

GUANO ISLANDS

from the

WPHC ARCHIVES

etc

GUANO COMPANY REPORTS

(a) American Guano Company -

- (1) Report to stockholders of the American Guano Company. Brooklyn, New York, Jacobs and Brockway, 1857.
- (2) Report of experiments with American guano. New York, W.H. Arthur and Co., 1859. 27 pp.

(b) Pacific Guano Company -

- (3) "The Pacific Guano Company; its history; its products and trade; its relation to agriculture". Cambridge, Riverside Press, 1876. 63 pp.

(c) Phoenix Guano Company (Williams, Haven and Company, Agents) -

- (4) Phoenix Guano from McKean's Island, Pacific Ocean, imported by the Phoenix Guano Company. Analysis by S.W. Johnson, Yale. New London, Starr and Farnham, 1860. 8 pp.
- (5) Phoenix Guano from Pacific Ocean, imported by the Phoenix Guano Company". New London, Starr and Farnham, 1871. 20 pp.

(d) United States Guano Company -

- (6) Report to the stockholders of the United States Guano Co. New York, 1859. 40 pp.

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"Guano. A Treatise on the History, Economy as a Manure, and Modes of Applying Peruvian Guano, in the Culture of the various crops of the farm and the garden". Boston, published by C.L. Bartlett, Agent of the Peruvian Government, 1860.

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"Guano, though no saint, works many miracles." Peruvian Proverb.

P.3. First consignment of guano from Peru to enter Great Britain made to a mercantile firm of Liverpool, Messrs. Myers & Co., in 1835, but guano, being still unknown, excited little attention till 5 years later when 20 casks again landed and it was soon found to be the most valuable manure in existence. Confidence as a means of increasing the products and renovating the soil was so great that the next year (1841) 7 vessels brought 1,733 tons from the Chincha Islands to Great Britain, and by 1842 41 British and 3 foreign vessels brought 13,094 tons. By the close of 1844 29,000 tons from Peru and many P.4. thousand tons from Ichaboe and other guano islands at that time discovered.

From 1841 (the commencement of any considerable working) to 1856 1,967,079 tons were removed from the Chincha Islands. Sales totalled \$100,263,519.

United States: from 1851 to 1858 673,412 tons were imported.

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Pp.3-6 might be copied for history and statistics.

GUANO

From Hutchinson, George E., "The Biogeochemistry of Vertebrate Excretion", Bulletin of the American Mus. of Nat. Hist., vol.96 (1950).

179 Guano companies. "The exploitation of this guano [on Phoenix Island] was begun in 1860 by C.A. Williams and Company, later the Phoenix Guano Company, and was continued until August, 1871 The exploitation of McKean Island by C.A. Williams and Company was begun in 1859, and by 1870 the locality was exhausted. During this period 30 cargoes were shipped (Phoenix Guano Company, 1871) corresponding presumably to between 20,000 and 40,000 tons. An island named Arthurs Island was claimed by the United States Guano Company. This concern stated in their "Report to the stockholders" (1859) that Capt. George S. Netcher discovered guano on it in 1842, and estimated an amount similar to that on Howland Island."

182 Guano Companies. "The only indication that guano digging took place [on Christmas Island] is Bryan's (1942) remark that the United States Guano Company worked the island for several years after November, 1858. This statement can hardly be reconciled with the meager references to Christmas Island in the shipping ~~intelligence~~ intelligence published in The Friend. Hague (1862), who was associated with the rival American Guano Company, moreover wrote that he had good reason to believe that no phosphate worthy of the name occurred on Christmas Island."

Footnote to p.182 "Though records of disputes between the companies exist (Bryan, 1942), the rivalry was probably apparent rather than real, or confined to the employees in the Pacific, for A. G. Benson was president of the American Guano Company and a trustee of the United States Guano

GUANO, cont'd.

Company, and a certain G. Hall a trustee or director of both companies. Commercial antagonism between such closely related companies can hardly have biased Hague's remarks in a scientific journal."

188 Lists of bonded guano islands. "In addition to the islands that have been mentioned, a number of atolls were bonded and registered with the United States Treasury as guano islands under the Guano Act of 1856. The full list is given in the New York Tribune, March 5, 1858, and has been reproduced by Behm (1859), Hague (1862), and by Bryan (1939a). An essentially identical list in the United States Treasury is given by Palmer (1900). Bryan (1939a) has moreover analysed the list geographically, but without discussion of the occurrence of guano, though much valuable information about individual islands is given in his later publication (1942)."

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From: Stevens, Edward F. (comp.) "One Hundred Years of Houlders. A Record of the History of Houlder Brothers & Co. Ltd. from 1849-1950". Privately published, [n.d.].

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16. "The Lucibelle was also purchased [1863], being a wood ~~rigged~~ full rigged sailing ship of 914 tons N.R., built at Richmond, Maine, U.S.A., in 1859. (This ship after twelve years service was wrecked at Honolulu in 1871)."

"Later in the same year the Company purchased the Golden City, as mentioned earlier in this record. She was a wooden three masted full rigged ship of 779 tons N.R., built 11 years earlier by J.A. Westervelt at New York and was very speedy, having been built specially for the Californian Gold Rush. (This ship was only under the ownership of the firm for a short time as she was wrecked in a gale at Lady Elliot Island on 13th July, 1866, whilst loading homeward for London)."

18. "It has always been a difficult operation for the shipowner to find, and to operate, a remunerative two-way trade, and this was particularly a problem of earlier days. As the development of Australia continued, a good and profitable outward run became available. There were difficulties in securing homeward cargoes, as Australia in the ~~settlement~~ early settlement days was concerned solely in establishing itself and had very little, if anything, to export.

Mr. E.S. Houlder had with him in the business Mr. Ebenezer Cayford, and a close business friendship grew between the two with the result that much of the administrative ~~work~~ duties of the Company's work fell upon Mr. Cayford's shoulders. On the staff also was Mr. J.T. Arundel who was also a close friend of Mr. Cayford. Mr. Arundel had a bad illness, which left him far from strong, and he was sent out to New Zealand on a sea ~~trip~~ voyage as an opportunity for convalescence. Whilst in New Zealand he became interested in the possibilities of developing some trade with guano and cocoanut in the Pacific Islands.

On returning home, Mr. Arundel in turn interested Mr. E.S. Houlder, and Mr. Cayford with the result that J.T. Arundel & Co., was formed. Mr. Arundel held one half of the shares, the other half being held between his two backers. Mr. Arundel, accompanied by Mr. J. Tarn, the firm's representative, visited the Pacific and found guano, cocoanuts and phosphate in a group of Pacific Islands.

A piece of rock which had been used as a doorstep in one of the ~~island~~ Australian offices of the firm, was accidentally the link which proved the highly superior quality of the phosphate on the islands in which the firm was interested.

This largely solved the problem of homeward cargo, for Houlders, operating in conjunction with J.T. Arundel & Co., leased from the Government a number

GUANO INDUSTRY, cont'd.

19 of these islands and so provided the homeward trade which was required for their ships. The real success of this venture came in 1899-1900 when phosphate rock of high grade was struck at Ocean Island and Nauru. Some of these phosphate interested were later consolidated into the Pacific Island Ltd., the forerunner of the Pacific Phosphate Co. Ltd. This early association explains the excellent contact with the Phosphate Commissioners and the reason for Houlder's close knowledge of the Phosphate Charter market throughout a long period of years. Here is but one ~~xxx~~ illustration of the results which accrue from the enterprise shewn by Shipowners, who in the creation and development of trade for the employment of their ships, of ~~xx~~ which this is but one example, have in turn brought considerable benefit to the world.

In later years Mr. Frank Houlder used to enjoy telling the story of a ship being wrecked in the Pacific. After several days in a lifeboat the crew sighted land. With lifting spirits and renewed energy they rowed for the shore, and found it to be a small uninhabited island. They landed and walked up the beach to see what they could find, and were confronted by a notice board which stated "This land is private property. Trespassers will be prosecuted by order John T. Arundel, 146 Leadenhall Street, London."

..... In the year 1868 the firm's business continued to expand in all its branches. Mr. Alfred Houlder and Mr. Augustus Houlder both travelled widely throughout the Pacific. Mr. Alfred Houlder whilst an active partner in Houlder Brothers & Co., was becoming more closely associated with the work of J.T. Arundel & Co., and helped these interests by applying additional efforts towards the production of copra."

20. "The Walter Glendinning a wood brigantine of 111 tons, built in 1859 by Robertson at Capetown, was purchased, [c.1869] but there is little record of the trading activities of this vessel. She may have been utilised by Mr. Alfred Houlder in his Pacific Island travels. It is believed that she was sold out of the firm's ownership about 1879."

23. " In 1878 Mr. Alfred Houlder was in Hawaii, engaged upon the copra development work when a volcano erupted and he literally had to run for his life. Always a sufferer from a weak heart, this sudden exertion resulted in his death. He was buried in San Francisco."

[1883]

25. "The phosphate trade continued to expand and Mr. J.T. Arundel established contact with Sunday Island in his vessel Explorer. This was a wood three masted schooner rigged steamer of 171 tons. The shortage of homeward cargoes for ships returning from Australia had by then been overcome."

49. "In 1907 ... Mr. Cayford decided to turn his interests and attention to the phosphate business [resigning his seat on the Board of Houlder Brothers & Co., Ltd., and Houlder Line Ltd.]".

55. "[In 1913] The Empire Transport Co., Ltd., [a subsidiary] entered into contracts with the Pacific Phosphate Company to provide six steamers a year to carry Phosphate from Ocean Island to Stettin."

GUANO INDUSTRY, cont'd.

58. "[In 1913] The Ocean ~~Trade~~ Transport 2,919 tons N.R. and Queensland Transport 2,939 tons N.R., both built by Irvine's Shipbuilding & Dry-dock Co. at West Hartlepool for the Empire Transport Company were added to the fleet. The first-named vessel was eventually wrecked on Ocean Island, South Pacific, in 1927 ..."

65. "In 1919, Mr. J.T. Arundel, previously mentioned as having been associated with Company during the ~~1800's~~ 1800's in the phosphate interests, died at Bournemouth."

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Crocombe, R.G. "Land Tenure on Rarotonga". Ph.D. thesis, A.N.U. Part II, Chapter 2, p.8 of draft.

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[in the Cook Islands]

"With the decline of whaling in the 1850s the young men began travelling to Tahiti, California, Samoa and elsewhere to seek employment [e.g. re Tahiti and California see George Gill to LMS 22.11.50. Re Samoa see Krause to LMS 23.8.64 SSL]. Before long even larger numbers were being recruited by labour ships to work on plantations and guano islands outside the group. While no statistics have been compiled, literally scores of references show that a very considerable proportion of the young adult male population was away from the Group between 1850 and 1880 [e.g. by 1853 there were so many Cook Islanders in Tahiti that a special pastor was appointed to look after their spiritual welfare: Gunson, "Evangelical Missionaries in the South Seas 1797-1860" Appendix (?). In 1861, 70 Manihikians were employed on Washington Island: The Friend, 19.10.1861. Large numbers from Rarotonga were shipped to the guano islands: Krause to LMS 29.8.62 SSL. Many Atiuans were engaged on Malden Island: Arundel, Diary 5.11.70. In 1849 some 42 Pukapukans were taken to work on Hawaii: Beaglehole, "Ethnology of Pukapuka" 5.]. On Aitutaki "scarcely a lad was left to work the land".[Royle to LMS 13.12.73 SSL] The position on Mauke and Mitiaro was no better for in 1871 out of their respective populations of 180 and 200, a total of only 32 men was left, and as a consequence gardens were neglected and food was in short supply [Vivian, Journal 1871-2 SSJ. Despite his reference to those still on the islands he says that "all the adult males" were away working for foreigners. Probably those who remained were aged or infirm.]. This organised recruitment of labour was controlled by the arikis [Arundel Diary 29.10.70. While the high

chief of Atiu organised labour recruitment he restricted numbers to the extent of ensuring that some able-bodied men were left to each extended family - Messenger de Taiti 28.5.64.], who thus gained an additional source of income and personal power.

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GUANO ISLANDS : LETTERS PATENT

On 10 6. 68 Gov of NSW authorized by Letters Patent to make leases and other dispositions of all Islands and other places containing Guano and other fertilizing substances, situated in Indian and Pacific Oceans between 10° S, 170° W, Antarctic Circle and 75° E and not within jurisdiction of any Colonial Governor, which may, from time to time, become the possession of Us, Our Heirs and Successors.

On 19 7 79 similar Letters Patent authorized HC to make leases and other dispositions, ^{provided} ~~made~~ ^{in conformity} with instructions from HM Govt, within Pacific Ocean W of 150° W and not within limits of Gov of NSW, nor within jurisdiction of any Colonial Government.

See SS to Gov, Fiji, Genl of 11 9. 79.

GUANO

USS 'NARRAGANSETT'

P.105 At Baker Island 1.4.72 for $\frac{1}{4}$ day.

P.121 Off to the Marshalls.

Above taken from microfilms with Gilson.

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HENDERSON ISLAND: APPLICATION TO USE

Grice Sumner & Co. to H.C., 31.12.80: We have the honor to apply through your Excellency to Her Majesty's Secretary of State for the Colonies for a license to occupy Elizabeth Island with permission to collect and export Guano therefrom.

This island is situated in the South Pacific lying between 24 and 25 South latitude and 128 and 129 West longitude.

It is not inhabited and fresh water has not been found upon it, the area is estimated at about five miles long by about two miles wide.

We offer a royalty of one shilling per ton for the first year and two shillings per ton after the expiration of this period, for all Guano exported.

A vessel has been despatched to the Island to ascertain if the Guano deposits are of sufficient magnitude and quality to justify the necessary outlay for shipping and other appliances.

If it is within Your Excellency's authority to grant an interim permission to occupy till a reply is received from Her Majesty's Secretary of State for the Colonies, we respectfully ask your Excellency to grant us this protection.

We made an application through the Governor of New South Wales and were informed that the Island is not within his jurisdiction, and referred us to the High Commissioner for the Western Pacific.

We beg to mention that we have occupied Malden Island in the South Pacific for some years under license from the Imperial Government to Export Guano, and are still working this island.

We have & C.

Grice Sumner & Co.

(The application should be made to me and I shall be disposed to grant the Lease when all the case is before me.

(Sgd) A.H.Gordon)

HENDERSON: GUANO ON

Grice Sumner & Co. to H.C., 12.4.81: Referring to our letter of February 24th to His Excellency Her Majesty's High Commissioner for the Western Pacific applying for a license to occupy Elizabeth Island we beg to say that the vessel we dispatched to examine the island has just returned.

The report received states that about 200 tons only of Guano could be found samples of which were brought from the Island.

We therefore beg to withdraw our application for a license.

We have &c.

Grice Sumner & Co.

JARVIS ISLAND.

^{exc} Alice Brogden, Wellington to H.C., 7.11.81: I have the honour to enclose a formal application for a lease of (Avery) or Jarvis Island, forwarded to me by Mr. Thos. Henderson, Jnr., of Auckland.

I shall feel obliged by your favourable consideration of the application.

In Mr. Henderson's communication to me he states that it will be necessary shortly to send a vessel with stores and supplies for the men in charge and it would be convenient if he were able to send instructions to them at the same time.

If you will be good enough to send any communication for Mr. Henderson to me I will forward to him.

I have &c.

Alice Brogden.

Thos. Henderson, Jnr. to H.C., 31.10.81: I have the honor to apply for a lease of the island called "Avery" or Jarvis Island, situate in latitude 0. 22 South and Longitude 159. 4 West, for the purpose of taking from it the Guano or other deposits now thereon, and for this purpose to have liberty to use any stone, timber, buildings, roads or other conveniences and to make and use any other roads, tramways, staithes or shipping places.

The above named island was taken possession of by Captain Sloan on the third day of August last on my account there being no person living thereon, and after having hoisted the British Ensign, he left in charge two persons namely Messrs. Hudson and Winkelman.

The declaration made on taking possession has been forwarded to the British Consulate, Apia, Samoa, for the purpose of registration.

I have &c.

Thos. Henderson, Jnr.

A. Brogden to Gerald Browne, 12.11.81: I have the honour to acknowledge receipt of your letter of the 10th inst. in which you inform me that His Excellency has communicated direct with Mr. Henderson on the subject of the lease of Jarvis Island, for which I am much obliged.

I have the honor etc.

A Brogden.

SYDNEY ISLAND

HC file 184.81 contains an important letter from Arundel to HC Garden dated 1.6.11.81 asking for permission to remove guano from Sydney; saying that the other Phoenix Islands are owned by C.A. Williams, that Capt Avery has been wandering round in the 'Julia M. Avery' with extracting guano in particular from Enderbury; getting a copy of a letter from Williams re this.

I have not copied the above because I am sure I have it in Canberra.

JARVIS: OWNERSHIP OF

Arundel to H.C., 16.11.81: Referring to the conversation of this inst. being about Jarvis Island, and in view of any further action being taken in the matter, it may be well to state in writing that the American Guano Company of New York are owners (of course under the United States Govt.) of Jarvis, Bakers and Howlands Islands - the two latter being in the North Pacific. We have had extended transactions with them, and when last in New York at the end of 1879 and subsequently by letter at the end of last year - they were anxious to dispose of all their rights and interests to myself and my firm - on payment of a Royalty of 50 cents per ton on all Guano ~~is~~ shipped, we having use of all their plant on the islands. Consequently I do not imagine that they consider the islands abandoned, although no one is at present in charge of them on their behalf and the action of Capt. Avery or any other person in taking possession is certainly premature and likely to lead to trouble.

That (in common with our own) continuous possession is not judged necessary by the American Govt. to maintain rights, I would mention that when in 1879 we applied to the Imperial Govt. for a license to work Christmas Is. the matter was referred by ~~the~~ Foreign office to the United States Govt. the island having once been temporarily occupied by the Americans - and the reply of the latter was to the effect that Christmas Island was still claimed by the American Guano Co. and our request was of course declined. I could have given Your Excellency copies of the correspondence but have left them on Caroline Islands. It must have been at least 10 years since the American Guano Co. had been in occupation. Trusting that this information may be of service,

I have &c.

John Arundel.

JARVIS ISLAND LEASE.

Thos. Henderson to H.C., 17.11.81: May it please your Excellency I have the honour to acknowledge receipt of your letter of 9th inst. enclosing form of Indenture relative to leases of Guano Islands.

In reply I beg to state that should a lease be granted operations would be commenced forthwith by despatching a vessel to arrive at the island say in January next.

I am at present unable to say what quantity of Guano would be annually exported, as so much depends upon procuring markets for the article. However during the first year I anticipate that at least five hundred tons would be sent away, and an increased quantity thereafter.

I am quite prepared to carry out the conditions of the Indenture.

As regards Captain Avery I am aware from documents found on the Island that he has registered a claim at the United States Consulate, Apia, but seeing that his representative left Jarvis Island on 13th November 1880 (as evidenced by the enclosed paper discovered in one of the buildings) and had not returned up to the time of Captain Sloane taking possession on my account on 3rd August following, I have ventured to make the application for a lease. I therefore trust that Your Excellency may feel empowered to accede to my request.

I have &c.

Thos. Henderson.

Minute:

Return the enclosure with thanks after copying it. Say that in view of the positive statement to the effect that Jarvis Island was the property of the American Guano Company contained in Mr. Arundels letter of the 18th inst. of which a copy was enclosed in letter of the -- I should hardly feel justified in granting a lease unless that statement should be contradicted and explained.

JARVIS ISLAND LEASE.(contd.)

Enclosure in Henderson's letter to H.C., 17.11.81:

To Whom it May Concern.

I leave the natives Robert in charge of this Jarvis Island which I have located and took possession of in February 17th 1880.

I further warn all persons against trespassing as I shall prosecute to the full extent of the law.

E.O. Avery & Co.

Jarvis Island June 15th, 1880

In (The keeper of the island has left on account
pencil (of sickness but will return soon. Nov. 13th 1880
(Jarvis Island.

E.O. Avery.

JARVIS ISLAND LEASE (contd)

Thoms. Henderson to H.C. 21.11.81: I have the honour to refer to my previous communication relative to procuring a lease of Jarvis Island, and to state that I have received information to the effect that the declaration of Captain Sloane and others was registered at the British Consulate, Apia, on 28th October last, the following being a copy of the certificate:

I hereby certify that I have this day registered this document in the Archives of the British Consulate.

Record No. 5, Folio 211

Register No. 3024

(Signed) J. Hicks Graves

Her Majesty's Consul

Apia, Samoa,
October 28, 1881.

I have &c.

Thos. Henderson -

JARVIS ISLAND LEASE

Henderson to H.C., 17.12.81: I have the honor to acknowledge receipt of your letter of 25th ult. and also through Mr. Brogden M.P. of your communication of 7th inst. addressed to that gentleman.

Under the circumstances I cannot but coincide with the view your Excellency has taken, and of the correctness of your decision in declining to grant a lease of Jarvis Island ~~or~~ or a permit to remove Guano therefrom.

It is my intention to address the American Guano Co., New York with a view to obtaining from them a transfer of their interest in the island.

I have to thank your Excellency for the consideration you have given my application, and I can only express my regret that the state of matters did not warrant your acceding to my request.

I have &c.

Thos. Henderson, Jnr.

GUANO LICENCES

Despatch No.8 of 22.3.82 from SS. ~~Not/No~~ HC not to grant any more licenses (he had just granted one for Sydney) without consulting HM Govt "in order that they may ascertain beyond doubt that the island in respect of which an application may be made is not claimed by any Foreign Power".

Enc. Arundel to CO, from London, 6.3.82, asks for modification of terms of Sydney licence as far as Royalty is concerned as "phosphatic guano is not a sufficiently valuable article to bear a Royalty - particularly when the expense of starting new operations, fresh plant etc. from England is concerned".

Previous licences had been on a uniform rental of £50 per annum, including:-

Caroline Island - dated 11.3.74
Flint - 11.3.74
Vostock - June, '74
Christmas - 9.6.71
Ducie - 9.6.71
Cato Island and Bank - 9.6.71

3 natives left in charge at Sydney pending grant of Licence.

"No rent - much less Royalty - is charged by the Government of the United States - who willingly ~~aff~~ accord protection in consideration of the extension of American commerce secured by granting these Licences. As the neighbouring islands of the Phoenix Group are held and worked by an old and valued American friend of mine, with whom in their working I am also connected in business, I might easily have worked Sydney Island under his name and with an American License, as an Englishman however I naturally preferred seeing our own Flag on the place, even if a small rental had to be paid for the privilege of hoisting it. 6. No expense whatever is incurred by Her Majesty's Government in taking possession or in maintaining the sovereignty of these outlying islands, in fact no official possession was ever taken of Flint or Vostok Islands during the existence of our late Leases, or were they and Caroline Island ever visited by a man of war in the whole 7 years of our occupation, during which time we paid to Her Majesty's Government £50 a year for each island, or £1,050 in all. In the leases moreover Her Majesty's Government do not bind themselves to afford any protection in case of war." have

..... "I might/just as easily worked Sydney Island under the American Flag, or in fact with no protection whatever and also that this is the third island which during my ten years residence in the Pacific I have had the honour of adding thus voluntarily to Her Majesty's Dominions."

Licence as granted for Sydney was on annual rent of £100, to be

Guano Licenses

considered as a payment in advance, so far as it will go, of the Royalty. Minimum annual export to be fixed at 200 tons. Licence to commence 1.11.82

Enc. Arundel to Gordon, HC, from Wellington, 16.11.81. Visited Sydney July 27/30 and Oct.23/7, 1881 - unoccupied.

"The other Islands of this Group are owned by my friend Mr C.A. Williams of New London, Connecticut, and are consequently under the United States Flag. As a Captain Avery an American has lately been ~~at~~ cruising about in the Pacific in the Julia M. Avery and visiting and abstracting guano from some temporarily abandoned islands among others Enderbury Island, one of this Group, I beg to hand Your Excellency the following extract from a letter from Mr. Williams dated San Francisco 21 May 1881 and received by me on 22nd June.

'Mr Smith has handed to me your letter to him of 28th April and I hasten to confess my shortcomings and to express my ~~of~~ regret that a letter received from you last Autumn has lain so long unanswered. My excuse, if you will permit me, is that it arrived with me in Vienna on the wing, and separated from all my papers which could have afforded the information desired by you. I now enclose a memorandum of the positions of Islands of the Phoenix Group. I think the positions must be very nearly correct, as the handwriting seems to be my own of about 15 years ago, and probably the memo is a copy of a record used by my vessels at that time. The landing at McKean's was on the West side and possibly some remnant of the old wharf may yet be left to indicate the spot. At certain phases of tide it was 'nasty' but ordinarily not dangerous. Should you find anything on any one of the islands, which I formerly occupied I will make quit claim of all rights in your behalf. I duly received a memorandum you were kind enough to send from Samoa concerning Captain Avery and his abstractions from Enderbury Island. I followed up the lot of Guano to its ~~at~~ sale in Antwerp, it was at once recognized as "low Grade Enderbury's" and brought £3 per ton because there was not a large lot, it would never pay me to handle and I am gladly out of the business.'

In the memo of positions he encloses, under the head of Sydney Island he says 'Landed on the Island did not take possession', in consequence of this ~~demand~~ I deemed it wisest to do so myself in the interim, so placed 3 of my ~~islands~~ nine natives upon it with provisions for 12 months, and left with them a notice I am therefore free to apply to Your Excellency for the said Licence for Sydney Island prior to obtaining from Mr Williams a transfer of his rights to the others, in accordance with his promise to that effect,

I am now on my way to England ...

Islands named on Mr Williams' memo as forming the Phoenix

Guano Licences

Group - Marys; Enderburys; Birnies; Phoenix; McKeans; Sydney; Hulls; Gardners; of these I ~~had~~ have visited all but Birnies and McKeans."

Enc. FO to CO 7.3.82. "not aware of its being claimed by any Foreign Power or of its being worked for guano by any Firm belonging to the United States of America." Phoenix Group mentioned in POC 1877 as "not being within Her Majesty's Dominions, and not being within the jurisdiction of any civilized Power."

Enc. Adm. to CO ~~22/2/82~~ 4.2.82. "...an American Guano Co. (The Phoenix Guano Co.) were reported in 1871 to claim the Phoenix Group of Islands ... Nothing was previously known as to the existence of Guano on Sydney Island, indeed doubts have been expressed whether Sydney is not another name for Hull Island, which latter island was examined by Commodore Wilkes, U.S.N. ... A Mr Williams, of the Schooner 'G.L. Frost', the only person who is said to have visited Sydney Island, describes it as of coral formation, about 20 feet high, a belt of wood surrounding a shallow lagoon not open to the sea ... Mr Williams did not visit Hull, and it is to be remarked that no one person is known to have visited both these Islands."

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The whole question of the forms of Guano Licenses, mode of Payment ~~(License/pt)~~ (royalty or rent), protection, etc., is set out in ~~CP~~ SS (Earl of Kimberley) to Gov., NSW, (Lord Augustus Loftus) No.47 of 8.6.81, of which a copy was forwarded to the HC under cover of SS to HC n.19 of 10.6.81. HC was required to follow suit.

Possibly it would be best to borrow the NSW papers on the subject?

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GUANO LICENCES

SS to HC No.20 of 3.10.82.

Treasury consider preferable to grant guano licences to British subjects upon a fixed rent rather than a royalty and rent should be not less than £50 p.a.

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SS to HC, no. 15 of 24.5.80 directs HC to issue licence to export guano from Suwaynow to J. Brown (under Letters Patent of 19.7.79). ^{current} Form of Licence is given (and is interesting). as not desirable phrase passage to be deleted.

Brown had petitioned for one of 2500 by letter of 9.7.79. (copied elsewhere) she had forwarded it to SS.

HOULDER BROS: LICENSE TO CARRY LABOUR

Ag. D.C. Powell, Apia, to Asst.H.C., 17.4.86: I have the honour to inform you that Mr. Ellis, Agent for Messrs. Houlder Bros., of the Steam Vessel "Explorer" applied to me for an extension of license to carry labour on board the above named vessel. As I know Mr. Ellis to be a man of excellent character, I did not hesitate to add a provisional extension to his license "until the earliest opportunity of receiving a fresh license from the Deputy Commissioner in New Zealand". I am under the impression that I have the power to issue the usual annual licenses for the carriage of labour in British or Colonial vessels but as some doubt appears to have arisen in Mr. Acting Deputy Commissioner Churchward's mind as to whether this was so or not, I thought it best to refer Mr. Ellis to Auckland until I had specific instructions from Your Excellency.

I have &c.

Wilfred Powell

Acting Deputy Commissioner.

ARUNDEL ON LABOUR LICENSES.

Arundel to HC, 22.10.90: Your letter of 1st of August duly reached me at Cooktown on the 28th September, and duplicate in Brisbane on the 4th of October. I beg to thank you for the same, also for the copies of the Pacific Islanders Protection Acts, which were duly enclosed.

I am much obliged to you for advising me of the position occupied by the Governor of New Zealand in regard to the issue of labour licenses, and regret that in consequence whereof it is not in your power to adopt my suggestion, and to appoint the Collector of Customs in Auckland as your Deputy Commissioner.

In your letter you refer to the delay that had arisen in respect of one of our vessels, but on reference to the correspondence you will find that in every case very serious delays had occurred, and owing to the unfortunate position of the seat of Government at Wellington anyone requiring a license from Auckland must necessarily suffer great inconvenience and delay.

The concluding paragraph of Your Excellency's letter cannot I think apply to our operations in the Pacific, we having held licenses under the Imperial Government for several islands for the last 20 years, being personally well known in Downing Street, and the security offered by us was of the most unimpeachable description, being the name of one of the oldest and most respected citizens of New Zealand. I have not yet received answers from Downing Street to my letters on this subject, but I cannot think that it is the wish either of the Imperial Government or of Your Excellency as High Commissioner that we should be exposed in one part of Her Majesty's dominions to delays and obstacles in the carrying out of the Acts in question, from which we are free elsewhere.

In reference to the closing portion of the paragraph, - "the parties fro whose benefit the license is issued", it is an open question where any benefit can arise when delays like those of which I have complained to Your Excellency have occurred, and I have been more than once assured at the Colonial Office that the presence of gentlemen like ourselves, carrying out liberally large operations in the Pacific is an undoubted benefit to the Islanders, and I think I am right in assuming that these Acts were not in any way aimed at such as ourselves, and should not in their execution be either a hindrance or an annoyance.

I have &c.

John Arundel.

MALDEN: RECRUITMENT FOR

Gov, Victoria, to HC, 17.1.91: Issued License to Barquentine 'Jerfalcon' under Pac Islanders Protection Acts 1872 and 1875, on 17.1.91, to carry 60 Kanaka labourers from Nui ~~(presumably Nui)~~ to Malden and from Malden to Aitutaki. The ship came and returned to Melbourne.

287 tons - crew of 10 - Joseph Murdoch master.

This ship seems to have done much of the recruiting work for Malden.

.....

Gov., Victoria, to HC, 23.2.91: Nui in letter above is Savage Island.

.....

On 15.8.87 similar license issued to 'Jerfalcon' (Murdoch) for 50 labour between Melb - Aitutaki - Malden - Aitutaki - Melb.

On 26.9.87 similar license issued to Berquentine 'Delmira' (Thomas Hepple Robson) for 60 labour between Melb - Nui - Malden - Nui - Melb. 338 tons - crew of 10 - no surgeon.

24.4.88 similar license issued to 'Jerfalcon' (Murdoch) for 50 labour between Melb - Aitutaki - Malden - Aitutaki - Melb.

.....

MALDEN ISLAND

HC to Gov. of Victoria, 4.2.91: License granted to 'Jerfalcon'
to ~~take~~ carry native labourers from Nui to Malden and Malden to
~~Aitutaki~~ Aitutaki in accordance with Pacific Islanders Protection Act,
~~1882~~ 1872. Presumably island referred to as Nui is
Savage Island.

.....

GUANO ISLANDS: PUNISHMENT SCALE FOR LABOUR.

HC to SS, No. 2 of 4.1.92: I have the honour to acknowledge the receipt of your Lordship's despatch No. 21 of the 26th October, in which I am directed to furnish your Lordship with my views on the subject of punishments which may be authorised to be inflicted on native labourers employed on Guano and other islands in the Pacific under license from Her Majesty.

2. Hitherto Licensees have only covenanted not to inflict any corporal punishment without the sanction of the High Commissioner, and no application has ever been made for such sanction. Now that the Licensee covenants to inflict no punishment without the sanction of the High Commissioner, Mr. Arundel has applied for and received my sanction to inflict money fines, subject to a return thereof being furnished to me annually.

3. Communication with the islands is so infrequent that in nearly every case punishment to be effective must be inflicted before the High Commissioner's sanction can be received.

4. Practically no difficulty has arisen in the past or is likely to arise in future. The natives employed are of Malay Polynesian race. A sufficient number are generally recruited from one island, and among the natives are one or two of chiefly position whose influence is sufficient to keep the others pretty fairly to their work.

5. On the other hand the gangs of labourers being generally from the same island, and belonging to a much superior race than the Melanesians, it would be very dangerous for their overseers to attempt any illusage.

6. Subject to your Lordship's approval I would submit that the following list of punishments which might be inflicted without previous reference to the High Commissioner.

For assaults occasioning, or intended to occasion, grievous bodily harm, and for any serious crime;

such personal restraint as may be necessary for safety before the offender can be removed to his home, together with reduction of rations by one-third, and forfeiture of tobacco;

For petty assaults;

Money fine, not exceeding three days pay, to be remitted to the High Commissioner; with or without stoppage of tobacco for not more than one week:

For unlawful absence from work;

Deduction, after second offence and warning, of double the wages payable for the period of the absence from work, also reduction of diet by one-third and stoppage of tobacco during such period:

For absence from work when it is doubtful whether the labour is malingering or not;

Stoppage of tobacco during absence from work:

For petty larceny;

A deduction equal to double the value of the goods stolen, half of the amount deducted to be remitted to the High Commissioner:

For petty disobedience and other petty offences;

Stoppage of tobacco for not more than a week.

GUANO ISLANDS: PUNISHMENT SCALE FOR LABOUR.

I have &c.

John B. Thurston.

PS. After perusing the foregoing I desire to say that I should not be prepared to recommend the increase by the Licensees, pending the receipt of my authorisation, and on the ground that they were grave cases, of any severer punishments than those suggested above.

GARDNER ISLAND: PROTECTORATE

H.C. TO S.S., Confidential, of 7.6.92: I have the honour to enclose copy of correspondence between myself and Captain Gibson, of HMS "Curacoa" with regard to the declaration of British Protection over Gardner Island.

2. The declaration of a Protectorate appears to me to be inconsistent with H.M.'s sovereignty over the island, if, as I believe, a sovereignty had been already assumed at the time of the issue to Mr. Arundel in February of last year of a license to exclusively occupy the island for the purpose of planting cocoanuts.

3. I have received no information as to the reason for the instructions given to Capt. Gibson, but presume that he was ordered to declare a Protectorate over Gardner, Danger and Nassau Islands in view of the possibility of their being required for the purpose of a transpacific cable, and that the fact that the sovereignty of the first named island had been assumed was either overlooked, or not known to the Lords of the Admiralty. But I shall be glad to be instructed if the action by this time taken by Captain Gibson in any way affected the license granted to Mr. Arundel which states that the Licensee "hath applied to Her Majesty to assume the sovereignty over the said island", and that "Her Majesty hath been pleased to accede to such application. "

I have &c.

John B. Thurston.

CANTON: WILLIAMS CLAIM TO

S.S. to H.C., Confidential, of 30.8.93: I have the honour to draw your attention to page 17 of the Paper printed by this Department in December 1892 for the use of the Federal Council of Australasia (Australian No. 152, of which copies were transmitted to you at the time) and to the reasons given by Captain Oldham for not including Canton (or Mary) Island in the Protectorate proclaimed in 1889 over the Phoenix Group.

As this island is represented as possessing a fairly good harbour, and, as lying in a favourable position for use in case of the construction of a cable between Australia and Vancouver, I should feel obliged for any information which you may possess as to the foundation of the claim to the island which is said to be advanced by Mr. C.A. Williams, of New London, Connecticut.

In case the claim is valid, you should at the same time report to me whether the island has any commercial value and whether you have any reason to suppose that Mr. Williams would be disposed to relinquish his claim in favour of Her Majesty's Government upon reasonable terms.

You will understand that no officer is to be made to Mr. Williams and that the matter is not very pressing for the prospects of such a cable are quite indefinite at present, and I know that any enquiries you may be able to make will take time.

I have &c.

Ripon.

