; and on the 5th of March comes the note "Left for Honolulu and America by SS. Australia." A delightful circumstance of his stay in San Francisco seems to have been that he was in time to hear Ilma da Murska in Robert le Diable. This, after the silence of the islands, was certainly worthy of remembrance. In business, while held by the delay of mails from Tahiti, Auckland and Australian ports, he concluded negotiations for a large sale of Toa and of coconut oil; and watched several operations at the hospital. The absence of all call for guano is noticeable, but it was not until his arrival in New York that any entry speaks as to the reason for this.

Washington 13th May, 1877. "We talked much of South Carolinan phosphates and their development."

The discovery of American phosphates dates from 1868 and South Carolina was to be for twenty years the chief producing State. River-rock was worked in the streams above Beaufort; land-rock was crushed near Charleston and at the time this was the highest grade phosphate on the market. From North Carolina, Alabama and Pennsylvania phosphates were exported during this decade, but only in small quantities.

Then in 1887 Floridan pebbles from the gravels of the Peace River were found to be richer than any existing stores, and these great river beds and old river valleys, promised an inexhaustible supply of the dark coloured phosphate. Florida still supplies more phosphates than all the American states together, although Tennessee deposits were opened in 1892, and mining for phosphates began in Arkansas in 1900.

On the trip across America while waiting for mails Idaho, Chicago and Salt Lake City had been visited. Now came a run to Charleston - the most important of that visit. Urgent calls from home, however, allowed no further delay and the diary of the voyage concludes - "May 26th. Off Queenstown."

Book II.

CHAPTER V.

This hurried business tour was not what the exile had hoped for. When the visit was to come in 1875 it was to last at least twelve months. Two years later his father's dangerous illness brought him across America to no leave at all, but to a very strenuous period of hard work. For three weeks, time that could be spared from the office was spent in the sickroom; later followed the winding up of family affairs and the tedious processes through which these must be brought to a settlement.

July was devoted to island business - interviewing firms interested in Pacific matters, inspecting machinery and opening up avenues for further island activities. At this time the traveller was filling a seat at the table of the Board with duties that made still more insistent demands on the bare four months he was able to spend in England. It was perhaps with relief that he boarded the Scythia for return and the entry comes in due course - almost gaily:

Oct. 25th 1877. "Back again in New York. A lot of work waiting"

This is the tale of island activities, not of individuals, but it gives point to the fact that such enterprise claims its toll to find that the date July 15th 1870-held to his death as the most memorable day of his life - was so treasured in memory not because it gives the birth of the island enterprise, but because it commemorates the opening of his engagement to the lady who not till 1882 joined him in his great adventure. There were hopes that 1875 and then 1876 might terminate the probation. The wreck at Caroline put a period to all such ~~hopes~~ plans for at least two years. Now it

New par

was hoped that 1879 might give the wished for leave. The intervening years had given him his place as the main figure in guano operations. On this short stay in England he assumed a position which within the next five years would be developed into that of principal of the J.T. Arundel Company. So in spite of set-backs the time had not been ill-spent. That it had not brought the success he hoped for was due to causes quite beyond his control. While the super-phosphates industry in the South of England still existed, while Canadian phosphates were sinking in value and no European stores yet found were taking their place, while Peruvian guanos were losing favour and Pacific guanos were extolled by American and German experts alike, it was impossible to see the actual effect of the South Carolinan discoveries of 1868. Indeed in the early 'seventies the Yankees themselves did not realise the importance of this find which was to make America for a time the chief supplier of super-phosphates for both sides of the Atlantic.

The end of the period was to see the languishing industry in the South of England expire; the 'eighties would boom Belgian and French stores and would bring on to the horizon first the Tunis-Algerian deposits and then the rich Gafsa mine. Thus at the end of the 'seventies there was a possibility that every market for island guano would close within no very remote future. The opening of new marts within the next ten years was a work for diplomacy. To this end and to the trading of island resources other than guanos, was the period of the 'eighties and 'nineties to be devoted by the guano company ~~with~~ of which John Arundel was now a prominent member.

In the meantime Fanning Island stores were already disposed of in advance, and for a few years the Californian market although not keen on the island fertiliser still claimed some guano and was interested in other branches of trade. From New York or San Francisco runs were again made to the Southern States and to others where works or mines existed. Always the entries in the diary point to the recognition of the efficiency that rules in American methods - the efficiency so evident in Panama to-day - the efficiency which, though it often exists, usually hides itself in England. The note "At Mansfield saw a car lifted bodily, its broad-gauge wheels removed and narrow gauge ones put on. Then it started on its new journey - all in the space of two minutes!" gives the key note of many such comments.

On the 17th of December at Honolulu ~~comes~~ the regular island notices appear again. "Our guano Co. taking over Fanning working." "Schooner Venus loading Toa at Flint." In January 1878 came another run to New York for the purpose, apparently, of joining English and American guano companies in a stiffening up of operations among these firms against German aggrandisement.

By March 1878 at Honolulu the usual mail and shipping business was ended before the 16th and the traveller on the high seas again en route for Fanning island which was touched on 22nd.

The experience here is slightly reminiscent of Starbuck in that the opening up of operations is broken up by unexpected voyages and another trip home, and that the chief difficulty is met in the initial stages of the enterprise.

27.3.78. Entry.

"Fanning Island. In my tent. Landed at Grieg's place at noon

Friday and stayed the night. Came over here yesterday morning doing the walk in an hour. Pitched my tent to windward of everybody. Spent the evening chatting with the staff. Cool and pleasant night, but did not sleep well. Tried cold seawater bath last thing last night but again not with good results. After breakfast began shipping which here is possible only at high tide. 800 bags to-day. Mules working well. My first introduction to these quaint creatures."

30th March 1878. "It has rained more or less all morning. We have, however, been at work raising rock, but had to knock off so that the poor fellows could get dry. Am writing in my tent - but obliged to shift the bed over to the storehouse on account of wet. Now I have moved the weather looks better, but as everything is damp it is wiser to stay here."

"Walked to south point yesterday - Sunday - and returned through the scrub. Saw a lot of ponds, and in one a fish like a mallet: also a number of birds, some white ones that I do not know."

Fanning Island 17 square miles in area is a low coral atoll from two to ten feet above sea-level, enclosing a shallow lagoon. The coral belt is in no place wider than 1500 yards. Although it had not been noted for its deposits, a very great deal of guano has been shipped from here, and from coconut trees even in the 'sixties quite good oil was obtained. Since then the owner Mr. Grieg, had made copra very successfully.

In May 1878 came the two Gales taking charge during the next inspection visit which would last till the end of the year. It is to be noticed that while from Caroline Tahiti was the centre of operation San Francisco and Honolulu are the nearest ports to Fanning, and for

'78 and '79 in consequence were the business headquarters.

A call was made at Christmas Island with hopes for its future. This atoll lies 145 miles from Fanning and existing trees in 1878 were found ready to give coconut-oil in paying quantities and, possibly, copra. There was every indication too that systematic planting would give splendid results.

Christmas atoll was a discovery of Captain Cook's and whalers for many years made it a port of call. Its fertility together with the presence of a very fine harbour with anchorage "for a fleet" has always given high hopes of Christmas Island which, however, have not been realised. No one of the many capitalists who have invested money here have made more than a paying return on the sum invested - chiefly through the difficulty of linking up this equatorial distant atoll with the world outside. Many voyagers have written of its white sands, of its tufts of old coconut palms, of its fertility and its fine climate which, by a French writer recently was pronounced to be perfect. The same authority declares that the 300 acres now planted with their prospective return of 120 to 150 tons of copra a year proves that Christmas Island has a future. He further notes that the many anchorages close to the shore are good and safe. In this John Arundel agrees, However, although he visited the big atoll many times and carried out some of the initial work there his own company never became directly interested in Christmas, which has been worked almost continuously by a New Zealand firm.

On this November inspection visit entries show he was much pleased with the planting done by the small working parties and with prospects generally; and he finds time to tell of the birds of which Louis Becke a little later and F. D. Bennett some half a century before him have spoken. On the longer stays at Fanning particularly much leisure time was spent studying, as well as the aquatic birds, a small white parroquet and the few warblers seen there and in making collections for his lifelong friend Canon Tristram of Durham, author of Tales of the Isles Told by Birds of the Air. This authority was especially interested in one species which he pronounced to be peculiar to Fanning.

A trip to Washington Island in this year is noted with full particulars of the coconut oil which that island was producing in some quantities in 1878. Later in the year came another cruise, leaving Fanning in September for Raiatia, Tahiti, Caroline, Flint, Vostock, Malden, Starbuck and arriving back at Fanning in December to pick up labour for return to Honolulu in the middle of January. There was a short delay at Tahiti and a little difficulty with the French Government over the provisions of the 1872 Island Labour Protection Act. The authorities, however, were very soon reassured as to the exceptional conditions ruling on what the natives called "Aneru's islands." It was inevitable that there should be greater difficulty in recruiting for the guano works than for coconut planting but the fact that ex-employees were always anxious to return to these fields gave emphasis to the popularity ofthis employer. The labour difficulty at this

time in Hawaii as well as in the Southern groups was a very real one. That it did not assume proportions to menace the success of the undertaking was probably due to the personal popularity in which "Aneru" was held.

The early 1879 run to Honolulu for the returning of labour was extended to San Francisco and mails there received sent the voyager down to Sydney calling at Tutiila, the promising trade prospects there attracting all nationalities. This was one of the earliest visits to Samoa where during the 'eighties the English company conducted a good deal of business. In Sydney, labour complications were studied, and entries in the diary generally touch guano stores in the Torres Straits and Gulf of Carpentaria as well as details of supplies in those islands to the east of Australia over which the French government was beginning to be concerned.

In April the wanderer then at Suva devotes some entries to India as a market for supplies and labour. The visit made for the purpose of examining the copra produced in Fiji opened many new interests. But by May he is again in Sydney drawn there perhaps by the talk of the Ashmore Shoals and Queensland islands producing, according to the protesting French press, guano showing 69% of phosphates. France in 1870 was as much concerned about these islands as she was later over Clipperton Island - and with as little ground.

In June of this year again all island firms are awake to the menace of the Hamburg ring. In this matter the company which

John Arundel represented seems to have been particularly clear-sighted. In Fiji, in New South Wales and Victoria Pacific traders quite realised the danger to local enterprise but members of British firms did not always do so. However, Messrs. Houlder Bros. were apparently awake to the grave danger to wider British interests in the South Seas. This points to very great perspicacity, for at the time it was the fashion in England to distrust the ambitions of Paris rather than those of Berlin.

Preparations for another trip home are evidenced in the June entries not in actual statements but by the collection of addresses from island employees, from fellow travellers, from missionaries on distant islands, from stewards and cabin boys whose relations were to be personally visited by this busy man of affairs during his stay in England in which he planned to carry through business enough to intimidate half a dozen ordinary men. In addition he hoped to be married. Yet with all these pressing concerns - personal, commercial and diplomatic - it is certain that none of the promises would be forgotten. The event made it impossible for them to be carried out. But all those waiting friends of lads on coasting vessels, of stewards on Torres Straits steamships, of exiles on distant outposts, and of his own men, received their message of explanation and regret for this unusual omission.

For the writer of the diaries was one of the most punctilious of men in all his relations. Above every consideration he placed his Master's service and the opportunity of helping his fellows.

For this he rarely overlooked a detail. It has been said of him that in his busiest hours he would not leave unanswered a message from a child. It is remembered that he never failed to acknowledge any letter. Indeed those who knew him best claim that he could not leave the smallest duty undone.

The July and August of 1879 he spent in Queensland and in September reached Thursday Island which he was afterwards to know very well. Evidently the plans were put forward this year for those bigger operations which were not actually carried out till the Pacific Island Company was formed in the 'nineties. Probably he was to spend a year or more in England and Europe engaged in the diplomatic business for which he was so well fitted. From London in the meanwhile a representative was being sent to take up his work on the islands.

From Thursday Island by way of Singapore, Malacca, Penang, etc. he arrived in October off Galle - first visited in 1870. Here he found a telegram telling him of the death at Honolulu of Mr. Alfred Houlder, one of the senior partners of the firm, who was on his way south to take up the management of the islands during Mr. Arundel's stay in England.

It is evident that from the beginning this very able member of the firm had been keenly interested in the guano business. The personal friendship that linked the two may have helped in his adoption of the younger man's views as to developments. But there is little doubt that Mr. Houlder quite apart from his firm's representative, had the development of the Pacific very closely

at heart. It is probable that from this stay of his among the islands plans ~~xxxx~~ would have been pushed forward to materially increase island interests and if possible to cope with German ambitions. Certainly it was due to this untimely death that the smaller J. T. Arundel Co. was formed - a company energetic enough, but insufficiently equipped to exercise any marked influence among the richer and more stable firms that were watching and occasionally impeding enterprise in the Pacific.

Entries at Aden, at Suez, on the trip overland to Cairo, on the run across from Brindisi are of the briefest. The shipwreck at Caroline was only an untoward incident in comparison with this loss. In the first week in November the traveller reached London. He left again by the City of Brussels for New York on November 25th. The work facing him made it imperative that his movements should be unhampered and his wedding was again postponed.