CANTON ISLAND

William Wyatt Gill to Thurston , dated Marrickville, Sydney, 20.3.94:

"At length I have obtained the information you desire about Canton of Mary Island. You are perfectly correct as to its being occupied by Mr C.A. Williams of New London, but it is held or worked (on account of its guano deposits) by my friend Mr Arundel. A minute ago I received his note to me which I feel pleasure in enclosing to you. Also a note from Capt. Mitchell, who is in charge of the old mission ship 'John Williams', until Capt. Turpie can bring out from England the new vessel (steamer). We expect to see Capt. Turpie here in or about July next. I mention this, as any sworn ~~depp~~// deposition concerning Nassau Island, could easily be obtained from him, as well as from myself, for the use of the Government.

I think you may rely upon my friend Arundel's doing all that is in his power to set Canton Island right. He is a true-hearted Britisher and a most reliable man. It is well for Britain and Australasia that you hold the reins at this critical moment. ..."

Enc. Arundel to Gill, Dunedin, 13.3.94: "Canton or Mary Island is held by me from my friend C.A. Williams of New London, Connecticut, who holds it from the United States Govt. I have had long chats with Wharton the Hydrographer to the Navy about it during my stay at home, and am trying to get it transferred to the Queen. I will write all this to Sir Wim Muston when I reach Auckland next week. Am very much pressed with work now.

Arundel to Thurston, Auckland, 29.3.95: "I note that you have placed the Union Group under the immediate control of Mr Consul Cusack Smith of Samoa, and that I must communicate with him before doing anything with regard to procuring labor from the Tokelau or Union Group.

The 'Ysabel' Capt. W. Ross - (formerly the Mission Schooner 'Southern Cross') will proceed from the Friendly Group about May 15th - for Hull Island and our other Possessions in the Phoenix Group, with Mr A. Gale one of our managers who arrived last night at Wellington in the 'Ruapehu' after a six months visit to England - and who will go on with cocoa nut planting - I think in the first instance he will engage Niue laborers, and probably call at the Tokelaus on the way up and learn whether any of the Islanders and their wives would be willing to leave, and we can then communicate with Mr Cusack-Smith later on.

CANTON OR MARY ISLAND - My old friend Dr Wyatt Gill of Sydney has written to me on Jan. 25th and Feb. 16th as to the ownership of this place - and saying that you had asked him for the information - as some trouble is likely to arise in consequence of your having taken possession of the same. Now this island as others of the Phoenix Group has been long held by my old friend Mr C.A. Williams of New London - Conn. U.S.A., although he never shipped Guano from any Island but Phoenix - Enderbury and ~~McKean's~~ McKean's - I got him to relinquish his claims to Sydney Hull & Gardner & Phoenix before applying to the Imperial Government for leases of the same - and as while at home I had several interviews with Capt. Wharton, the Hydrographer to the Navy, about Canton Island and he seemed very

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desirous that it should be placed under the old flag, mainly on account of possible cable requirements, I wrote to Mr Williams on the 20th Nov. as follows:- "There is a chance of the English Govt. taking Canton Island in view of the new Pacific cable calling there. I presume you would raise no objection - in that case I would apply to them for a lease and might try it for cocoa nuts again - Capt. Wharton R.N., the Hydrographer to the ~~Navy~~ Admiralty was talking to me about it at our last interview."

On the 10th inst. I received Mr Williams reply dated New London - Jan. 18th in which he says:- "I should not raise any objection in regard to Canton Island, and could not do so if I would, as I have never held any patent for it." ~~from~~ which I think you will deem satisfactory. In the authority I had from Mr Williams however, and which he gave me in Paris in 1882 Canton Island is I know mentioned among his Islands, the authority extending all over the Phoenix Group except Sydney, Hull and Gardner Islands - Phoenix Island itself being at that time one of his. I would therefore pending further advices from yourself beg to apply to your Excellency for a cocoa nut license for Canton Island, on the same terms and conditions under which I hold Sydney, Hull, Gardner etc."

J.T. Arundel, Sydney, to Thurston, 19.11.94: Encloses original letter from Mr Charles Augustus Williams, New London, Connecticut, dated January 18th 1894 -

Note: Neither this letter nor the enclosure nor the file is marked as in any way confidential.

New London, Jany 18 1894

Dear Mr Arundel

When your of 20th Novbr was written I was on the ocean and did not reach home till near the close of the year when I found a mass of correspondence demanding attention.

With regard to your enquiry as to restrictions on Sale of Guano, I would reply that there are no restrictions that prevent sale to any parties, American or foreign but there is a provision in the Act which makes it incumbent on the lessee to sell Guano to American Ships calling at Islands for same at \$4 per ton as it lies in native bed ships crew digging & loading same. Or at \$8 per ton delivered on board ship by island crew. No application of the kind contemplated has ever occurred to my knowledge. I should not raise any objection in regard to Canton Island, and could not do so if I would as I have never held any patent for it.

With cordial good wishes I am Sincerely yours

C.A. Williams

.....

CANTON ISLAND LEASE

Sec to HC to Arundel, 5.9.94: HMG has authorized HC to issue a yearly lease for £25, up to the year 1915, on your producing for HC's inspection original letter from Mr Williams to yourself, extracts from which you have furnished.

"The lease will contain provision for the resumption by Her Majesty's Government of any portion of the island that may be required for the purpose of a trans-Pacific cable; and will also be conditioned to hold good only until the right to it is challenged by a foreign Government, and a superior claim in the matter established."

.....

Sec to HC to Arundel, 12.12.94: "The clause contained in the Lease with regard to its holding good until the right to it is challenged by a foreign Government and a superior claim in the matter has been established, has been inserted by direction of the Secretary of State, and on the recommendation of the Foreign Office, on account of the island having been claimed by the United States in the list of Guano islands bonded under the Act of Congress of August 18, 1856, and a certificate respecting it issued to the United States Guano Company of New York."

.....

CANTON ISLAND: LEASE TO ARUNDEL

HC to SS No.22 of 20.3.95 transmits copy of lease of Canton Island granted by the HC to Mr John Arundel.

GUANO ISLANDS
from the
ARCHIVES OF HAWAII

The Friend, Oct. 1861. p.72.

Singular Marine Phenomena. - The Rev. Mr. Bicknell, who has just returned from a visit to Washington Island, situated about seventy five miles to the westward of Fanning's Island, reports as follows: that there is a lake of fresh water in the middle of this island. It is coralline in formation, and is five or six miles in diameter. The land is low and covered with cocoanut and pandanus trees. In some places the land is a mile in width. The lake of course, is large. He tasted the water and found it fresh. We have lately heard of another similar phenomenon on the coast of California or Mexico. It would be interesting to learn full particulars respecting these islands.

Washington Island was originally uninhabited, but Messrs English & Co., have procured about seventy natives from Humphries Island, one of the Hervy group, and are now manufacturing cocoanut oil, under the superintendence of a brother of Mr. Bicknell. The same firm is now at work upon Fanning's Island, with about 130 natives.

The Friend, Jan. 1864, p.8.

Baker's Island Marine Report.

Arrived:

- May 29 - Am Ship Elizabeth, Winslow, 42 mos out, 6000 sp.
- July 9 - Am whale bark Triton, Packard, 32 mos out, 220 sp.
- Aug 15 - Am wh ship Gay Head, Lawrence, 34 mos out, 1150 sperm.
- Nov 18 - Am ship Herald of the Morning, Williams, 12 days from Honolulu.
- " 28 - Sch Helen, McGregor, 22 days from Honolulu. Sailed next day for Howland's Island. Returned on the 28th, took ship's company and sailed for Honolulu.

Loss of Ship Asterion.

Sept 24, at 3 o'clock, A.M, the Al ship Asterion, of New York, 1125 tons, B.D.Hurd, Master, with a cargo of Guano, from Howland's Island, struck on the reef at the N.E. part of Baker's Island, and became a total loss. The crew were all saved, as well as some of the stores, &c. Nov.19, Mr George Ulrick, first officer of the Asterion, with six men - Jas Wilson, Frank Robinson, W.Pike, W. Donley, C.Hotchkiss, and S.G.Bolles - left Baker's Island in a whale-boat, for Howland's Island, to induce the Schooner Helen to come to Baker's Island and take the shipwrecked crew, since which time nothing has been heard of them.

The Friend, June, 1864, p.48.

Lost boat of the Asterion.

Off the harbor of Honolulu,
Thursday, May 26th, 1864.

Rev. S.C.Damon, - Dear Sir: - By request of Capt. Willey I write to inform you of the Chief Officer of the ill-fated ship Asterion. I suppose you have the particulars from Capt. Hurd up to the time he left Baker's Island. Owing to currents and not having chronometer time, he was unable to find Howland's Island, after trying some 56 hours. He then had to do the next best thing, as it was impossible to get back to Baker's. He with the rest of the boat's crew were in the boat 9 days, without seeing land, and at the dawn of the 10th they

GUANO (From "The Friend" cont.)

were overjoyed with the sight of land, which proved to be one of the islands of the King's Mill group, I forget which it was. For eight days they had nothing to eat nor water to drink. He was on this island 6 weeks before he had a chance to get away. At the end of that time a small schooner, which was in the oil trade, touched there. The schooner's name was Clarence, of Sydney, and which, after cruising from one island to another, returned to that port, where he (Mr Alrick) arrived safe and well last February. I was at that time in the American ship Black Hawk, Capt, Seth Doane. We were in Newcastle at the time he arrived in Sydney. Capt. Doane sent for him to come to Newcastle, which he did, and took passage with us from thence to San Francisco, and arrived April 20th 1864. As soon as we arrived he sent a dispatch to his wife. He had a free passage given him, and left in the steamer for his home and family, the first of this month, and I trust he is now happy with his dear wife at home, - so, if you write, he will be there to receive it. He spoke very highly of the treatment he received at the King's Mill Group, and thought he should like to live there if he had his family.

Yours Respectfully,
 William Church.
 Chief Officer of ship Ladoga.

The Friend, Sept. 1864, p.72.

Report of Ship Lady Washington.

The ship Lady Washington of Boston, Capt. Holbrook, was lost at Baker's Island, May 3rd, at about 1 o'clock, p.m. Early on the morning of the 3rd the wind came out from the westward, with frequent squalls, which caused the ship to swing directly in shore, and very close to the reef, but she laid very well to her moorings all the forenoon. About a quarter to 1 o'clock, a heavy squall from the west struck her, which, (together with the very heavy surf which had been running in all day) caused the ship to drag her moorings, and strike on the reef. As soon as possible we got the boats alongside, and got into them. The ship Skylark, lying at the south mooring, sent her boats, which rendered valuable assistance. All this time, the ship was thumping very heavily, and filling fast, and in 15 minutes from the time she struck, she was on her broadside, and going down head first. At half past 1 o'clock she had entirely disappeared, taking down the mooring with her, and no part of her has been seen since except a few movable things about the deck, and some of the cabin doors, which washed ashore. The ship's company proceeded to the ship "Skylark", where we were very kindly received.

As soon as we were on board the Skylark, Capt. Bursley got under way and stood out to sea. The whaleship Desdemona, Capt. Bates, which was then off the island, sent two boats to our assistance, but they did not arrive until we were all off. Afterward, Capt. Bates took one-half of the crew aboard the Desdemona, the other half remaining on board the Skylark. Both vessels then cruised around the island for 4 days, when finding that the surf had gone down enough to permit a landing boat to land, they stood in, and on the 7th the Desdemona landed her portion of the crew, and on the morning following the Skylark did the same. Our thanks are due, both to Capt. Bursley and Capt. Bates, for the kindness and generosity with which they treated us. All but 3 or 4 lost all their clothes.

GUANO (From "The Friend" cont.)

The L.W. had in between 400 and 500 tons of guano when she went down. Capt.

Holbrook and all the rest of the crew were at Baker's Island when I left (July 2nd) waiting for the Guano Company's vessel to come and take them off.

May 11th, John Bennett, (colored) of Boston, and steward of the L.W., was capsized out of a boat when coming in through the surf, and nearly drowned. He was insensible when he was got ashore, and died six hours afterward, deceased was about 40 years of age. On June 25th, Nils Christian Hansen, a native of Drammen, Norway, seaman of the L.W. died of dysentery, aged 23.

The ship St Charles, of Boston, Capt Higgins, arrived at Baker's Island, June 6th, at 2p.m. The A.G.Co's agent, Mr Kinney, boarded her, and at 4p.m. she made fast to a spar buoy, a short distance from the edge of the reef. It was intended that she should lie there, till the next day, and she was to lay a mooring. But soon after the sails were furled, the wind died away, and the surf sent the ship in on the reef. The three topsails were then set, to try and back her off, but as it was then a dead calm, it was of no use. The ship was set on the reef as far as amidships, where she struck fast, her stern being in deep water; and when the tide fell she careened over on her port side.

As soon as she got ashore they commenced saving provisions, and everything else, that could be easily moved, both from the island and from the ship Skylark. The next day, everyting that could be, was saved and the masts cut away. On the 8th she went to pieces first breaking in two amidships. Then the wreck was sold as she lay, for \$200. Her bow from the break of the forecastle, with bowsprit and jibboon, yet (July 2nd) remains whole. Capt. Higgins took passage in the ship Skylark, Capt Bursley, which left Baker's Island June 26th for Falmouth, England, with about 1200 tons of guano. While the Skylark was at the islands, Capt Burseley put to sea five different times for the safety of his ship, besides once parting the mooring in the night, and drifting out to sea. The ship Danube, Capt Broughton, first arrived off the Island, June 16th, but did not come to her moorings, till the 26th, when she took the one the Skylark left.

E.A.Hooper,

Late 2nd officer of ship Lady Washington.

Report of Ship Ladoga.

Sailed from Honolulu, May 27th, 1864 to load guano at Howland's Island. Had moderate N.E. trades to Lat. 40° 30' N., Long 169° 30' W; thence to Howland's Island June 5th; found the ship Mary Robinson and bark Harrison at the moorings loading. They reported having very bad weather, heavy squalls from the westward, and torrents of rain. The ship Mary Robinson had been on the reef but received no serious damage.

June 28th, touched at Howland's again, found both ships crippled, had been on the reef the previous night, in a heavy squall from N.W., and knocked off their rudders, causing the M.R. to make some water. At 5p.m. filled away and at 7p.m. Island bearing west, saw the Mary Robinson, with her flag half mast and Union down, (the wind at the time blowing strong from W.N.W.) and at 8p.m., she went down with 1300 tons of guano on board, taking the moorings with her. Her crew were all saved. The bark Harrison got on the reef the same time, doing considerable damage to her keel and copper, but did not make any water.

July 5th, bark Harrison got her rudder hung in chains, and sailed for San Francisco, to repair, taking Captain, officers and crew of the M.R. The Ladoga has been lying off and on at Howland's 28 days, with baffling winds and

squally weather and rain every other day. The middle of the island is a perfect lagoon, and guano all wet. Sailed from Howland's July 6th for Honolulu for moorings. Touched at Baker's Island July 2nd.

Enclosed you will find the report from that Island.

John A. Willey, Master of Ladoga.

Baker's Island Report.

The ship Lady Washington became a total wreck, on May 3rd while laying at the moorings on Baker's Island, and sunk to a depth unknown in twenty minutes after striking the reef, carrying the buoy down with her, the crew were taken off by the boats from the ships Skylark and Desdemona, and taken on board the above ships until May 7th, when the surf going down, they were landed on Baker's Island with the loss of all their effects.

Whale ship Desdemona, arrived at Baker's Island, May 2d, sailed May 7th.

June 6th - Arrived, ship, St Charles, and was lost the same day while preparing to lay a mooring.

June 21st - Arrived ship Danube from San Francisco to load Guano, and came to the buoy 26th.

June 26th - Sailed, ship Skylark for Falmouth, England.

June 26th - Off, ship Ladoga waiting for a chance to load at Howland's Island, and has been for 19 days.

July 1st - The ship Ladoga is off, and reports having left Howland's Island on the 29 ult. Also that the ship Mary Robinson and a bark, name forgotten, having struck the reef the day before. Both losing their rudders and doing other damage.

July 3d - Arrived, ship J.R. Keeler.

July 8th - Arrived, ship Shakespear, schr Odd Fellow. Schr Odd Fellow sailed on the 9th. Saw the ship Fleetwing about 10 miles east of Baker's Island bound for that island.

The Friend, June, 1865, p.48.

Report of the Loss of the Ship "Seaman's Bride", at Baker's Island, March 11th, 1865.

After laying off the Islands for 68 days, came to the moorings on Monday, March 6th. Discharged what cargo we had for the Island, and commenced to take in cargo, and had got on board about one hundred and fifty tons. Saturday, wind fresh from northeast all day; at 6p.m. fell dead calm, and ship swung inshore. From 6 to 8 p.m. light airs from west, which drove the ship on the reef, striking very heavily, and she began to fill almost immediately. Slipped the moorings and let her come broadside on the reef, and began to save what provisions we could. The Agent of the A.G.Co., sent his boats and native sailors to our assistance, and we succeeded in saving about 60 days' provisions and part of our personal effects. In half an hour we had to leave the ship, as she was lying nearly on her broadside, heeled offshore, and thumping heavily. During the night the masts went over the side, and in the morning she was all broken up. Sold the wreck to, Capt. Babcock, agent of the A.G.Co., for \$150, for the benefit of whom it may concern.

I hereby tender the sincere thanks of the officers and crew, together with my own, to Cap. Babcock, for his uniform kindness to us through all our misfortunes, and also to Mr Colcord, Foreman of the Island, and Mr. Lake and the natives, for their help on the night of the disaster.

A.B. Wyman,
Late Master "Seaman's Bride".

GUANO (From "The Friend" cont.)

May, 1866, p.40.

Report of Brig Harriet Newell.

Sailed from Honolulu, Jan.19th, 1866, for Phoenix Island, had light westerly and S.W. winds for the first three days, then took the trades quite strong to the line in $166^{\circ} 37' W$, and arrived at Phoenix Island, Feb.2d - 13 days from Honolulu, found all well at the island; landed provisions and sailed the 3d for Enderbury's Island. Arrived at that island 21st Feb. Had very light winds and a very strong westerly current. Found all well. Landed recruits and sailed the same day for McKean's Island, arriving there on the 23rd Feb. Landed recruits and sailed the 25th for Honolulu. From the island to $2^{\circ} 00' N$, $175^{\circ} 30' W$, had strong easterly winds, and from $10^{\circ} 00' N$, to $170^{\circ} 00' W$ had very bad weather, with heavy squalls and continual rain. From there to $24^{\circ} 30' N$, $161^{\circ} 00' W$, had very good weather and lights winds from the eastward. March 27th took the wind from NNE, and raised the Island of Oahu at daylight the 29th, and Diamond Head to 30th - 32 days from McKean's Island.

On March 1st in Lat $4^{\circ} 50' N$, Long $174^{\circ} 00' W$, exchanged signals with a large merchant ship in ballast, showing Hamburg colors.

Wm.J.Cunningham, Jr,
Master brig Harriet Newell.

The Friend, Sept. 1867, p.86.

From the Guano Islands - On the 14th ultimo arrived the Hawaiian brig Kamehameha V., Capt. Stone (formerly master of the brig Josephine), 35 days from Baker's Island. The brig left here on the 15th June, and after touching at Jarvis' Island, Phoenix Island, Enderbury's Island and Mc Kean's, arrived July 9th at Baker's Island. At each of these islands the Kamehameha V. left supplies for the agents and employes of the Guano Company. At Baker's Island the ships Kenilworth, Rival and Stewart Lane had all been loaded and sailed; the Sea Chief was loading, having 500 tons on board, and the Geo. Green waiting her turn. The Sea Chief, before coming to the anchorage, experienced a severe squall from the southwest, by which she lost her fore-topmast, mizen topsail yard, and split her mainsail. Capt. Stone reports all right at the islands he has visited - no deaths and no sickness of importance. On the passage to Honolulu, in "the doldrums", during twenty days the Kamehameha V. experienced heavy rain squalls from southeast to northeast. When to the leeward of Hawaii, on the night of the 13th inst., Capt. Stone was overtaken by a strong kona, with rain, thunder and lightening. This sent him flying on his course, and he made Oahu before daylight on the morning of the 14th. He brought with him the tail end of the gale. - Advt.

The Friend, Feb. 1869, p. 9.

The Mauna Loa sails on Saturday for a cruise among the South Sea Islands, under the direction of the Board of Immigration. We understand the object of the expedition to be to obtain immigrants and laborers, with their families, who will come to reside permanently upon the Hawaiian Islands. Capt. English goes in command of the vessel. His long acquaintance with the inhabitants of the South Sea Islands eminently fits him to command the vessel. We are glad to learn that the vessel will go to the Hervey Group - including Mangaia, Aitutaki and Rarotonga - instead of visiting the low coral islands under the line. Capt.

GUANO (From "The Friend" cont.)

English will fing English missionaries at the Hervey Islands, through whom he can communicate intelligently with the natives. The honorable manner in which Capt. English has conducted the labor system on Fanning's Island is a guarantee that he will be equally honorable in opening negotiations with the inhabitants of the Hervey Islands. The terrible lesson inflicted upon South Sea islanders by the Peruvian slavers, has created a prejudice against the islanders going abroad, unless they know where they are going. The honor of the Hawaiian Government is publicly pledged that the present expedition shall be conducted in the most honorable and upright manner.

The Friend, June, 1872, p. 48.

Report of U.S.S. Narragansett - Left Honolulu Jan. 27th, 18 days passage to Pango pango, made a survey of that harbour and Leone Bay, Island of Tutuila. Visited Apia, Upolo. Arrested Capt Hayes and seized his vessel; could find nothing against him, were obliged to release him and his brig. Left Pango March 14th for Phoenix Island and Enderbury Island the same evening group and Guano Islands. March 27th made Phoenix Island and Enderbury the same evening when we made fast to moorings and remained until next day. All well on the island. March 29th passed Mary Island. April 1st called at Baker's Island, found them short of provisions - supplied them with bread, and brought four natives to this port as passengers. April 2nd made Howland's Island; made fast to buoy and remained several hours; all well on the island. 41 days passage from Howland Island, had good trades carrying them to 32°N, long 168°30'E. had southerly and easterly winds until striking the trades May 8th lat. 31°W, long 155°58'15"W, squally and heavy rains until reaching the island.

The Friend, Oct. 1872, p. 81.

Kingman's Reef - The following report in regard to this reef, has been received from the U.S. ship Resaca, Commander Green:

August 31st, 1872 - at 1 o'clock, p.m., on a wind heading NE $\frac{1}{2}$ E, Kingman reef to windward bore SE $\frac{1}{2}$ E, distance seven miles, making centre of the reef in lat 6°27'30"N. long 162°13'30"W, which nearly corresponds with the position as given by Capt. Kingman. It is certainly a dangerous reef, the discolored water being observed to extend eight or nine miles, the sea combing over the ridge of the reef for a space of about three miles in an ENE and WSW direction. Several patches of white sand and coral were observed from the top even with the water's edge.

Also:-

Pleasant Island - Captain Moore, commanding H.B.M.'s Barossa, lately visiting Pleasant Island, remarks in a letter dated Hongkong, June 19th: "On June 5th I was at Pleasant Island. Two white men came off. One, an American, keeps a book of arrivals, a copy of which I send you:

Brig Carl, J. Armstrong, arrived at Pleasant Island from Melbourne Oct. 30th, 1871; four months from Levuka; trading for natives. Had 70 on board from various islands.

Sea Breeze, Wicks, arrived at Pleasant Island from Melbourne April 20th, 1872.

Brig Nuuanu, P.W. Hughes, arrived May 9th, 1872. Sailed for Hongkong.

Whaling Bark Bartholomew Gosnold, J.M. Willis, six months out, arrived May 18th, 1872

This man begged I would send a notice to you at Honolulu and other places for whalers, so as to caution them in coming to Pleasant Island not to go near

GUANO (From "The Friend" cont.)

the east end of the island, as the natives are at war with the west end, where these white men live. They are a desperate set, and if any number of them got on deck of a ship they would try to take her, as they did a small vessel in 1852. Those natives are in great want of powder and muskets, and this man wishes to warn captains of whalers not to sell any, or some day some vessel will repent it. The day after I left, the 6th, I very fortunately fell in with H.B.M.'s Blanche, 25 days from Sidney, come on the same duty as myself.

The Friend, December, 1872, p.97.

Report of Schooner C.M.Ward, G.W.Rickman, Master - Left Honolulu Sept 6th with wind from ENE for first 16 hours; then calm for 24 hours. Saw the light from the volcanoes on Hawaii on the 8th. Sept.9th took light wind from E up to lat 6°N., long 155°50'W. From thence strong wind from ESE to Christmas Island, arriving there sept 17th. Left Christmas Island next day, and arrived at Jarvis Island Sept 19th. Left there next day, wind light from E, arriving at Enderbury Island Sept 24th. Found here the ship George Green with 1,300 tons guano. Left there same day wind strong from E, arriving at Baker's Island Sept 27th. Left Baker's Island Sept 29th, wind light from E, and arrived at Howland's Island afternoon of the same day. Left Howland's for Honolulu at 3p.m. Oct 1st, wind light from E. Fell calm, and drifted to lat 3°N, long 177°55'W; then took light winds from SE. Had wind light from ENE to SE to lat 8°N, long 157°40'W, From thence light winds to the islands.

Reports of Schooner C.M.Ward - also Mary Foster

- Jan.1873 - Left Honolulu Nov, 1872, returned Dec. 22nd. Nothing of interest.
- April, 1873 - Left Honolulu, Feb 1st, returned March 30th. Nothing of interest.
Visited Enderbury, Jarvis, Baker and Howland.
- July, 1873 - Left Honolulu March 31st, returned May 31st. Nothing of interest.
- Sept. 1873 - Left Honolulu June 17th, returned Aug. 14th. " " "
- Feb. 1874 - Left Honolulu Nov.1st, returned Jan.12th. " " "
- March, 1874 - Left Honolulu Oct.23rd, 1873, returned Feb.27th. Went to Sydney (Australia) first, then Starbuck Island. (Mary Foster)
- April, 1874 - Left Honolulu Jan 31st, returned March 15th.
Visited Washington, Baker and Howland.
- May, 1875 - Left Honolulu Jan.30th, returned April 25th. Bad weather.
Visited Jarvis, Enderbury, Baker and Howland.
- Feb. 1877 - Left Honolulu Oct. 23rd, returned Jan. 7th. Visited Fanning, Jarvis, Enderbury, Baker, Howland and passed Mary and Washington. Bark Sonoma also loading at Baker.

GUANO (From "The Friend cont).

Feb. 1874, p.12.

Some anxiety is felt for the safety of the Hawaiian brig Kamehameha V., Capt. Weeks, which sailed hence on a whaling and trading voyage to Micronesia, Dec.18th, 1872. She is reported to have left Bonape, (Marshall Islands) on the 6th of August last, for Honolulu, intending to touch at some islands on the way. It is known that the inhabitants of many of the islands in those seas are savage and treacherous.

Baker's Island Report - Ship Electra, M.P.Hedge, amster, dialed July 9th, with 1,300 tons of guano.

Ship Enos Soule, H.B.Soule, master, sailed Oct.28th, with 2,150 tons guano.

Bark J.R.Rea, D.D.Ross, amster, sailed No.8th, with 810 tons guano.

Ship C.M.Davis, E.H.Thompson, master, dialed Dec.15th, with 1,625 tons .

All these ships touch at Cork or Falmouth for orders.

The weather has been very warm and the wind light this season.

Denison Hempstead, Super't.

Howland's Island Report -

Am ship King Philip, Daly, master, arrived June 12th, and sailed July, 10th with 1675 tons guano; 14 days taking in guano.

Am ship Premier, Merrithew, master, arrived Sept.3rd, and sailed Sept. 21st; 9 days taking in guano; took 1,547 tons and discharged 350 tons ballast.

Russian ship Martin Luther, Schjonning, master, arrived Oct. 22ns, and sailed Nov 19th, with 1,178 tons guano; laid at the buoys 10 days, and discharged 600 tons of ballast.

October, 1879, p.81.

Report of the Schr Jos Woolley, Benj. Hempstead, master, - Sailed from Honolulu June 21st and sighted Fanning's Island on the 29th; July 3rd arrived at Jarvis and found the ship Springfield at the moorings loading; she finished loading on the 20th and sailed 21st with 1,550 tons guano for Hamburg. July 26th took all the men and material on board and sailed for Baker's Island, arriving Aug 3rd, taking men and material and sailed on the 9th for Howland's Island arriving on the 10th, and taking men and material on board sailed for Honolulu. Sept 3rd a native Hawaiian named Holo died and was buried at sea. Sept 22nd at 10a.m. made island of Oahu bearing S.S.W. distance 20 miles and arrived in port at 2p.m.

Guano

Honolulu Advertiser 1940 Oct 6, p. 10 has a good photograph of the full rigged brig "Mermaid" which is stated to have brought guano to Honolulu years ago.

In an article of Robert L. MacCall on p. 11 entitled "Ballast of Equatorial Island Dirt was Golden" it is stated, in the authority of Bryan, that the Pacific guano was found by the excavator of 3 new classes of birds (1) Terns (2) Boobys (3) Frigates, in order of importance.

The Pacific Guano Co. was apparently first founded in 1890.

GUANO - MALDEN ISLAND

The Friend, Feb., 1878, p.13:

IMPORTANT TO MARINERS. - The following information of great importance to masters of vessels traversing the South Pacific, we find in the Sydney Argus of a late date:

"Captain Brown, master of the bark Oriental of this port, states that on his last voyage to Malden Island, while passing through the Kermadec Group, he found that Curtis Island was laid down 40 miles too far to the westward according to Imray's chart. Its correct position, according to good observation, is in lat. $11^{\circ} 32'$ S and long $173^{\circ} 33'$ W. Again, while taking the sun at noon on June 20, Captain Brown came upon an island not laid down in Imray's chart, and on passing to the westward to examine it, he saw the American flag flying. It proved to be Nassau Isle, which is laid down 35 miles too far ~~to~~ west in Imray's chart of 1874. Its correct position, by good observation, is in lat $11^{\circ} 33'$ S and long $165^{\circ} 23'$ W.

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Ross, Angus. "New Zealand Aspirations in the Pacific in the Nineteenth Century". Ph.D. thesis, Cambridge University, 1949. (Xerox copy at the A.N.U.).

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P.44. Walter Coombs and William Crush Daldy, who were later as the firm of Coombes and Daldy to play a useful part in the development both of the fruit and the guano trade with the islands, were at that time [1848] respectively a shipping agent and a captain of a schooner, the Shamrock, trading with Tahiti [Footnote: The Southern Cross, 13 April 1844 (for Daldy's interchange of correspondence with the French Governor of Tahiti), 2 October 1847 (for advertisement for departure of Sea Nymph, a fine fast sailing barque, for Manila, "For freight and passage apply to Walter Coombes, Agent")].

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P.111. One item imported from the islands and of some importance in the development of New Zealand agriculture was guano or phosphate. In October 1861, the energetic firm of Coombes and Daldy imported the first cargo of 40 tons of guano from Starbuck [Footnote: This island on 155°W. and 336 miles south of the equator has been variously named Low, Starve, Hero, Barren and Coral Queen. It is a low, barren coral atoll] in their clipper schooner Coral Queen [Footnote: The Southern Cross, 11 October 1861. The Coral Queen had left Auckland 16 July, reached Rarotonga, where she took on supplies and 16 natives to act as labourers in loading the guano, 1 August, left Rarotonga 7 August, reached Starbuck 16 August, leaving that island on the return voyage on 17 September.]. The cargo was mainly sold by auction in Auckland at 12/6, 13/- and 13/6 per hundredweight [Footnote: Ibid, 15 October 1861]. Thereafter, the Coral Queen usually made at least two trips a year to Star-

P.112. buck Island and the value of this cheap fertilizer was proved on some of the poorer soils near Auckland [Footnote: C.O. 209/200, No.4, Grey to Carnarvon, 11 January 1867, Encl.]. After some correspondence between the firm, the Governor of New Zealand and the Colonial Office, a lease over the western portion of the island was granted to Messrs James Burt, William Crush Dalby and Walter Combes [Footnote: C.O. 209/172 No.20. Grey to Newcastle, 20 February 1863, also C.O. 209/172 No.31. Grey to Newcastle 30 March 1863.]. Their license was secured for seven years as from 1 January 1866 [Footnote: C.O. 209/200, No.4 Grey to Carnarvon, 11 January 1867. In an enclosure, Burt, Dalby and Combes showed that they had imported 40 tons in 1861, 140 in 1862, 170 in 1863, 230 in 1864, and 170 in 1865.]. Up to that time some 750 tons of guano had been imported and the business evidently proved sufficiently profitable to warrant the entry of other vessels into the trade in the late sixties [Footnote: Ibid and N.Z. Herald 29 September 1869 which shows that Onward returned via Harotonga with a cargo of guano. C.O. 209/216 No.3, Bowen to Granville, 8 January, 1870, shows that Combes and Dalby (there is no mention of Burt) paid up the arrears of rent for the "lease of Island of Starbuck or Coral Queen" in the previous year.]. On 23 December 1866, Commander Swinburne of H.M.S. Mutine visited several of the small islands in this region but the only one of which he took possession was Starbuck Island [Footnote: F.O. 83/1079, Rogers to Hammond, 4 June 1867, encl. Rear-Admiral Denman's report of 11 March 1867. Swinburne, however, made the double mistake of naming the firm as that of "Combs and Dalby of Sydney". He found two men left in charge of the island on which were "several thousand ton of guano ... of an inferior quality." He reported "the only operations carried on are affected by a vessel named the 'Coral Queen' (from which the Island derives its usual

name) which arrives annually at the Island to relieve the men resident thereon, and bring provisions; she then takes in a cargo of guano and returns to Sydney."]. Its occupation by representatives of the firm of Combes and Daldy and their assurance that it had not been occupied by any other Power convinced him that the British title would not be disputed.

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GUANO

P.C. Advertiser, Aug.19, 1871 (Vol.XVI, no.3), p.3, c.4:

STARBUCK ISLAND. - The English Company which has held possession of this island for some ten years past, is at length making movements towards shipping the stores of superior guano which are there deposited. The British Schooner Mary Cummings, which arrived her on the 9th inst. from the islands, in search of laborers, sailed yesterday on her return, having shipped about 30 Hawaiians for one year. The supply of guano is said to be very large and of superior quality. The island lies a little to the south of the Line, and being in nearly the same parallel of longitude with these islands, the passage between it and Honolulu can generally be made with a leading wind both ways. This, together with the fact that we are but ten days sail from San Francisco, whence telegraphic communication can be had with the Company in London, will doubtless ensure the making of Honolulu a place of call for ships bound to Starbuck's, and for procuring supplies.

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GUANO - FANNING ISLAND

Pacific Commercial Advertiser 1857 Oct.29 (Vol.II, no.18), p.2, c.5.

FANNING'S ISLAND - The brig Emma, Capt. Zenas Bent, which left here under charter for Fanning's Island last July, returned on Saturday last with about 80 tons coccoanut oil, which was pressed in about two months time. Fanning's Island harbour is in N. lat. $3^{\circ} 49'$ and W. long. $159^{\circ} 20'$ and is one of the many circular islands which abound in the Pacific Ocean. It produces little else than coccoanuts, of which there are an abundance, and the settlers are constantly planting more. About a year ago the manienie grass of these islands was introduced there and grows well. Capt. Bent left on the island six cows and a bull, and a few sheep, which it is thought will prove of great use to the settlers. Mr. Henry English is the "proprietor", and, with his few white companions and one hundred and fifty natives from a neighbouring island, may be considered as possessed of quite a "pretty property". At the prices realized for the last lot of oil brought from Fanning's Island - fifty cents per gallon - the present cargo of the Emma is worth about \$10,000; besides which she took to Tahiti for sale there some 40 tons. The British flag we understand has been raised on Fanning's Island, a formal possession having been taken by the British authorities. Capt. English owns the island, having purchased it from previous owners; and the protectorate of the English flag gives additional guarantee to his rights.

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GUANO

P.C. Advertiser, 27.9.87/79 (vol.24,no.13), p.3, c.7.

EXHAUSTED MINES. - Like the surface gold diggings of California, the island guano deposits of the Pacific are giving out. The American Guano Company, which for the last twenty and more years has been exporting guano from the islands of Phoenix, Baker's, and Jarvis, with an undoubtedly immense profit to the ~~shareholders~~ stockholders and agents has now gone out of the business, the inference being that the deposit of "decayed coral", as we have heard it called, is no longer worth the taking away. The company has removed its fixtures and employees. Fannings Island, which until recently was supposed to be good only for the growth of cocoanuts, now turns out to be a rich mine of guano-phosphate - In connection with which we are glad to know that our former fellow-townsmen, Mr. William Greig, is receiving a substantial benefit in the shape of a royalty for every ton of phosphates taken from his island. His mine will probably last him his lifetime.