Dec. 19th 1879. Copies from Press Telegram.

"Berlin. The Federal Council have adopted by a considerable majority a Bill fixing the legislative period of the Reichstag at ~~4~~ four years. The Crown Prince favours Messrs. Godeffroy's application for an imperial guarantee and also advocates that Germany acquires territory in the Samoan group." The only comment "German activities in the Pacific" seems to show that the traveller realised very early in the history of Samoa how detrimental these activities might become.

After settling Mr. Houlder's business in America and Honolulu the return was made to Fanning in January 1880. For a time a

period was set to all larger plans. The working of the islands in hand was pressed on apace and in addition to those already staffed, atolls neighbouring on or comprising the Phoenix group were prepared for the main working when the staff at Fanning should be ready to be removed.

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Book III. = Strenuous Years.

CHAPTER I.

That a period was now put to any proposed wider activities of the London firm in the South Seas seems evident and that this was directly accounted for by the untimely death of Mr. Alfred Houlder is probable. But other agencies were at work to urge concentration in shipping business rather than on any uncertain issues. The history of the 'eighties indeed seems to show that the limited work of the smaller firm was safer than the wider and more speculative activities of any big company. The progress of Samoa for instance for the next decade made it necessary to exercise extreme caution in business relationships there. Pacific enthusiasts of the day perhaps did not altogether realise that without premonitory warning a period of stress had set in which menaced all island activities. But there were signs for those to read who could.

A parsimonious Colonial Office at home; an aggressive policy on the part of France; the all watchful German advance made business difficult at the outset. Depressed and falling land values in the States in Australia and New Zealand - due very largely to the mistakes of amateur farming-were affecting all enterprise in those countries. That the effect of this instability could disturb the development of new lands was possibly not unrealised by many Pacific merchants. But distrust was in the air and many businesses cut down outlay as a precautionary measure.

Firms interested in guano had the American phosphates to consider

and in the late 'seventies and early 'eighties all employers of island labour were faced with the complications set up by the working of the Pacific Islanders Protection Act passed in 1872 but not actually enforced until the appointment of the Commissioner.

It was inevitable that the working of this Act, enforced over a tremendous area and drawn up to benefit many conflicting interests should for a time work adversely for the employer. In itself a most beneficent measure there were times when in its application it set up distrust all round. The atrocities of the early Peruvian trade in labourers, scandals that in the 'sixties called public attention to Queensland plantations and the effect of this traffic in depopulating certain islands, to-gether with the active campaign against blackbirding carried on by all humanitarians at home and abroad, made the passing of the protective act imperative. For half a century officers of the British Navy had declaimed against island trader and employer alike, and in the interests of their own reputation the Australian States as well as Fiji pressed for compulsory protection for the labourers.

But in the years of the scandals not all employers were inhuman and not all trading vessels were slave-ships; indeed the exceptions had done the mischief. As many authorities point out most of the Queensland planters treated their workpeople well and their quarters and wages were quite up to the requirements of the Act.

Unfortunately in such cases the exception does not prove the rule but sweeps it away. In 1847 a naval captain had reported of

a disturbance he was sent to quell at Ratuma that "natives by fair means or foul were decoyed" to work on Queensland stations as shepherds, etc; this report for many years was held as applying to all employers on Australian plantations.

Unfortunately the plaint of the islanders that the traffic was depopulating their villages was not based on any exception. By 1863 the traffic had assumed such proportions that the whole of the male population of some islands had been taken for plantations in Fiji, Samoa or Hawaii. The New Hebrides, Rotuma, the Gilberts and Ellice groups perhaps suffered most. But all had grievances. Returned labourers brought home with them firearms paid as wages with which they terrorised the rest of the villagers. Some islands had the memory of glaring outrages. And most tragic of all the complaints was that which proclaimed that such children as were born to the attenuated populations lacked altogether the physique and mentality of the original inhabitants.

Half the trouble on the islands could be traced to collision between the islanders and boats' crews engaged in the traffic, the other half to the tyranny set up by returned workmen with their firearms. All these considerations made the passing of the 1872 measure absolutely imperative. The first appointment under this Act made Sir Arthur Gordon then governor of Fiji High Commissioner of the Pacific, with sympathies well known throughout the archipelagoes. When the dual appointments were separated in 1884, the commissionership in due course came to Sir John Thurstan another pronounced friend of the islanders.

But always the passing of such measures, for a time and to a certain extent must strain relations if not between the employer and his employee yet between the employer and those whose duty it is to regard him with distrust. The relations between John Arundel and his men were always of the happiest, but in the closing 'seventies and early 'eighties the working of the act more than once impeded the carrying out of contracts. A short delay at Tahiti in 1878, labour complications in Hawaii in 1879 were noted in their order. In the 'eighties came argument with Mr. Balance's government in New Zealand and, indeed, the effect of the Act on ~~this~~ guano islands as in Fiji and Tahiti was ultimately to bring in a staff largely recruited from China and Japan. However, this was not an immediate development - and recruiting in the Society Islands and Raratonga was for some time still be to regarded as a pleasant interlude rather than a care.

The first three months of 1880 show a general rough stocktaking of all the islands and their products. The accounts under the main headings - guano, cocoanut oil, toa, pearl-shell etc. are all very satisfactory. In the light of after events this is probably a preliminary to the forming of the new Company in which J.T.A. became actually the chief figure. This filled the evenings at Fanning where the chief was relieving Mr. Gale, home on leave.

On a flying visit to San Francisco at this time the election in full swing is noted as being carried on with "all bars closed". This in San Francisco in the 'eighties would seem to prove that the States had travelled far since E.A.Poe's time. The island

voyager was a quite sociable person in those days and that he was one not easily overlooked is evidenced by a good many letters and some few newspapers brevities touching social happenings. However always schemes of philanthropy appealed more directly to the busy man than did any mere social functions.

In April Fanning was visited by phenomenal rains, but on the whole work progressed favourably. In July came the clearing up for a not distant move and the preliminary prospecting trip is interesting because on this run the chief first touched Sydney Island to be beloved during his lifetime for itself and its associations. On his return to Fanning the visit of H.M.S. Pelican brightened some few weeks. Such incidents in life on these islands mark red-letter days.

December on the now well known cable island was brought in by a period of rain with phenomenal squalls continuing till the last day of the year. Indeed on the 7th February 1881 it is recorded that "although mails have been ready to be despatched the rain is so persistant that the loading of guano has been delayed for weeks".

A cutting from a Honolulu paper in May tells that "The clipper Vivid is again in the stream and sails for Fanning Island immediately after the arrival of the mailboat. Capt. Cawley takes the owner of the Vivid a cruise among the South Sea Islands next month. Afterwards, it is said, the Vivid will be sold."

On June 9.1881 the entry notes "Rain and ill-health for six months without break has impeded the work shockingly".

A development that ushered in those two great discoveries of the last half of the 19th century - the separator and cold storage - was a marked activity in shipping circles, and the 'eighties saw the birth of three new Ocean lines. The Sydney Morning Herald notes the first on the 19 May 1881.
"The Messageries Maritimes Mail service is now opened, the route being via Marseilles, Suez, Aden, Reunion, Mauritius, King George's Sound, Adelaide, Melbourne and Sydney. It is subsidised for fifteen years at £131,900 - a much larger mail subsidy than that paid to any English shipping firm. It is anticipated that the Messageries Maritimes will outlive all other mail companies on these islands." This anticipation was hardly realised but at the time the splendid French fleet - every vessel of which was a thing of beauty justified these hopes.

Close on the Messageries Maritimes line came the Hamburg to Sydney Steam Co. - (not yet the Norddeutscher Lloyd) with its old-fashioned 3000 to 10000 ton boats suggesting no possible rivalry with the fine French steamers. At the end of 1881 a reference is made to the formation of a New Zealand and Australian line of steamships running from London to Adelaide, Sydney and Melbourne. This Alliance line, as it was called seems to have been the predecessor of the New Zealand Shipping Company.

The summer of 1881 was spent prospecting in and about the Phoenix Islands. These lie just South of the line and according to Steward's Handbook the great circle tracks between Sydney and San Francisco, between Fiji and Hawaii pass through the group

which comprises Mary or Canton, Enderbury, Birnie, Phoenix Gardner, McKean, Hull and Sydney Islands, with Baker and Howland just north of the Equator within easy sailing distance.

John Arundal writes very fully of these islands for many years under his control. One was especially dear to him. The group is interesting he says "as comprising the two classes of South Sea Island. Birnie, Enderbury and McKean are solid masses utterly devoid of, or very scantily supplied with vegetation while Sydney Hull and Gardner are atolls proper - islets covered with vegetation encircling a lagoon enclosed from the sea by a tide-locked reef. Canton Island is certainly an atoll but has no vegetation except a few creepers and tufts of coarse grass".

These islands were discovered in 1840 by the United States Exploring Expedition but at that time Sydney was overlooked. According to the diary "The islands are covered with birds - chiefly my old friends the Wideawakes. In passing at night time between the northern and southern limits of the group a certain sign of the crossing of the three islands (Birnie's lying between) is the chorus kept up by these terns. The first time I visited the group we saw what we thought a long line of smoke and judged it must be the Australian mail-steamer far out of her course. It was simply a line of these black birds - a quarter of a mile or more long."

Birnie's is described by Professor Dana in the 'forties as being about four fifths of a mile by one third trending north west. No

lagoon. A sandy flat about ten feet high. To the south-west the submerged reef extends nearly a mile with the sea beating over it." The guano ~~diggers~~ Seekers in the 'eighties found it larger in every way - the northern side fully 20 feet high and on the south two fair sized lagoons of salt water - probably formed by the continual washing up by the sea of shells, broken coral etc. which had enclosed arms of the sea.

At Enderbury comment is made on the upheaved blocks of coral-conglomerate and on the drying up salt lagoons. "The existence of these large masses of upheaved coral found chiefly on the western reefs of these low islands" comments the writer of the diaries "is advanced as one of the objections to the subsidence theory". Unfortunately he omits any elaboration of the interesting fact.

On the 26th July 1881 at Sydney Island the entry is fuller than in general on such short visits.

"Island 2 miles long. Beautifully green and covered with trees. Anchorage not good but easily bettered."

"Walked right across to lagoon on the right. At first sight this appears one lagoon but we soon found another half the size of the first with fresh water in it. Then came another - close to the beach and the captain afterwards struck a fourth - a fresh-water lagoon. Roads like those at Malden lead to the inner ridges. Finding a good deal of guano decided to stay till Saturday. On Thursday night slept under a tree but had a proper tent last night."

"A ridge of old coral runs along the north shore. Climbing this we had a good view out to sea. One of the old roads runs along the top of this ridge and along the intermediate gully parallel with it. Afterwards it comes out by the sea but turns inland again passing some remarkable mounds. We traced an old road leading to a big tree with remains of older bush lying about.

"Further on was a remarkable enclosure within five upright corner stones about 6 feet high. Three lines of stones laid vertically stretched our towards the sea but some seem to have been displaced. Several flat slabs lie to the north both inside and out. These are now much weathered. Round the lagoon are separate piles about four feet square and three high. Some are on the coral bank and some on the beach. We struck a circle of these slabs - formerly, it would seem, a fish pond on the edge of the lagoon. One of the natives wading into it found mud and water up to his waist. It was 20 feet in diameter and open at one end, etc.etc."

Again

"The traces of the former inhabitants are most curious and interesting and the fish-pond would suggest that these were a fairly large population. There must have been fish in the lagoon which again had communication with the sea to keep the water clear. A fresh water-hole has still a good supply. Beyond this are graves and mounds. The old paths - long lines of flat slabs of coral-run through clumps of trees proving that these grew after the formation of the roads. Some distance away is

a collection of deep holes perfectly round about six feet in depth and eight feet in diameter at the top. Whether these were used in the cooking of food it is impossible to say. Then there are smaller holes - twenty or thirty altogether."

On this same cruise Hull Island was visited. "Deeply wooded and very much indented" is the comment when the island appears from the sea and on landing Hull is found to have fine fresh water, some full sized coconut trees and nearly 1000 self sown young palms. "The toa is in full flower here and a grove of Boetia consists of speciments much more spreading and bushy than that on Caroline. The lagoon is clear of reefs - A very pretty island."

Gardner Island has its beauty too but "the place is not high enough nor old enough for guano".

On the 20th August a landing was made at Suwarrow where Mr. Dean was in charge for an Auckland firm. Four days later Palmerston Islet, tiny spot as it was, showed more mounds, the work of some passed-away inhabitants, for the islet was uninhabited when visited first by whalers a century and a half ago. "The mounds" according to the visitor " are twenty feet long and fresh water is stored in them. Many stone hatchets have been found in them. Mr. Master the owner, took possession of the island in 1860 and has brought up a family of thirteen children here".

On another small island visited one family had lived almost as long as the Masters, growing coccoanuts, bananas, etc. They kept a horse and some mules and a little chaise cart. "The

animals are hobbled head to hoof to keep them from the bananas but the mule lifts his hobbled leg up and so gets as much fruit as he wants - an extraordinarily sagacious animal".