DEATH OF MR. ALFRED HOULDER. - It is with great regret that we announce the sudden death, from organic disease of the heart, of Mr Alfred Houlder, of the firm of Houlder Bros & Co. of London and Liverpool, on Saturday the 20th inst., at 2 p.m. while ascending the hill to the Volcano House on his ~~re~~ return from the crater of Kilauea. His stay at Honolulu over several months had earned him the esteem and affection of many.

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GUANO

"Friend" March 2, 1874 (Vol 23, no 3), pp 17-18

article entitled "U.S. Navy Aiding Commerce and Science U.S.S. Patomouth"

vessel has ret'd to Honolulu after cruise thru Line Group (Christmas, Palmyra, Washington, Fanning)

Christmas damaged - difficult in sailing vessel.

wrecks at Christmas 'PULSFORD', 'BRITON', 'J. C. FREMONT', 'MARIA HELENA', 'MOZART', unknown Danish ship.

Rama H wrecked 20.12.47 - rescued following spring. Rebuilt mill vessel constructed from wreck & dispatched to Honolulu where French ship vessel 'SARCELLE' found which was next at once & rescued rest.

Palmyra previously charted as one body of land - now found to be about 60 islets & 3 lagoons.

steamers shd be sent in future for survey work.

Judd, Charles Hastings 1835-1890

(1) Photo of in P.C. Advertiser 1910 July 3.

(2) "Builders of Hawaii" 1925 pg 133 920
(history shelf) 5f

Benson, Alfred G.

(1) writes to Judd re contract to establish steam navigation 26.4.51.

(2) contract granted for construction of a horse Railway 30.10.52

Hawaiian Gazette, Jan 31, 1872; (Vol.VIII. No.3) p.3, col.2.

The amount of Guano taken from the islands of the American Guano Company during the past year has been far greater than is generally supposed by those who occasionally see a vessel touching here and said to be chartered to take a cargo "to Cork for orders". We give below a list of vessels loaded at Howland's Island during the past year: -

German bark Wilhelm.....	550	tons
Susan Godfrey.....	1580	"
Elizabeth.....	750	"
Beau Monde.....	1550	"
Terpsichore.....	1880	"
Oswingo.....	1150	"
Frances.....	1226	"

Making in all from that island 8,686 tons. Much more, comparatively, has been shipped from Baker's and Jarvis Islands, making the total shipments fully 30,000 tons. It is worthy of remark that the seven ships loaded at Howland's Island during 1871, only occupied 60 working days altogether.

also col.4.

Schooner C.M.Ward - left this port Dec. 16th; had light winds from S.E. to W. to lat. 16 N., long.158.30 W., thence variable to lat.16, long.159, and took the trades; arrived at Phownix Island at noon on the 29th; left next day at 3 p.m. with a mooring buoy in tow for Enderbury's, arriving at 4p.m. From thence proceeded to Baker's Island, Jan.2nd. One of the crew, named Manuel Williams, a native of the Western islands, died of consumption the next day, and was buried at sea. Arrived at Baker's Island the afternoon of the fifth, and left the next day at 6p.m. for Howland's, arriving there at 10p.m. on the 27th. Had 45 passengers hence, one of whom was landed at Enderbury's, 3 at Howland's, and the others at Baker's Island. Had 5 foreigners and 54 Hawaiians on return trip from the various islands. Left Howland's at 4.30 p.m. on the 8th for Honolulu; had light southerly and westerly winds first part of the passage, then light from N.E. until the night of the 20th; took a stron westerly gale, which continued to increase, hauling to N.W., until the 22nd, with heavy swell and rain squalls. Commenced to moderate on the 23rd, after which had light baffling winds to port, arriving the morning of the 25th inst.

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Whalers Reported - From Messrs.C.A.Williams and Company, Agents of the American Guano Comapny, we learn that the whaling bark Lagoda, hence Nov.18th, touched at Enderbury's Islans clean, Dec.9th. She experienced a heavy westerly gale 14 days out from Honolulu, and sprung her foremast. Bark Progress, hence Nov.13th, touched there Dec18th, having taken 3 sperm whales in sight of the island, which made 100 barrels. One of the boats which fastened to a fourth whale, got badly stove and had to cut adrift. The Progress sailed on the 22nd to cruise to the westward, and from thence would proceed to the King's Mill Group for recruits.

GUANO

Hawaiian Gazette, Jan 31, 1872, contd.

Guano Vessels - British bark Kate Covert arrived at Queenstown Dec.12th, from Baker's Island. Am. clipper barks Mary E.Packer, Holloway, and Agate,Brown, arrived at the same port from Jarvis Island - the former Dec31st in 119 days, and the latter Jan.1st in 111 days, one day less than her previous passage from the same island. Norwegian bark Atlas, Larsen, left Liverpool Nov.15th for this port, en route for the guano islands.

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GUANO

(Vol. I, No.25)

Pacific Commercial Advertiser, Dec 18, 1856; p.2. col.4.
~~Hawaiian Gazette, Jan. 31, 1872; (Vol. VIII, No. 9) p.3, col. 2.~~

For Guano - The fine schooner "Lihiliho" has been chartered by the American Guano Company, to proceed to Jarvis and New Nantucket Islands belonging to them, under command of Captain John Paty, to procure a cargo of Guano. She is the best vessel that could be obtained, and Capt. Paty is just the man to find not only the island but the guano, if they are to be found anywhere in this neighbourhood. Capt. P. wont return with an empty vessel, if he has to fill her hold with a cargo of birds instead of their valuable deposit. And as for the "breakers" which appear so formidable in Com. Mervine's report, that his officers did not even touch dry land, we think Capt. Paty will gain a foothold, at least long enough to fill one bag. Mr. Arthur Benson is agent for the Company. We understand that several bags of the deposit were taken to New York, analysed and found to be worth \$45 per ton - not equal to the Peruvian guano however, which commands \$60. The deposit is covered with a thick crust overgrown with shrubbery, but that is suppose not to injure its value, but on the other hand tends to preserve it. The Liholiho will sail about Saturday and be absent some three months. The enterprise has our best wishes for its success.

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GUANO

The Polynesian March 19, 1859 (Vol.XV, no.46), p.2, c.1:

The United States Guano Law of 1856. As the fact of Lieut. Brooke having ~~dis~~ claimed the rights, benefits and emoluments of the guano discovered by him at "French Frigate shoal", to the N.W. of this archipelago, has given rise to some talk, and some varied opinion, displaying more or less ignorance of the United States' law bearing upon the discovery and discoverers of guano islands, we applied to the Commissioner of the United States, Hon. J.W. Borden, for a copy of the Act of August 18, 1856, which he courteously furnished and we now publish it entire. Guano discoveries are evidently the enterprise of the day, and Honolulu is becoming the centre of Guano operations; therefore it is always proper, and may be profitable, to know the laws of different countries which affect such discoveries.

Here follows the Act.

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GUANO

P.C. Advertiser June 21, 1860 (vol.IV, no.56), p.2, c.5:

GUANO LABORERS. - The agent of the American Guano Company gave notice a few days ago, that forty laborers were wanted to proceed to Baker's Island. On Tuesday, the day set for them to apply, there was a perfect rush of applicants, - we should judge some 300 appearing to offer their services. The^{se} guano engagements are very popular with the natives, and probably a thousand laborers could be obtained here as readily as fifty. The operations of this company appear to have taken a fresh impetus, as we hear that ships will follow each other as rapidly as they can be loaded at the island. Governor Wilder took passage yesterday/ in the Red Rover for Baker's Island, accompanied by his sister.

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GUANO

Note in red pencil on the back of the "Description of Jarvis, Howland and New Nantucket Islands, by Capt John Paty, late Master of the Hawaiian Schooner Liholiho" (No, 209 - A) forwarded under cover of despatch No. 209 of the 21st March, 1857, from the US Consul, David L. Gregg, to the Sec. of State. (Int. Dept Misc. 1857 Mar. 24)

Presumably this note is by Gregg himself.

" Note. Capt. Davis of the St Mary's is of opinion that the material called guano at these Islands, is not guano at all. Dr Taylor told me that the ordinary tests showed more carbonate of lime in the ordinary beach gravel of Jarvis' Island, than in the so called guano.

Soon after the Liholiho, Dr Judd sent me a bag of the guano which I have tested according to the best of my ability. I am satisfied that it is utterly valueless as a fertilizer. It produced no effect whatever on plants to which I applied it, while common surf mold, and ordinary manure applied to the same kind of plants standing within a few feet, exhibited a marked effect.

Nov. 2, 1857.

If it contains ammonia it is not perceptible to the senses.

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Report of Schooner Nettie Merrill.

Left Honolulu June 1st at 5 p.m. with light trades, and arrived at Hanalei, Kauai, at 1 p.m. on the 2d. Took on board a whaleboat & sailed again on the 3d, at 11 a.m. with light winds. Sighted Johnson's Is. on the 7th at 3 p.m., and came to anchor at 5 p.m. Sailed again for Honolulu on the 10th. Experienced a succession of light winds & calms. On the 17th took a light breeze from the South, which gradually hauled to the Southwest & lasted 3 days. This irregular wind in the summer months being of rare occurrence, the passengers thought best to name it "Capt. Climey's Monsoon." Sighted Kauai on Sunday, at sunset, & arrived at Honolulu on the 24th - making the round passage in 23 days.

GUANO ISLANDS

Honolulu Advertiser Oct. 18, 1935 (No. 17,507), p.1, c.7:

Japan sees Tangle over U.S. Islands. Tokyo, Oct.17. -

The annexation of Jarvis, Baker and Howland Islands by the United States may lead to complications with Great Britain, Japanese government officials believe.

According to a map compiled by the British Government, these three tiny, uninhabited islands are considered British possessions. Last Sunday they were placed under the jurisdiction of Hawaii, and the question now is whether Britain will remain silent or object to their annexation from a strategic standpoint.

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GUANO

P.C. Advertiser, July 8, 1871 (Vol.XVI, no2):

RETURNED GUANO DIGGERS. - The C.M. Ward arrived yesterday, had 76 native laborers whose times have expired on the different guano islands of the American Guano Co. Among them, however, were several Chinese, three of whom were sick with scurvy apparently, and were taken to the hospital.

On the passage up, one Chinaman and three natives died, one being a case of consumption, and the others reported as venereal. There is said to be a great deal of sickness among the laborers from the latter disease, they concealing when they ship here and becoming unable to work on the island.

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CANTON AND ENDERBURY

Honolulu Advertiser, April 30, 1948 (Vol. No.21,630), p.2, c. 5.

U.S. Court Here includes two isles.

Washington, April 29. UP - President Truman today signed into law a Bill ~~exte~~ extending jurisdiction of the US District Court in Hawaii to include Canton and Enderbury Islands.

Until the President's action, military courts presided over criminal actions on the islands. Defendants now probably will be brought to Honolulu for trial in the Federal Court.

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GUANO

P.C. Advertiser, Jan 26, 1860 (Vol.IV, no.35), p.2, c.3:

BAKER'S ISLAND. - The Josephine brought discouraging news from Baker's Island, reporting the complete destruction of the sheer wharf, erected for the purpose of shipping guano over the ~~reef~~ surf. This wharf was about 400 feet in length and put up with a great deal of labor. The first injury to it was caused by the hull of the wrecked ship Virginia being washed against it in a storm. This carried away five pairs of shears, which, however, were soon replaced and the wharf put in working order. A few days later, a tremendous surf rolled in from the westward, which completely demolished the whole structure. This surf is supposed to have been created by the S.W. Monsoons, which blow ~~with~~ with such terrific fury in the China seas. Eyewitnesses describe it as exceeding anything of the kind ever seen at these islands in our heaviest storms. The surf rolls in from the sea, sometimes an unbroken column, twenty to twenty-five feet high, and quarter of a mile ~~long~~ long, threatening at times to deluge the islands, and affording one of the grandest sights imaginable. And this occurs without any strong wind, or perhaps the wind from the contrary direction. Of course no fabric, though built of solid masonry, could withstand such a tremendous power, and the probability is that the shipping of guano will have to be done by the slow mode of beaching the whaleboats, whenever a quiet sea permits it, for no boats could ever ride through such surfs as we have described.

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GUANO

Vol XXI - No.52

Commercial Advertiser, June 23rd, 1877, p.3, col, 5.

Mortality at the Guano Islands - As intimated in our last, a careful investigation was made during the week by Gov. Dominis and Harbor Master Capt. Daniel Smith, into the report of the mortality among Hawaiian laborers at the guano islands. It was ascertained that the following were the facts. From March, 1876 to April 1877, at Baker's Island there died - Nauoli, Naiole, and Huakini, of scurvy, and Kueki of consumption. There were landed here sick with scurvy from Baker's Island - Keawe, Josua and Poipoi, all very bad, but now getting better: Waihoikaia and Kalawaia, slightly affected. From Enderbury's Island - Levi, Kaanaana and Daniela, slightly affected with scurvy and now getting better. From Jarvis Island - Kapy, bad with scurvy, and Holokahiki, slightly affected. It is stated that at one of the islands, where the disease was most prevalent, the men had been deprived of their former diet of fresh fish; yto this it was thogght, might be attributed the prevalence of scurvy.

BAKER ISLAND

P.C.Advertiser, Oct 20, 1877 (Vol.XXII, no.16), p.2, c.1:

FROM BAKER'S ISLAND. - By recent arrivals from the guano islands we learn that an ocean current has been observed there for several months, running with great velocity to the eastward - a most unusual ~~occurrence~~ circumstance. The ocean was covered by the debris of the ~~ocean/to/the~~ islands to the west - cocoanuts, etc. The A.W. Holcomb arrived at Baker's Island June 25th, and was thirty-five days in communicating with the island, the moorings being out of sight ~~of/land~~ under water owing to the current. The superintendent, Captain Wood, considered it fortunate that the ship did not get the moorings, as in his opinion she would have gone ashore. He reports that there is a plenty of good guano remaining on Baker's Island, reports to the contrary notwithstanding.

.....

LACEPEDE ISLANDS

Dunbar, Thomas "Some American Claims and Reactions in Australian History" Aust Assoc. Adv. Sci., Rept. vol 19 (1928), pp. 256-7.

1869

Claim by S P. Lord and American Quarantine Act.

Could be worked up into a little article if U.S. Consul's correspondence and Lord's correspondence can be traced.

Lord lived in Melbourne.

Lord advised by George Higginbotham that islands not part of Australia, being 9 miles off coast and not annexed.

see Pitt Rivers of 1869 (same or after)

GUANO ISLANDS

P.C. Advertiser, June 16, 1877 (Vol.XXI, no.51), p.2, c.1:

MORTALITY AT THE GUANO ISLANDS. - By the schooner C.M. Ward we learn that eight Hawaiians, laborers at the islands, had died of scurvy, and two on the passage to Honolulu, while one was taken to the hospital on arrival ~~her~~ here, in a very low condition from the same disease. Our informant states that the sickness is attributable to the lack of proper antiscorbutics in the food of the laborers, and that this is not the fault of the agent in Honolulu but of the managers at the islands. We understand that an inquiry into the facts will be instituted by the government officials here.

.....

BAKER ISLAND

Honolulu Star-Bulletin, Oct. 12, 1944, p.1, cols 1.2.3 and 4.

Japanese held Baker Island in 1943

Washington, Oct.13 - The navy department disclosed today that the Japanese, in 1943, advanced to Baker Island, less than 1,900 miles from Pearl Harbor.

Baker and neighbouring Howland were too small to serve the Japanese as an effective military position, but were good observation posts.

The occupation of Baker marked the closest Japanese approach to Hawaii except for naval air thrusts between the beginning of the war and the battle of Midway in June, 1942.

Wake, still held by the Japanese, is 2,600 miles from Hawaii.

Revealing last August that American sovereignty was reestablished on Baker and Howland, the navy said the islands were reoccupied without opposition by forces under Rear Admiral Arthur W. Radford.

Because of the absence of opposition, it was assumed then that the enemy had not occupied the two islands straddling the air route to Hawaii and the south-west Pacific, but it has become known for the first time now that the Japanese while in possession of Baker, was subjected to severe air attacks in September 1943.

Awarding a decoration to one of the carrier fighter pilots who participated in the attacks, the Navy said "American planes were in "action against the Japanese on Baker Island from Aug 31 to Sept 16, 1943.

Then, the Americans held two small island air bases at the Ellice Islands and were preparing to move into Tarawa and Makin which were invaded and occupied a few weeks later.

Baker and Howland were retaken simultaneously with the offensive in the Gilberts.

The Japanese apparently were discouraged by Admiral Radford's 16 day air

assault and the survivors were pulled back to Tarawa.

Howland and Baker were occupied by American citizens in 1935.

An aviation landing field was built on Howland before the war, and a wether observation station was maintaid on Baker.

A Navy officer decorated for his part in the air attack was Lt. Richard L. Loesch Jr. 26 of Montrose, Colo.

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GUANO ISLANDS

MISCELLANEOUS DATA

Pierson, George. Journal of Voyage from Sandwich Islands through the Kingsmill and Mulgrave Islands to Strong's Island in the Caroline Group. (ABC:19.4, v.2).

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The missionary George Pierson left Honolulu on 24.5.55 on board the whaling barque "Belle" (Capt Handy of Fairhaven, Mass.). For further notes on the voyage and particulars of Capt. Handy, etc., see under "GILBERT ISLANDS: BOSTON MISSION".

.....

Monday 11th June, 1855. ... Just at night we came in sight of a little uninhabited island named Egg Island, Lat. 3° 05' S. Long. 171° 06' W. Its name comes from the bird eggs which are abundant on it. There are no trees of any kind on it only clumps of bushes. About noon next day we came up to Lagoon or Mary's Island; Lat. 2° 60' [50'?] S. Long. 171° 40' W. This is also uninhabited. Both of these islands are of coral formation. This one encloses a lagoon. Two boats went ashore to catch fish and get eggs. Annette [Pierson's wife] and myself went with them. There is one narrow shallow passage into the lagoon. The island is pear shaped six or eight miles long. -- There are no trees on it and only a few clumps of bushes. There is a little grass growing in tufts about, and a considerable purslane otherwise it is merely a barren waste of coral, sand, and rocks piled up there inhabited only by birds, rats which are very abundant and came from vessels which have been cast away on this low island -- and crabs. We were rather late in the season for eggs. They got some fish, two green turtles or loggerhead and some shell fish.

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Guano legislation and the American Guano Company.

From: Nichols, Roy F. "Latin American Guano Diplomacy" in Wilgas, A. Curtis (ed.). "Modern Hispanic America". Studies in Hispanic American Affairs, Vol.I, 1932. Washington, D.C., The George Washington University Press, 1933. Ch.20, pp. 517-43.

.....

Use of guano as a fertilizer known in Peru since the Incas. Experiments made in Europe in 30s and 40s frequently noted in American journals (c.1842 & 1843) and it began to be advertized for sale.

Principal source Chincha Islands off Peru, where Peruvian Government had granted to the English firm of Gibbs and Co. a monopoly of selling on a commission basis for Govt.

Later, attention was directed to Lobos Islands further to the north off the coast of Peru. A ship captain, James C. Jewett, and his ~~brother~~ backer and silent partner, a speculative New York merchant, Alfred G. Benson, endeavoured to obtain U.S. Govt. backing for exploitation. Webster, Sec. of State, agreed to afford support, including naval protection (1852). But in face of Peruvian Govt. claim to islands, which Britain supported, the U.S. had to climb down and recognize Peruvian sovereignty.

A.G. Benson and his associates then became interested in guano deposits in the Central Pacific, forming themselves into the American Guano Company and acquiring the rights of a Captain Baker, who claimed to have discovered deposits on Baker and Jarvis Islands.

Before commencing to dig, Benson and his associates felt they should obtain "some guarantee of official protection to an investment so remote". "They petitioned the President for aid and Pierce and Secretary Dobbin agreed to send a warship to investigate".

On Oct. 20, 1855, the Secretary instructed Commodore Mervine to send a vessel "with a view to ascertaining the correctness of the information, of protecting our citizens in their rights and taking care of the interests of our country". He ~~authorized~~ authorized an agent of the company to go with the expedition, at the company's expense, to point out the location."

Before the Naval expedition could report, Congress met and the American Guano Company sought enactment of a bill somewhat similar to the one proposed in the spring of 1856 by Sampson and Tappan, Boston firm which had been interested in exploiting the deposits on Aves Island, from which they were disposs^{ess}ed by the Venezuelan Government. They felt that they would have stood a better chance if official U.S. recognition had been forthcoming for their occupancy. As there appeared to be no machinery for such recognition they submitted a draft proposing that in case an American citizen should find and occupy a guano island that "the right of sovereignty and eminent domain of, to and over the same" would be vested in the U.S., which would have the power to protect Americans in its use by force of arms.

A.G. Benson and associates (the American Guano Company) proved powerful allies and Senator Seward on May 26, 1856, introduced a bill sponsored by this Company. It provided for protection of discoverers and also financial inducements to encourage search for new islands.

Congress favoured it and with little debate in Senate and none in the House the Seward bill became law on August 18, 1856. Under it:-

- (i) Discoverers by following procedure in Act could register finds and obtain official recognition of their rights, provided no other nation could establish a claim to the guano in question;
- (ii) islands so registered became a part of the U.S. so long as their guano deposits lasted;
- (iii) the Government insured to the discoverer the exclusive right to take and sell the guano and established the price at either \$4 or \$8, the latter if delivered on board the vessel; and
- (iv) sales might be made to U.S. citizens only.²

Under the Act, proper papers and bonds were filed with the State Department on October 28, 1856, for Baker's and Jarvis, but no proclamation was issued until 1861. Meanwhile a proclamation had been issued for Navassa, off Hayti, which still appertains to the U.S. and is the oldest of American overseas possessions.

Since then some 60 or 70 islands became at least temporary possessions, but American interest in guano soon waned owing to nitrates being discovered and becoming more popular.³

Footnotes

- ¹ 34:1 Sen. Misc. Doc. No.60 (Ser.835), Miscellaneous Letters relating to Guano Islands, v.2, 4, under Baker and Jarvis, State Department Archives. The result of Mervine's expedition is found in 35:1 Sen. Rept. 307 (Ser. 939).
- ² Cong. Globe, 33:1, 336, 1140-1144, 1194, 1370, 2024, 2040-2041; see 33:1, H.R. bill 509, Cong. Globe, 34:1, 1669, 1696, 1739-1743; Act of Aug. 18, 1856, Stat. at large, V.XI, 119-120.
- ³ Moore "Digest of International Law", I, 556-580, for history of guano islands after 1856. See also series of vols. marked "Miscellaneous letters relating to guano islands" in the State Department Archives and Ed. M. Douglas, "Boundaries, Areas, Geographic Centers and Altitudes of the U.S. and the Several Islands," Dept. of Int., Geological Survey, Bulletin 817, 54.

Guano Islands

British Policy regarding

Gt. Britain & I. - Colonial Office - (Australia - Pub. Lands).
Papers relative to Crown Lands in the Australian colonies,
various pp. 1853. Bound with others as Parliamentary
documents, vol.62, 1853, no.3. In Pub. Lib., Sydney.

All the correspondence refers to the discovery of guano on certain islands off the coast of South and Western Australia. It is of importance, however, as containing the instructions of the Secretary of State (Rt. Hon. Earl Grey) re the policy to be adopted towards discoverers of guano, i.e. no leases to be given to private individuals - islands which may be discovered containing guano to be retained as the property of the Crown and anyone who wishes to take ~~it~~ it away is to take out a Licence.

Quotes (No.144, p.110) the legislation enacted at the Cape of Good Hope.

In a despatch to the Lieut.-Governor of Western Australia the Sec. of State says (No.16, p.70):-

"I should have seen nothing to take exception to in the regulations which you laid down for Messrs. Elder, provided only that they had been equally open to all shippers who might be desirous of engaging in the same business. But I must inform you that I look upon it as objectionable to grant monopolies, even for a most limited period, to the discoverers of guano, as a reward for finding that manure."

But the Sec. of State approved the granting of a lease of an island "provided you have the means of so doing without giving them a monopoly". That is, the Governor may lease the portion of an island on which guano has been found, or if there are several islands with guano then he may lease the whole of one.

No special rewards are to be given for persons willing to explore for guano.

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BAKER ISLAND

List of officers or others about to sail as passengers in
the United States Steamer 'Narragansett' 4th R. Dated at
Baker's Island The first day of April 1872

<u>Name</u>	<u>Rank</u>	<u>To join what ship</u>	<u>Remarks</u>
Hovi	Refractory Kanakas	For delivery to the	
Io		Company's Agent	----
Choroley		at Honolulu	

Richard W. Meade
Commander U.S.N., Commanding

Hon. Geo. M. Robeson.
Secretary of the Navy,
Washington, D.C.

Enclosed with Commander Meade's letter to the Secretary of
the 1st April, 1872.

Microcopy 147. Roll 97. Page 163.

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~~341. W. W. Gill, 16.8.81.~~

~~70 whites on Raro., "Quietly pursuing their different callings", only 3 of whom are French.~~

GUANO.

London Missionary Society Letters.

242. Krause, 29.8.62.

"some of our people (Rarotongans) have been working on a guano island" and deposited some of their money with Misi for contributions.

243. Krause, 30.10.62.

Only one whaler so far in 1862.

19 people from Tongareva had been taken to an uninhabited island to collect shell and slugs and salvage from a wrecked whaler; they were left there for 7 months, and returned to Rarotonga, not Penrhyn.

295. W. W. Gill, 18.8.71

Account of outstation trip 1871.

At Mauke, popn. 3 and 400, but 40 men away on contract digging guano (not stated where).

Gill talks as if pop. on Manihiki and Rakahanga is permanently on islands; about 400 people on each. Pukapuka pop. in 1862 = 600.

In 1871 = 340, due to

300. J. T. Arundel, Starbuck. 12.5.72. slavers, etc.

His grandfather was in L.M.S.; he is in business in Pacific, as manager in guano digging at Starbuck, employing Cook Islanders. First reached Raro. in Oct., 1870, and took interest in mission. He signed up 60 natives for work on Starbuck, and a native pastor went with work party.

301. J. T. Arundel, Starbuck, 9.3.72.

His staff now consists of 100 people, 83 of whom come from Sandwich Is.

309. Harris, Mangaia, 4.3.76.

Many deaths in past year: and young men still leave the island. Not so many are going to Malden Is. (Southern Line nor on ships, but go to Raro. and Tahiti.)

43

London Missionary Society Journals.

1870. Chalmers, Rarotonga, 19.12.70.

Young men care little for leaving own land now, and do so only for guano islands, where they get good pay, are treated well, and then return. Rarotonga has no law prohibiting people from leaving island as Mangaia has, and chiefs would never consent to it. No one runs away from Rarotonga, all who go go openly, and hence are not afraid to return.

If a number go to a guano island, a native teacher goes with them. The firm pays him; liquor is prohibited; the teachers are free to hold all services. The chiefs do not object to their going except those from Aitutaki and Mangaia.

MALDEN ISLAND

EARNES, (?). "Two Years Adrift: the Story of a Rolling Stone". Brighton, A.M. Robinson, n.d. (Copy on Nat. Lib., Canberra).

"Principally a reprint, with some additions and revisions, of a series of Sketches which were first published in the 'Brighton Guardian'". Publication date is said to be about 1876.

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...

Contains a chapter headed "An Out-of-the-Way Island", describing a visit to Malden Island, probably in the early 1870s, as a sailor on the recruiting vessel 'Oriental', pp.109-120. This chapter is reproduced below, together with various references to the recruit in the previous chapter, "A Cruise in the South Pacific" on pp.95-108. These are the only two chapters in the book relating to the Pacific Islands.

105

"When we left Moonika (probably Manihiki - HEM) our crew was increased by twenty natives whom the captain had engaged to work at Malden. These poor fellows, many of whom would never see their beautiful home again, were as light-hearted and happy as the day was long, singing, laughing, and working without a care on their minds, in utter ignorance of the two years' hard dreary work on the treeless desert that was awaiting them. From Moonika we steered for Rorotonga, the chief mission station in the Low Archipelago, and in ten days hove-to under the shadow of its verdant hills.

.....

106

Our next place of call was Aitutaki, a lovely island to the north-east of Rorotonga.

Aided by the strong trade winds, we performed the journey in a night and by sun-rise hove-to about half-a-mile from the reef.

Here I went ashore with the captain, and was introduced to the King and the missionary, a Mr Harris, who has done much good in the pleasant field in which it is his good fortune to work. ... At Aitutaki our complement was made up, so we braced up our yards, and soon were speeding away across the trades in the direction of Maldon Island, of which singular place an account will be found in the next Section.

.....

107

"Fifteen days after the hills of Aitutaki had sunk below the horizon, we saw the sun glaring down upon the desert surface of Maldon. Before sunset, the process of mooring the vessel was completed, and the sails all furled, with the exception of the maintopsail, which was kept hoisted to prevent the ship forging ahead to the reef, which lay not sixty yards from us. Later on, as the moon ~~slowly~~ was slowly creeping up behind the white coral beach, we said "good-bye" to our dusky friends, and they wen ashore to the two years of what was almost legitimized slavery that awaited them. The undertaking at Maldon is perfectly legal, and apparently just to the natives employed; but I could not help a feeling somewhat akin to sadness, when I compared those whom we had just left at the island with those whose term of service had expired, and thought that the simple peace and comparative innocence of the weaker race should be sacrificed, as it were, to the golden lust and more civilized vices of the stronger.

.....

An Out-of-the-Way Island.

109

"There are some spots on earth, which, either by reason of their remoteness from civilised centres, or their social unimportance, remain almost unknown to a vast majority of people, while, from their formation or history, they would be interesting to many whose inability, or disinclination, to travel deprives them of much interesting contemplation. It was once my good fortune to visit such a place, and I was so impressed with its strangeness, that I took no small pains to learn as much as possible of its geography, formation, and history. My efforts were crowned with but small success; still, the little I did glean from the imperfect researches of the white settlers, and the vague traditions of the Kanakas, was sufficient to make Maldon Island appear to my mind as one of the most interesting places I had ever seen or heard of.

110

Situated in South Latitude 4° and West Longitude 155°, it was first explored by Lieut. Maldon, and officer on board the frigate 'Blonde', commanded by the father of the poet Byron. It was then considered an unproductive desert, all search for water on its surface was unavailing, no trace of life, animal or vegetable, with the exception of a few rank weeds thinly scattered over the parched, coralline soil, was visible, and so, after taking possession of it in the name of the British Government, its explorers left the island to the solitude that reigned supreme over its barren surface.

Some years afterwards it was discovered that there were extensive deposits of a greyish earth, almost exactly resembling Roman cement, containing large quantities of sulphur and ammonia,

lying on the island. An enterprising speculator bought it from the Government, agreeing to pay the nominal duty of one shilling per ton on the exported "guano", as, for want of a better name, the material was called, and, on being carried to Europe, it became largely used in various manufactures.

The expense, however, of working the deposits, and the difficulty of maintaining workmen on a desert, that yielded nothing for the support of life, proved too much for the resources of an individual, consequently the speculator became bankrupt, and Maldon bid fair to relapse into silence once more. It was not, however, fated to do so; a Melbourne firm bought the concern, some ten or twelve years ago, for £5,000, and proceeded to work it on a larger scale.

111

A small colony of white men was placed on the island to superintend the carrying on of affairs, and Kanakas were imported from the neighbouring islands to do the hard work, which the intense heat of the climate rendered it impossible for Europeans to do, while a condensing engine, capable of yielding 600 gallons a day, was set up to supply the indispensable fresh water. A service of ships was established between Maldon and Malbourne, for the purpose of transporting the "guano" to Australia for transhipment to Europe, and these ships kept the island supplied with food and conveyed the Kanakas from their ~~homes~~ native islands to the scene of their labours.

It was in one of these vessels that I paid my visit to this out-of-the-way corner of the earth.

On our voyage from Melbourne, we called at several of the Society and Friendly Islands, for the double purpose of trading, and engaging Kanakas to work the deposits at Maldon. Here it may be interesting to pause for a moment and note an instance of how South Sea Island "trading" is carried on.

112

These Kanakas are engaged by the Melbourne firm for a period of two years, and, in addition to their rations of salt meat, flour, and biscuit, receive wages at the rate of £2 per month. Now comes the curious part of the bargain. The innocent natives are compelled by an agreement, signed between the agents of the firm and the king or missionary of their island, to spend at least one half of their wages in the purchase of clothing and other miscellaneous articles, such as guns, chests, ornaments, and ammunition, from the stores at Maldon; and, so great is the profit made by the sale of these articles, that by the time the confiding Kanakas have spent, as is often the case, the whole of ~~their~~ their hard-earned wages on these tempting fineries, their astute employers get their labour for a mere nominal sum.

Maldon Island possesses no harbour; it is encircled by a partially submerged reef, on which the almost unbroken swell of over a thousand miles of ocean hurls itself with terrific force, and breaks in giant billows on the low coral shores. While vessels are taking in cargo they lie in about sixty fathoms of water, and are moored to a large buoy, which is connected with the shore by a huge chain over two hundred fathoms long. Though not much more than a stones throw from the seething water on the reef, vessels thus moored are almost as safe as though housed in a dock; the main or mizzen topsail is kept hoisted, and the unvarying trade winds, blowing it aback, keep the ship at a safe distance from the sunken reef, while an anchor, lowered to a depth of about thirty fathoms, gives timely warning of danger by grinding against the rocks below if she forges too far ahead. Only one instance is, I believe, on record of a vessel being lost at Maldon. On that occasion the trade wind failed almost entirely, and a Hamburgher, lying at moorings without the usual anchor lowered, forged ahead, dragged by the weight of the chain, and went to pieces in less than an hour after the time she struck.

113

The Sunday after I arrived at the island I undertook an excursion with one of the officers of the vessel, to the windward side where the deposits were found. After a little pleasing excitement in crossing the reef we landed, and, having paid one or two visits in the little colony, we set out on our walk of eight miles over a treeless desert, under a sun the heat of which I have never felt equalled in any part of the world. Our road lay along a railway on which the "guano" is conveyed to the leeward side in trucks impelled by the trade-wind. When I turned my back on the half dozen wooden houses which formed the leeward settlement, and faced the white glaring expanse that lay before me, I involuntarily exclaimed, "What a lifeless desert!" And a desert it truly was, for it seemed as ~~if~~ though the breath of the destroying angel had passed over it and blasted it with a ruin as complete and ghastly as that which fell on the doomed cities of the plain or the once populous deserts of Egypt. Above - the cloudless expanse of azure, whence the sun poured down its almost intolerable heat; around me, the bleached coral soil which flung back the sunbeams with two-fold intensity; and hung in mid-air all round the horizon, the shadowy mirage of the giant billows, whose monotonous roar was the only sound which broke the silence of this otherwise voiceless desert. Yet, even here was wealth gathered by thousands, and even this lifeless solitude had come to own the sway of almost omnipotent man!

114

We had got about half way across the island when we came to the banks of a small lake; its stagnant waters lay sullen and unmoved, for its banks are somewhat lower than the level of the sea, and consequently it is sheltered in some measure from the trade wind by the higher portions of the island, which,

however, have only an elevation of some twenty or thirty feet.

This lake is one of the most curious features of this most singular place. Although it is of but small extent, it is, apparently, unfathomable; soundings have been made to a depth of several thousand fathoms, but no bottom has been reached. This fact led me to suppose that Maldon Island is all that remains of a huge volcano, long since extinct, submerged beneath the blue waters of the Pacific.

115

It is oval in form, having a perimeter of about 37 miles, and a lesser diameter of 8 miles. The Kanakas believe that the lake is without bottom, and that in its gloomy depths departed spirits wait until "the big island comes again". When I heard this article of faith from the lips of a fairly educated Kanaka, I thought of a theory I had once heard, that many of the islands of the Pacific are but the remains of a vast continent, which was once the home of millions, now submerged beneath the waves, and it seemed to throw a strange light on a subject which at present I have no space to enter upon.

A couple of hours' walking brought us to the windward side of the island.

Here we were greeted cordially by our old shipmate, who, for the first part of their service were working here digging the deposits.

Poor fellows! they had only been on the island four days, and already there was a change in many of them.

The bright genial smile no longer shone out on the slightest provocation, their smooth olive brows had already learnt how to wrinkle in a frown, and the terse - "Maldon Island kino, i.e. no good" - told of their disappointment and deception.

.....

117

Having spent a few hours with our former companions and dined with dear old Count Von Brunn, the working manager, who, by the bye, has lately succumbed to long toil, a cerulean climate, bad brandy, and a temper like pyroxile - we prepared for the return journey.

As our dinner had consisted mainly of tinned lobster, currant cke, and oysters, washed down with the vilest "port" ever boiled out of logwood, we did not feel particularly "fit" for another wolk of eight miles. We put this to the worthy Count and he most obligingly promised to send us home in a cab.