Fanning stores were now worked out and before the new headquarters was decided on a business trip to Samoa and New Zealand was necessary. In Wellington New Zealand the South Sea traveller renewed his acquaintance with old friends last seen in 1869 and for the first time he met Sir Arthur Gordon the governor of New Zealand with whom was formed the pleasant friendship that lasted until and after Sir Arthur, then Lord Stanmore became chairman of the big company of which John Arundel was managing director. New Zealand and Australian papers throughout his visit were concerned with the fear of French influence in the Pacific - a bugbear which as the diaries prove conclusively the South Sea traveller never feared for a moment: His associations with the French whether ~~in~~ as representing the smaller company he was soon to give his name to or as the big Pacific firm which carried out much wider operations, were always extremely friendly.

Book III.

CHAPTER II.

Christmas 1881 was spent at sea after a heavy week at Melbourne, and on New Year's Day comes the entry "Only 1928 miles from Galle". Later "Prof. Smith (a fellow traveller) knows Cocos and Christmas Island (Indian Ocean) very well. Says it is one of the best of the cocoanut islands and copra from here is especially good." Evidently there was no knowledge then of the phosphate island we now recognise as a rival of the great British stores and the ~~Sapa~~ Gafsa mine.

The traveller on this voyage passed through the canal from Suva to Port Said for the first time. In 1870 it had been part of the route to run through the Isthmus by train and in 1879 a detour had been made to Cairo. This time he left the boat only at Naples, and arrived in London on the 10th February - a voyage of over 6 weeks - in spite of his haste.

Although the visit was primarily in the nature of leave to be devoted chiefly to his own concerns (his marriage took place early in March) a succession of unlooked for happenings added perplexities to the diplomatic business which he expected to carry through. At Galle news of his mother's death reached him; on arrival in England he found Mr. Edwin Houlder, senior partner of the firm, very seriously ill. Although the visit to Brussels, Antwerp, Paris, etc., was arranged as part of his holiday both in Belgium and Holland island business was pressing. At Rotterdam a firm proposing to act as sole agents in Holland for Pacific guano claimed every moment.

It must be confessed that this traveller delighting in movement and space is but a poor observer. He had seen his Europe many times;

holidays spent abroad with his cousin, William Izod, were among his boyhood's memories, but he renews acquaintance with Bruges, with Paris, Antwerp, Brussels and Haarlem with little more ~~pleasure~~ interest, it would seem, than he feels in again catching the first glimpse of Perim. That these visits are a delight to Mrs. Arundel brings him pleasure. That is natural, But it is made very clear in those spring wanderings about Europe that the joy he finds in travel is the movement and change, not the revelation of it.

That at Haarlem a call is made on Senator Godeffroy with the comment afterwards "Cuban guano is coming on the market" and at Berlin is noted the conclusion of experts that "prospects will never be better than they are now" makes tantalising reading. What manner of man is this Godeffroy, the senior of a firm which in its way had as much to do with two decades of Pacific history as Bismarck had with the next? And why, in touching the situation, do none of the speakers refer to Belgian quotations and rumours which by now must have been heard of the Tunis-Algerian find, seeing that a big Scotch firm was already negotiating for concessions over these stores?

23rd 5.1882. A cutting from the Sydney Morning Herald after telling of a royal license granted to the lessees of Bird Island continues "a similar license has been granted to Mr. Arundel to permit of the export of guano from Sydney Island."

The Vivid, that smart little craft whose speed had been the admiration of all the visiting captains at Fanning, was sold at the end of 1881 and in the summer of 1882 the Firebrick, re-christened <u>the Explorer</u> was brought at Sunderland. This was quite an imposing yacht in which the owner hoped that he would learn to know the Indian Ocean as intimately as the Pacific. After she left dock she

was despatched to Suez to be ready for a prospecting trip about the Persian Gulf and the archipelagoes to the south-east.

On October 23rd 1882 "A very sad day", opens the entry that notes the death of Mr. Edwin Houlder, the senior partner of the original firm, In concern for this second loss, little mention is made of its obvious results which must be to make the island enterprise of quite secondary importance. From boyhood John Arundel's relations with his employers had been those of close personal friendship and throughout his life any circumstance that made for the severance of such ties was deplored. The policy of the younger firm of Houlders, no less friendly to the island representative, was yet ~~bending~~ bent towards concentrating on shipping business.

In view of the monstrous demands soon to be made on shipping space by the development of cold storage and the growth of the wool trade the policy of the London firm was eminently wise. In a few years Messrs, Houlder's fleet the Grange Line, was ready for all calls. And it is quite possible that through the uncertain years of the 'eighties and early 'nineties the smaller J.T.A. co., within its narrow limits did safer work than it would have done if its activitss had been wider. At the time small businesses survived where big ones went to the wall.

The fall of Godeffroy's for instance was largely due to the unwieldy proportions of this big company, Together with Webers with which it was associated this firm had interests in Samoa, in Fiji in the Marshalls, Gilberts and eastern Carolines and spread out octopus-like to Tonga, New Guinea, the Solomons and those islands known afterwards as the Bismarck archipelago. If such a firm, hand in hand with the German Government, had been at work at the birth of this

century probably history would have marched faster than it did. But in the period of fluctuating values that had now set in it was impossible to keep pace with this multiplicity of interests.

This, in a lesser degree was the experience of most big companies at the time.

In the first week in November 1882 after his longest stay on English soil since 1868 the traveller left Dover with Mrs. Arundel for the Pacific via Paris, Turin, Brindisi, Port Said and the Indian Archipelagoes. At Aden the Explorer was waiting and the rest of the voyage became a cruise in search of Indian Ocean guano. Before leaving England leases were taken of some of the islets off the African Coast and these were visited as well as the Maldives, etc. However, no promising stores were discovered. In December Sunda Strait was threaded and Krakatoa passed at the New Year. At the end of January, with Thursday Island as a centre, prospecting was begun on the Queensland Coast and Raime Island and the Louisade Archipelago were very thoroughly examined.

Although no mention of the fact is made in the diaries the Explorer was at that time very near the boundary of the much discussed Australian-German sphere of influence. It was probably the hoped for incursion of Queensland into these fertile lands that sent so many enterprises to northern ports in the 'eighties.

It is well to remember that if Australian counsels has been listened to by the Colonial Office, the partition of New Guinea and the further German annexations would never have been made. In 1867 Australia had pressed for the protection of the Crown over such

British enterprises as might be established on these shores, but between the troubles of the Maori war in New Zealand, and developments in Fiji and Tahiti, this was not the time to urge on the Colonial Office the adoption of further protective duties. Again in 1872 New South Wales pressed the annexation not only of New Guinea but of New Britain, the Solomons and the New Hebrides in the South Pacific and of the Marshalls, Gilberts and Ellice Islands near the equator, - ~~all~~ most of which afterwards became centres of German influence.