"A cab" exclaims the reader, "on a desert island more than a thousand miles from anywhere! Nonsense you are romancing now with a vengeance!"

The reader, however, is wrong. This is sober fact, nor have I wandered into the ideal once during this veracious narrative.

I have mentioned that the "guano" was transported across the island in railway trucks impelled by the trade winds; well, one of these vehicles was specially constructed and reserved for the conveyance of passengers, and this was our "cab".

118

It was fitted with a large sail with a lot of reefs in it, and, as it ran smoothly upon the metals, a high rate of speed was obtainable.

We tested its capabilities in this respect to the utmost.

Having said good bye to our friends, we started off with three reefs in the sail. This was enough to take us home comfortably at ten miles an hour.

After a few minutes however my companion, who had liked the "port" rather better than I did, wanted to go faster.

I was nothing loth to a little excitement, so we shook out two reefs and before long we were rattling away over the rails at fifteen miles an hour.

This was an improvement, but not enough. As ~~the~~ evening came on the wind rose, and when we were about three miles from home my friend proposed that we should shake out the other reef and go home in style.

With some misgivings I consented, and in another moment we were tearing along like an express train.

We both held tight and for a time enjoyed it immensely. Gradually however the unpleasant impression dawned upon us, that we could not stop ourselves in time to prevent an accident at the terminus.

I suggested getting out but relinquished the idea as ignominious, besides our speed was close on twenty miles an hour.

119

Close to the "station" was a rather sharp curve, and this we looked upon confidently as the end of our journey.

And so it was.

As we approached it we shifted the sail, held tight, and sat resigned.

Happening ~~to~~ just now to look along the line, I discovered to my horror a piece of wood lying across the metal.

Our fate was now sealed; we rushed round the curve, oscillating horribly, and a terrific jolt told us that the end was come.

The next minute I was picking myself up about five yards from the scene of the catastrophe.

We were somewhat bruised but no bones were broken, and we ended by a hearty roar of laughter at our mishap.

We did the rest of the journey on foot, not caring to try the "cab" again, and in due time we were telling our experiences of Maldon on board our ship.

I have not yet mentioned that during my walk that Sunday, I came across rude structures composed of large slabs of coralline rock, evidently put together by the hand of man. I asked several of my Kanaka friends what these were, and I was told that they were tombs, marking the last resting place of those who had inhabited Maldon when the scorched desert I saw around me was a fertile paradise supporting hundreds on its now barren surface.

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So this island, whose very name was forgotten in the ages during which it had lain as I saw it, had an historic past, - vague and shadowy as the ghostly billows which floated in its skies, - but still a past! A time when it had been the scene of human hopes and fears; when sentient beings had been born, had lived and died among its glades and meadows; when the rich tropic vegetation, replete with all that man could want for his sustenance, had burst spontaneously from the teeming soil; when silver streamlets had gurgled on their course, flashing in the sunlight, which now only burnt fiercely on the desert shores of a stagnant, unfathomable lake. What a change was here!

I confess I was deeply impressed with this strange story of the past, told to me in the musical language of the sunny Pacific Isles, eked out, here and there, for my better understanding, with a sentence of broken English; and often, during my stay at Maldon, I have ascended to the masthead of the vessel, and looked over the whole Island, glaring in the fierce sunlight, or lying beneath the moonbeams, thinking of the fate of nations and races; for the ghastly desert I could see stretched out beneath me had once been the verdant, smiling

home of a race that had passed away; whose history only lived in the vague traditions I had heard; and whose only monuments were the few crumbling slabs of coral, which were, nevertheless, as eloquent in their tale of the long ago as a fallen column in the Egyptian desert, or the huge fragments of an Aztec temple.

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Note: Between pp.115 and 117 I have omitted a number of paragraphs in which the author gives his reflections on the exploitation of native races by Europeans, as these contain nothing whatsoever on Malden Island.

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GUANO

'Official Opinions of the Attorneys General of the United States', ed. by J. Hubley Ashton. Vol. IX. Washington, D.C., W.H. & O.H. Morrison, 1866.

GUANO ISLANDS.

1. What facts must be established to justify the President in annexing a guano island to the United States.
2. Manner of proceeding, and form of bond.

P.30

ATTORNEY GENERAL'S OFFICE,
June 2, 1857.

SIR: The President may consider an island as appertaining to the United States, and protect it accordingly, upon the following facts being established:

1. That a deposit of guano has been discovered upon it by an American citizen.

2. That it is not within the lawful jurisdiction of any other government.

3. That it is not occupied by the citizens of any other government.

P.31

4. That the discoverer has taken and kept peaceable possession thereof in the name of the United States.

5. That the discoverer has given notice of these facts as soon as practicable to the State Department, on his oath.

6. That the notice has been accompanied with a description of the island, its latitude and longitude.

7. That satisfactory evidence has been furnished to the State Department showing that the island was not taken out of the possession of any other government or people.

After the President shall be satisfied on these points, and shall thereupon decide to treat the island as an appurtenance of the United States, he may allow the discoverer or his assigns to keep exclusive possession for the purpose of taking off the guano and selling it. But before this exclusive right can be given to the discoverer, he must give bond to the United States, with good sureties, and in a sufficient penalty, conditioned that he will sell guano to no one but residents

of the United States, and to them only for the purpose of being used in this country; and that he will sell it at a price not exceeding the maximum allowed by the act of Congress; that he will provide all needful facilities for getting the guano off within a certain time; that he will give up his possession whenever his right to hold it shall be lawfully terminated; and, generally, that he will obey the laws of the United States on the subject. I have given, not the form of the bond, but the substance of what it ought to contain.

The discoverer will then hold the island "at the pleasure of Congress." (Act 18th August, 1856, sec.2; 11 Stat. at Large, 119.) This phrase means that Congress may terminate the possession when it pleases. If it could be construed as a condition precedent, so as to make it necessary that another act of Congress must be passed to authorize the taking of possession, this act would be nugatory altogether. It is not to be presumed that any legislative body would pass a law covering the whole class of cases, and then forbid that it shall go into operation without another law for each particular case. General regulations are made for the very purpose of saving the necessity which would otherwise exist of having each individual's rights or duties specially prescribed. There is nothing to contravene this general principle, even in the form of expression here used. It is technically accurate to call one a tenant at will who holds an estate liable to be terminated whenever his landlord sees fit. Under this act, the discoverer of a guano island is the nation's tenant at will, and that will (or pleasure, which signifies the same thing) is to be expressed by Congress whenever the nation may desire to put an end to the estate granted.

P.32

The President is not bound, against his own conviction of public policy, to declare any particular island as appertaining to the United States. The law forbids him to do so before the prerequisites above mentioned are complied with, and leaves it to his discretion afterwards. But he may do it without waiting for an adverse claim to be set up.

I am, most respectfully, yours, etc.,

J.S. BLACK.

Hon. LEWIS CASS,
Secretary of State.

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guano deposit, possession taken, and
and actual occupation of

GUANO

'Official Opinions of the Attorneys General of the United States', ed. by J. Hubley Ashton. Vol.IX. Washington, D.C., W.H. & O.H. Morrison, 1866.

P.364

JOHNSON'S ISLANDS

1. The act of August 18, 1856, requires, before an island whereon guano is discovered shall be deemed as appertaining to the United States, that the island shall be taken possession of and actually occupied; conditions which are not complied with by a mere symbolical possession or occupancy.
2. No claim, under the act of Congress, can have any earlier inception than the actual discovery of the island, rock, or key whereon it is found.
3. In determining the proper party to give the bond required by the act of Congress, the political department of the Government can only look to the party complying with the conditions of the statute, without considering the legal or equitable rights of other parties to share in the profits of the speculation, which are to be left for the determination of the proper judicial tribunals.

ATTORNEY GENERAL'S OFFICE,
July 12, 1859.

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SIR: The papers transmitted by you to this office in relation to Johnson's Islands present two conflicting claims to the benefit of the act of Congress of August 18, 1856, in relation to guano islands. To determine the important questions presented for my opinion requires a reference to certain facts exhibited by the papers. From these it appears that the schooner Palestine, owned or chartered by certain citizens of the United States associated under a written agreement with William H. Parker, who was on board, sailed on the 8th of January, 1858, from the port of San Francisco on an adventure for the discovery of guano islands, and in the month of March reached two islands called Johnson's Islands, in the Pacific ocean, in 16° 4' north latitude, and 169° 17' west longitude. These islands Parker claims to have seen while on a voyage to China, in 1852, but they do not appear ever to have been visited by any one until the arrival of the Palestine, when a deposit of guano was discovered.

They were unoccupied, destitute of wood, water, or soil

Johnson's Islands, cont'd.

suitable for agriculture, and after diligent search no evidence could be found of any former occupation, cultivation, or possession. The American flag was planted upon both islands by the captain of the Palestine, possession was taken in the name of the United States, and crosses were erected with an inscription stating that the islands were taken possession of "for the owners and charterers of the American schooner Palestine, March 19, 1858, James Buchanan, President." The schooner remained there seven days, and having taken on board one thousand two hundred pounds of guano, sailed for San Francisco, arriving at that port on the 23rd of April, 1858.

Three of the parties to the original agreement, to wit: Ryan, Bixly, and Stoddard, on the 8th of June, 1858, associated with two other persons, and (as they allege, with the privity of Parker, whose name, for some unexplained reason, was not joined) organized themselves under a general law of the State of California, as a corporation, by the name of the "Pacific Guano Company." The instrument of organization recites the voyage of the Palestine, and the discovery and taking possession of two certain islands known by the name of Johnson's Islands. The objects for which the company was formed were declared to be "to collect, ship, sell, or otherwise dispose of guano on and from said islands, and such other islands as the company may hereafter acquire." In this company Parker appears to have been at one time a stockholder.

P.366

The Palestine, having been despatched from San Francisco by the Pacific Guano Company on a second voyage, arrived at the islands on the 22nd day of July, 1858, and it was then found that the American flags had been removed, the crosses thrown down, and the inscriptions destroyed.

A vessel called the Kalama, sailing from Honolulu, under the Hawaiian flag, had arrived at these islands about the 14th day of June, 1858, and the American flags and crosses planted by the Palestine, then still standing, were torn down by Samuel C. Allen and other persons on board the Kalama, and the Hawaiian flag was erected.

Afterwards, on the 27th of July, 1858, by a royal proclamation, these islands were declared to be part of the domain of the king of the Hawaiian Islands. This proclamation recites a discovery and act of possession on the 14th of June, 1858, by Samuel C. Allen, under authority of Kamehameha IV, king of the Hawaiian Islands.

The Palestine, having taken on board a cargo of guano, left two men to reside on the islands, and sailed for San Francisco.

Johnson's Islands, cont'd.

Affidavits show that from the time of the second arrival of the Palestine until now these islands have been in the actual, continuous, exclusive possession of the Pacific Guano Company by their agents; that houses have been erected, vessels chartered to furnish supplies and export guano; upwards of sixteen thousand dollars have been expended in taking and securing possession and in the erection of buildings; and measures have been taken for surveying harbors and making soundings and charts for the safety of shipping by that company.

P.367

The benefit of the act of the 18th of August, 1856, is now claimed by two adverse parties, viz: the representatives of William H. Parker, and the Pacific Guano Company, an association incorporated by the laws of California. Each of these parties disputes the other's right.

In a communication dated the 2nd of June, 1857, addressed to the State Department in relation to guano islands, I stated that the following facts must be established to enable the President to exercise the power conferred upon him by the act of the 18th of August, namely:

1. That a deposit of guano has been discovered upon the island by an American citizen.
2. That the island is not within the lawful jurisdiction of any other government.
3. That it is not occupied by the citizens of any other government.
4. That the discoverer has taken and kept peaceable possession thereof in the name of the United States.
5. That the discoverer has given notice of the facts as soon as practicable to the State Department, on his oath.
6. That the notice has been accompanied with a description of the island, its latitude and longitude.
7. That satisfactory evidence has been furnished to the State Department, showing that the island was not taken out of the possession of any other government or people.

The first question presented by the present case is in respect to the second, third, fourth, and seventh of the foregoing conditions, the others being complied with.

An actual taking of possession and actual occupation of

Johnson's Islands, cont'd.

the island whereon guano has been discovered are express conditions of the act of Congress, which are not complied with by a mere symbolical possession or occupancy, as by the planting of a flag, the erection of a tablet, an inscription, or other ~~like~~ like acts. And hence, neither of these rival claimants can have any show of right before the second arrival of the Palestine, in July, 1858; for although the island had been previously visited by them, guano discovered and removed, inscriptions raised, and the flag of the United States planted, still, when the Palestine sailed, the island was abandoned.

P.368

But on the 22nd of July, 1858, these islands were again visited by the Palestine in the service of the Pacific Guano Company, and upon her departure men were placed upon the island and left in occupation, and that actual occupation appears to have been maintained until the present time. And unless the island, before the second arrival of the Palestine, had passed into the lawful jurisdiction of some other country, or was actually occupied by the citizens of some other country, the case seems to come within the act of Congress.

A Sandwich Island schooner, on the 14th day of June, had visited the islands, and by persons on board of her the United States flag was removed, and the flag of king Kamehameha planted upon the islands. But this vessel had departed, and the islands were deserted when the Palestine arrived. The acts of the persons on board the Kalama, however designed, were nothing more than empty ceremonies that could vest no jurisdiction over the islands in the Hawaiian government. Prior acts of possession equally solemn had been performed by American citizens before the Hawaiian vessels touched at the islands. And there is little room for doubt that the Kalama expedition was a sharp scheme of Americans, under cover of the Sandwich Islands' sovereignty, to lay claim to a discovery which they knew to be in course of prosecution under the flag of the United States.

The law of nations will not acknowledge the property and sovereignty of a nation over any uninhabited country, except where actual possession has been taken and settlement formed, or of which it makes actual use.

"When navigators," says Vattel, "have met with desert countries, in which those of other countries had, in their transient visits, erected some monument to show their having taken possession of them, they have paid as little regard to that empty ceremony as to the regulation of the popes, who divided ~~the~~ a great part of the world between the crowns of

Johnson's Islands, cont'd.

P.369

Castile and Portugal." (Book 1, chap.XVIII, sec.209.) The royal proclamation of July 27, was not more effectual to give jurisdiction. At its date these islands appear to have been in the actual occupation of American citizens, holding in the name and under the flag of the United States.

Without adverting then to any question that might be made in regard to the right of any sovereignty to acquire jurisdiction over these islands, in view of their position in reference to our coasts, it is clear they were not within the lawful jurisdiction of the king of the Sandwich Islands when the Palestine reached them in July, 1858.

An actual continuous occupation having been kept up by the Pacific Guano Company from the 22nd of July, 1858, it is my opinion that the proof brings the case within the act of the 15th of August, 1856. And this answers your first inquiry.

The second inquiry relates to the party from whom the statutory bond should be required. The object of that bond and what it should contain have been mentioned in a former opinion, to which reference has been made. The bond is to be given by the discoverer, his or their assigns. By the discoverer, Congress surely intended the party complying with the conditions of the act. Parker claims to have been the discoverer of the islands, and he may be so; but the possession and occupation have been made by the Pacific Guano Company, either in their own right or as the assignees of Parker and his associates. It is clear that the conditions of the act of Congress were not performed by Parker, and if the case stood upon his acts, there is no case for the discretionary power of the President.

P.370

The notion that Parker acquired any right by having seen or discovered these islands in 1852, cannot be supported; for there is no pretence of possession or occupation at ~~the~~ that time; nor could Parker and Ryan acquire any right by having "laid a claim" to these islands in the belief that they contained guano, but before any actual discovery of guano deposit, possession, or occupation. Speculative claims anticipating discoveries are not sanctioned by the act Congress. No claim under the act of 1856 can have any earlier inception than the actual discovery of guano deposit, possession taken, and actual occupation of the island, rock, or key whereon it is found.

The legal or equitable interest which Parker may have in the speculation, and the obligation of his associates to account and share with Parker, or his representatives, under the written agreement and special circumstances of the case, cannot be

Johnson's Islands, cont'd.

determined by the political branch of the Government.

An adventure, under the direction of Parker, for guano speculation, seems to have been agreed upon by him and his associates before any actual discovery of the deposit, which was only found at the first arrival of the Palestine.

The result of this voyage led to the formation of the Pacific Guano Company, which was organized by some of the original adventurers. Whether Parker took an active part in its organization, or for some undisclosed reason was merely passive, is not material, because the instrument of organization specifically states that one of the proposed objects was to secure the guano of Johnson's islands, and refers to the voyage that had been made. Parker was a member of the company, and therefore a party to this ~~agreement~~ instrument. That there was no actual occupation of the islands until after the organization of the company, and that the occupation was by its servants, is certain.

Whether the Pacific Guano Company stand in the position of discoverers, or assignees of the discoverers, they would take the exclusive right to the deposit of guano upon Johnson's islands, intended to be conferred by the act of Congress, without prejudice to any legal or equitable right that Parker's representatives might have to share in the profits of the speculation. The nature and extent of those rights, if any exist, are proper for the ~~at~~ determination of a judicial tribunal.

Upon the facts exhibited by the papers before me, I am of opinion:

1. That the case presented is one that admits the exercise of the discretionary power of the President, conferred by the act of Congress of August 18, 1856.
2. That the Pacific Guano Company is the proper party to give the bond required by that act.

Very respectfully, yours, etc.,

J.S. BLACK.

Hon. LEWIS CASS,
Secretary of State.

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GUANO

'Official Opinions of the Attorneys General of the United States', ed. by J. Hubley Ashton. Vol.IX. Washington, D.C., W.H. & O.H. Morrison, 1866.

P.406

CAYO VERDE

The President has no power to annex a guano island to the United States while a diplomatic question as to jurisdiction is pending between this Government and that of a foreign nation.

ATTORNEY GENERAL'S OFFICE,
December 14, 1859.

SIR: The papers sent me by you show that W.J. Kendall, of Baltimore, has petitioned to be protected in the possession of a guano island, in the Caribbean sea, called Cayo ~~Grax~~ Verde. It also appears that Cayo Verde is regarded by the British government as under the dominion of that power, and belonging to the Bahamas; Lord Lyons having given notice that the removal of guano therefrom by an American would be considered not only as a trespass, but a hostile aggression.

Before a citizen of the United States can be entitled to the benefit of the act of 1858, it must appear that the island, rock, or key upon which he has discovered guano, was not, at the time of its discovery, within the lawful jurisdiction of any other government. In the present case Cayo Verde is distinctly asserted by the British government to be within its jurisdiction. The President has no right under the law to annex the island to the United States, or to put any American citizen in possession of it, until the diplomatic question raised by the British minister shall be finally settled, and ~~then/so~~ not then unless it be settled in our favor.

I am, very respectfully, yours, etc.

J.S. BLACK.

Hon. LEWIS CASS,
Secretary of State.

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GUANO

Hunt's Merchants' Magazine and Commercial Review, VOL. 41,
July - Dec., 1859 Issue for October, 1859, pp.476-477.

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GUANO ISLANDS DISCOVERED.

A correspondent of the New York Tribune gives the following ^{interesting} figures in ^{respect} relation to Guano Islands:-

Noticing, a few days since, that Clipperton Island had been proclaimed to the world as belonging to the Emperor of France, and as this guano question has become one of the first moment, it has occurred to me it would not be uninteresting to your readers to know, if any, and how many Guano Islands in the Pacific Ocean, or elsewhere, have become the property of citizens of the United States, and have been recognized by the government as pertaining to its territories under the act of Congress approved August 18, 1856.

The following is believed to be a correct list of said islands, and their several latitudes and longitudes, viz.:-

	Latitude.	Longitude.	
Baker's	0° 15' N.	176° 21' W.	<i>all</i>
Jarvis	0 21 S.	159 52 W.	<i>deduced</i>
Holland	0 50 N.	176 52 W.	
Malden's	4 15 S.	155 00 W.	
Arthur's	3 32 S.	176 05 W.	
Christmas	1 53 N.	157 32 W.	
Caroline	9 54 S.	150 07 W.	
Ann's	9 49 S.	151 15 W.	
Staver's	10 05 S.	152 16 W.	
Flint's	11 26 S.	151 48 W.	
Rauman's	11 48 S.	154 10 W.	
Rogewein's	11 00 S.	156 07 W.	
Gronique	10 00 S.	156 44 W.	
Frienhaven	10 00 S.	156 59 W.	

Hunt's Merchants' Magazine for Oct., 1859, cont'd.

Guano Islands Discovered, cont'd

	Latitude.	Longitude.
Quiro's	10° 32' S.	170° 12' W.
Low	9 33 S.	170 38 W.
Clarence	9 07 S.	171 40 W.
Favorites	2 50 S.	176 40 W.
Duke of York	8 30 S.	172 10 W.
Farmer's	3 00 S.	170 50 W.
Birnie's	3 35 S.	171 39 W.
Phoenix	3 40 S.	170 52 W.
Mary's	2 53 S.	172 00 W.
Edinburg's	3 08 S.	174 14 W.
Sydney	4 24 S.	171 00 W.
Penhryn's	8 55 S.	157 07 W.
Pescado	10 38 S.	159 20 W.
Ganges	10 59 S.	160 55 W.
Rierson	11 11 S.	160 53 W.
Sideron's	11 05 S.	161 50 W.
Humphrey's	10 40 S.	160 52 W.
Frances	9 58 S.	161 40 W.
Flint	10 32 S.	162 05 W.
Nassau	11 52 S.	165 90 W.
Danger	10 00 S.	165 56 W.
Mary Letitias	4 40 S.	173 29 W.
Kemin's	4 41 S.	173 44 W.

Hunt's Merchants' Magazine for Oct., 1859, cont'd.

Guano Islands Discovered, cont'd

	Latitude.	Longitude.
Walker's	3° 58' N.	149° 10' W.
Sarah Anne	4 00 N.	154 22 W.
America	3 40 N.	159 28 W.
Prospect	4 42 N.	161 33 W.
Samarang	5 10 N.	162 23 W.
Palmoore	5 43 N.	162 20 W.
Danger	6 30 N.	162 32 W.
Makin	3 02 N.	172 46 W.
Mathew's	2 03 N.	173 28 W.
Davis	6 40 N.	170 10 W.
Barbera	3 54 N.	173 00 W.

P.477

The two first named islands have been claimed by the American Guano Company, and the rest by the United States Guano Company, and other citizens of the United States.

I understand these acquisitions are all to be surveyed and chartered (sic.), and the quality and quantity of the guano thereon to be ascertained by competent analytical chemists and topographical engineers, and a report thereof made to Congress at the earliest practicable period. At some of these islands there are good harbors and safe anchorage; and at most of them there is a good lee, which, coupled with the fact that most all of them are situated where storms are seldom known, (the prevailing winds being from the East,) makes them places of safe resort for ships.

The quantity and accessibility of the guano, on many of these islands, is placed beyond doubt. What remains to be demonstrated is its quality, and whether there is such to warrant its importation. On this point I am not competent to decide, because there are two theories which now divide the opinions of scientific men, viz., the ammoniacal and the mineral. The former advocated by Laws, Gilbert, Johnson, and others;

Hunt's Merchants' Magazine for Oct., 1859, cont'd.

Guano Islands Discovered, cont'd

and the latter by Liebig, Gale, and others, who claim that it is nutrition, not stimulus, which is the great desideratum. The guano from these islands comes under the last head; the Peruvian, Elide, and Ichaboe, under the first. Time will settle which theory is correct.

A gentleman who is well acquainted with the islands of this ocean, gives us some information in regard to some of those claimed above, which it may be ~~as~~ well to state here. 1st. Arthur's, Favorite, and Farmer's Islands do not exist; 2^d. Walker's, Sarah Ann, Samarang, and David's Islands are of doubtful existence. All the above are laid down on the charts, it is true, but probably none of them exist; 3d. Flint's, Clarence, Duke of York, Rierson's, and Humphrey's Islands are all inhabited, and possession of them cannot, very well, be taken by foreigners. Sydney Island is covered with trees or woods. Christmas and Caroline Islands are partly covered with cocoanuts, and are known not to possess guano. That there may be guano, in abundance, on many of the islands claimed, is very likely, but the best de~~po~~sits will probably be found to exist on small, rocky islands, as yet, perhaps, undiscovered.

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GUANO

The Merchants' Magazine and Commercial Review, Vol. 44,
Jan. - June, 1861 - Issue for June, 1861, pp. 784-785.

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COMMERCIAL REGULATIONS

Importation of Guano under the provisions of the Guano Act
of August 18, 1856

Having received official information from the Department of State that the islands noted below have been recognised by the issue of the proper certificate, as appertaining to the United States, for the purposes specified in the guano act of August, 18, 1856, the same is published for the information and government of officers of the customs and others concerned.

The special attention of collectors and other officers of the customs is called to the provisions of the 3d section of the act aforesaid, to wit:

"SEC.3. And be it further enacted, That the introduction of guano from such islands, rocks or keys shall be regulated as in the coasting trade between different parts of the United States, and the same laws shall govern the vessels concerned therein."

There being no officer of the customs at the islands, rocks or keys in question to grant clearances or certify manifests, those provisions of the coasting laws which authorize, under certain circumstances, the omission of those papers, will apply to vessels engaged in this trade, and they will be put on the footing of vessels of the United States laden with domestic productions. But masters of such vessels will be required to have manifests subscribed by themselves of the cargo, and to exhibit the same, on demand, to officers of the customs for inspection. Regular entries at the custom-house must be made on arrival at the port of destination in the United States, and collectors of the customs are instructed to cause in all cases the cargo to be carefully inspected.

It will be perceived that the 3d section of the act aforesaid applies the provisions of the laws regulating the coasting trade to vessels employed in the transportation of guano from the islands, rocks and keys in question to ports in the United States.

Only such vessels, therefore, as can legally engage in the coasting trade of the United States, can be employed in such transportation. Foreign vessels must, of course, be excluded,

The Merchants' Magazine and Commercial Review for June, 1861,
cont'd.

Commercial Regulations, cont'd

P. 785

and the privilege confined to the duly documented vessels of the United States.

Starve, or Barren, lat. $5^{\circ} 40'$ S., long. $155^{\circ} 55'$ W.

McKean, lat. $3^{\circ} 35'$ S., long. $173^{\circ} 17'$ W.

Phoenix, lat. $3^{\circ} 35'$ S., long. $170^{\circ} 55'$ W.

Enderbury, lat. $3^{\circ} 08'$ S., long. $171^{\circ} 08'$ W.

Certificates for which have been issued to the Phoenix Guano Company.

Nevassa, lat. $18^{\circ} 10'$ N., long. 75° W., certificate for which has been issued to E.K. Cooper.

Howland, lat. $00^{\circ} 52'$ N., long. $176^{\circ} 52'$ W., certificate for which has been issued to the United States Guano Company.

Jarvis, lat. $00^{\circ} 21'$ S., long. $159^{\circ} 52'$ W.

Baker's, or New-Nantucket, lat. $00^{\circ} 15'$ N., long. $176^{\circ} 30'$ W., certificate for which has been issued to the American Guano Company.

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Captain Miller, Tahiti, to H. W. Rouse, Hⁿ Consul, Valparaiso,
Perite of 6 12 54 Tahiti Consulate Papers, M.L.

" You have of course received the Foreign Office Circular
Instruction about Guano. I have heard it stated that
Guano is believed to exist in large quantities in the
Island of "Salas", between Easter Island and the Coast of
Chile, and the party who informed me of this report says
that he has himself seen vast numbers of Sea Birds in the
neighborhood of that island, in the occasion of his passing
by it a few years ago. It lies very far out of the track
of vessels bound from here to Valparaiso, but not much
out of the course of ships coming from Valparaiso or Callao
to Pitcairn or to those Islands; and I mention the circumstance,
as you may perhaps think it worth while to suggest a
visit to "Salas" Island, to any one of Hⁿ ships bound
from your Port in this direction. The natives are
differently represented as hostile, and friendly, to strangers (me)

DISCOVERY OF CENTRAL PACIFIC

ILLUSTRATION

- (1) Arrowsmith's chart of the Pacific in 9 parts. It might be worth while reproducing the appropriate portion of chart 6 (i.e. the Central Pacific part), as an illustration of the geographical knowledge at the commencement of the 19th century -

it gives the track of all voyages up to and including the Charlotte in 1788.

- (2) Norrie's Country Trade Chart might be a good illustration of a later date's ideas.

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F.O. 58/91. - 1859.

Captain Frederick Montresor (H.M.S. Calypso) to Admiral Baynes, dated Honolulu, 31 Jan. 1859.

(Note: this report proceeded from a query sent by F.O. to Adm^y. regarding a report of guano find on Jarvis--RG)

Guano Islands

"I have the honor to forward for your information some remarks on Jarvis Island resulting from a conversation on that subject with Mr. C.H. Judd, an exceedingly intelligent young man (born and bred in Honolulu of American parents) who goodnaturedly permitted me to make notes of our conversation in his presence.

"Jarvis Island, which he says is pretty correctly laid down in our charts, . . . is the only island in this vicinity which has hitherto exported guano.

"This island is, he states, three miles long and two wide, it is a low coral island having the appearance of a flat spit of sand about twenty feet above the level of the sea, the agent's house and sheds being seen from a ship approaching long before the land is visible. (Brokes Island, placed in the Admiralty Charts in Lat. 1°10'S. and Long. 159°37'W., he says positively has no existence. There is no bay or harbour but moorings have been laid down for four ships, of fifteen hundred tons, to lay at the island for loading at the same time. The island is usually very accessible by boats.-- Boats which load in bulk are filled from a rail car containing bags of guano. November and December are the worst season in regard to work, but even in these months the work is never entirely suspended by the violence of the surf for more than three consecutive days, after which there is an interval of several days of fine weather. No water has as yet been discovered on the island and both water and provisions are imported by the company for their workmen.

"The quantity of guano on this island is estimated by admeasurement at one million of tons; of this six thousand tons have been exported since the American Guano Company of New York, to whom it belongs, first commenced regular shipments in May 1858, and they have entered into a contract now carrying out to supply another company with one hundred and ten thousand tons, which at the rate they are likely to work it will take five years to ship; the price charged per ton delivered, the agent tells me he believes, but is not certain, is eight dollars. The island, Mr Judd affirms, belongs as I have said to the American Guano Company of New York under the protection of the American Flag, but he believes no duty of any sort is charged by the Gov't. The sale of the guano and general agency is vested in Dr. G.P. Judd, the father of Mr. C.H. Judd, a former Minister of State, while the more active employment of superintendence at the island is trusted to the energy of his son.

"Hitherto thirty hands, natives of Hawaii, have been employed, but Mr. C.H. Judd is at this moment at Honolulu to raise fresh hands

and has succeeded in getting twenty additional ones. The wages given are ten dollars per month with rations. The workmen engage to serve for one year and keep steadily to their engagement and Mr. Judd enters into a bond to pay one thousand dollars to the Hawaiian Gov't for any man who /sic/ he does not bring back at the end of the year, a regular official list being taken of all who leave. The ships that have been employed on this service have all been American, and usually about the thousand tons register, which he says is the most convenient size, generally taking away from twelve to fifteen hundred tons.

"The first cargo consisting of eighty tons was shipped in the 'Liholiho', Hawaiian schooner, to Honolulu and . . . transhipped from thence to New York on the 'Aspasia' ~~/sp??/~~ (American) in 1857. The 'White Swallow' (American) took the next cargo of one thousand one hundred tons direct to New York. *x or Astasia?*

"The guano on this island extends from the centre of the island towards the beach, of which it stops short several feet, and is from four feet to ten inches in depth. They work it sectionally as one would cut a cake. The nature of the guano on this island differs according to Mr. Judd's account greatly from that of the Chinche Islands; in the latter ammonia is the prevalent ingredient, in the former, which I am told has been tested by the first chemists in New York and other states of the Union, as also in Honolulu, has as a maximum 80 per cent of phosphate of lime; is almost scentless, and has no evil effect upon the health of the men working at it. Mr. Sloggett, the surgeon of this ship, by Mr Judd's request tested, as far as his means of analysis on board permitted, a specimen of Jarvis Island guano, and is of opinion that it contains ~~no ammonia~~ but that it is composed in a very great proportion of phosphate of lime. On examining under the microscope he was unable to discover any minute organic forms such as have been found in great quantities in ~~Shabo~~ /sp??/ Guano.

"It is Mr. Judd's intention to sail tomorrow, the first of February, with his new raised hands for Jarvis Island and to explore for the purpose of finding guano the islands which he says lay /sic/ to the westward (not to the southward of west) and in about 175°, by which I fancy he means Barbers or Barbadoes Island, but he declares most of these islands are laid down wrong in our charts. Eight days is the average passage for a clipper from Honolulu to Jarvis Island. The cargo has no deteriorating /sic/ effect on the health of the crews, and one would not be aware from the scent that such a cargo was on board. This is all I gathered relating exclusively to Jarvis Island.

"Fanning's Island laid down in the Admiralty Charts in Lat. 3° 50' N., Long. 159° 11' W., but which Mr. Judd says is nearly a degree further to the westwards, has a quantity of guano for which it has no export trade. This island belongs to Mr. Inglis /sic/, an Englishman, who has hoisted the British Flag and claims the island as under its

protection. Mr. Inglis employs a number Hawaiians /sic/ in making oil from the coconuts of which there is a great abundance on the island, and makes a good trade by importing it to /sic/ Honolulu. Johnson's Island, by the chart in 17°0'N. and 169°40'W., Mr. Judd says has a quantity of guano but that the ownership of the island is disputed between the Americans and the Hawaiians which I believe is the reason for its not being worked.

"I am aware that you will have better general informationn /sic - ?/ on the subject of my letter than I can hope to glean and that you will already been informed on many subjects of which it treats, but I conceive it my duty to forward all the information I may obtain with the hopes that some remark among the many may be new and of use.

I have, etc.

Fred'k. B. Montresor, Captain

"P.S. Fanning's Island is said have water upon it."

CENTRAL PACIFIC

U.S. NAVAL VISITS TO

- (1) Oct. 1825 - Lieut. Paulding, U.S.S. "Dolphin": Atafu, Nukunono, Caroline
- (2) Aug. 1857 - Commander Charles H. Davis, U.S.S. "St. Mary's".
Baker,^{1,2}; Jarvis.
- (3) 1859 - Lieut. J.M. Brooks, U.S.S. "Fenimore Cooper": Johnston.
- (4) March 1872 - Commander R.W. Meade, U.S.S. "Narragansett":
Carter,²; Baker; Phoenix; Christmas.
- (5) ? Lieut. Hamphill, U.S.S. "Tuscarora": Enberbury.
- (6) Oct. 1872 - Commander Nathaniel Green, U.S.S. "Resaia [?]:
Kingman Reef.
- (7) 1874 - U.S.S. "Portsmouth": Washington.
- (8) 1876 - Commander J.H. Miller, U.S.S. "Tuscarora": Pukapuka.

¹ annexed. ² surveyed.

Honolulu Advertiser, 3.6.1935.

SEVENTY YEARS AGO.

Persons wanting plumbing done, would do well to call on Mr. Robert Rycroft, at the tin and copper-smiths, next door above Flitner's and see specimens of his handicraft.

A. B. Wyman, late Master of "Seaman's Bride," reports her loss at Baker's Island, March 11, 1865. He says in part: "From six to eight p.m., light airs from west; at eight p.m. took heavy squall from west, which drove the ship on the reef, striking very heavily, and she began to fill almost immediately. The agent of the A. G. Co. sent boats and native sailors to our assistance, and we succeeded in saving about sixty days' provisions and part of our personal effects. Sold the wreck to Capt. Babcock, agent of the A.G. Co., for one hundred and fifty dollars."

SIXTY YEARS AGO.

Thos. G. Thrum, business agent, advertises: The Islander, a weekly journal devoted to Hawaiian interests. Particular attention is given to Scientific Researches, especially among the Pacific Islands. Home and foreign news form a prominent feature of the paper. It aims at discussing matters of interest and importance and making

itself necessary to the home as to the man of business or the general student. The list of contributors embraces the best literary talent, and includes among others, the following: Henry A. P. Carter, George H. Dole, Curtis J. Lyons, Alfred St. Hartwell, Sanford B. Dole.

Honolulu Advertiser, 10.8.1936.

SEVENTY YEARS AGO - 1866.

D. L. Fletcher, Master of brig Kamehameha V, reports: Left Honolulu May 11, touched at the following islands: Malden, Jarvis, Phoenix, Enderbury's, Hull's, McKean's, arrived at Baker's after voyage of 32 days. Left there on June 17 for Honolulu, touching at Howland's Island. On the 27th of June, J. McDonald fell overboard from aloft, during a squall, and was lost. July 26th, Kohololio, a native of Oahu, died, after an illness of some months. Arrived at Honolulu August 3, after passage of 46 days.

Honolulu Advertiser, 1.9.1936.

SIXTY YEARS AGO - 1876.