Year by year Australian opinion had strengthened. The discovery of gold in New Guinea in 1878 gave it force. By the 'eighties Queensland had emerged as the colony most interested in the annexation, and in 1883 Sir Thomas McIlwraith, the Premier acting in conjunction with the other provinces throughout Australia, actually took possession of New Guinea on behalf of Her Majesty. His action was supported by public meetings throughout the colonies, and the need for this annexation was affirmed by such an authority as Sir Arthur Gordon, Commissioner of the Pacific who at first had opposed it on every ground. However, before the end of the year, the Colonial Office under pressure from Bismarck, repudiated the action of the Queensland Government, and not the reiterated demands of separate colonies nor the unanimous verdict of the inter-colonial Conference held at the end of 1883 could bring any change of policy. "Germany has no designs on the Pacific" was the reiterated assertion of English ministers, an asseveration that was to be refuted completely by the changes on the face of the map made within the next six years.

The Explorer reached Sydney Island in March, and here the site of the house was determined and stores left. A week later the voyage was continued to Auckland, with calls at Pango-Pango, Apia and Tutuila. On leaving the very unusual comment is made by this friendliest of wayfarers "Very glad indeed to leave Samoa".

A quotation from a letter sent to Hamburg touching certain matters in Samoa, mentions that as Apia is the nearest port to Sydney Island it would be convenient for relations to be established with the new Hamburg firm trading in the group in place of the former Godeffroy Company. "The firm out in the Pacific" says this letter "is now the John T. Arundel and Co. drawing on Messrs. Houlders of London with postal address for 1883 and 1884 Auckland". This is the first actual mention by name of the new firm.

With Auckland as headquarters it was evidently intended that for a period New Zealand interests should be fostered, while the islands for the summer season should be left in the hands of the capable managers - the two Gales, Messrs. Flockton, Thompson, etc. The Explorer having been docked, a temporary home was made in Princes Street, Albert Park, and although the New Farming with its big claims on fertilisers had not yet reached New Zealand, and though another guano firm was at work there, satisfactory business relations were opened in a run through the Waikato, Gisborne, Napier, Wellington, Christchurch, and the Bluff. That a first meeting with Mr. G. C. Ellis, a connection by marriage, was to strengthen into a close association with him and his family, is not gathered from the brief entry in the June diary. June gives another and more personal

happening in the birth of a little daughter in Auckland.

Probably there would have been no move for a few months, but news of the death of Mr. George Flockton made another trip imperative. At Sydney the traveller notes the meeting of business men interested in the Ashbourne Shoals. These with the Huon interests were threatened, it was thought, by the German negotiations from Berlin. Of the real trouble that made North Australian history for some years and that led to the first distrust on the part of Australian provinces of Colonial office policy there is no actual mention

A visit to Lady Elliott Island, off Queensland, brings particulars of that islet as given in the Australian Directory, in a July entry made in Queensland.

"Lady Elliott Island is half a mile in circumference covered with scrub and stunted trees, which, however, attain a height of 35 feet, the elevation of the island being fifteen feet, so giving fifty feet above high water mark. The islet is encircled by a coral reef which stretches half a mile to the north and east and a long coral spit runs off the north-eastern point. There appears to be an average depth of 22 fathoms for the distance of a mile all round the island. In south-easterly winds there is an anchorage under the lee of the islet in from ten to twenty fathoms. Sand and coral cover the bed at a quarter of a mile from shore. Myriads of sea birds come to Lady Elliott, which appears to be one of the great breeding places of the neighbouring coast. Turtles, now seldom seen, used to abound. In 1843 numbers of eggs were deposited in these sands."

On this trip Brisbane was visited, but August found the traveller back in Auckland, and almost immediately the Explorer sailed for Sydney Island. The loss of Mr. Flockton had made it imperative for visits from the management to speed up the work all round, and on the 28th August 1883 the family entered into the home life on the ocean-washed little island that was to be so much beloved and so kindly remembered.

On his first visit to the Phoenix Islands, John Arundel was impressed by this the least known of them. "To my mind",he writes, "this is the most curious and interesting of the group", and he constantly refers to the beauty of the tiny atoll - to-day a coconut plantation worked together with that on Hull Island by an overseer and a staff of twenty men. Sydney lies outside the trade routes that cut the group and is rarely visited. Its old roads, its mounds and fishponds telling of a past that is quite lost are not so impressive as the similar remains on Malden Island, nor is it so strikingly beautiful as are some of the wooded atolls nearer to the Society group, but its climate is of the kindest; it has no lurking menace to shipping and it lies bathed in sunshine all the year round, a grove of waving palm-trees cooled by the land and sea breezes

Of the short family life at Sydney Island (it lasted only a little over twelve months) the diary makes little mention, but references to it come later and show it in an extraordinarily simple setting. Mrs. Arundel shared with her husband the affection of the native workmen who, to a man, adored the babes - (a second little daughter was born here in 1884). Among his personal treasures

prized by this unaffected gentleman to the day of his death, was a small crudely coloured sketch made by an amateur artist on a passing boat, of a part of the reef at Sydney Island in its green and blue setting with the family on the sands, while two vessels ride outside the reef - the one the Explorer presumably. The return to his island home from his now hurried trips, the even tenor of the life there, the dusky friends with the native pastor who christened both his children and whose services he attended with his wife, probably made up memories the picture of this Eden never failed to awaken.

A Conrad might perhaps do justice to the idyll. Among the many romances actual and fictional lived out on these islands, probably there are few in which the same elements have played. Those who knew Mrs. Arundel remember her fine culture; friends of her husband claim him as a diplomat and man of affairs; yet the absolutely simple life they lived on Sydney Island might apparently have been prolonged indefinitely with no regret, except those for his necessary absences on inspection visits.

Probably a very happy circumstance for both was that which brought into the Company at this juncture the family connection first met in the home in Auckland. George Coxon Ellis, now assistant travelling manager, knew the Australian shores of the Pacific well; his knowledge of medicine made him a valuable visitor to any island and his association in the work relieved the Chief of the almost intolerable strain of supervising unaided all the

many issues so widely distributed. The assistant-manager was an excellent sailor, and on his trips on the Explorer in 1884 touched Birnie, Hull and Suwarrow Islands on prospecting trips, and in addition visited Auckland, Brisbane and Sydney, in all of which centres he was well known.