The Legislature. The passage by the assembly of a resolution to the effect that the public treasury shall assume the payment of the expenses of the royal visit to the United States, is simply an act of justice. All will concede the King by that visit made an excellent impression and did more to enlist the sympathies and good will of our neighbours

than without such visit would ever have been achieved by mere negotiation.

From Flint's Island, per W. H. Allen, R. B. Chave, master: 6,440 ft. Koa wood, 4 cakes cocoanut oil, 66 empty casks, 65 rolls matting, 180 logs aito wood, 2 bags coin, 2 boxes sample guano, 2 do vanilla beans.

Honolulu Advertiser, 18.12.1936.

FIFTY YEARS AGO - 1886.

The Australia arrives, bringing among other things, a case from Consul W. J. de Gress, Hawaiian Consul at the City of Mexico, containing four elaborately carved canes for presentation, one to His Majesty the King, one to His Excellency Mr. Gibson, one to Mr. R. W. Laine, Mexican Consul, and another to Mr. R. J. Creighton. The canes are made of coffee wood, finely polished, with monogram of the recipient, on each, with the Mexican arms.

There is a collision of two express wagons, which become total wrecks, then one of the horses runs into a carriage, which becomes a sorry sight. Damage done will amount to several hundred dollars.

The schooner Jennie Walker will sail for Fanning's Island next Monday morning, when Mr. Gregg, her owner, will return thither from Honolulu.

Honolulu Advertiser, 19.2.1937.

SIXTY YEARS AGO - 1877.

Report of American schooner Mabel Scott, S. Higgins, master: Sailed from Tahiti January 4 for Flint's Island and arrived on the 7th, after loading firewood sailed on the 11th for Vostock, arrived there on the 12th and sailed same day for Fanning's Island, arriving there on the 21st; schooner Kinau, Capt. Hatfield, was lying at anchor in the lagoon; on the 25th the C. M. Ward called off the island, left the same day for Jarvis Island. Left Fanning's on the 27th for Hilo, Hawaii, arrived February 4. Sailed from Hilo on the 13th and arrived this port on the 15th. Fine weather whole trip.

Honolulu Advertiser, 20.2.1937.

SIXTY YEARS AGO - 1877.

Edward Preston writes to the Editor: "I was present at the police court on Tuesday morning when a Chinaman was charged and fined one dollar and one dollar costs for desecrating the Sabbath. His offense appeared to be this: last Sabbath he shut up his house and painted the inside of one of his rooms, and some pious God-fearing man informed against him."

Imports from Flint's Island, per Mabel Scott: 20 cords mira wood and 1,000 cocoanuts.

Honolulu Advertiser, 9.7.1938.

SEVENTY YEARS AGO - 1868.

The only foreign arrival which we have this week is the brig Kamehameha V., from a cruise among the Guano islands. We learn from this arrival that the Guano business was never more prosperous than now. At Baker's Island, under the superintendence of Capt. Johnson, arrangements are so complete that in favourable weather two hundred tons of Guano have been put aboard in one day. Four thousand, six hundred tons have been shipped this spring at this island, and no accident of any kind has happened.

Honolulu Advertiser, 14.6.1939.

SEVENTY YEARS AGO - 1869.

Quite a Ride. We frequently of late hear of driving a wagon up or down the Pali, but it is always with the assistance of a cow-boy or two, who with lassos hold back or pull up. A gentleman of this city drove over alone one day this week, and back again next day with a second party without the aid of anyone, except that on the way up, when the horse needed rest, the wheels were blocked with a stone. We cannot recommend parties to risk so much in attempt to equal this feat.

Hawaiian brig Kamehameha V., Captain Rickman, returns from trip to the Guano Islands, 39 days from Howland's. She reports loss of the British ship Shaftsbury, while lying at her moorings at Baker's Island.

Honolulu Advertiser, 15.6.1939.

SEVENTY YEARS AGO - 1869.

Editorial paragraph. If shipowners will continue to send their vessels to Baker's and other Guano Islands, at unseasonable months, against the repeated cautions of those whose opinions ought to be their guide, they must expect to hear of frequent disasters. It is unsafe for large vessels to load there during the winter months.

Honolulu Advertiser, 14.7.1939.

SEVENTY YEARS AGO - 1869.

A correspondent writes of Baker's Island: "Eight weeks ago the last vessel of the guano fleet, the brigantine Kamehameha, sailed away for Honolulu, taking the laborers and the Superintendent of the island, and leaving me with one faithful Hawaiian to perform the only duty of guarding the property until the reopening of the busy season, in May or June." (Written Jan. 15, 1869).

On Thursday Messrs. Adams & Wilder sold the property on Emma Street, owned and occupied by Mr. W. L. Green, for \$5,100, Mr. Theo. H. Davies being the purchaser. This property is said to have cost about \$10,000. It will be occupied by Mons. Ballieu, the French Consul.

Honolulu Advertiser, 10.9.1939.

SEVENTY YEARS AGO - 1869.

The wreck of the British ship Mattie Banks, as it lies on Baker's Island, is sold by Messrs. Adams & Wilder for sum of \$100. Articles saved from the wreck remaining on the island are sold \$2⁶8, and articles brought here realize \$745, making total of \$1,113.

Honolulu Advertiser, 30.12.1939.

SEVENTY YEARS AGO - 1869.

The R. W. Wood, Capt. English returns from an unsuccessful voyage to the Islands of the South Pacific in search of laborers, having brought only twenty-six females and sixteen males. There are five married couples and their services are eagerly sought for. They are engaged for two years, with a contract to return them at the end of that time. They do not speak a language which our people can understand. They are natives of Danger Island.

Honolulu Star-Bulletin, 19.5.1939.

While reviewing some old family letters recently William J. Forbes of Honolulu discovered a letter dated from Jarvis island May 12, 1859.

The letter was written by Levi Chamberlain, one of Mr. Forbes' uncles, to relatives in Honolulu.

Mr. Chamberlain, it is apparent from content of the letter, was stationed on the island at the time as an employe of the American Guano Co., which only two years previously had claimed title to Jarvis, Howland and Baker islands.

His description of life upon the island provides the basis for an interesting comparison with experiences and accomplishments of the Hawaiian youths who are at present stationed on the island and who are commonly thought of as "pioneers".

Excerpts from the letter follows:

"So the Syren is gone! I was afraid my letters would not reach Honolulu before her departure, though it is rather aggravating to hear that the departure of the Syren and arrival of the Josephine were so near each other.

"I did not know but the Syren would touch here, as this island is directly in her course. One ship we thought was her, and I consequently went off to her, but proved to be an English vessel trying to get a cargo, but we had ships enough of our own and to spare.

"She was last from Tahiti and we got some oranges from her, which though pretty well shriveled up, were very acceptable.

"We have had bad weather, and ships have come near getting into trouble, and I expect the American Guano Co. will have to pay some demurrage.

"This is a mean little island. Our house is twice its height. The mountains around Honolulu will look very exalted,

I expect.

"We are anxiously awaiting the Josephine as we are out of fresh provisions. We have a first rate cook and when there is anything to make up it is made up in first rate style.

"We had a rain, a genuine Kona rain last night. Rain is very rare. . . . Our house, the best on the island, though but a shelter from the sun, was not able to resist the attack of this new foe, and for an hour I was dodging around from place to place with my mattress, trying to find a spot where the drops would not touch my face....

"We have caught fish, beautiful silver fish, by the thousands for the last two or three mornings and salted them down. I should like to put a pan full of them fresh from the water and flapping into your kitchen.

"I shall escape one thing by being absent at this time, the renewal of the treasurership of the Tract Society and an election to some office in the Cousins' Society. I have a great bore now before me, a presidential address before the Lyceum at Punahou.

"I didn't know but I should get rid of that, but they stick to me, and I received by the last mail a letter from the secretary stating that they expected it when I got back. . . .

+ + + +

"Well, when my time is up, guano and guano companies may go to pot for all I care. I want them nearer civilization, not where, if anything breaks, it takes an age to have it

replaced, and where it is impossible to communicate with headquarters in times of pressure and bad weather and obtain new laborers."

- (1) "Report on the Natural History of the American Equatorial Pacific Islands (Jarvis, Howland, and Baker)", by E. H. Bryan, Jr. TS, 25 pp.
- (2) "Brief on Baker, Howland and Jarvis Islands" TS, 2 pp.
- (3) "Our Equatorial Islands", by James D. Hague. From The Century Magazine, Sept., 1902. TS, 12 pp.
- (4) "What are the Guano Islands?", by E. H. Bryan, Jr. From Paradise of the Pacific, Sept & Oct, 1939. TS, 12 pp.
- (5) "Phosphatic Islands of the Pacific Ocean", by J. D. Hague. From Am. Journ. Sci., vol 34, pp 224-43, 2nd ser., Sept, 1862. TS, 26 pp.
- (6) "The Guano Trade in the Pacific". The Friend, July, 1859, p. 52. TS, 1 p. (Copied)
- (7) "Data for Photographs taken by E. H. Bryan, Jr. in the Cruise of U.S.S. Taney to Central Pacific, July, Aug., 1838" TS, 3 pp (itemizing 13 photographs). 2 copies in folder.

* Folders 1 and 2 are not on the Central Pacific Islands.

E. H. Bryan, Jr.

Contents of Folder 3

- (8) Affidavit certifying the E. H. Bryan, Jr., has crossed the Equator eight times. Ts, 1h.
- (9) "Powers Trolley for Forgotten Isles, now vital as air bases in Pacific", by Otto Janssen Advertiser, April 17, 1938.
- (10) "South Seas are now commanding the attention of the entire world", by Russell E. Hall, Advertiser, April 17, 1938.
- (11) "Dr. Greening Sees it Through", by Edwin North McClemon. Paradise of the Pacific, January, 1938, pp 5-6. (Handly mentions Central Pacific).
- (12) Notice of Latest Hydrographic Office Chart Issues. June 30, 1937.
- (13) "Life on the Equatorial Islands", by Solomon Kalana. The Friend, June, 1937, p. 111; July, 1937, pp 125-6.
- (14) "USN Exercise may extend into So. Seas". Advertiser, April 3, 1937.
- (15) "Army Helps Develop Pacific Areas. Plays leading part in Colonization of Equatorial Islands." Star-Bulletin, Mar 15, 1937.

E. H. Bryan, Jr.

Contents of Folder 3

- * (16) "Plants found on Jarvis, Howland and Baker Is." Ts, 1p.
(List of names and locations)
- * (16) "Plants of Jarvis, Howland and Baker Islands" Ts, 2pp.
(Descriptive list)
- (17) Memorandum for Captain Meyer re Natural History collecting
on Jarvis, Howland, Baker Is., by E. H. Bryan, Jr.
Ts, 1p. January 2, 1938.
- (18) Data for pictures taken by E. H. Bryan, Jr., on the 'Itasca
Expedition', March-April, 1935. Ts, 3pp. (including
47 photographs)
- (19) "Hawaiian Youths from 3 Pacific Isles from Clubs". Star-Bulletin,
July 1, 1946.
- * (20) Abstract of Chapter 2, pp. 14-59 of "The Manufacture of
Chemical Manures", by J. Fritsch. Trans from French by
Donald Grant. Laden, Scott, Greenwood & Son, 1911
Ts, 4pp. Valuable.
- (21) "Sixteenth Cruise", by Eddie Mack. Paradise of the Pacific,
July, 1939, p. 31.

E. H. Bryan, Jr

Contents of Folder 3

- (22) "Seventeenth Cruise to Line Islands", by Ned North. Paradise of the Pacific, January, 1940, p. 21.
- (23) "American Christmas Island", by Bailey S. Marshall. Paradise of the Pacific, January, 1940, pp. 24, 29.
- * (24) "Howland Island, Its Birds and Plants, as Obtained by a Captain Mc Stetson in 1854", by Llewellyn Howland; with "Natural History Notes and Observations", by J. C. Greenway, Jr. Pacific Science, vol. 11, no. 2, April, 1955, pp. 95-106. Valuable 2 copies in folder.
- (25) "The Wreck of the Amaranth", by George N. West. Sunday Polynesian, Honolulu Advertiser, Dec. 22, 1946, pp. 1-2.
- (26) Note reading: "Alexander D. Burnley. Whaler 'Ontario', 1825-26. Log of the Ontario" (nothing else to indicate location, and no text). Ms, 1p.
- (27) Note reading: "JARVIS I. Newspaper articles: May 18, 1937. Ray Collo's ed. (Extracts from log of 'Amaranth'). Nov. 12, 1857. Adv. Jarvis and New Fastnet (Baker) Islands.

E. H. Bryan, Jr.

Contents of Folder 3

Oct. 18, Colonists on Jarvis I. enjoy 'exile'. George West.

Feb. 25, 1937 Jarvis I. land plane base to be started over Ts, 1h.

(28) Jarvis Island, 1935. 6 photographs. 3H.

Pattern of central area which had been dug up for guano.

Lowest part of central depression.

Wreck of the 'Anaranth' on south beach.

Remains of the schooner 'Anaranth'.

Fragments of the schooner 'Anaranth'.

Large log with buttress base on beach.

(29) Photos of Jarvis I. Taken Dec. 11, 1938, by Lt. Dorsey, U.S.A. Res.
3 photographs, 1h.

(30) "Joseph King's Diary Recounts Life on a South Sea Island",
by Fred Bailey. Advertiser April 2, 1938.

✓(31) "Laying the Foundation Stone under the Government House,
Jarvis. Equatorial Group of Islands South Seas." August,
1936. Ts, 1h. 2 copies in folder.

(32) No. 2 Edited by E. H. Bryan Jr. Mar. 27, 1935.

Miscellaneous information on Jarvis Island Ts, 1h.

E. H. Bryan, Jr.

Contents of Folder 3

- (33) Jarvis Island Extracts from Scientific Expedition by Lt. Commander S. W. King. TS, 1p. Good. 2 copies in folder.
- ✓ (34) Log extracts of barkentine 'Amaranth' of San Francisco, California, 1862 tons, with comments of Lieut. Robinson, U.S. Shipping Commissioner's Office, San Francisco, California. TS, 1p.
- (35) "Sailing Directions from Honolulu for Jarvis". The Friend, May, 1859, p. 40. TS, 1p. (copied)
- (36) "Survivors Tell of Heavy Raids by Japanese". Advertiser, Feb. 14, 1942. Also TS excerpts from above, 2pp.
- (37) Letter from E. H. Bryan, Jr., to Mr. R. E. McGuire dated July 7, 1948, re information requested on Ahemara and two graves on Carter Island. TS, 1p.
- (38) "Honolulu War Diary", by Laelle Gilman. Advertiser, Feb. 17, 1942. Paragraph on rescue of colonists from Howland and Baker Islands.
- (39) Letter from John N. Seward dated Nov 18, 1951, requesting ^{recent} information on Palmyra, Howland, Baker and Jarvis, and reply from E. H. Bryan, Jr., dated Nov 20, 1951. TS, 3pp.

E. H. Bryan, Jr.

Contents of Folder 3.

- (40) "Howland Island Rescue", by Thomas Bederman. Life, March, 1942, pp. 54, 57, 58, 60. (well illustrated)
- (41) List of newspaper articles on Baker, Howland and the Equatorial Islands (18) TS, 3 pp. Copied
- (42) Scientific News. Copied by E. H. Bryan, Jr. No 2. July 21, 1938. Howland Island. TS, 1 p. 2 copies in folder
- (43) Howland Island, 1935. 3 photographs. 2 pp.
View of Camp.
Colonists' Camp, west side. April 18, 1935.
Kou (Cordia) thicket.
- (44) Scientific News. Copied by E. H. Bryan, Jr. No 3. July, 1938. Baker Island. TS, 1 p.
- (45) "Long reflected Howland Island". Adventure March 18, 1937.
- (46) "Arctic Tests Plane today". Adventure March 6, 1937.
- (47) "Fifteenth Cruise to American Line Islands", by Eddie Mack. Paradise of the Pacific, May, 1939, p. 30.
- (48) "Navy Reaches out in Pacific with Eyes on Aid to Britain". Newsweek, January 13, 1941, pp. 33-4.

E H Bryan, Jr

Contents of Folder 3.

- (49) "Christmas Island of the United States", by Bailey S. Marshall. Paradise of the Pacific, Jan, 1939, pp. 11-2.
- (50) "Fourteenth Cruise to American Equatorial Islands", by Richard Blackburn Black. Paradise of the Pacific, Jan, 1939, p. 15.
- (51) "American National Policy for Western Pacific" Paradise of the Pacific, April, 1939, p. 4.
- (52) "Polyps of Coral and Guano gone on Howland" Paradise of the Pacific, Feb, 1937, p. 20.
- (53) Memorandum for Messrs Miller and Black by E. H. Bryan, Jr, dated July 24, 1956, ^{his report on the} ~~re~~ ^{re} national history of American Equatorial Islands and reply from Bill Miller dated Aug 15, 1936. Ts, 3 pp.
- (54) "Lonely Baker. Five miles on a South Sea Atoll" Advertiser, March 9, 1936.
- (55) The Itasca Scientific News. Edited by E H Bryan, Jr. No. 3, April 4, 1935. Ts, 1 p.
- (56) Diary of a visit to Baker Island April 18, 1935 Ms, 1 p.
- * (57) "Index to the Islands of the Territory of Hawaii, 1931", by R. D. King. Baker Island, p. 23, and Howland Island, p. 24. Ts, 2 pp.

- (58) "Life on a Guano Island", by H. B. E. (Nathaniel B. Emerson?). New York Times, Jan. 15, 1869; and Feb. 13, 1869. TS, 10 pp. Valuable.
- (59) Miscellaneous small clippings on American and other guano islands from Adventure "History from Adventure Files" in envelope.
- (60) Miscellaneous clippings on Howland Island Light and the Arctia Earhart Incident.
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✓ Copy taken.

- (1) Equatorial Islands (in general). Pocket of newspaper clippings.
- (2) Pacific Equatorial Islands (Taney, 1938). Scientific Data, No 1, July 18.
 Manuscript sheet, 1 p. & TS copy
- (3) Cruise of the U.S.C.G. Cutter 'Taney', July to August, 1938. Rep. of Harbors.
 TS, 1 p. 2 copies in folder
- (4) Engineering Association of Hawaii. Weekly Bulletin, Vol XI, No 42, Oct. 21, 1938.
 Notes of an address by E. H. Bryan, Jr. Manuscript, 1 p.
- (5) Discovery of Central Pacific Islands. List. TS, 2 p.
- (6) Plants recorded from American Equatorial Pacific Islands. Revised List, compiled
 at Bishop Museum, 1935. TS, 2 p.
- (7) "Outposts of Empire in the Southern Pacific", by Russell E. Hall. Far
 Eastern Survey, Vol VII, No 4, Feb. 16, 1938, pp. 35-43. Print.
- (8) "Conflicting Interests in Pacific Islands", by Russell E. Hall. Far Eastern
 Survey, Vol VII, No 6, March 23, 1938, pp. 65-7. Print.
- (9) "South Expedition to American Equatorial Islands", by Richard E. Black.
 Paradise of the Pacific, Jan., 1937, p. 23. Print.
- (10) "Pacific Dots: Islands coveted as aviation bases for Antipodes". Literary
 Digest, Vol. 123, No. 4, Jan. 23, 1937, pp. 7-8. Print.
- (11) "Our New Possessions. Three new American possessions, small but of future
 importance", by William Atherton Du Puy. Ancient History, Vol. XLV,
 No 5, Feb., 1937, pp. 58-64. Print.
- (12) "Pacific Airports of the Future", by Clifford Gessler. Asia, November, 1935,
 pp. 684-7. Print.

E. H. Bryan, Jr.

Contents of Folder 5.

- (13) "The Equatorial and Phoenix Islands", by Edwin H Bryan, Jr. TS, 6H.
- (14) Questions and Answers on the Equatorial Islands. TS, 2H.
- (15) "About Guano". *Polymerian*, Oct. 21, 1857, p. 206, para. 4, c 1;
and Feb. 6, 1858, p. 317, col. 4, para 5. TS, 3H.
- (16) Memorandum concerning Natural History collecting on Pacific Equatorial Islands. Oct. 14, 1936. By E H Bryan, Jr. TS, 1H.
- (17) The Phoenix, Tokelau and British Line Islands. Extracts from "British Possessions in Oceania, Handbook 144, London, 1920. TS, 5H.
- (18) Summary of Pacific Equatorial Islands, compiled by E H Bryan, Jr. TS, 6H.
- (19) "Birds of Pacific Equatorial Islands". TS, 1H.
- (20) "Notes on Birds of the Pacific Equatorial Islands", compiled by E H Bryan, Jr. TS, 4H.
- (21) Letter from Erling Christophersen to R. G. F. Judd, dated Sept. 27, 1935, re flora of the Central Pacific Islands. TS, 2H.
- (22) Two photographs of Peramel on the Itaxia Expedition, 1935. 1H.
- (23) "Hawaii --- Artificial Aerial Bridge", *Paradise of the Pacific*, May, 1937, p. 23. Print.
- (24) "With Aerial to American Equatorial Islands", by Richard Blackburn Black. *Paradise of the Pacific*, May, 1937, p. 17. Print.
- (25) Cruise of Roger B. Taney to Equatorial Islands, 23 Oct. to 22 Nov., 1937. Itinerary. TS, 1H.

E.H. Bryan, Jr

Contents of Folder 5

- (26) "The Eleventh Cruise to American Equatorial Islands", by Richard Blackburn Block. *Paradise of the Pacific*, Jan., 1938, p. 7. Print.
- (27) Passengers, Berthing and Messing Arrangements, etc. (Presumably on USCG. 'Taney' TS, 1h.
- (28) Letter from J.W. Jones, Hull Island, to H.E. Schultz, Swains' Island, dated July 28, 1938, re sea boat landed on Oloaga by mistake. TS, 1h.
- (29) "Sixteenth Cruise", by Eddie Mack. *Paradise of the Pacific*, July, 1939, p. 31. Print.
- (30) "Sequoi - Centennial of America in Eastern Pacific". *Paradise of the Pacific*, Jan., 1938, p. 4. Print.
- (31) "History of Pacific Equatorial Islands", by Edouard A. Stockpole. *New York Times*, March 13, 1938, pp. 1 & 8. TS, 9ff.
- (32) Central Pacific. Resume of calls made by Frank Bennett and recorded in his "Through Tropic Seas", London, 1910.
- (33) "The British Central Pacific Islands". Extracts from "A Report on Land Classification and Utilization", by H.E. Naudé. TS, 22ff.
- (34) Fanning Island. Packet of newspaper clippings.
- (35) Christmas Island. Packet of newspaper clippings.
- (36) "Up the Gangplank", by LaSelle Gelman. *Advertiser*, December 25, 1940. Includes notes on Christmas Island.
- (37) "Christmas Island". Notes on American army occupation and British representation. TS, 2ff.

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Contents of Folder 5

- (38) "The Americans Leave Christmas Island". PIM 19(8): Oct. 26, 1948. TS.
- (39) "Annotated List of Birds Observed on Christmas Island, October to December, 1953", by Joseph E. King. Pacific Science, January, 1955. Part With Bibliography.
- (40) "Tokelau to be Part of New Zealand". PIM 19(3): Oct. 24, 1948. TS.
- (41) "Fanning Island Cofra Cof". Statistics for 1937-1941. TS, 1h.
- (42) "Washington Island Rainfall Record, 1937 to 1942". TS, 1h.
- (43) "Washington Island, Cofra Production, 1937 to 1942". TS, 1h.
- (44) "The Phoenix Group and other Islands of the Pacific", by John T. Arundel, F.R.G.S. New Zealand Herald, July 5 and 12, 1890. TS, 9ff.
- (45) Letter from Albert F. Ellis to Gilbert Archey, dated Nov. 28, 1939, re archaeological remains on Hull and Sydney Islands. TS, 1h.
- (46) "Drittes Kapitel. Die Gruppen Neuseeland, Phoenix und Aneike". TS, 12ff.
- (47) "Northern Cook Islands". From British Possessions in Oceania. No 144. London, 1922. TS, 2ff.
- (48) "Commodore Byron in Central Pacific, 1765". From Hancock's Voyage, London, 1773, vol. I, pp. 107-14. TS, 6ff.
- (49) "Starbuck Island". The Friend, May, 1873, p. 36.
- (50) "Helder and Starbuck Islands". From the Voyage of H.M.S. Blonde to the Sandwich Islands in the year 1825-1825, by Captain the Right Hon. Lord Byron. London, 1826, pp. 204-6. TS, 2ff.
- (51) "Caroline Island. Plant and Animal Life, 1883". From Report of the Eclipse Expedition to Caroline Island, May, 1883. Nat. Acad. of Sci. TS, 2ff.
- (52) "Caroline Island". From the letters and journals of Daniel Wheeler. Philadelphia, 1840, p. 153. Miller, 1835. TS, 1h.

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Contents of Folder 5.

- (53) "Caroline Island" From Narrative of a whaling voyage round the globe, from the year 1833 to 1836 . . . , by F. D. Bennett, vol. I, pp. 365-78, 1840. TS, 7 pp.
- (54) "Bennett's Description of Caroline Island", Cited from F. D. Bennett, Narrative of a Whaling Voyage around the Globe, by E. H. Bryan, Jr. TS, 6 pp.
- (55) "Flint Island" From Extracts from the letters and journals of Daniel Wheeler, Philadelphia, 1840, p. 152. Newber, 1835. TS, 1 p.
- ✓ (56) "Halden Island Climate" From World Weather Records, Smithsonian Miscellaneous Collections, by H. H. Clayton, vol. 79. Aug. 22, 1937, pp. 122-3; 1159-61. TS, 4 pp. 2 copies in Folder.
- (57) "The Guano and other Phosphatic Deposits occurring on Halden Island", by W. A. Duxon, F.C.S. Royal Soc. of N.S.W., Trans. & Proc., XI, pp. 176-81, 1877. TS, 7 pp.
- (58) "Notes from Halden Island", by A. J. Campbell. Victorian Naturalist, VI: no. 8, pp. 123-6, Dec., 1889. Abstract TS, 2 pp. 2 copies in Folder.
- ✓ (59) "Notes on the Vegetation of Penrhyn and Norfolk Islands", by A. Murray Lister. J.P.S., vol. 42, no. 168, pp. 300-7, Dec., 1933. TS, 8 pp.
- (60) "Notes on the Meteorology and Natural History of a Guano Island", by W. A. Duxon, F.C.S. Royal Soc. of N.S.W., Trans. & Proc., XI, pp. 165-75, 1877. TS, 14 pp.
- (61) Perulled notes on Palmerston Island. 1 p.

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Contents of Folder 5.

- (62) Brief pencilled notes on Vostok, Caroline, Flint and Starbuck Islands, from "Notes on Birds in the Western Pacific, made in H. M. S. 'Crested', 1883-5", by J. R. H. MacFarlane. The Ibis, ser. 5, vol. 5, pp. 201-215, 1887. 1h.
- (62) Location of Places in the Pacific. TS, 1h. (Lat & long.)
- (63) "Island Mystery". Short Story Magazine, April 10, 1938.
- (64) "Island of Swamow". The Friend, Dec., 1877, p. 102, c. 1-3. TS, 2 ff.
- (65) Flint Islands. Notes from Nature, LXXVIII and LXXIX (pp. 70-2), Nov. 19, 1908. TS, 1h.
- (66) Flint Island, Hull Island. The Total Eclipse of January 3, 1908. By William J. S. Lockyer. Nature, LXXVII, pp. 104-106, Dec. 5, 1907. TS, 1h.
- (67) Report of bark Ionia, Leveque, Master. The Friend, Oct., 1875, p. 85, c. 3. TS, 1h.
- (68) "Manihiki" Notes. TS & MS, 2 ff.
- (69) "Pukabanga Island". Notes from "An old Tradition from Pukabanga Island", by Banofa. JPS, XXIX, 1920, pp. 88-91. TS, 1h.
- (70) Notes on Pukabanga from Fudlong, South Pacific. MS, 1h.
- (71) Note on Pukabanga from "Traditions and some words of the language of Danga on Pukabanga Island", by Rev. J. J. K. Hutchins. JPS, vol. XIII, pp. 173-4, 1904. TS, 1h.
- (72) Notes on Nassau from Fanning's Voyage to the South Seas, Starbuck's History of Whaling and Gulls' Dettings from the Pacific, p. 29. TS, 1h.

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Contents of Folder 5.

- (73) Notes on Palmyra Island from Cook's Voyage, vol II, p 2 (London, 1777)
TS, 1 $\frac{1}{2}$ for visit on June 16, 1774. TS, 1 $\frac{1}{2}$.
- ✓(74) Notes on Palmyra Island from Cook, Clerke and Gore, "a Voyage
to the Pacific Ocean ...", vol. I, pp 214 - (London, 1784).
TS, 3H.
- ✓(75) "Palmyra Island", from the Voyage of the 'Duff' (London, 1799),
pp 92-95. TS, 2H.
- (78) Brief chronological table of visit and chart readings of various
Central Pacific Islands. Pencil, 11H.
- (79) Charter of Incorporation of Hae Panlalan (Society of Colonizers),
July 5, 1956.

✓ Copy taken.

- (1) Collection of maps of Central Pacific Equatorial Islands.
- (2) Memorandum from Hawaiian Transportation Officer, Honolulu, to Regional Transportation Manager, San Francisco, dated March 14, 1957, in absence of Post Offices on Baker, Endeavour, Howland, Jarvis, Kingman Reef and Sand Island. TS, 2 ff.
- (3) Pearl and Canton Island. Pearl, 1 ff.
- (4) List of names occurring in charts of the Central Pacific Equatorial Islands. TS, 9 ff.
- (5) "Passing stars and stripes on Kingman Island". *Advertiser*, May 23, 1922.
- (6) "Fresh Palmyra Fish at Municipal Market". *Advertiser*, May 23, 1922.
- (7) "Chas. B. Wilson landed Kingman 57 years ago". *Advertiser*, May 23, 1922.
(The schooner 'Briel' (left French). They landed in shorts Wilson's family owned Farming, Washington and Palmyra. They planted coconuts on Palmyra).
- (8) "U.S. Flag over New Island". *Advertiser*, May 22, 1922, p. 1.
(Annexation of Kingman's Reef).
- (9) Washington Island Pearl and Record, 1937 to 1942. TS, 1 ff.
- (10) Washington Island Copra Production, 1937 to 1942. TS, 1 ff.
wild and planted 2092 acres.
uncultivated 1402 acres.
Total 3494 acres.
- (11) Fanning Island Copra Crop, 1937 to 1941. Copra shipped 1937 to 1941.
- (12) Seven photographs of Christmas Island by Christopherson, Esq., 1924; and Bangorero Expedition, 1934.
- (13) Letter from E. H. Bryan, Jr., to R. Conbley, dated Jan. 21, 1958 on Middle Island.
- (14) Letter from R. Conbley to E. H. Bryan, Jr., dated Jan. 14, 1958 inquiring re information sent at (13) above.
- (15) List of names occurring in charts of the Phoenix Islands. TS, 3 ff.
- (16) Information on Howland, Baker and the Phoenix Islands. TS, 6 ff.

E H Bryan, Jr

Contents of Neg. Folder

- (17) Information on the Phoenix Islands (more extensive than in (16)). TS, 25 pp.
- (18) A number of loose newspaper cuttings relating to Christmas Island.
- (19) "Scientific Data", prepared by E H Bryan Jr.
- No. 1, July 18: The Pacific Equatorial Islands
 - No. 2, July 21, 1938: Howland Island
 - No. 3, July 22, 1938: Baker Island
 - No. 4, July 25, 1938: Canton Island
 - No. 5, n d.: Enderbury Island
 - No. 6, July 30, 1938: American Samoa
 - No. 7, n d.: Jarvis and Phoenix Islands
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List of Newspaper articles on American Equatorial Islands,

by E.H. Bryan, Jr.

1. Equatorial Islands:

- (1) 1937, Aug.21: Equator Isle colony plan may be halted.
- (2) 1937, Aug.23: Officials deny Baker Island abandonment.

2. Howland Island

- (3) 1937 Feb.6: Duane returns from Howland (p.2).
- (4) 1937 March 16: SB All 3 Howland runways now in perfect condition for Miss Earhart's use. A.H. Keane.
- (5) 1937 Mar.20: Adv. or SB Howland birds to have peace. V.M. Culver.
- (6) 1936, July 23: SB Itasca party leaves Friday.
- (7) 1937 June 25: SB Squib by James Carey.
- (8) 1937 June 2: SB Map of Howland with runways.
- (9) 1937 Jan.16: SB Howland Isle base will be constructed.
- (10) 1937 Jan.19: SB Duane will carry poultry to stock southern isles.
- (11) 1937 Feb.28: Adv. Preparing new Mid-Pacific Airport on Howland Island. Flying field on Howland nearly ready for Amelia.
- (12) 1937 June 28: Adv. Howland Island waters are alive with sharks. Howard Hanzl?.
- (13) 1936 Jan 16: SB Wm. Norwood's Aloha Lines, quotes Killarney Opiopio re Howland Island.

3. Baker Island

- (14) 1936 Feb.28: Lonely Baker. Five months on a south sea atoll. By Jules Rodman. Adv.
- (15) 1936 Mar.&: Ditto, Part 2.
- (16) 1936 Mar 14 (15?): Ditto, Part 3.
- (17) 1856 Dec.11: Adv. Baker (or New Nantucket) Island. The Guano Islands. From the Washington Union, Sept.6.
- (18) 1860 Jan.26: Adv. Baker's Island.

List of Newspaper articles, cont'd.

4. Jarvis Island

- (19) 1937 May 18: Ray Coll's col. (Extracts from log of 'Amaranth').
- (20) 1857 Mar.12: Adv. Jarvis and New Nantucket (Baker) Islands.
- (21) Oct.18: Colonists on Jarvis enjoy 'exile'. George West.
- (22) 1937 Feb.25: Jarvis land plane base to be started soon.

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PHOENIX ISLANDS

REFERENCES

- (1) "Under the Southern Cross", Overland Monthly, Feb. 1893.
- (2) "Our Equatorial Islands", by James D. Hague: letter to New York Sun, 16 Nov., 1900.
- (3) "Our Equatorial Islands", by James D. Hague: Century Magazine, Sept., 1902.

Bibliographies

~~Prints of Baker, Howland and Jarvis Islands etc. Bishop Museum. T.S.~~
~~Typed copy of data in possession of John Williams, reporter of the Honolulu Advertiser.~~

BA KER ISLAND

- (1) 1858, Jan 28 Pac. Com. Adv. Guano.
- (2) " " Haw. Gazette.
- (3) 1869, July 3 Pac. Com. Adv.
- (4) 1859, July The Friend.
- (5) 1856, Dec. 11 Pac. Com. Adv.
- (6) 1860, Jan. 26 " " "

CHRISTMAS ISLAND

References in Honolulu Advertiser.

- (7) 1912, July 16 Another isle of Pacific sold.
- (8) 1913, Oct. 12 Father Rougier has to make London in 20 days or lose option on Christmas Island, Price, £10,000.
- (9) 1924, August 15 Scientists find Christmas Island treasure trove. (Bishop Museum-Whippoorwill Exp.)
- (10) 1927, Feb. 25 Father Rougier to develop huge coconut plantation on Christmas Island.
- (11) 1933, June 28 Padre of Christmas Island leaves \$5,000,000 estate.

HOWLAND ISLAND

- (12) 1858, Jan. 28 Pac. Com. Adv. Guano.
- (13) 1858, Jan. 28 Hawaiian Gazette.

JARVIS ISLAND

- (14) 1857, March 12 Pac. Comm. Adv. Arrival of the Schooner Lihiliho with 100 tons of guano.
- (15) 1858, Jan. 28 Pac. Comm. Adv. Guano.
- (16) 1858, Jan. Hawaiian Gazette.
- (17) " June The Friend Report of ship John Marshall from Jarvis Island.
- (18) 1859, Aug. 12 Hon. Adv. Scientists find little on Jarvis. (Whippoorwill exp.)
- (19) 1893, Feb. The Overland Monthly, Vol.21, Ser.2. (s

Bibliographies of Baker et. cont'd

Bishop Museum

- (20) California periodical). Under the Southern Cross, by Mabel H. Closson. Vivid description of guano working life on Jarvis-mutiny-adrift in longboat-reef life-conspiracy which ended working of deposits-final evacuation.

JOHNSTON ISLAND

Ref. from Pac. Com. Adv. & Hon. Adv.

- (20) 1859, Oct. 8 Guano, - signed by John Brown, Jr. captain of the Ocean Belle.
- (21) 1870, July 9 Annexation.
- (22) 1928, Aug. 5 Features...by Lorrin A. Thurston.

MIDWAY ISLAND

- (23) 1868, Aug. 29 Pac. Com. Adv. (Capt. Reynolds takes possession) title, American flag in Pacific.
- (24) 1869, Feb. 13 Pac. Com. Adv. Possibility of harbor improvement.
- (25) " April 10 " Harbor discussion.
- (26) 1870, May 28 " " "
- (27) 1894, Apr. 18 " Wreck of the Wandering Minstrel.
- (28) 1896, Dec. 4 " " "
- (29) 1917, May 9 " Weather.
- (30) 1922, Feb. 11 Hon. Advertiser. Cable repairs.
- (31) " Nov. 27 " " Gale breaks cable.
- (32) 1923, Apr. 27 Pac. Com. Adv. P.2, Col. 2: Interview with Mr. and Mrs. Morrison.
- (33) " May 27 Hon. Adv. How coming of man affects the isles of leeward Hawaii.
- (34) " Oct. 31 Hon. Adv. The status of Midway.
- (35) " Nov. 1 ✓ Midway entrusted to Navy by Roosevelt.
- (36) " " 2 " " belongs to U.S. direct; not part of Haw.
- (37) 1924, Feb. 28 " " yields \$2,000 cargo of fish.
- (38) 1927, July 23 Hon. Adv. Midway poor spot for Pacific flight stop-off.
- (39) " Sept. 16 " " Pacific aviation oasis (By E.N. McClellan)

PALMYRA ISLAND

Honolulu Advertiser

- (1) July 6, 1903, p. 7, col. 2 Buried treasure.
- (2) Jan. 30, 1912, p.1, col. 4 Uncle Sam hears John Bull after Palmyra.
- (3) Feb. 1, 1912, Judge Cooper gives facts about his south seas island. Tells of the British claim being tacked up on tree on beach.
- (4) Nov. 11, 1920, Sec. 2, p. 7, Col. 1 Peterson and Tulloch return.
- (5) Sept. 15, 1921, p.4, col. 2 Navy to make survey.
- (6) Sept. 22, 1921, Sec. 2 Swiss Family Robinson.
- (7) Sept. 27, 1921, Sec. 2, p.1, col. 5 Palmyra Islanders saved from starvation by arrival of Navy relief ship.
- (8) Dec. 21, 1921, Sec.2, p.1, col. 5. Meng says he intends returning to Palmyra.
- (9) Dec. 22, 1921, Sec. 2, p. 1, col. 5. Palmyra Is. Crusoes back.
- (10) Mar. 14, 1922, p.3, col. 4 Bring big fish catch from Palmyra.
- (11) Mar. 22, 1922, p.3, col. 3 Palmyra sails on second trip to stock up on low price, high grade fish.
- (12) May 30, 1922, p.1, col. 6 Model Hawaiian village planned.

WAKE ISLAND

- 1866, Sept. The Friend. Wreck of the Libelle on Wake Island.
- 1899, Feb,22 Pac. Com. Adv. Flag raising ceremonies.
- 1899, June 1 " " " A cable island.
- 1923, Aug.12 " " " Description.
- 1924, Hawaiian Annual. " p.91.

Carton Island

Bibliography

- (1) Paradise of the Pacific, June, 1939, p 16: "Another Cookmenicum"
- (2) PIM, April 17, 1939, p 7: "Another Cookmenicum"
- (3) PIM, May 16, 1939, p 47: "Americans Visit Carton Island"
- (4) PIM, June 15, 1939, p 6: "Transpacific Air Service"
- (5) PIM, " " " , p 14: article on PAA construction work

Guano Shipping

The Friend. Aug. 1869.

Arrivals.

- June
 25 ~~Schooner Hattie Merrill, Clancy from Johnson's Is.~~
 27 " Hokulele, Buschmann, 22 days from Fanning's Is.

Departures

- June
 21 Brig Kamehameha V, Rickman, for Guano Is.
 21 am. ship Atlantic, Pennell, for McKean's Is.
 July
 1 am ship Ellen Goodspeed Peble, for Baker's Is.
 8 Brit ship Lottie Maria, Graffam, for Howland's Is.
 17 am " Ella Norton, Nicols, for McKean's Is.

Jan. 1869

- Dec. Arrivals
 18 Haw brig Kamehameha V, Rickman, 32 days from Howland Is.
 Jan. 1 am. Schooner Fanny, Thomas, 8 1/2 days from Fanning Is.

Departures

- Dec 2 Brit. bk. Gasling, Griffiths for Baker's Is.

Feb. 1869

- Jan. Departures
 2 Haw brig Kamehameha V, Rickman for Guano Is.

May 1869

- March Arrivals
 27 Haw. brig Kamehameha V, Rickman, 43 days from Baker's Is.

Departures

- Apr. 3 Haw brig Kamehameha V " " for Guano Is.
 18 am ship Free Trade, Bursley " " "
 28 Br ship Mattie Banks, Ralph " " "
 May 11 am ship Lorenzo, Tolland & Coe, for Baker's Is.
 26 " Resolute, Teeman " " "

Guano Shipping

1869

Time Arrivals

10 Haw brig Kamehameha V, Rickman, 39 days from Howland Is.

Time Departures

1 Sch. Nettie Marshall, Clancy, for Johnson's Is.

25

arrivals

27 Sch Hokulele, Buschmann, 22 days from Fanning Is.

Time Departures

~~21 Haw brig Kamehameha V, Rickman, for Howland Is.~~

~~24 Am ship Atlantic, Pennell, for M^c Kean's Is.~~

~~July 1 Am ship Ellen Goodspeed, Pettie, for Baker's Is.~~

~~8 Brit ship Lottie Maria, Geffam, for Howland's Is.~~

~~17 Am ship Kela Norton, Nichols, for M^c Kean's Is.~~

Aug. Arrivals

24 Am ship Loeygo, Tollanabee, from Baker's Is.

Aug. Departures

3 Brit brig Teed Thomson, Bevan, for Baker's Is.

5 Am ship Robin Hood, Taylor, for

7 Am ship Rival, Doane, for M^c Kean's Is.

20 Brit ship Golden Hoop, Cutting, for Baker's Is.

Sept. Arrivals

5 Haw brig Kamehameha V, Rickman, 39 days from Howlands Is.

Aug. Departures

30 Am ship Wax Hawk, Williams, for M^c Kean's Is.

Sept 18 " " Crusader, Bradford, for Baker's Is.

21 " " Ocean Rover, Carlton, " "

24 " " Titan, Berry, " "

25 Haw brig Kamehameha V, Rickman, for Guano Is.

Guano Shipping

1869

Oct. Departures

- 13 Am ship Grace Darling, Spear, for Baker's Is.
- 17 Brit ship Mary, --- for " "

Dec. Arrivals

- 20 Haw brig Kamehameha v. Rickman, 38 days from Howlands Is.

1870.

Jan. Departures

- 12 Haw brig Kamehameha v. Rickman, for Guano Is.
- 13 Dan bark Meeanda, Kaebowa for Baker's Is.

March

- 21 Brit ship Regent, Elliot, for Baker's Is.

April Arrivals

- 3 Haw brig Kamehameha v. Rickman, 34 days from Howland's Is.

April Departures

- 12 Am ship Gento, Freeman, for Baker's Is.
- 19 Haw brig Kamehameha etc for Guano Is.

May Departures

- 12 Am bark Agate, Brown for Baker's Is.

June Arrivals

- 23 Haw brig Kamehameha v. Rickman, from Guano Is.

May Departures

- 28 1708 Gal ship R.M. Sloman, Alwood, for Baker's Is.
- " Am ship Puritan, Henry, for Enderbury's Is.
- June Am ship Gov. Melton, Howland, for Phoenix Is.
- 15 Br. bark Achilles, Major for Baker's Is.

Guano Shipping 1870.

June Departures (cont)

- 26 Br. ship Wm. Wilson, Welbun, for Baker's ss.
28 North German ship Mathilde, Rahtgens for Baker's ss.

July

- 3 Am bark Transit, Carleton, for Phoenix ss.
7 Haw brig Kameha etc. for Guano ss.
13 Brit bark Favorite, Fea, for Baker's ss.
21 Schs Pauahi, Ballastier, for Guano ss.

Aug

- 13 Brit barkentine Cleopatra, Johnson, for Malden ss.
22 Am schooner C. M. Ward, Hatfield, for Guano ss.

Sept

- 4 Am ship Laurens, Call, for Enderbury ss.
8 Brit ship St James, Hatfield for Baker's ss.
9 Haw schs. Isabella, English, for Fanning's ss.
14 Am bark Annie W. Weston, Daves, for Howland's ss.
16 Am bark Heroid, Bease, for Baker's ss.
26 Am ship Electra, Gotham for Howland's ss.
30 " " Frank Flint, Smalley for Baker's ss.

Oct

- 1 Haw brig Kameha etc. for Guano ss.
4 Am bark Francis B. Fay, Robbins, for Enderbury ss.
29 Am ship Reynard, Abecam, for Baker ss.
31 Am schs C. M. Ward, Hatfield, for " "

Nov

7 German ^{br}Therese, Meyer.

Dec
10

Am Schs C. M. Ward, Rickman, for Guano ss.

Guano Shipping
1870

Arrivals

- Sept 23 Haw Brig Kamaha etc. from Guano ss.
- Oct 24 Am sch. C.M. Ward, Hatfield, 19 days from Baker's ss
- Nov 3 Sch. Isabella, English, 14 days from Fanning ss
- 23 Haw Brig Kamaha etc. 28 days from Howland ss.
- 30 Am sch. C.M. Ward, Hatfield, 10 days from Jarvis ss.

1871

- Jan 26 Am sch. C.M. Ward, Rickman, 18 days from Howland.
- March 30 " " " " 24 days from " "
- 20 Haw " Kamahle, Fletcher, 50 " " Jarvis.
- May 5 Am sch. C.M. Ward, Rickman, 16 days.
Reports strong trades & heavy sea, with squalls.
- 26 M. German bark Elizabeth, Oscon, from Montevideo bound to Baker's ss.

Guano Shipping

1871

Departures

- Feb.
 7. N. German ship Otto & Antonie, Simonsen, for Baker's Is.
 9. Haw. sch. Kamaile, Johnston, for Jarvis Is.
 13. Am. sch. C. M. Ward, Rickman, for Guano Is.

March
 16. N. German bk. Wilhelm I, Moller, for Howland Is.

Apr.
 4. Am. sch. C. M. Ward, Rickman, for Jarvis Is.

5. N. German ship Susanne Bodefroy, Angeltreck, for Baker Is.

8. Am. ship Emerald, Lull, for Phoenix Is.

27. Am. " Geo. Green, Welch, for Phoenix Is.

28. Haw. sch. Kamaile, Bridges, for Jarvis.

May
 9. Am. sch. C. M. Ward, Rickman, for Guano Is.

Arrival of the Manuokawai

Interesting Account of her Explorations.

The Hawaiian schooner Manuokawai, Captain John Paty, arrived yesterday noon from her cruise among the islands to the westward of this group in search of guano, having been absent from Honolulu fifty days. She brings a few bags as specimens of the deposit on the islands visited, which will be tested in order to ascertain its value.

The following interesting account of the cruise was furnished us by Capt. Paty:

The schooner Manuokawai has visited Maui, Nihoa, or "Bird Island," Necker Island, Gardner's Island, Laysan's Island, Lisiansky's Island and Pearl and Her's Reef, or "group." Also ran over the location (according to Blunt's charts,) of Pollard's Island, Neva Island, Bunker's Island without seeing the appearance of land. They do not exist or, their location on the chart is not correct.

Nihoa, or Bird Island. N.W. by W. $3/4$ W. from Honolulu, 244 miles. It is a precipitous rock, 400 feet high, about 1- $1/2$ miles long and half a mile broad; the north side is nearly perpendicular. On the south side is a small space of sandy beach, where boats may land in smooth weather, although I think it is seldom a boat can land there with safety. Near the beach is a small drain of fresh water. About a dozen of seal were seen on the beach, and birds were plentiful about the island. There is anchorage off the south side of the island from $1/4$ to 2 miles, in from 7 to 17 fathoms of water, Plenty of sharks about the anchorage.

Necker Island. W. by N. $3/4$ N. from Honolulu, 403 miles. It also, is a precipitous rock, 300 feet high, 1 mile long and half a mile broad, with small patches of coarse grass on its surface. Could not see any landing place for boats, as the surf was breaking high all around it. A bank of sand

and rocks makes off to the NW, I should say six or eight miles or more. I had 18 fathoms 2 miles off, the island bearing NE.

Gardner's Island. W.N.W. from Honolulu, 607 miles. This is merely two almost inaccessible rocks, 200 feet high, extending North and South about 1/6 of a mile. A bank extends off to the SW, some 15 or 20 miles. The bottom seemed to be detached rocks, with sandy spaces between; I had 17 fathoms of water 10 miles south of the island. I think fish are plentiful on the bank.

Laysan Island. W. by N. 3/4 N. from Honolulu, 808 miles. This is a low sand island, 25 to 30 feet high, 3 miles long and 1-1/2 broad. The surface is covered with beach grass, and half a dozen small palm trees were seen. It has a lagoon in the centre (salt) 1 mile long and half a mile wide, and not a hundred yards from the lagoon abundance of tolerable good fresh water can be had by digging two feet. Near the lagoon was found a deposit of guano.

The island is "literally covered" with birds; there is, at a low estimate, 800,000. Seal and turtle were numerous on the beach, and might easily be taken. They were evidently unaccustomed to the sight of man, as they would hardly move at our approach, and the birds were so tame and plentiful that it was difficult to walk about the island without stepping on them. The gulls lay enormous eggs, of which I have a specimen. Fish too, are plentiful.

A bank of rocks and sand extends off to the South and West 6 or 8 miles or more. Good anchorage can be found on the West side of the island, where there is a very smooth sand beach.

Liseanskey's Island. W. by N. 3/4 N. from Honolulu, 922 miles. This is a low, sandy island, elevated from 20 to 40 feet above the sea. It is about 1-1/4 miles long, and the northern part one mile wide; the surface is covered with green coarse grass. There is what has been a lagoon near the

southern part of the island, in the centre of which fresh water was found by digging 5 feet. Birds, fish, seal and turtle abound here, but not so plentiful as at Laysan Island.

The island is surrounded with detached rocks, which from the ESE to SW, make off as far as the eye can reach. Good anchorage will be found by getting the south point of the island bearing E. $1/2$ S., and steering or working towards it. In doing this you will pass between two large breakers, bearing North and South from each other, about $3/4$ of a mile apart and 2 miles from the land. After getting inside the breakers, anchorage can be found in from 4 to 8 fathoms water on sandy spots from $1/2$ to $1-1/2$ miles from the beach; you can anchor outside of the breakers if necessary. Good buoyropes should be attached to the anchors.

On the island I found the remains of three casks, a spar, which had been used as a lookout station, a few peices of timber, and part of a cook-house or galley, on which was carved "Holder Borden," and several other names.

By a statement in the Friend of November, 1844, I supposed the Holder Borden was wrecked on an island about one degree West of this; so I believe most people would, after reading Capt. Pell's assertions relative to locality. I lost three days of time in looking after it, and can safely say that Pell's Island does not exist in this ocean. The 40 domesticated ducks which Capt. Pell speaks of, must have reassumed their roving propensities, as I did not see the sign of one on the island. I have understood that Captain Pell planted some cocconuts on the island in 1844—not any sign of them exist now in 1857, or any other vegetation, except coarse grass and a (few) small renning vine. I planted a ^{handful} of white beans, and a few sweet and Irish potatoes. I made the latitude of the island 26 deg. 4-0 min. 30 sec. N., and long. by Chronometer 173 deg. 51 min. W.

I sailed nearly around Pearl and Kerm's reef, and saw six small islets, which appeared to be located some distance inside of the reef, in what seemed to be a large lagoon, and abounded with birds, seal and turtle; no safe anchorage outside the reef. The center of the reef is in lat. 27 deg. 43 min. North, and long. 175 deg. 48 min. W. W.N.W. 1053 miles from Honolulu.

A considerable portion of my time has been consumed by calms and looking for banks and islands which do not exist, or are erroneously marked on Blunt's charts.

* Arrived at Hanalei, Sunday, May 31; sailed thence on Tuesday, June 2, and arrived at Honolulu on Friday, June 5.

John Paty.

Captain John Paty.

Captain John Paty's Exploring Expedition in the good schooner "Manuokawai" did not involve questions the solution of which was likely to make men's ears crackle. Columbus, La Perouse, Captain Cook, Commodore Wilkes, Dr. Kane and Captain Sir John Franklin, had each a better chance of rendering himself famous. But we are not sure that any of those personages, however illustrious their names may be, could have better carried out the limited object of those who dispatched him than our townsman Captain John. We all know that he can handle a square rigged vessel with the best of them, but fore-and-afters seem to be his forte; it is said that he can "get more out of" a vessel of that class than one man in a hundred. The most interesting result of the cruise was the possession taken in the King's name of two islands upon which guano was discovered. Laysan's Island is the name by which one of these places is known, and the other is called Liscanskey's Island. From an analysis made by Dr. Hillebrand the guano does not appear to be of very good quality, although perhaps the comparatively small expense at which it could be introduced here might make it valuable, at least for home consumption. A short description of the islands in question can be found in the Polynesian of June 6 amongst other interesting notes of his cruise furnished us on his return by Captain Paty. The idea of the Hawaiian "Sanddrift" undertaking to assume possession of inferior "snad-drifts" may seem strange, especially to strangers, but a sovereign power enjoys its rights, whatever its size may be; the great advantage possessed by the larger powers is that they can also maintain their privileges.

We understand that the expense of this little expedition was extremely moderate, and certainly not more than the mere establishment of the fact of there not being guano at certain places is worth. So long as a doubt remained

we heard from time to time a talk of what the government could do in the way of filling its coffers if it only set to work in the right way, that is to say, by sending vessels to carry off imaginary cargoes of the great modern fertilizer. If the guano on the two islands above alluded to prove to be worthy of transportation to a foreign market, there may still be a positive profit derived from the knowledge acquired by means of this little outlay, and in any case it may happen that some of our agriculturists will find it to their advantage to use the article such as it is.

The following resolution passed by the Privy Council when a formal announcement was made of what Captain Paty had done, his journal with its numerous sketches and interesting details being on the table at the time, we publish in justice to the gentleman alluded to:

"Resolved, That Captain John Paty, during his late expedition in command of the schooner "Manuokawai," has conducted his investigations to the entire satisfaction of the King's Government, and that the Minister of the Interior is directed to address to him a letter to that effect."

The Guano Islands of the Central Pacific Ocean

The guano trade belongs to one of the most remarkable experiences of the century, and in its development the knowledge of vegetation and the change of organic substances were necessary before the importance of this bird manure could be realized. In order to send whole Fleets to the Antipodes to secure these treasures for the European landman, a high degree of perfection in navigation must have been attained.

On the islands along the rainless Peruvian coast, where no water torrents washed the lye from the guano deposits of innumerable sea birds, and thus robbed the guano of its valuable salts, it is well known that this product occurs in the greatest quantity as well as in the highest quality.

All seas were searched for such deposits. Barren rocks and lonely islands, swarmed by shrieking sea birds, were suddenly objects of eager investigation, and lonely uninhabited islands which rose from the lap of the tropical seas, and which by mariners were formerly carelessly passed, stirred interest and encouraged search, as who knew what riches were deposited on the apparently baked ground.

That is how guano settlements were discovered along the Arabian Gulf and the African Coast, which, although soon depleted, nevertheless enriched the lucky discoverers; and that is also how a great many otherwise unimportant islands in the center of the Pacific Ocean were taken in possession by various American guano companies and by the Government of the United States as provinces of the great Republic acknowledged.

This American Polynesia, on which the talented geographer C. Behr published a profound as well as interesting composition in "Petermann's Mittheilungen" lies across an enormous ocean desert of about 21 degrees of latitude and 36 degrees of longitude, is scattered in the center of the Pacific Ocean, in the center of a wide circle which is bounded to the west by the Ratak, Gilbert and Ellice archipelago, to the south by Samoa and the Society Islands, to the southeast by Paumotu and the Marquesas Islands and finally in the north about through the ninth parallel northern latitude.

These immense ocean spaces belong to the least known regions of the whole earth. The usual cruising line between Asia and Australia at the one side and America at the other, go far beyond these desolate

waters in the south as in the north, only the eastern part is often crossed by mariners who sail back and forth between Tahiti and the Sandwich Islands. The famous navigators whom we owe thanks to for the most of our knowledge of the Pacific Ocean, have only touched them at the edges, other information being confined to the frugal and often unreliable reports of the whale fishermen.

Probably with right, relying on the first exact researches, the American Guano Company claimed the islands Jarvis, Baker and Howland while the Phoenix Company looked upon the group of the same name as her possession, and is supposed to have established a settlement on McKean or Wilkes Island. Which islands were annexed by the United States Guano Corporation and other citizens of the United States I do not find anywhere stated, only this much is evident that during the last years considerable shipments have been made to the harbors of the United States; according to the Illustrated London News in 1859 not less than 20,000 tons in 14 vessels were exported to the United States. But as the guano obtained in this area is by far poorer in ammoniacal salts than the Peruvian guano, and the expense of transporting being enormous, it is very doubtful if the companies can continue. Of worseomen seems to be the information from Honolulu on the 15th of March, 1860 (Pacific Commercial Advertiser) that various companies had discontinued the shipping of guano for a while, because the amount in warehouses exceeded the demand.

It would not pay to take the trouble of naming all the unimportant coral islands in the wide water space, to which this chapter is dedicated, especially as complete information can be found in the compositions of Ashm previously mentioned. Most readers will be contented in the discussion of two of the most interesting of the multitude of islands - Penrhyn and the Christmas Islands.

The high full cocoanut woods which cover the low Penrhyn Islands deceive the navigator from afar with the appearance of an elevated shore. The sight granted him must be lovely. Between the high crowns moving in the wind, and the ground, one sees through between the trunks to the sky and the distance.

An extended lagoon with many coral rocks surrounds the island, which is about 9 sea miles long and 5 wide, through which only boats can enter.

Isolated in the great ocean and offering but little lure to the commercial ship and whaler, the island is very seldom in touch with the outside world, and the navigator sailing by only knows her in haste. When Chango put in at the Palin Islands on his world trip, numerous boats directed the hearing "Rurik" and a peaceful race wished to associate with the stranger. The islanders were strong, well built and huskier than the inhabitants of the Eastern Islands, and of the same color. No tattoos were noticed; instead one saw several older men with

a sign of the frugeness. There were 36 boats, each carrying 7 to 13 men. The women wore a frise hanging girdle with stripes, the men wore only a bundle of coconut leaves fastened with a string. Only a few had shoulder coverings, poorly constructed of two pieces of a woven mat of coconut leaves. They pushed themselves talkatively and trustingly towards the ship, and, however, accepted the invitation to go aboard. They showed eager desire towards and accepted with a sort of admiration, the goods of the Europeans. They had very little to exchange - some coconuts, mostly unripe, to slake thirst, utensils brought along incidentally, and their weapons, long spears and coconut wood. At first they refused to sell the latter and would only agree to for long nails or woolen scarlet belts. It appeared that the island must have supported a large population although it was unknown which fruits, outside of coconuts and pandanus, and which roots were produced, and whether pigs or dogs were native to the island.

Twenty-five years after Chamisso, the "Porpoise," Captain Ringold, belonging to the Wilkes Expedition, appeared at Penrhyn. A fantastic account by a proaic naman says:

"The ship cruised all night near by and on the following day at sunrise one saw a great many canoes who were rowing towards the brig. Towards 7 o'clock, 21 were alongside and others soon followed. As the number of visitors increased, they became bolder and climbed up the ship with loud cries. They were the roughest and wildest looking creatures seen during the whole voyage. They accompanied their ugly cries with most violent twisting and g-staring and appeared to be out of sorts due to excitement. Except for a narrow halo of coconut leaves they were naked. Each canoe contained from 7 to 15 men, all wild and unmy. The noise was nearly deafening as all spoke an un-understandable language and the discord of voices was intolerable, at times high and shrieking, then again deep and coarse. During their talks they slapped their hips violently and some wrung their hands and screamed, whereupon their eyes came out of their sockets, and their terrible grimaces made them appear like madmen in the worse outbreak of madness. It was impossible to have their interest taken by any object for any moment, but their eyes strayed with feverish haste from one to another. Weapons were hidden in their canoes. Some succeeded in coming aboard and various articles were taken, one of which was a sailor jacket which was quickly and skillfully hidden in one of the boats.

"As these good people got to be just too annoying, the captain gave orders to 'clear the deck.' As soon as they were in their canoes again, they threw heavy coral pieces and shells with all force on board. One fired some shots over above their heads, but they did not seem to notice them at all, but stood upright in their boats, swinging spears with provoking screams. As their number steadily increased, the brig was continuously kept on sails, to prevent any attack. After long unsuccessful efforts, at

last an exchange to say and they gave their weapons and neck bands in exchange for knives, clothes, etc. As soon as they received the exchange articles they threw the desired ones on board and seemed to be earnest in trading, although they showed themselves as skillful thieves. Their swimming ability was like that of the amphibians as they dived for the smallest article that fell overboard in spite of all robbing and warring. Their statures were athletic, their carriage upright, their skin colour darker than that of the Samoans and Tahitians; none of them tattooed. Among the crowd only two or three women appeared of lighter face colour with long shiny hair and beautiful white teeth. As seen only 5 to 8 foot spears of coconut wood were noticeable. The canoes of dark colored wood, and larger, as one finds them generally on the lower islands, had a slight outrigger and no sails; the pieces of which they contained of were combined by coconut bark. The natives seemed to own only a few tools. The only European article which was noticed was a polishing stone fastened on a stick, and a few glass pearls, so evidently the Fenrhynians were not in communication with foreign countries and, therefore, one can somewhat excuse their obvious lack of breeding. Captain Kingold stirred one of them by the present of an ax to come on board and gave him a piece of chalk with which he might draw the form of his island on deck, as is known of the beautiful northern child of nature Eskimalia, Iskolik, who sketched the Fary and Iscla streets for Captain Parry. But the tropical wild one was so wildly and astonished about everything, that he saw, and nothing else, but sprang around deck in loud exclamations. The tongue ability of these people anyhow was marvelous. In the same time, which nearly seemed impossible to hold even only for a few minutes, some of them would talk 3/4 of an hour, in which they hardly took time to breathe.

"The wild behavior of the Fenrhynians naturally eliminated all possibilities of attempting any landing. Presently the island seemed to be strongly populated, and the northwest side to be a long shaped village shaded by coconut palms, van roots were seen in the boats, but no taro. One suspected the possession of chicken, according to the feathers they wore as ornaments."

CHRISTMAS ISLANDS

The Christmas Island was discovered by Cook in December 24, 1777 who was stopping around this deserted locality to watch the eclipse. She has been since very seldom visited, except by whale fishermen, who now and then appear there to collect stock of turtles, fish and coconuts without spending harbor duty or reporting exchange goods. She is the largest of all islands in the present mentioned chapter of ocean sphere, and Bennet, who sailed 2/3 of the coast, believes she must have a larger circle line than 60 miles. She forms a low belt of rising land not 10 feet above sea level, which a shallow lagoon incloses in a horseshoe form the entrance to which the sandy island lies. A passage at both sides of this island directs to the lagoon, where ships are able to enter.

Cook found the ground at some spots loose and black, at other it showed sea products as broken corals and shells, which, similar to a ploughed field, ran parallel in long narrow directions and very long furrows, which showed distinctly that they must have been thrown there by waves, although this was now about a mile far off.

The sharp observer Cook, who like his great ancestor Columbus, was talented with an eye for all appearances of nature, took of this the conclusion that the island must have been lifted from the ocean bottom and possibly still in its growth.

The island is probably only for this reason not inhabited because she doesn't seem to have any sweet water, although the future increase of coconut palms will remedy this deficiency to a certain degree. On the other hand, she is rich on salty seas, which visibly have no connection with the ocean, and of which one is positioned at the southeast with a length of 5 English miles. Their salt contains are very important, and one can gather on its shores the best cooking salts.

The vegetation consists of rich grass, Tournefortien, and coconut trees, which must have very much increased since Cook's visit as he found only few, that bore any number of fruits, mostly of salty taste, whereas Captain Hooper who searches the whole island in 1857 found several woods of coconut trees. Those by Cook, the attentive friend of present navigators, on Sandy Island planted coconuts were in 1846 grown to groups of trees when Captain Scott visited the island; a beautiful memorial to the great man. Cook and Hooper agree to boast of their riches on birds, fish and turtles. Of the latter Cook's men caught about 300 which approximately weighed 90 to 100 pounds, and all of greenish color, which played important roles at the major Lord's feasty banquets in London. The same lack of water, which scared people away from the islands seems to keep the rest of mammals away, and the instinctive positiveness with which the birds build their nests on the ground shows that here the cosmopolitan rat is missing. Bennet found a great number of hermit crabs,

the same as on the Carolines, and similar sea snail shells occupied. Towards evening they merely cover up the whole sandy shore of the little lagoon island, where they keep motionless a few feet away from the water.

This opens another subject of the low animal world and gives a rich field of observance, and the learned scholar who has stopped over on a deserted island will find opportunity to enlarge knowledge in many of our facts of sea creatures.

LOST BOAT OF THE ASTERION

Rev. S. C. Damon,--Dear Sir:--By request of Capt. Willey I write to inform you of the chief officer of the ill-fated ship Asterion. I suppose you have the particulars from Captain Hurd up to the time he left Baker's Island. Owing to currents and not having chronometer time, he was unable to find Howland's Island, after trying some fifty-six hours. He then had to do the next best thing, as it was impossible to get back to Baker's. He with the rest of the boat's crew were in the boat nine days, without seeing land, and at the dawn of the 10th they were overjoyed with the sight of land, which proved to be one of the islands of King's Mill Group. I forget which it was. For eight days they had nothing to eat nor water to drink. He was on this island six weeks before he had a chance to get away. At the end of that time a small schooner, which was in the oil trade, touched there. The schooner's name was Clarence, of Sydney, and which, after cruising from one island to another, returned to that port, where he (Mr. Alrick) arrived safe and well last February. I was at that time in the American ship Black Hawk, Captain Seth Doane. We were in New castle at the time he arrived in Sydney. Captain Doane sent for him to come to Newcastle, which he did, and took passage with us from thence to San Francisco, and arrived April 20th 1864. As soon as we arrived he sent a dispatch to his wife. He had a free passage given him and left in the steamer for his home and family, the first of this month, and I trust he is now happy with his dear wife at home--so, if you write, he will be there to receive it. He spoke very highly of the treatment he received at the King's Mill Group, and thought he should like to live there if he had his family.

Yours respectfully,

William Church.
Chief officer of ship Iadoga

SCHOONER ODD FELLOW.

Schooner Odd Fellow, Bush, reports--Left Honolulu, March 11th. Had fine breezes and pleasant weather, with the exception of three days calm near the island. Arrived at Baker's Island, March 26, found the ship Princess there, loading. Left Baker's Island, April 24th. Have had light airs from the N. E. and calms the entire passage. Between the lats. of 6.30 and 8 N. where I have always found baffling winds with an easterly current, had light airs from N.E. Anchored at Waimea, June 3d, short of provisions, 41 days from Baker's Island. Left Waimea, Saturday night, June 4. May 8, lat. 6, N. Long. 168 W. passed a clipper ship steering S.W. by S.

Arrived at Baker's Island, April 10th, ship Lady Washington, Holbrook, 12 days from Honolulu, to load guano.

Sailed from Baker's Island, April 22d, ship Princess, Crowell, with a cargo of guano for Liverpool.

Schooner Active, Bush, reports--Left Honolulu, Aug. 22, with moderate trades and pleasant weather, until 8 days out, Lat. 13.30, then light ~~S.S.E.~~ winds and pleasant baffling winds and calms with much rain, 7 days to Lat. 4.30, took stiff S.E. wind and pleasant, one day to 2.15 N. then light S.S.E. Winds and pleasant to Enderbury Island 15 days from Honolulu. Left Phoenix Island Sept. 19, 4 P.M., for Honolulu, winds moderate from E.S.E. and clear until Sept. 25, Lat. 4.30 N. Long. 65.00, wind fresh S.E., and very rugged at 11.45 A.M., carried away the foremast. Causing a detention of 2 days to clear the wreck and get sloop rigged, then had light baffling southerly winds, and calms, with much rain until Oct. 7th, Lat. 9.00, Long. 149.30, had 3 days wind light, N.N.E. and pleasant to Lat. 11.30, and squally to 14.00. Since which time have had light baffling southerly winds and pleasant weather until our arrival at Honolulu, Oct. 20.

Phoenix Islands
Guano Islands

Report of the Loss of Ship Mattapan

At Baker's Island, Oct. 6th, 1864. At 11 o'clock received a heavy squall from the Westward; which blowed the ship suddenly on the reef as far as midships, and bringing her moorings with her. Set the colors for assistance, which came, and commenced discharging provisions baggage, sails and rigging the ship striding, and pounding very heavy, making water, tide ebbing, ship settling down forward, slipped the chain and let her come broad-side on to save the property, succeeded in saving everything movable in a damaged state. At sun down all hands left the ship, as it was not prudent to remain longer as she had bilged. Tide flowing in her and riding heavy with a heavy surf on.

On the 7th, sold the ship as she lay on the reef for two hundred dollars, built tents on shore, and made ourselves as comfortable as circumstances admitted.

Thanks to Capt. Howland, of ship M.L. Sutton, for his sympathy, and kindness in offerering myself and officers his ship at our disposal; also to Mr. C. Carr, the carpenter on the island, for his repeated kindness and attention to us while on the island and for his constructing us such comfortable and commodious tents, and to the kanakas in general as they sympathized with our misfortune.

Edward A. Robinson,
Late Master ship Mattapan.

Report from Howland's Island.

Report of ship Ladoga passing Baker's Isl. Oct. 13, bound for Holmes Hole with part of a cargo of guano from Howlands Island, where she left the day before in consequence of surf daily coming on.

The ship Arno, Capt. Nason, was totally lost on the reef (no date). Capt. Nason took passage in the Ladoga, leaving his crew on the island.

Ship White Swallow has left for China, deeming it unsafe to lay at the islands. An English ship (did not obtain her name) had been on the reef and got off leaking badly, had gone for repairs.

NETTIE MERRILL,

Report of schr. Nettie Merrill, Capt. Russell--First five days from Honolulu, had moderate trades, latter squally weather, wind N.N.E. to E. 17 days passage to Howland's Island, where we laid one day. Left the Island with fresh squalls from the westward, and much rain, worked into 158 deg. W, between 4 deg. and 5 deg. N, winds E. to N.N.E., latter part light airs from East; April 26 made Maui, bearing N.E. 50 miles. Arrived in Honolulu, April 27, making the passage up in 34 days.

LOSS OF SHIP "MONSOON" OF BOSTON.

Arrived at Howland's Island Dec. 18, and made fast to South Buoy, and up to Jan. 10 had pleasant weather, with light trades. During an interval of eighteen working days discharged 400 tons guano. Sundown Jan 9, good trades and ship laying well, but very heavy surf on, and up to midnight the wind blew fresh from the S. E. At 1 A.M. Jan. 10, the wind hauled suddenly into the south; at 1-1/4 it was blowing hard from S. S. W.--the ship swung, and when on an angle of 30 deg. with the reef struck very heavy, breaking rudder short off, taking with it portion of stern-post, ripping up quarter deck plank, and large portions of keel came up along side; surf continually breaking under ship's quarters. Thus she pounded for one hour when she floated off with five feet of water in her hold, and swung to the buoys. At 4 A.M. the ship again went on the reef, and pounded and ground along for a few hours, when she floated off, and the "Monsoon" went down stern first about one mile from the island. We saved a few provisions and small portions of our clothing, but badly stained and injured by the filling of the boats in landing.

Jan. 30, my two officers and thirteen of the crew of the late ship "Arno," wrecked in August last, were kindly received on board of the Br. Brig "Ben Nevis," Capt. Kenmond, bound to Shanghai, from Sydney, the brig being driven thus far from her proper course by westerly gales, and I would thus acknowledge his kindness in relieving a crew of shipwrecked Americans.

To Capt. Wm. Chisholm, Superintendent of the Island, I am particularly indebted for his courage, in launching his boat through a very heavy surf, in the dark, and storm, and saving my family; also for his unceasing kindness to us all, during our

stay upon the Island. A. Frisco, native of Sebic, Manila, was drowned.

April 26, schooner "Nettie Merrill," Capt. Russell, came to the Island and took my family, self and people to Honolulu. I would thank Capt. Russell for his kind treatment during the passage up.

February 23, ship "Daring" passed; March 12, ship "Kentuckian" passed; March 21, ship "Daring" standing north again.