Newspapers of that summer gave full accounts of the terrific hurricane at Raratonga.

The Chief himself inspected Enderbury and Canton Islands in June and had them in full work by August. Then the Explorer took the second in command to Suva, returning in time for J. T. A. to leave for New South Wales at the end of September. Meanwhile prospects were better than had been hoped and 5,000 tons of good guano were exported, reported as from the Phoenix group that year.

While the two friends at Sydney Island were conducting the affairs of the young company quite as satisfactorily as they could have hoped, and the Australian colonies, smarting under the snub from the Colonial office, were complicating Mr. Gladstone's relations with Bismarck, an antipodean statesman whose originality is not always remembered, advanced his plan for the settlement of the Pacific question. Sir Julius Vogel is really the father of New Zealand's policy at Raratonga and Samoa, so an article from a Christchurch paper quoted in the diary of Nov: 1884 is not without interest

"His plan", says the writer, "is briefly this. He proposes that the sum of one million sterling should be raised for the purpose of developing the trade of the South Sea Islands. Of this sum one-fifth is to be subscribed in New Zealand, one-fifth in Australia

one-fifth in the United States, one-fifth in Great Britain and one-fifth in France. Germany's interests in the South Seas are to be bought out and got rid of. The New Zealand government controlling operations should guarantee interest on capital at 5%, but no greater liability than £10,000 is to be incurred on any issue in any one year. On the other hand a medium of commerce is to be created, and this will take the form of New Zealand Government Notes which are to circulate as cash throughout the islands but to be payable to bearer in New Zealand only. These are the main outlines of the scheme, the ostensible aim of which is to make New Zealand the centre of the South Sea Island trade, and at the same time to reconcile conflicting interests which have hitherto gone a long way to debar our trade from attaining those proportions which under more favourable circumstances it is imagined would properly belong to it."

"Whatever opinion may be entertained as to the ostensible object of the scheme", so comments the influential southern paper, "there will assuredly be a very wide difference of opinion as to whether the methods proposed for achieving it are such as the Government of this colony could safely or creditably be identified with."

Book III.

CHAPTER III.

The January diary of 1875 opens in San Francisco. An epidemic brought by a passing boat the preceding June had left a good deal of illness on the Sydney Island. Happily there were no casualties, but some of the convalescents were returned to their homes; and when the run to America became necessary it was thought well for the children too to have change of air. A home was made at ? ? Monterey much to the satisfaction of the black boy Maunga, who took kindly to the delights of civilisation. In spite of the attractions of Sydney Island this was probably shared by his master and mistress, when in March the former left again for Samoa and Fiji. While reports of the hurricanes at Raratonga and Samoa were still filling the papers, it must have been a relief to know that his family were safe, in a world less impermanent than are the surf-washed equatorial islands. As at all times the diary tells of the charms of California - that never pall apparently even when, as in this year, shocks of earthquake there are frequent.

At Apia in early April the mailboat brought news of the loss of two of the island boats in the storm of January 6th. The period of the 'eighties with its hurricanes was a disastrous one for shipping in the South Seas and with other firms the J.T.A.Co. in those years paid a heavy toll in wrecks among their island fleet. After a call at Upola the chief hurried back to Sydney Island where the Explorer with the travelling manager awaited his arrival. The friends together visited Canton and Enderbury with labour and landed on Jarvis, Baker and Howland Islands. A notice left at Jarvis

declares it to be the property of the American Guano Co. for whom John T. Arundel of Sydney, Enderbury, Caroline and other islands is acting. For the next ten years the J.T.A.Co. very often carried out operations as agent for other firms. Indeed it was on excellent terms with its neighbours, and maintained the friendliest relations with all other enterprises at work in these seas.

The report on Jarvis made to the owners points out how very thoroughly stores there had been worked out. It dwells on the immense amount of labour that must have been spent in getting to the stratum of rock guano - in many cases three or four feet below the surface, composed of sulphate of lime. In the dry lagoon in some cases, the stuff touched at the depth of five feet, in colour and smell resembled that in the lagoon at Flint Island, but analysis showed it was not of the same quality and in any case there was very little of it left.

"The buildings" runs Arundel's report, "are tumbling to pieces with white ant, and the large house which looks first rate at a distance, is quite eaten up. The tramways have been taken up - both wood and iron; and the short piece of jetty left is almost tumbling to pieces. We saw hardly any vegetation, no rats and only one crab."

"For shipping it is the best island I have touched except Canton. A large break in the reef leads right up to the beach, and we landed and embarked with the greatest ease."

Jarvis Island enters little into the working of the J.T.A.Co., but it has interest in the fact that with Baker and Howland it was one of the earliest of the islands known in connection with guano. J. D. Hague in his 1862 paper speaks of the stratum of sulphate of

lime (sometimes compact and crystalline) two feet thick; Professors Liebeg and Johnson reported on the guano here in 1860. Mr. Hague thinks that the deposit on Jarvis Island more than those on other atolls has been acted upon by sea water - high seas frequently washing over the crown of the beach. This probably accounts for the paucity of animal life. He too notices that on Jarvis rats are less numerous than on other islands, while J. T. Arundel saw none of the rodents.

The construction of the big house mentioned in J. T. Arundel's reports dates from the 'fifties, when works on Jarvis Island were in full swing. Writing of the island as he saw it ~~then~~ in the early sixties, Hague says "The interior surface of Jarvis is almost as completely white as the beach and the surrounding ring of surf shaded only here and there by a scanty growth of dark green vegetation, creeping purslane and a long brownish grass. Seen from a ship several miles away in dazzling sunshine the white island can hardly be distinguished from the sea breaking in shining surf upon the encircling reef. It was a tradition that a vessel once approaching the island known to be near could not make out a trace of it, till one of the look-outs reported a flag in the water, then a house, then a man riding on a mule, and finally the island under the mule!"

The official residence both at Baker and Jarvis Island, according to this entertaining American writer, was a square two-storey house with broad verandahs on each floor, many windows, a pyramidal roof surmounted by a cupola serving as a lighthouse and over all a flagstaff from which the Star-spangled banner waved without ceasing for over a quarter of a century. It had been built in New York and sent

sent round the Horn "and" says the writer "had the appearance of a sportsman's seaside club-house, and was as completely furnished as the celebrated mid-ocean cottage which Mrs. Leck and Mrs. Aleshine discovered .... I thought Mr. Stockton must have heard of the Jarvis Island house .... but he assured me that the one he wrote of was his own invention."

It is regrettable that Mr. Hague's experience at first hand is of only the three islands he tells of so admirably. He experienced a wreck on Jarvis as passenger on the Silver Star through the failure of the Captain to pick up moorings; he also tells that Jarvis and Baker were located on the charts long before guano as such was heard of whalemen regularly making for Baker Island to pick up and leave letters in the solitary box which was this mid-ocean post office.