Capt. Merrill

HARRIET NEWELL

Report of the Brig Harriet Newell.--Sailed from Honolulu, Jan. 19, 1866, for Phoenix Island, had light westerly and S. W. winds for the first three days, then took the trades quite strong to the line in $166^{\circ} 37' W$, and arrived at Phoenix Island, Feb. 2d--13 days from Honolulu, found all well at the island, landed provisions and sailed the 3d for Enderbury's Island, arrived at that island 21st of February. Had very light winds and a very strong westerly current. Found all well. Landed recruits and sailed the same day for McKean's Island, arriving there on the 23 of February. Landed recruits and sailed the 25, for Honolulu. From the island to $2^{\circ} 00' N. 175^{\circ} 30' W$, had strong easterly winds, and from $10^{\circ} 00' N. 170^{\circ} 00' W$. had very bad weather, with heavy squalls, and continual rain. From there to $24^{\circ} 30' N. 161^{\circ} 00' W$, had very good weather and light winds from the eastward. March 27th took the wind from N.N.E, and raised the Island of Oahu at daylight the 29th, and Diamond Head the 30th--32 days from McKean's Island.

On March 1st in Lat. $4^{\circ} 50' N.$ long. $174^{\circ} 00' W$, exchanged signals with a large merchant ship in ballast, showing Hamburg colors.

Wm. J. Cunningham, Jr.

Master brig Harriet Newell.

HOWLAND ISLAND

LOSS OF THE CLIPPER SHIP "KATHAY."

1867

By the arrival on the 29th ult., of the schr. San Diego, from Howland's Island, we learn the loss of the above named vessel, and are indebted to Captain Popham, for the following particulars:

"The British ship Kathay, of 1123 tons register, of the port of Liverpool, sailed, from Bombay, Oct. 7th, 1866, for Howland's Island, Experienced strong winds and fine weather until reaching the Friendly Islands, from thence to the Equator, strong northerly gales and squalls, with calms for three or four days, wich caused rather a long passage of 90 days. Arrived at Howland's Island, January 6, 1867, when we had very unsettled weather for several days, having to slip once and put to sea.

On Sunday, January 20th, 1867, while lying at the moorings, swung taut off from the reef with fresh trade winds, a black cloud in passing overhead caused the wind to shift suddenly from the westward. Got a spring on the buoy, which helped to keep the ship from striking very heavy as she swung round, but she started the stern-post which caused her to leak a good deal. We then hung the ship to the buoy amidships, parallel with the island with her head to the S.S.W., but the heavy surf and wind, were heaving ship and moorings right on the reef, being then winthin 15 feet of striking.

As a last resource, we made sail, and in a few minutes slipped from the buoy, but the ship had not gone half her length before she was hove broadside on the reef, where she instatly bilged and commenced filling fast, the ship laboring and rolling so heavily on the reef that it was impossible to stand on the decks. A few minutes afterward, the main and misen masts fell. A part of the crew got into a boat and put off from the ship. Finding I could do no more on board, I left the ship with the remainder of the crew, her topgallant-forecastle being then under water. A few minutes afterwards she fell off the reef and sunk in the short space of one hour from the time of the wind veering. It is impossible to save a ship at Howland's Island with such a sudden shift of wind, and it's my firm belief tha ship went under the island, as Howland's Island, is in my opinion, \ddagger like a bunch of coral or an old oak

tree with the top part just above water. I don't believe you would get soundings with 1,000 fathoms line 200 feet from the reef.

The Kathay was a splendid clipper ship. I must give Mr. Westervelt, her builder, great praise in modeling her. She was built in New York, in 1853. We had taken on board about 400 tons of guano, and had a fair prospect of completing our cargo of 1600tons in twenty-five days.

Myself, officers and crew lost everything of any value. Had the accident happened by night, there would have been loss of lives also. But, thank God, we all got safe on shore, where we remained until February 15, 1867, having been made as comfortable as things would allow, being short of everything on the island. Captain Chisholm, superintendent of the island, deserves the highest praise in working everything for the best. He also lent us every assistance in trying to keep the ship off the reef.

We have had a long and tedious passage to Honolulu, getting short of everything. On Sunday last we touched at Cook's anchorage at Niihau, where Capt. Tengstrom received great kindness from Mr. Sinclair and his two nephews. They supplied us with three sheep and several bags of potatoes and brought them off after dark to the schooner, which kindness I shall never forget, as there was a heavy surf on at the time. Capt. Tengstrom has been very kind to us in the long tedious passage. The crew of the Kathay is twenty-five men all told.

Wm. Popham.

Late Master of the British ship Kathay.

I made Howland Island to be in Lat. $0^{\circ} 47' 30''$ N., Long.

P.C. Advertiser.

LOSS OF THE BARK DANIEL WOOD

Before daylight on Wednesday morning, Capt. J. Richmond, with a boat's crew of the whaling bark Daniel Wood, belonging to New Bedford, arrived at this port in a whale boat from French Frigate Shoals, where the bark was wrecked April 14th. It will be remembered that the whale ship South Seaman, a fine, nearly new vessel, was lost March 13, 1859, on the same shoals, which consist of a series of rocks, reefs and sandbanks, located about 450 miles to the north and west of these Islands, Owing to their low position, being in no case more than six feet elevation above the sea, and also the fact that strong and variable ocean currents prevail in their neighborhood, they are peculiarly dangerous to navigators, especially to ships bound hence to the northward. On some of the islets, which are very small, consisting of only an acre or two each, a limited supply of brackish water can be obtained, although that is not to be depended on at all seasons. Turtle usually abound, and fresh fish are easily taken, while sea birds flock there in myriads to deposit their eggs, which, contrary to general supposition, are very palatable and devoid of fishy tast.

The Daniel Wood arrived at Honolulu on the 5th of April, from a cruise to the westward, with a hundred and odd barrels of sperm oil, which was here discharged for shipment home, the bark leaving again on her cruise to the northward on the 10th. On Saturday, the 13th, Capt. Richmond ascertained his position at 3 P.M. to be lat. $23^{\circ} 10'$, and long. $164^{\circ} 20'$, the shoal on which the vessel afterward struck, which is known on the chart as Basse Francaise Shoal, then bearing west by half north, distant 85 miles. The course of the vessel was given northwest, which would have made, with the variation, a course of northwest by north, and if no currents had interfered, and the position of the shoal been correctly laid down, the vessel would have gone forty-five miles to the windward of all danger. On Saturday night the weather was beautiful, with a clear atmosphere, and a full moon, and the bark, under all sail, was steadily pursuing her course with a fine favorable breeze.

At 1 o'clock Sunday morning, Capt. Richmond, who was below, heard the second officer, in charge of the deck, shout to the man at the wheel: "Hard up the Helm!"

The Captain immediately sprang up on deck and ordered the vessel to be put about; but before this could be accomplished she struck heavily on the reef, and pounding her way over the first or outer rocks, went on to the inner ones. Here the breakers were reached, about half a mile from the place where she first struck heavily on the reef, and the vessel heeled over to the blows of the breakers. It having become apparent that she could not be saved and was about breaking up, the masts were cut away to keep her upright. The crew all went into the boats with the exception of the Captain, second officer, cooper and three seamen, who remained on board as long as safety would admit, and got about a hundred gallons of water into their boat before leaving. At daylight the only sign or terra firma in sight was a bleak looking rock, for which the boats pulled. At a distance of fifteen miles from the ship they reached a small sand bank, barren, with the exception of here and there a tuft of grass.

On Monday morning they again boarded the ship, through a heavy sea, and the Captain was washed overboard, but fortunately regained the deck. On this occasion they secured six casks of water and a lot of bread and meat. It occupied them a whole day and a good part of one night, to tow the casks of water to the sand bank through tortuous channels, and on getting there the men were given each a pint of fresh water. On broaching two of the casks they were found to contain salt water, and they were the first of the six that were landed. Imagine the feelings of these shipwrecked mariners when the thought arose that they were on "a lone barren isle," without fresh water!

On Monday noon the ship broke up, and the Hawaiians of the crew, expert swimmers, were active in the water in securing provisions. The Captain decided at once to proceed to Honolulu for assistance. Taking a favorite large whaleboat, named the Ann E. Wilson, he put on her, what the sailors call a "sister gunwale" and a "wash-board," and declared his intention to start for Honolulu. As an instance of Yankee enterprise and determination of character, under difficult circumstances, it is well to mention that the only tools the Captain and his men had to operate with in making their boat seaworthy for the long and perilous voyage of nearly five hundred miles to

this port, was a saw, a hammer and a chisel. The nails with which to fasten their work they had to draw from the fastenings of the other boats.

On Tuesday, the 16th, the boat being ready, the Captain, second officer and six men embarked at 3 P.M., with a necessarily limited stock of water and bread, bound for Honolulu, leaving twenty-seven of their shipmates on the sand bank, doubtless with a feeling of uncertainty, both on the part of those who went and those who remained, as to whether they should ever see one another again. One party left on an unfrequented barren sand beach in mid-ocean, and the other, with scanty provisions, undertaking, in an open boat, a sea voyage of hundreds of miles.

For the first four days after leaving the shoal the Ann E. Wilson encountered strong winds from the north and north-northeast, but made very good headway in the desired direction, sometimes pulling and sometimes sailing when the wind gave a slant. For prudential reasons all hands in the boat were put on an allowance of one pint of water and one biscuit a day. Thus they struggled on, until Sunday morning, April 2^d, when they made the Island of Niihau. Landing there, they were most hospitably and kindly received by the proprietors of the Island, Captain Sinclair and family, of whom Captain Richmond speaks in the highest terms. Leaving Niihau at 6 o'clock on Monday morning, they continued their course for Honolulu without touching at Kaui. During that night they spoke the (~~Massachusetts, Capt. Williams, who~~) Monticello, Capt. Phillips who gave them the course to steer, their compass having become disarranged. On Tuesday night they spoke the Massachusetts, Capt. Williams, who hove his ship to and insisted upon their coming on board and taking some refreshments. They landed at the wharf in Honolulu on Wednesday morning, at 3 o'clock, after an open boat voyage of eight days during tempestuous weather and on starvation rations.

As soon as the facts became known to General Smith, the American Consul at this port, preparations were at once made to get the United States steamship Lackawanna, Capt. Reynolds, ready for sea to proceed to French Frigate Shoals, for the purpose of rescuing the shipwrecked officers and crew of the Daniel Wood. She was made ready with all possible dispatch, and sailed on Thursday, at one o'clock, and will probably be absent on her errand of mercy about a week or ten days. Her presence here is

quite fortunate on this occasion, and forcibly illustrates the propriety of the policy which we have repeatedly urged, that the American Government should always have a war vessel either at or in the neighborhood of Honolulu. Just now, in these "piping times of peace," what better occupation for one of "Uncle Sam's bull-dogs" than to succor his shipwrecked mariners from a barren sand spit where, without this timely assistance, they all might have perished.

In this connection it may not be amiss to refer back to the loss of the whale ship South Seaman. From a letter of Capt. Norton's published in this paper, we learn that she left Honolulu March 10, 1859, and ran on to the shoal at 5 A.M. on the morning of the 13th following. The vessel was a total loss. A few gallons of water and some hard bread were safely landed, and the Captain and crew decided to start in whale boats for Guam. Just as they were leaving they fell in with a boat belonging to the schooner Kamehameha IV., which was on a wrecking cruise in that neighborhood. She took half of the crew on board, and was twelve days reaching Honolulu. Returning to the shoal she brought the remainder of the men to Honolulu.

There are six small islets, the largest of which contains only an acre or so of surface. The reef(~~contains only an acre or so of~~) extends northwest and southeast, and is variously estimated at 25 to 35 miles long. Capt. Norton took an observation on the largest islet, and placed it in $166^{\circ} 16'$ west long., and $23^{\circ} 40'$ north lat. Bowditch places it in $165^{\circ} 59'$, and Lieut. Brooks of the Fenimore Cooper, in $166^{\circ} 25'$. Captain Norton's position is believed to be the most correct.

FROM THE GUANO ISLANDS

From the Guano Islands.--On the 14th ultimo arrived the Hawaiian brig Kamehameha V., Capt. Stone (formerly master of the brig Josephine), 35 days from Baker's Island. The brig left here on the 15th of June, and after touching at Jarvis' Islands Phoenix Island, Enderbury's and McKean's, arrived July 9th at Baker's Island. At each of these Islands the Kamehameha V. left supplies for the agents and employes of the Guano Company. At Baker's Island the ships Kenilworth, Rival and Stewart Lane had all been loaded and sailed; the Sea Chief was loading, having 500 tons on board and the Geo. Green waiting her turn. The Sea Chief, before coming to the anchorage, experienced a severe squall from the southwest, by which she lost her fore-topmast, mizen topsail yard, and split her mainsail. Capt. Stone reports all right at the Islands he has visited--no deaths and no sickness of importance. On the passage to Honolulu, in "the doldrums," during twenty days the Kamehameha V. experience heavy rain squalls from southeast to northeast. When to the leeward of Hawaii, on the night of the 13th inst., Capt. Stone was overtaken by a strong kona, with rain, thunder and lightning. This sent him flying on his course, and he made Oahu before daylight on the morning of the 14th. He brought with him the tail end of the gale.--Adv.

copy Schooner San Diego, H. Tengstrom, master, 35 days from Howland's Island, reports--Left Honolulu June 14th, and had fresh N.E. trades until in Lat. 7° N., Long. 170° W. from whence I had light and variable winds the remainder of the passage, and arrived at the Islands on the 28th. Left the Islands on the 6th of July; had light and variable winds until in Lat. 10° N., Long. 170° W., from thence fresh trades; arrived in Honolulu on the 11th August with 17 laborers from the Island, Am. ship Cynthia, of Boston, arrived June 3, took on board 1500 tons of guano, in 25 working days, and sailed again July 3, for Holmes Hole, Mass., for orders.

Brig Kamehameha V., reports--Arrived at Jarvis Island June 26, at Phoenix Island July 2, Enderbury Island July 3, M'kearn's on 5th, and at Baker's Island on 9th. Found the guano colonies all well, and supplied them with water and provisions. Left Baker's Island on return, July 9, sighted Palmyra Island 28, and arrived at Honolulu, August 14--35 days passage, having experienced heavy squalls, calms and light weather the entire passage.

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REPORT OF SCHOONER SAN DIEGO

Left Honolulu, Nov. 4th, had fresh trades to lat. 10° N. from thence to lat. 2° N., westerly winds. Arrived Howland's Island on the 17th; during the latter part of the month had much variable winds and squally weather. Left Howland's Island, Nov. 30th, with the wind from the westward, and sighted Baker's Island next day; saw two vessels laying at the moorings; the wind being light and a strong current setting from the northwest, was unable to communicate with the shore. December 3d, 4th and 5th, had strong westerly winds; on the 8th arrived at Baker's Island, and left the next day for Howland's Island, arriving there in the evening. On the 10th took on board the officers and crew of the wrecked ship Lizzie Oakford, also the superintendent, foreman and working party of the Island, leaving one white man and three Hawaiian natives to keep possession. Capt. Tengstrom also gives the following reports from Howland's and Baker's Islands:

Report from Howland's Island.

On the 25th of Sept., during a shift of wind from the eastward to the westward, the ship Lizzie Oakford, Captain Rocko, slipped from her moorings and stood to sea. All day the vessel was in sight of the Island, and at 6 P.M. she passed the north end, standing to the eastward with the wind southerly. On the 26, at 4 A.M. the superintendent, observed a vessel's light to the eastward, and answered it by showing a light from his house, not supposing it to be anything important he again retired to rest, but was soon aroused by the arrival of a seaman from the Lizzie Oakford, who reported that she had gone on the reef, and he had swam ashore through the surf. During the day the superintendent and his men assisted in saving the provisions and clothing. The ship remained two days on the reef, and then broke up and became a total loss.

Report from Baker's Island.

On the 18th of November the bark Garstang, Captain Griffiths, arrived. On the 19th, the Minnehaha, Capt. Bursley, also arrived, 15 days from Honolulu. Nov. 20th, very unsettled weather, light winds, with a heavy swell from the westward, making it impossible to get under way with the ship. On Dec. 3d, at 2 P.M., blowing hard from the westward, and in a heavy squall the Minnehaha broke on of her moorings

and swung head on the reef, and was obliged to slip the other mooring as the vessel was breaking up. All hands were save, but the ship was a total loss. December 4th the gale increasing, the crew of the Garstang was taken ashore and the vessel left to ride out a strong westerly gale. The crew returned on board on the 6th, and on the day after she slipped her moorings and stood out to sea, returning again on the 8th. The 9th, wind fresh from east-southeast and pleasant weather; the bark finished loading, expecting to sail next day.

Report of Brig Kamehameha V.

November 14th towed to sea from Honolulu; 16th, touched at Kawaihae for potatoes 19th, off Pele point, took the trade winds fresh; 24th, sighted Palmyra Island, after which had light southerly winds and calms until December 5th, being near Enderberry Island, was struck by a strong westerly gale which continued until the 7th; 6th, sighted Birnie's Island; 8th, made McKean's Island, and next morning came to with our own anchors and a hawser from the shore, wind at southeast and moorings gone. Landed the stores and left at 1 P.M. taking off the officers and crew of the ship Washington, which was wrecked on the 4th of December, and other passengers. Arrived at Baker's Island on the 11th; discharged cargo and sailed on the 15th, taking off the officers and crew of the ship Minnehaha, which was wrecked on the 3d, also, 30 laborers and other passengers; 15th, at 7 P.M. passed close under the lee of Howland's Island. From the signals made there concluded that no further communication was required, and proceeded for Honolulu.

MARINE INFORMATION.

At Sea, Lat. 35°N., Long. 140°W.

July 28th. 1868.

Mr. Damon--Being near Redet's Rocks (as you will see by the above latitude and longitude), I have been reading in the Friend (page 8th, 1864) something concerning them. Your statement in regard to concerning them. Your statement in regard to their discovery differs so much from my ideas of truth and justice, that I feel inclined to put in a counter statement. The rocks were discovered in 1850 by Thomas Bridge from on board the brig Emma, Capt. Redet (pronounced Reedy.) Bridge is now living at Tahiti, and two years ago was a fisherman with me in the schooner Porpoise. I consider his statement reliable. He says that about midday, just as the Captain had taken the meridian altitude of the sun, he (Bridge) being aloft, saw two shoal spots, which he describes precisely as Capt. Redfield does those that he saw, except that he does not mention any kelp. Says they passed very close; had to change their course to avoid them.

I have questioned Madame Redet, who was on board at the time, and is now living on the Island of Huahine. She says there is no doubt about the matter--there is a shoal there. Capt. Redet (now deceased) having been on the spot exactly at meridian, would be very likely to have the latitude correct; and as his longitude and Capt. Redfield's agree nearly, I should look for the rocks in the place he assigns them. Capt. Sutton, of the bark Ioachim, says he saw them, but his description differs widely from the others. He says they are above water, and of a sharp pinnacle form. It is possible there are more than two rocks, though the surveying party in the Fenimore Cooper sought for them in 1858, and could find nothing; but their eyes were poor for finding rocks below the guano level.

In Tahiti about five months ago, I saw Capt. Russel, of the Gen. Pike. He reported a reef fifteen miles W. 1/2 N. magnetic from Hergert's Rock, Marquesas Islands; Did not sound, but thought he passed over places of not more than four fathoms of water.

Yours respectfully,

Matthew Turner.

THE MAUNA LOA

The Friend, February 4, 1869, p. 9.

The Mauna Loa sails on Saturday for a cruise among the South Sea Islands, under the direction of the Board of Immigration. We understand the object of the expedition to be to obtain immigrants and laborers, with their families, who will come to reside permanently upon the Hawaiian Islands. Capt. English goes in command of the vessel. His long acquaintance with the inhabitants of the South Sea Islands eminently fits him to command the vessel. We are glad to learn that the vessel will go to the Hervey group—including Mangaia, Aitutaki and Rarotonga—instead of visiting the low coral islands under the line. Capt. English will find English missionaries at the Hervey Islands, through whom he can communicate intelligently with the natives. The honorable manner in which Capt. English has conducted the labor system on Fanning's Island is a guarantee that he will be equally honorable in opening negotiations with the inhabitants of the Hervey Islands. The terrible lesson inflicted upon South Sea islanders by the Peruvian slavers, has created a prejudice against the islanders going abroad, unless they know where they are going. The honor of the Hawaiian Government is publicly pledged that the present expedition shall be conducted in the most honorable and upright manner.

REPORT FROM THE GUANO ISLANDS.

We are indebted to Capt. Rickman, of the brig Kamehameha V., for the following report.

Baker's Island.

American ship Ellen Goodspeed came to the moorings July 27th, and sailed for orders, August 19, with a full cargo of 2,000 tons of guano.

American ship Robin Hood moored on the 21st of August, and was destroyed by fire on the 30th, having 412 of guano on board at the time.

British brig Fred. Thompson moored on the 27th August and sailed for Cork, for orders, on the 7th September, with a full cargo of 410 tons of guano.

British ship Golden Horn moored on the 2d September and sailed on the 18th for Cork, for orders with a full cargo of 1550 tons of guano.

American ship Titan came to the moorings on the 5th October, and sailed on the 27th with a full cargo of 1850 tons of guano.

American ship Ocean Rover moored on the 28th October, and at the last accounts November 12th had 467 tons of guano on board.

American ship Crusader ~~en-the~~ moored on the 28th October, and at the last accounts had loaded on board 210 tons of guano.

American ship Grace Darling arrived on the Island on the 29th October.

Howland's Island

British ship Mary arrived on the 1st November, and at last accounts, Nov. 12th, had 400 tons of guano on board.

M'Kean's Island.

American ship Rival sailed on the 25th October, destination and cargo not reported.

Report of H. I. R. A. M. A. Donau.--Left Yokohama Nov. 14th; on the 18th encountered a heavy cyclone; 18th to 28th continual heavy westerly gales; on the 28th encountered another cyclone. On the 29th, in the forenoon, a heavy sea ~~carried~~ carried away the rudder and the stern post. Rigged a temporary rudder, which, as it had to be very massive, on account of the large size of the ship, was not

completed until the 8th December. The vessel made six hundred miles without any rudder, and with the temporary rudder, one thousand two hundred miles. Lost twenty-six sails and one boat, but no spars, all the other boats were badly damaged.--Gazette.

The Friend, Vol. 20, No. 5, May, 1870, p. 40

REPORT BRIG KAMEHAMEHA V.

Capt. Rickmann furnishes the following. Left Honolulu January 12th, 1870, for the Guano Islands. Arrived at Jarvis Island January 23d. The surf being high, was unable to land stores. Drifted out of sight of the island, which we made again on the 1st of February. At 9.30 A. M., sent a boat on shore with Mr. Smart and four men. At 10.30 A. M., sent a boat with Mr. Johnson and four men. At 3 P. M., both boats came off to the brig. when I loaded them with stores and sent them on shore (the brig being at the time about two miles from the island) thinking they could land and return to the brig before dark; Mr. Thomson, the second officer, and four hawaiians being in one boat, and, Mr. Johnson and four men in the other. The boats not returning before dark, I kept the brig making short tacks as during the night. Finding the boats did not make their appearance, and the wind getting light, and the vessel drifting to leeward, kept her to the Northward. February 4th. Manuel Demideny fell overboard from the fly jib-boom while loosing the sail. When first seen he was under the port tack. The vessel was immediately brought to on the starboard tack, a lifebuoy having been out adrift and thrown overboard for his assistance also a 1 1/4 inch plank 12 feet long was thrown overboard at the same time. The man had a heavy coat and an oil-cloth jacket on at the same time, and being unable to swim, and not having succeeded in getting hold of the plank or the life-buoy, he went down before the vessel with the light wind and strong westerly current could be got around; and having no boats it

was impossible to save him. February 11th made Jarvis Island again, bearing west. At 10 A.M., Mr. Johnson came on board reporting that the other boat, in which was Mr. Thomson and the four Hawaiians, had not reached the island. In pulling for the island on the first of February after having left the brig about twenty minutes, they met with a heavy cross current, and heavy toppling sea, and for about an hour and a half, as near as he could judge, they were unable to gain an inch on the island. Just before sunset before sunset Mr. Johnson's boat got into smooth water, and made a landing. Mr. Johnson saw the other boat about 15 minutes before sundown, it being at the time about that time a quarter of a mile astern of his boat. Soon after looking for it again and unable to see it. Thinking that it was possible that the boat had not been capsized, but had been carried away by the current, which was setting about W. S. W., I kept the vessel on that course for two days and nights, shorting the sail and laying the brig aback during the night, all the time keeping aloof at the mast-head in hopes of discovering the boat. Giving up all hope of finding the missing boat, and convinced that it was capsized in a tide-rip and the whole crew lost, I put the brig on the course for Phoenix Island, where we arrived on the 17th of February. Left Phoenix Island on the 18th for Enderbury Island; arrived the same day, and left for McKean's Island where we arrived on the 20th. Left McKean's Island on the 21st for Baker's Island arrived on the 23d. Left on the 25th for Howland's Island; arrived on the 26th. Left Howland's Island on the 27th for Honolulu; arrived on the 3d instant. At McKean's Island schools of sperm whales were observed during December and January.

REPORT BRIG KAMEHAMEHA V.

The Friend, May, 1870, p. 40.

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REPORT OF SCHOONER C. M. WARD, CAPT. RICKMAN.

The Friend, February, 1872.

Left Honolulu December 16, 1871, with the wind from the southeast, veering to the westward. Had the wind light up to lat. 16° north, long. $158^{\circ} 38'$ west; took the trades in lat. $14^{\circ} 30'$ north, long. $159^{\circ} 00'$ west. Arrived at Phoenix Island Dec. 29th. Left Phoenix for Enderbury's Dec. 30th. Arrived at Enderbury's at 4 P.M. same day. Left Enderbury's Jan. 2nd, 1872, for Baker's Island. Arrived at Baker's Island Jan. 5th. Left Baker's for Howland's on the 6th January. Arrived at Howland's Island on the 7th. Left Howland's Island for Honolulu on the 8th of January. In long. $171^{\circ} 48'$ west took the wind light from the southward, veering to the westward, weather looking very threatening. On the night of the 20th January blowing hard from the westward, with heavy sea running. On the 22nd wind hauled to the northwest, with heavy squall and rain; sleet blowing hard with heavy sea. At 2 A.M. on the 23rd, weather more moderate. Arrived of Diamond Head after a passage of $15 \frac{1}{2}$ days from Howland's Island and a round trip of $38 \frac{1}{2}$ days. At Enderbury's Island spoke whaling barks Progress with 100 barrels sperm, and Lagoda, clean. Found everything working satisfactorily at the islands visited.

REPORT OF BARK COMET, CAPT. A. FULLER.

Left San Francisco Dec. 30th. In crossing the bar took several seas on board, it breaking at the time. The first 16 days out a continuation of heavy gales from S.S.E. to S.S.W. with a great deal of rain. Then had four days' light winds from N.E. to E.S.E. From Jan. 21st to 24th had a very heavy gale of wind with plenty of rain from S.S.E. to W.S.W., blowing heaviest when it reached S.W., with a very heavy swell from W.N.W. After the gale the wind sprung up from N.W. to N.N.W. and remained so, when we made the east end of Maui Jan. 26th at 4 a.m.

LETTER FROM A GUANO ISLAND.

The Friend, February, 1872, p. 11.

Enderbury's Island, December 25, 1871.

Rev. S. C. Damon,

Dear Sir:-Being fully aware of the fact that you are always glad to hear news concerning vessels and their crews after leaving Honolulu for a voyage, I send you a line or two that may serve insertion in the maring journal. The Hawaiian bark, Mauna Loa, Briggs, arrived at this island on Nov. 22nd, 1871, 19 days from Honolulu. The passage down was a very pleasant one. The cruise were mainly from the wrecked fleet in the Arctic; many of the foremost hands having been officers in the whaling fleet, and they were the most ablebodied, efficient, and orderly ship's crew it has ever been my pleasure to sail with. They could sing well too, Mr. Editor, I like to hear men sing heartily on ship board. It is an infallible sign of a cheerful heart; and where a cheerful heart beats in the bosom of a man he entertaines a sense of his own superiority and realizes what is due alike to his Maker and his fellowmen. I always think there is something radically wrong on board of the ship whose crew does not sing and if there is one place more than another "where music hath charms" it is round a rusty windlass when the anchor grips hard. I found on board a number of the bound volumes of the Friend, and found them very valuable indeed, not only for the interesting articles contained in them, but as works of reference, and it seems to me that no better Directory or Guide Book to the Hawaiian Kingdom could be purchased and as a Record of past events fraught with the greatest interest to the nation I hardly know how the resident of Honolulu can do without it. I have derived more information from its columns concerning the commercial advancement in the islands than I could possibly have done by a long residence at them, after themore important events had transpired. A perusal

of the column headed Missing too tells its own tale. How many anxious hearts look at it for relief from years of agonized suspense, and this too seems to be of the most gratifying proofs to me of its value; that its worth, as a medium of communication between loved ones and those who have wandered away from home and its sweet influence, should be felt the world over, and a glance at these anxious enquires breathing love in every letter prove that it is so. Long may it flourish and be the bearer of good tidings as a true friend always should do. The Mauna Loa, after landing Mr. Geo. E. Weston and some supplies, sailed for Baker's Island, at which place she was to land 25 native laborers, and proceed on her cruise. On Dec. 9th the bark Lagoda, Capt. Swift, arrived off the island cruising; Captain reported all well on board; had sprung his topmast in a gale on Dec. 2nd; had seen nothing but one humpback since leaving Honolulu 20 days before; she sailed for the westward the same day and would touch at Baker's Island.

On the 10th of Dec. the whaling bark Progress Capt. Dowden, arrived off the island and just after making land, sighted a very large school of sperm whale close in shore; struck four and saved three of them turning out one hundred barrels. After standing off and on the island until the 22nd, she sailed for the westward and would touch at the King Mills group for wood and fruit. I boarded the vessel in company with Capt. Hempstead just after she made the island, and in the cabin lying on an open chart I noticed a volume of the Friend open and the Captain informed me that had it not been for the sailing directions for the Phoenix Group published in it he would have been in a "pretty mess", his charts having the islands misplaced, and some not laid down at all--another thrilling instance of a true friend in a tight place. May it prove valuable to many such, and wheather they steer for a heavenly or an earthly harbor by its directions may they ever find it is the earnest wish of

Yours Truly,

Geo. E. Weston,
Chemist Phoenix Guano Co.

REPORT FROM ENDERBURY'S ISLAND.

The Hawaiian bark Mauna Loa arrived here Nov. 17th, ^{1871,} after a passage of 19 days from Honolulu,, and after landing stores and one passenger, proceeded on her cruise the same day, having on board thirty native laborers for Baker's Island. The whaling bark Lagoda, Capt. Swift, arrived off the island Dec. 9th, 22 days from Honolulu. The captain reported heavy weather and a gale from the westward on the 2nd and 3rd December, during which the foretopmast "was sprung"; had seen no whales since leaving. She continued on her cruise same day. The whaling bark Progress, Capt. Dowder, arrived off the island Dec. 18th. Soon after making land a large "school" of sperm whales were sighted; boats were lowered and four whales struck, three of which were killed close in shore, the fourth getting away, the fast boat being badly stove during the run. Laid "off and on" until the 22nd, when she sailed to the westward, intending to touch at one of the islands of the Kings Mill group of wood. The whales turned out 100 barrels of oil. The captains of the above named vessels report all well on board.

REPORT OF SCHOONER C. M. WARD, CAPT. RICKMAN.---Left Honolulu Dec. 16th, 1871, with the wind from the southeast, veering to the westward. Had the wind light up to lat 16° north, long $158^{\circ} 38'$ west; took the trades in lat $14^{\circ} 30'$ north, long $159^{\circ} 00'$ west. Arrived at Phoenix Island Dec. 29th. Left Phoenix for Enderbury's Dec. 30th. Arrived at Enderbury's at 4 P. M. same day. Left Enderbury's Jan 2d, 1872, for Baker's Island. Arrived at Baker's Island Jan 5th. Left Baker's for Howland's on the 6th January. Arrived at Howland's Island on the 7th. Left Howland's Island for Honolulu on the 8th of January. In long. $171^{\circ} 48'$ west took the wind light from the southward, veering to the westward, weather looking very threatening. On the night of the 20th January blowing hard from the westward, with heavy sea running. On the 22d wind hauled to the north west, with heavy squall and rain; sleet blowing hard with heavy sea. At 2 A. M. on the 23d, weather more moderate. Arrived off Diamond Head after a passage of $15 \frac{1}{2}$ days from Howland's Island, and a round trip of $38 \frac{1}{2}$ days. At Enderbury's Island spoke whaling barks Progress with 100 barrels sperm, and Lagoda, clean. Found everything working satisfactorily at the islands visited.

Phoenix Islands
Guano Islands

REPORT OF U.S.S. HARRAGANSETT.

Left Honolulu Jan. 27th, 18 days passage to Fango Fango made a survey of that harbor and Leone Bay, ¹ island of Tutuila. Visited Apaia, Upolo. Arrested Capt. Hayes and seized his vessel; could find nothing against him, were obliged to release and his brig. Left Fango Fango March 14th for the Phoenix group and guano islands. March 27th made Phoinix Island and Enderbury Island the same evening, when we made fast to moorings and remained until next day. All well on the Island. March 29th passed Mary Island. April 1st called at Baker's Island, found them short of provisions--supplied them with bread, and brought four natives to this port as passengers. April 2d made Howland's Island; made fast to bucy and remained several hours; all well on the island. 41 days passage from Howland Island, had good trades carrying them to 32° N, long 168° 30' E, had southerly and easterly winds until striking the trades May 8th lat 31° W., long 155° 58' 15" W, squally and heavy rains until reaching the island.

REPORT OF SCHOONER G. M. WARD, RICKMAN, MASTER.

The Friend, September, 1872, p. 72.

Left Honolulu at 4 p.m. July 6th, and at 6 p.m. had wind strong from the eastward up to lat. 9° N. long. $156^{\circ} 40'$ W. then took the wind light and baffling from the southward, with rain up to July 16th; then took the wind fresh from the S.E. at lat. $5^{\circ} 40'$ N., long. $155^{\circ} 10'$ S. Arrived at Christmas Island at 10 a.m. July 18th; wind E.S.E. Left Christmas Island for Jarvis at 10 a.m. July 19th arriving at Jarvis Island at 10 a.m. next day; fresh breeze from the eastward. Left Jarvis for Enderbury's at 6 p.m. July 22nd, wind light from the eastward. Arrived at Enderbury's Island July 27th. While there experienced strong squalls from the eastward, with rain. Left Enderbury for Baker's at 2 p.m. July 29th; wind light from the S.E. Arrived at Baker's Island at 7:30 a.m. August 1st. Left Baker's for Howland's at 2 a.m. Aug. 2nd, arriving at Howland's at 7 a.m. same day; wind fresh from E.S.E. Left Howland's for Honolulu at 5 p.m. Aug. 2nd; wind light from the eastward. Had light winds from E.N.E. to E.S.E. up to lat. 9° N., long. $156^{\circ} 40'$ W.; then took the wind light from the N.E. up to lat. 18° N. long. $158^{\circ} 40'$ W.; then had light airs and calm weather to Honolulu. The U.S. ship-of-war Naraggansett called at Baker's Island July 28th, and left a mail. The ship J. H. Hale arrived at Baker's Island July 31st, 102 days from Hamburg. Aug. 1st, at 5:30 p.m. a vessel hove in sight at Baker's Island, supposed to be the Favorite, from the States, she being 142 days out. The ship Sardis arrived at Howland's Island July 20th, and had on board 1,000 tons of guano.

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Messrs, C. A. Williams and Co. have furnished us with the following report of vessels from the Guano Islands:

At Enderbury, the ship Sunrise had loaded, in $12 \frac{1}{2}$ working days, 1,760 tons, and sailed May 31st; the ship Intrepid had loaded in $10 \frac{1}{2}$ working days, 1,794 tons and sailed July 12th. From Baker's the ship Cultivator had loaded 1,800 tons and sailed July ^{8th} 12th. From Howland's the ship Atlas had loaded 800 tons, and sailed July 10th; the ship Josiah L. Hill had just arrived August 2d, at the moorings; the ship Sardis was at the moorings Aug. 2d.

CRUISE OF THE KAMEHAMEHA V. AND DISCOVERY
OF THE WRECK OF THE NORTH GERMAN
BRIG WANDERER.

By the politeness of Capt. E. Wood, we are enabled to give the following account of the recent two months' cruise of the Kamehameha V. to the westward, including the finding of the wreck of the German brig Wanderer, lost on Lisiansky shoals in the month of May last:

"Sailed from Honolulu June 26th. July 4th at French Frigate Shoals. Saw there two large hogs on a sand spit, a quarter of a mile in circumference. They have been there since April 1867. There is no fresh water there and very little vegetation. As soon as the boat landed, the hogs took to the water and swam off to some rocks just awash, and seemed perfectly at home in the water.