Howland Island belonged to the guano company and was to succeed Sydney and Baker's as headquarters while the Phoenix guano was worked. With Jarvis and Baker it had been visited and prospected several times during the century and through the reports of experts in the 'sixties its guano stores were widely known. On this trip there was a general changing of staffs - the preliminary to a more protracted absence. Developments required another visit home, and Mr. Ellis, for the future referred to in the diary as G.C.E. was to be in charge on the Pacific side of the world. Hull and Gardner were now being planted with coconut trees. Indeed all islands were so actively worked at this time that the opening of a new field of operations as soon as possible was imperative.

An entry in June quotes from the Auckland Star a report of an interview with Sir Julius Vogel who admits that "J. C. Firth has asked

questions about guano islands in the Pacific and has been told that there are none now unannexed."

J. C. Firth then at MataMata, wiser in many ways than his generation knew, was evidently looking for guano for New Zealand. His concern is interesting as showing that over thirty years before that the country's share in the purchase of Nauru and Ocean Island there was recognition of the need in the dominion for a store of phosphates of its own. It is probable that, the sweeping up of guano islands by H.M.S. Cormorant in '85 and '86 (of which some American writers complain so bitterly) was due to the recognition by Governement at last that hidden in these low-lying atolls was the only store of phosphates Britain could depend on - a store that was quite insignificant when measured with American, German, Belgian and French supplies. It would be interesting to know whether John Arundel's visits to England in the 'eighties had anything to do with this somewhat belated discovery.

At Tutuila on the 28th June: At Manihiki and Jarvis in July, then back at Sydney Island - "very sadly deserted" on the 5th August; by September at Honolulu, where the orders for Toa brought Flint Island into prominence again. Quotations for copra, coconut oil and pearl-shell come before guano, the demand for which is probably tapped by the further rich American discoveries with stores now coming on the market.

By the 11th October 1885 the family was awaiting passage at New York (where they saw Miss Anderson as Rosalind). They reached London reached London early in November, in time, it was hoped,

to be established in a home of their own by Christmas.

It is startling to find among letters of nearly forty years ago, one that objects to would-be tenants on the score that "there is a very great objection to letting houses to a family of children in the winter." Happily the 'family of children' who probably felt the cold nearly as much as did the devoted but shivering Maunga were at length safely domiciled at Sevenoaks, Kent, where their father spent his first home Christmas for fifteen years.

Meanwhile the stores being worked in the Pacific, though widely separated were far from being inexhaustible. In England much interest was taken in rock phosphate of which so far the guano company at work had little experience. In Belgium a Sydney and London firm is found to be doing some business, but neither here nor in Germany is there a demand for Pacific guano.

In April 1886 under the heading "German Packet Service" comes the entry.

"The steamers on the line are the Oder-3150 tons; the Necker-3120 tons; with three new vessels, Prussia, Bavaria and Saxony, each 4000 ton, doing 14 knots an hour. Packets for Eastern Asia touch Antwerp, Port Said, Suez, Aden, Colombo, Singapore, Hong-Kong and Shanghai, and from Hong Kong a branch line will probably to extended to Korea. Packets for Australia attain an average speed of 11½ knots Leaving Bremerhaven they touch Antwerp, Port Said, Suez, Diego Garcia, etc. Another Branch line will ultimately link up Tonga and Apia."

From such small beginnings in the 'eighties the Norddeutscher Lloyd line grew into its surprising proportions.

Another entry of June '86 "British guano firms realise the need of a British Australian combine."

"Island mails report 30,000 coconut trees on Caroline, of which 10,000 are good. Flint Island also good."

Then a paper cutting "On 7th August 1886 at Sevenoaks, Kent, the wife of John T. Arundel of twin sons."

A month later an announcement is made under ~~another~~ the sadder heading "On 6th and 7th September the infant twin sons of J. and L. Arundel aged 30 and 31 days." There is no comment at the time - but his 'boys' are frequently mentioned in the diaries of after years.

In 1886 public interest in Pacific matters was very much awake and was beginning to make itself heard. Among notices of questions in Parliament on the 23rd August it is asked whether in 1884 there were over 4000 more deaths than births among the natives at Fiji, and whether that year there was a decrease in the imports and exports of those islands of £158,000? The Colonial Secretary was further also asked to define the native policy adopted in these islands. Labour problems are also under consideration - the proposal of some employers to bring Javanese into the Pacific brought very strong protest from the Dutch Government. And guano matters were not flourishing when, loaded with care - (private as well as business worries) - the head of the firm left by the Servia for America at the end of November. His family remained in England as Mrs. Arundel was not well enough to travel.

At New York all invitations were declined "Business too pressing" is the explanation in the diary, but at Boston a meeting in the hotel with M. a family friend from San Francisco gives a little self-revelation. "He told me of my

revelation. "He told me of my little Lilian's confidingin him that she had been corrected, etc." And again "when I was here last it was with my dear ones." Indeed homesickness and forebodings that accompany him through the voyage are accentuated as he nears San Francisco.

On Christmas Day 1886 the only comment notes the relief of receiving an opportune mail with home letters, but on the last day of the year the Explorer arrived at San Francisco, bringing G.C.E. spoken of by Californian papers as representing the J.T.A.Co. in the South Seas. This gave the spur of immediate business and, as always, this friend and kinsman was altogether welcome. Much of his news is retailed in articles in the evening papers. Canton Island is worked out and Baker in full swing. "The trade of the islands" according to the article "is now principally with Europe." Fanning Island is mentioned and a reference is made to the extension of the cable. A further comment touches the effect on the islands of a new Steam Navigation Company which by 1887 has six steamers running in the South Seas.

Further press references are made in January 1887 to the sale of the Explorer to the Hawaiian Government and of the progress of the cable extention from Cape York to Thursday Island.

In February the friends made a marvellously quick voyage to Melbourne and Sydney, chartering island boats and buying a steel hawser with which G.C.E. would go direct to Howland where the chief after a short visit to Auckland was to join him and decide problems in connection with the laying of moorings. Then comes the entry -

"Cable received takes me home immediately. All my plans suspended. G.C.E. carries on."

News of Mrs. Arundel's health had become more disquieting every mail. She was now seriously ill and the message was urgent.

The entries for the rest of the month are brief. "12th March at Honolulu." "19th San Francisco." "31st. Arrived Chicago." At New York the Alter (N.D.L.) was caught, and on the 18th April John Arundel arrived again in England - only just in time to add a few hours to the few years this so long parted couple had spent together.