"July 11th, at 3 A. M. struck on a reef not laid down in any chart in my possession and I have the latest from the surveys of Capt. Brooks, of the schooner Fennimore Cooper. The reef lays south of Maro's Reef, and is probably the same that the Two Brothers was lost on, over fifty years ago. I shall take the liberty of naming it Dowsett's Reef, after the owner of this brig. Its position (centre) is in lat $26^{\circ} 13'$ N, long $170^{\circ} 38'$ W. It extends N. W. and S. E. about eight miles from lat $25^{\circ} 08'$ to $25^{\circ} 16'$. The weather side is a steep wall. It runs to a point to the N. W. and spreads out to the south about four miles wide, with a narrow strip of rocks even with the water. A very dangerous place, and only one of many in a W. N. W. direction from French Frigate Shoals, to the coast of Japan. I was steering W by N at the time, fancying myself secure to pass Maro's Reef, twenty miles to the south. First saw breakers to leeward. Hauled to the wind, with courses up for an emergency. In twenty minutes she touched. Put the helm down and let go all halyards and anchored. Gave her 18 fathoms chain when she swung to her anchor and fetched up on the rocks. Dark as pitch. Furled all sail and got a spare anchor and wser ready. At daylight took it sixty fathoms ahead and hove her afloat. From the masthead, nothin in sight but sunken rocks in all directions.

There was seven feet of water thirty feet from her stern, rocks close under the bow, and the question was, how in the world did she get ther, and how was she to get out again? As the sun rose, it commenced to blow strong from the eastward, and at 1 P. M. it would be high water. Got a spring from the larboard quater and clinched it on the hawser as far ahead as possible; put a purchase on the spring and hove it taught. Loosed the jibs and courses; canted her head into a hole of deep water to the south with a ledge of rocks in all around; cut all clear and came out of that scrape. Now to get out of the pen. Went to the masthead and saw a hole in the reef, about 20 fathoms wide, that looked deep. Went through all right, with the lead going--ten fathoms--no bottom!

"July 24th, made the reefs at Lisiansky Island, and saw a wreck on the reef to the S. E. of the island. Came to an anchor, and at 3 P. M. sent off two boats for the sand spit, about two miles off. On the west side found a studdingsail boom; rigged as a flag-pole, with signal halyards rove. On the N. E. side found the long boat on the beach, having drifted ashore. She had been rigged for sea, and been capsized or stove on the rocks. She had a canvas deck, a bowsprit, rigged the mast with the rigging had been cut clear of the boat. She was badly stove. On the south end of the island found the place where the crew had landed. There was found her quarter boat, with a mast and remains of a sail, moored to two water casks, half full of fresh water, and a grapnell off shore. She was a wreck, being badly stove. On the sand beach were the remains of clothing, some carpenter's tools, a box of bread, a box of Jenny Lind cakes, and three of soda crackers, all wet with rain water; a tin chart case, empty; some tins of pine apples, put up in New York; the poles that had been used for a tent, a topmast studdingsail, made up. The wreck was about four miles off, and it was too late for the boats to get to her that day, and as the weather looked threatening, we were compelled to go on board. There was the appearance of a flag at half mast on one of the masts that were standing and a boat's crew volunteered to make the attempt to board her that night, which however was not donw. The next morning at 7 o'clock, started for the wreck, Mr. Andrew J Cahill in charge of the boat, the wind blowing hard in squalls, with heavy

rain. The boat was five hours in reachin the wreck, and three in getting back. Found the wreck to be a brig, laying with her head to the N. W., full of water; the larboard rail out of water; the main topmast gone at the cap; main yard across, with remains of mainsail; the foremast, Topmast and topgallant mast standing with all the yards a cross; foretopsail set; remains of topgallant sail flying, which was what had appeared like a flag at half mast the day before. Two casks of fresh water were lashed securely on the larboard quarter outside. She lays on the N. E. side of the reef, which extends ten or twelve miles to S. E. No breakers in sight from the wreck. Mr. Cahill cut a hole in the house on deck, and getting into a stateroom, found the vessel's log-book, which he brought away. By this it appears that the wreck was that of the North German brig Wanderer, of Hamburg, from San Francisco bound to Port May on the coast of Tartary. The last entry was dated May 9th. The log-book was brought to Honolulu and placed in the hands of the Acting German Consul.

"From the spot where the brig lay, soundings extend S. W. about 25 miles.

"During the cruise of the Kamehameha V we saw sperm whales once, and took one, making about 40 barrels. Brings a lot of tortoise shell, shark oil and fins, etc."

Kingman's Reef.--The following report in regard to this reef, has been received from from the U. S. ship Mesaca, Commander Green:

August 31st, 1872--At 1 o'clock, P. M. on a wind heading N E. 1/2 E, Kingman reef to windward bore S. E. 1/2 E, distance seven miles, making centre of the reef in lat $6^{\circ} 27' 30''$ N, long. $162^{\circ} 13' 30''$ W, which nearly corresponds with the position as given by Capt. Kingman. It is certainly a dangerous reef, the discolored water being observed to extend eight or nine miles, the sea combing over the ridge of the reef for a space of about three miles in an E. N. E. and W. S. W. direction. Several patches of white sand and coral were observed from the top even with the water's edge.

REPORT OF SCHOONER EMILY, PITMAN, MASTER.--Left Mille Aug 15th, and Arno on the 22d. Had heavy gales followed by light bafflaing winds. Had suffered considerably on the passage for want of provisions, being obliged to subsist principally on coconuts and the preserved fruit of the pandanus tree. No provision to be had at the Marshall group. Arrived at Honolulu Oct. 26th.

Captain Pitman furnishes us with the following correction of Admiralty shart, sheet 6, (officially corrected to June 1870).

Daniel or Peddler I., native name Arno, in lat $7^{\circ} 10'$ N. long. $171^{\circ} 53'$ E, is a double Island connected by a reef, bare at low water, with lagoon inside. Entrance to lagoon, from S. and S.W. by W. The Narragansett was standing on to pass through the apparent channel between the two Islands, when spoken by the Emily about the 19th of August and warned off. Capt. Pitman received the thanks of the Commander of the Man-of-war.

Schan I., native name Wodo, is 35 miles furthur E. than put down on the chart, the latitude being correct.

Lilel or Lydia I., native name Ajai, put down as a dot is a long Island extending N. W. and S. E. from lat. $8^{\circ} 53'$ N. to lat $9^{\circ} 12'$ N. long. $165^{\circ} 48'$ E.

Paterson I., native name Lai, put down as long narrow string of Islets, is circular in form composed of 30 Islets, in long $166^{\circ} 15'$ E. lat. $8^{\circ} 55'$ N.

Lip I., reported by the Morning Star, but not on the chart, is in lat $8^{\circ} 15'$ N, long $167^{\circ} 28'$ E. It has about 40 inhabitants.

North of Odia or Elmore I and 20 miles distant is a small Island named Jabut.

Namerick I. called on the chart Ebon or Baring I. is in lat $5^{\circ} 35'$ N. long. $168^{\circ} 23'$ E.

Ebon I. called Boston or Cornville I. on the chart is in lat $4^{\circ} 36'$ N, Long. $168^{\circ} 50'$ E.

Hunter's I., sometimes called the Namerick is in lat. $5^{\circ} 40'$ N, long $169^{\circ} 20'$ E.

Areeifor or Fwi Providence I., marked with a (?) note on the chart is in

lat. 9 20' N. long 161° 22' E. It is composed of 13 islands being inhabited and has a good lagoon inside. It abounds with coconut trees.

Vol. 21, No. 12, Dec. 1872, p.97.

Report of Schooner C. M. Ward, G. W. Rickman, Master. Left Honolulu Sept. 6th with wind from E. N. E. for first 16 hours; then calm for 24 hours. Saw the light from the volcanoes on Hawaii on the 8th. Just. 9th took light winds from E, up to lat 6° N, long 165° 50' W.. From thence strong wind from E.S.E. to Christmas Island, arriving there Sept. 17th. Left Christmas Island next day and arrived at Jarvis Island, Sept. 19th. Left there next day, wind light from E, arriving at Enderbury Island, Sept. 24th. Found here the ship George Green with 1,300 tons guano, left there same day, wind strong from E, arriving at Baker's Island Sept. 27th, left Baker's Island Sept. 29th, wind light from E. and arrived at Howland's Island afternoon of same day. Left Howland's Island for Honolulu at 3 P. M. Oct. 1st, wind light from E. Fell calm and drifted to lat 3° N., long. 177° 55' W then took light winds from S. E. Had wind light from E. N. E. to S. E. to lat 8° N, long 157 40 W. From thence light winds to the islands.

BARKENTINE "AMARANTH" OF SAN FRANCISCO, CALIFORNIA, 1062 TONS.

C.W. Neilson, Master. Official Number - 107681.

Shipped crew at Astoria, Oregon, April 3, 1913 for Auckland, N.Z. Proceeded thence to Newcastle, N.S.W., loaded coal for San Francisco, shipped part crew latter end of July and sailed early in August.

7:45 P.M. 30th August, stranded on Jarvis Island, Latitude $0^{\circ} 23'$ South, Longitude $159^{\circ} 54'$ West. 10:00 P.M. left in two boats as ship was breaking up. Stood by whole night, landed on Island next day and found ship a total loss. Left Jarvis Island September 1st for Saman Islands.

September 9th, landed on Danger Island at 9:30 P.M., rested on Danger Island during September 10, got fresh water and coconuts. September 11 started for Pago Pago in the morning.

September 12, $12^{\circ} 34'$ South, $167^{\circ} 27'$ West.

September 13, $14^{\circ} 03'$ South, $166^{\circ} 50'$ West, 11 P.M. passed the Mema Group to the South.

September 14, at 7:00 A.M. sighted Tutuila, arrived Pago Pago at 10:00 P.M., everybody in boat well.

The U.S. Gunboat ~~RINE~~ PRINCETON went to sea to look for No. 2 boat and found it at Apia, September 24, all men well.

Crew sent up to San Francisco on S.S. "Ventura".

Paid crew at U.S. Shipping Commissioner's Office in San Francisco 10/10/13.

(Compliments of Leighton Robinson, U.S. Shipping Commissioner's Office, San Francisco, California. for Richard B. Black. Log extracts of "AMARANTH".)

LAYING THE FOUNDATION STONE

UNDER THE GOVERNMENT HOUSE

J A R V I S

EQUATORIAL GROUP OF ISLANDS

SOUTH SEAS

Latitude 0° 22' 37" South
Longitude 160° 01' 37" West

The Month of August, 1936.

Be it known by ye all present, and those that shall hear and read about this momentous occasion, that we have assembled here this day for the purpose of making history; dedicating, identifying and christening this new structure as the Government House, constructed in the month of July, 1936.

Briefly speaking, it might be said the repossession and colonization of this island began in March, 1935, on which date American citizens came ashore from the ITASCA and established their abode in what is now known as the Settlement of Millerville.

This expedition has followed in the footsteps of its early forefathers, who sailed into these waters of the South Seas aboard the old clipper ships looking for new lands to conquer, and possessions for their Mother country. Then following in the wake of these early explorers came a later generation searching for fortune, adventure, and trade expansion - which resulted in the gunno operations on this island in 1857, and continued for a period of twenty years. This was an American institution by American citizens, utilizing American ships, equipment, and trading their cargoes for American supplies and monies.

We are now awaiting the final act of the show, the setting of which is in the South Seas. The curtain rises, Aviation appears over the horizon with the intention of bringing closer together foreign countries, and here again we see the importance of this island becoming a leading question of the day. The aeronautical picture is about to be painted; and we can see an expedition being organized, and then departing from the Cross-roads of the Pacific - Honolulu - enroute to this island with the intent to study the aviation possibilities in store on the islands of the Equatorial Group. American citizens inhabiting this island are frequently visited by the ITASCA, bringing food supplies, water, and other comforts and necessities for the health and welfare of the Kamohamoha Boys.

In conclusion, may it be said that the undersigned are witnesses of the aforesaid information and activities on this Island, and take great pride in affixing their signatures hereto:

1948

THE STARS AND STRIPES IN THE CENTRAL PACIFIC

by E. H. Bryan, Jr.

What might otherwise have been the thirteenth routine cruise to the American Equatorial Pacific Islands, became for us a real, 5,500 mile scientific expedition, due to the desire of Samuel Wilder King, Hawaii's Delegate to Congress, to be informed first hand concerning American islands in the Central Pacific, questions concerning which are constantly being put to him in Washington. King, as a Lieutenant Commander in the U.S.Navy, had been the naval leader of the scientific expedition to the equatorial islands in 1924, on board the U.S.S. Whippoorwill, but the cruise had not included American Samoa.

To the little group of scientists, engineers, and technical experts, who were privileged to go along, the trip gave ample opportunity to explore a representative cross-section of the south seas. Visits were made to islands high and low, barren and luxuriant, ranging from the virgin forests of Samoa's volcanic islands, to the treeless coral reefs and sands of Jarvis and Baker, and the dreary coral dot atop Kingman Reef.

The cruise took just a month. Landings were made on ten islands, all American, with stays of from a few hours to three days. ^{Nine} ~~Eight~~ other islands were observed in passing. Some of these islands were atolls, in turn made up of from three to 52 islets. In memory let us take you with us on this cruise, so that you, too, may know a little more about the other parts of Polynesia over which fly the Stars and Stripes.

First, a word about our vessel, the U.S.Coast ~~XXXX~~ Guard Cutter Taney. The name is pronounced tau-nee, somewhere between the color and the Polynesian god, Tane. No private yacht could have been more comfortable. In fact, one might say that we traveled on a two and a half million dollar private yacht, manned by 108 courteous and efficient officers and men. Passengers, at the maximum, numbered 34, bringing the population of our floating ~~paradise~~ ^{hotel} up to 142. Excellent food, movies every evening, careful consideration given to our slightest wish, no cruise could have been more delightful.

"Our host", Commander E.A.Coffin, did everything within his power to facilitate our making the most of the trip - landing us here, rowing us there, routing and timing the course of the vessel so that we were at the right spot at just the right time.

The business of transporting supplies, water, radio and other equipment, and colonists, to five tiny equatorial islands, of course, came first; but the expressed or anticipated desires of the "passengers" came a close second.

Each officer~~y~~ and man on the ship played his part to make the cruise one long to be remembered. Lt. Comdr. John W. Kelliher, able executive officer, saw to it that all activities ran smoothly. He was our purser, freight clerk, boat dispatcher, ~~and~~ counselor, and vocal entertainer. Lt. Comdr. C. W. Lawson, in addition to his duties as Chief Engineer, saw to it that there was a talkie on deck each evening. Lieut. E.G. Brooks, navigating officer, "hit every island right on the nose"; and when his services were not required on board, his ability as a fisherman kept the entire ship supplied with huge ono, tuna, ulua, and other choice fish. And so on, for all the officers and men, but space does not suffice.

The list of passengers, besides Mr. King and the writer, included Richard B. Black, in charge of the American Equatorial Islands for the U.S. Department of the Interior; ✓ J. Walter Doyle, Honolulu Collector of Customs; Edward B. Brier, engineer with the Hawaiian Dredging Company; Lieut. E. H. Strange, U.S.N., aerological expert, and two assistants; Lieut. T. B. Anderson, U.S.A. air corps; Lieut. Charles Billingslea, U.S.A. and one assistant, Sergeant Ralph Wilson, making his 13th trip; Arthur Beach, radio engineer; George C. Munro, ornithologist, and two assistants, Walter D_onaghho and William Emory, who helped him band birds on the islands; Jack O'Brien, of the Hilo Tribune-Herald and Associated Press; Henry T. Zerbe, who helped to install radio equipment; and James C. Kamakaiwi, Sr., teacher at Ninole School, North Hilo.

Leaving Honolulu on the evening of Saturday, July 16, a smooth and uneventful run ~~xx~~ of 1670 miles was made to Howland Island, where we arrived at 9 A.M. on the 22nd. Howland is a flat sand and coral island, in outline resembling a flattened hot dog or an elongated kidney bean. It is two miles north and south by a little over half a mile wide, and is surrounded by a narrow fringing reef, which extends ✓ out from both ends. It is nowhere more than 20 feet high, much of it ~~much~~ less, with a dry land area of perhaps 400 acres. Itascatown, as the camp is called, is located near the middle of the western, concave side. It consists of half a dozen ^{frame} houses and sheds, and the stone and cement lighthouse, which with the flagpole, flying the Stars and Stripes, add another 20 feet ^{or} so to the height of the land, making the island visible, in clear weather, from a distance of ten to a dozen miles.

The entire western beach is sandy, with here and there slabs of sandstone, thrown up by storms. Much of the rest of the beach is rough and rocky, composed of broken fragments of sandstone and coral. Except for some small clumps of kou trees, in a small depression east of the camp, the entire surface is flat and covered only by low herbs, such as pig weed, bunch grass, and a species of ilima. The surface lent itself readily to the grading of airplane runways, ~~the length of and across the island,~~ prepared by the colonists in 1937 ^{for} ~~as an~~ emergency ^{use.} field. This field was to have been ~~first~~ used first by Amelia Earhart and her companion Frank Noonan, July 2, 1937. It still remains unused. The monument which supports the light is dedicated to these intrepid fliers who lost their ~~high~~ lives in the cause of world aviation.

Howland is said to have been discovered by Captain George E. Netcher of New Bedford, Massachusetts, on September 9, 1842. On February 5, 1847, it was taken possession of in the name of the American Guano Company by Alfred G. Benson of New York and Charles H. Judd, of Honolulu. From 1860 to 1880 colonies of ^{American} guano diggers were maintained on it and other guano islands in the equatorial Pacific. Supplies reached them by regular quarterly trips of schooners from Honolulu, while a large number of schooners, barks, and clipper ships carried away thousands of tons of guano. When the best of the guano had been shipped, the American colonies were removed. From about 1883 to 1890, Howland, Baker, and other guano islands were occupied by the John T. Arundel Company, a British firm, which removed some more guano, and in turn abandoned the islands. A party of American colonists was established on Howland on March 30, 1935, from the U.S. Coast Guard Cutter Itasca.

The writer found the island much improved over its condition at the time of his previous visits of March and April, 1935. In addition to the airplane runways, the lighthouse, and the substantial dwellings, there was an air of wellbeing about the island. Five young kamani trees, three tree heliotropes, half a dozen wind-blown ironwood trees, and some newly sprouted coconut palms, gave promise of future shade; providing the colonists keep on watering them. The grounds were well laid out, with neat walls ^{and} paths edged with stones. It will be interesting to return in future years and compare the island with the memories of barren waste of long ago.

After a one day stop, dropping off the ornithologists so that they could band birds all night, we proceeded to Baker Island 36 miles away. Baker lies 13 miles north of the equator, and is a trifle smaller and even more barren than Howland. It is saucer-shaped, about a mile east and west by 1500 yards wide. It rises steeply from the fringing reef to a beach crest 18 to 20 feet high, within which is a depression, long since dry and now covered with herbs. Meyerton, the camp, is located near the middle of the western side, on the crest, where long ago stood the camp of the guano diggers. Part of the sandstone walls of "Judd ^hHale", former governor's residence, and bricks from two of the four large cisterns, have been used in the building of the lighthouse. Toward the northeastern side are several low mounds, between which have been planted some ironwood trees and a clump of coconut palms, eight of which are still growing.

Said to have been discovered by Michael Baker in 1832, this island has passed through much the same cycle of occupation as Howland. In addition, it was a favorite rendezvous for whalers. They established a post box on the island, where letters could be left for passing vessels to carry to their destinations. The American colonists were landed on Baker on April 3, 1935.

~~After the doctor's report of today's case, the doctor~~

Landings on Baker are notoriously bad, well managed boats having been upset on more than one occasion. We were favored, however, with such calm weather that all supplies and equipment were put ashore by mid afternoon, and we were soon on our way back to Howland, a two hour run, arriving at 6 P.M. Here we put ashore a radio operator, Herbert Chang, transferred from Baker, picked up the bird banding party, and were under way at once for Canton.

We crossed the equator at about 4 A.M. the next morning, Sunday, July 24. The previous evening Davy Jones had come aboard and served summons on a large group of trembling "polywogs". The charges against them were emphasized, at the hands of ^azealous shellbacks, by a deluge of ripe tern eggs and a good wetting-down on deck.

Promptly at 10 A.M. Father Neptune and his Royal Party appeared. After many ordeals, including the water tunnel, the electric triton of the Royal Devil, confessing before the Royal Chaplain, kissing the knee of the Royal Queen (which wasn't bad) and the foot of the Royal Baby (which, for some, seemed to be, - the Royal Baby being the rotund and jolly negro cook), swallowing the royal pill (a

very bitter one) at the hands of the Royal Doctor, being painted by the Royal Navigator, shorn and shampooed by the Royal Barber, and duly ducked in the royal tank, the lowly polywogs were admitted to membership as shellbacks in the realm of Neptunus Rex, mighty ruler of the deep. This being the writer's 9th crossing of the equator, he had a ringside seat as a member of the Royal Party. It was all good, although decidedly unclean fun, and a trifle barbaric. Sensitive souls should avoid making their first trip across the equator on a coast guard cutter.

Early in the morning of the 25th we sighted Canton Island, famed as the locale of the 1937 solar eclipse expedition. As we approached the habitations, just south of the main lagoon entrance on the west side, we saw the British Jack and the Stars and Stripes floating from two flagpoles side by side. Ashore we were as warmly greeted by G.V.Langdale, F.I.Fleming, and their Fijian serverⁿt, Siamona, who make up the British colony, as we were by our own four Hawaiian boys and the three white men, Hanslee Towill, surveyor, Alfred Voigt and Alexander McGalliard, radio technicians; the last three we brought back with us, their missions accomplished. There was one greeding, however, which eclipsed them all; that was the one between James Kamakaiwi, veteran colonist, and his father.

Canton is the largest and most northerly of the Phoenix group. It is an atoll, composed of a narrow strip of land, from 50 to 600 yards wide, enclosing a triangular lagoon, about 8 miles long by 4 miles wide at the western end. This rim is broken by only three or four lagoon entrances, all on the west side, ~~xxx~~ only the southern one of which is deep enough to admit a rowboat. The vegetation of Canton is somewhat more luxuriant than that of the two islands which we had just visited, there being several small thickets of kou and tree heliotropes, a two mile long thicket of Scaevola shrubs, known in Hawaii as naupeka-kai, and other shrubs, in addition to the usual herbs. About 8 of the coconut palms which had been planted ~~xxxx~~ a third of a century ago are still growing, and a large proportion of those set out on the west side by the New Zealand eclipse expedition also seem to have survived the first year.

^{On a} But little guano was dug on Canton, but the atoll was well known to whalers. Today it presents a two-fold value. Parts of the hard rim could be used, almost without grading, as a landing field for airplanes; and there are stretches of the lagoon, between coral heads and reefs, where seaplanes could alight and take off.

planted about a third of a century ago are still growing, and a large proportion of those set out last year by the New Zealand eclipse expedition seem to have survived.

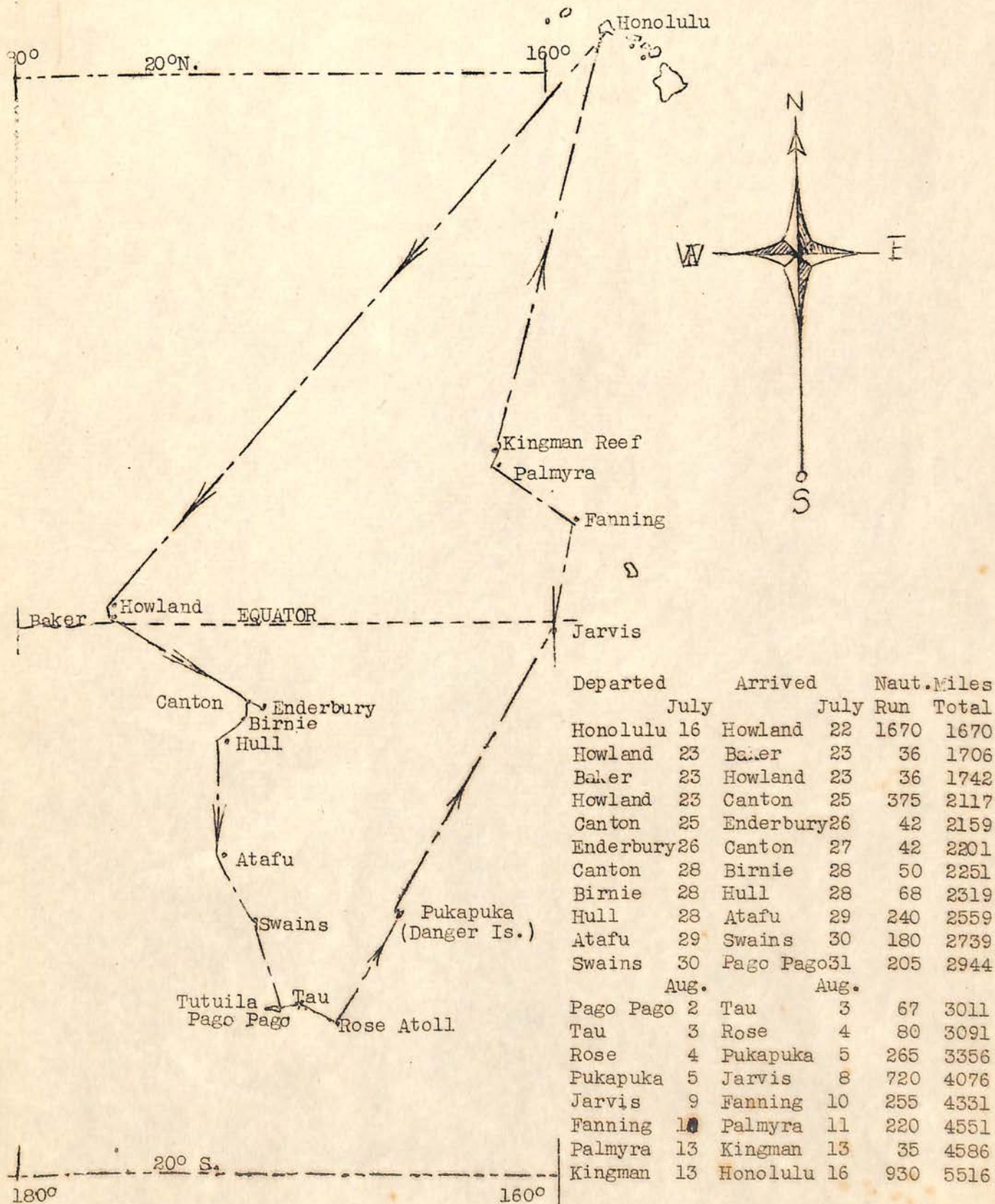
But little guano was dug on Canton, although we visited the old stone pier on the north side of the lagoon and traced out the route of the former tram line there. The island seems to have been well known to whalers. Its present value is two-fold. Parts of the flat, hard rim could be used, almost without grading, as a landing field for airplanes, and there are stretches in the lagoon, between coral heads, where seaplanes could light and take off. ⁶⁾ Being on the direct route between Hawaii and Fiji, its future use in trans-Pacific aviation is an assured fact. It is a pleasure to learn that Great Britain and the United States have agreed to its joint utilization, and that the pleasant relations which exist between the respective groups of colonists on the island is now official.

After landing supplies, new radio equipment, and a group of technicians to install it, we proceeded to Enderbury, arriving early in the morning of the 26th. In contrast to Canton, which is largely lagoon surrounded by a narrow strip of land, Enderbury is nearly solid land, two and a half miles long by a mile wide, with the lagoon reduced to a shallow puddle. Its vegetation is much like that of Canton, with several ~~small~~ kou thickets, a ~~small~~ grove of tree heliotropes, and three small clumps of coconut palms, which, sad to relate, are in much poorer condition than when the writer first saw them in 1924.

Being on the direct route between Hawaii and Fiji, its future use in trans-Pacific aviation is an assured fact. It was with pleasure that we learned that Great Britain and the United States have agreed to its joint utilization, news which reached us at Fanning Island. Most cordial relations exist between British and Americans all through the central Pacific.

After landing supplies, new radio equipment, and a group of technicians to install it on Canton, we proceeded to Enderbury, 42 miles away, arriving early in the morning of the 26th. In contrast to Canton, which is largely lagoon ~~surrounding~~ surrounded by a narrow strip of land, Enderbury is nearly solid land, two and a half miles long by a mile wide, with the lagoon reduced to a shallow puddle. Its vegetation is much like that of Canton, with several kou thickets, a grove of tree heliotropes, and three small clumps of coconut palms, the last, sad to relate, in much poorer condition now than when the writer first saw them in 1924.

CRUISE OF THE U.S.C.G. CUTTER "TANEY" DURING JULY AND AUGUST, 1938.



PLANTS COLLECTED ON THE AMERICAN EQUATORIAL PACIFIC ISLANDS BY
 ASHLEY C. BROWNE, October, 1939, identified by E.H. Bryan, Jr.

Family	Genus and species	Palmyra,	Jarvis,	Howland,	Baker,	Canton,	Enderbury
Seaweed	<i>Turbinaria ornata</i> Ag.			X			
Lichen		X					
Ferns	<i>Asplenium nidus</i> L.	X					
	<i>Polypodium scolopendria</i> Burn.f.	X					
Pandanaceae	<i>Pandanus</i> sp.	X					
Gramineae	<i>Lepturus repens</i> (Fors.) R.Br.	X	X	X	X	X	X
	<i>Eragrostis Whitneyi</i> Fosberg var. <i>typica</i> Fosberg				X		X
	<i>Digitaria pacifica</i> Stepf.				X		X
	<i>Cynodon dactylon</i> (L.) Pers.				X		
Cyperaceae	<i>Finbristylis cymosa</i> R.Br. var. <i>microcephala</i> F.Br.	X			X		
Urticaceae	<i>Fleurya ruderalis</i> (Fors.) Gaud	X					
Nyctaginaceae	<i>Boerhaavia tetrandra</i> Forst.	X	X	X	X	X	X
	<i>Pisonia grandis</i> R. Brown	X					
Portulacac.	<i>Portulaca lutea</i> Solander	X	X	X	X	X	X
	<i>Portulaca oleracea</i> Linn.				X		X
Aizoaceae	<i>Sesuvium portulacastrum</i> L.	X					X
Zygophyll.	<i>Tribulus cistoides</i> L.	X	X				
Simarubaceae	<i>Suriana maritima</i> Linn.					X	
Euphorbiaceae	<i>Euphorbia hirta</i> Linn.				X		
	<i>Phyllanthus niruri</i> Linn.				X		
Malvaceae	<i>Sida fallax</i> Walp.	X			X	X	X
	<i>Abutilon indicum</i> Sweet	X					
Boraginaceae	<i>Messerschmidia argentea</i> (L.) Johnston	X					X
	<i>Cordia subcordata</i> Lam.			X		X	X
Verbenaceae	<i>Vitex Negundo</i> L. var. <i>bicolor</i> Lam.			(Intro.) X			
Tiliaceae	<i>Triumfetta procumbens</i> Forst.				X	X	X

ADDITIONAL SPECIES OF PLANTS FROM THE EQUATORIAL PACIFIC ISLANDS
COLLECTED BY E. H. BRYAN, JR., GIFT OF BISHOP MUSEUM

NYCTAGINACEAE	<i>Pisonia grandis</i> R. Brown,	Rose Atoll
LAURACEAE	<i>Cassytha filiformis</i> L.	Canton I.
CRUCIFERAE	<i>Lepidium bidentoides</i> F. & E. Brown	Palmyra I.
CONVOLVULACEAE	<i>Ipomoea glaberrima</i> Boj.	Palmyra I., Enderbury I.
RUBIACEAE	<i>Morinda citrifolia</i> L.	Canton I.
GOODENIACEAE	<i>Scaevola frutescens</i> (Miller) Krause	Canton I.

REPORT ON THE NATURAL HISTORY
OF THE AMERICAN EQUATORIAL PACIFIC ISLANDS
(Jarvis, Howland, and Baker)

by E. H. Bryan, Jr.,
Curator of Collections,
B.P. Bishop Museum, Honolulu.

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- II. Plant life and Agricultural possibilities.
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I. GEOGRAPHY, TOPOGRAPHY, CLIMATE.

Situated along the equator in the Mid-Pacific, between latitudes 6° north and 12° south, and longitudes 150° and 180° west, are about thirty low coral islands. Most of these are small; but Christmas Island attains a length of about 30 miles. These islands are rather loosely assigned to five island groups as follows: Phoenix (8 islands), Tokelau (3), Samoa (1 - Swains), Cook (9), and Line (10). Different authorities agree only on the Phoenix group and the Tokelau (also called Union) group. The Line Islands are in part called the "Fanning Group", and might better be called the Equatorial Islands.

These coral islands vary in form from open atolls ~~small islets scattered along reefs which enclose shallow lagoons,~~ to flat or saucer-shaped sand islands without lagoons. Intermediate forms, ~~various types of lagoon islands,~~ are also found, especially in the Phoenix group, and Washington, Christmas, and Swains.

The flat or saucer-shaped islands are fringed with coral reef platforms, as are the atolls, but they lack the central lagoon. In the lagoon islands, the enclosed lagoons ^{may} range from extensive sheets of water, with many entrances through the enclosing reef ~~f~~ (typical atolls), to solid islands with only a small puddle of a lagoon. Intermediate forms include doughnut-shaped rings, with no entrances into the enclosed lagoons, ~~and~~ ^{atolls with} nearly continuous rims, through which there are but two or three lagoon entrances, and these nearly blocked by coral, ^{and small islets scattered along the enclosing reef.}

Jarvis, Howland, and Baker belong to the flat or saucer-shaped type, without lagoons. They have been considered as belonging to the "Line" group, although I prefer to call them Equatorial Islands. Their position and size is as follows:

	Latitude	Longitude	Length (miles)	Width (miles)	Height ^(maximum) (feet)	(Extreme height) of land (up to about 25 ft.)
Jarvis,	0° 23' south,	160° 02' W.	1.8	1.3	25	
Howland,	0 49 north,	176 43 W.	2.0	.6	17	"
Baker,	0 13 north,	176 33 W.	1.0	.9	22	" (up to about 22 ft.)

From this it will be seen that all three islets are very comparable in size and height. Baker and Howland are about 38 miles (~~about~~ 44 land miles) apart, while Jarvis lies 1000 miles to the east, across the equator. The following is a more detailed description of the three islands.

Jarvis. In outline Jarvis is somewhat rectangular, the long axis being about east and west. There may formerly have been a lagoon within Jarvis, the ~~surface~~ ^{surface} being saucer-shaped, sloping in toward the center from a nearly continuous beach crest which has been piled high by the waves, especially on the northeast and south. Its land surface is about 1000 acres. The island is surrounded by a fringing platform reef which is about 300 feet wide, and awash at low tide. Between the reef and the beach crest is a moderately steep beach, partly sand, partly coral blocks, rubble and broken pieces, and parallel to it. Within the beach crest, are secondary ridges, which may have been made by storm waves sweeping up and over the crest, although J.D.Hague suggests that they ^a were traces of former lagoon beaches. Portions of the interior basin are bare of vegetation, consisting of sandy flats in which there are dark-colored moist seeps, although these must be well above sea level. The guano deposits formerly occupied much of the central basin, but ~~much of it~~ ^{the greater part, the guano} has been removed, the last of that which was dug being piled up in a series of heaps along the former tram line route, toward the west side, where the pyramidal wooden beacon is located. Landings may be made through an artificial break in the platform reef on the west side, near this beacon.

Kidney bean

Howland.. Howland Island is shaped like a ~~jelly bean~~, lying in a NNW-SSE direction. It is nearly two miles long, but averages only a half mile wide, with an area of about 400 acres. The west central portion is somewhat depressed, the result of guano digging. There is no pronounced beach crest and no central basin, as on Jarvis and, to a less extent, on Baker. In the south central portion is a small depression, about a quarter of a mile long, a hundred yards wide and three to five feet below the surrounding level of the surface, in which ~~the~~ ^{small thickets of} kou (*Cordia subcordata*) ~~thickets~~ are located. At the north end are several undulating mounds. The east side is formed by a series of low ridges, parallel with the east beach, ~~Between~~ ^{is} them and the central depressions there ~~being~~ ^{long} a narrow, somewhat gravelly flat. The west beach is sandy, with scattered coral blocks. The south, east, and north beaches are largely of broken coral. All sides are fringed with a flat, platform reef. The north end is somewhat pointed, terminating in a long reef spit.

Baker. Baker Island is nearly square, a mile east and west, by nearly a mile north and south. It is surrounded by a platform reef, 200 to 400 feet wide. On the west side this is more or less broken, not platform-like, with several feet of water above pot holes. On this west side there is a high beach crest, reaching a maximum height of about 22 feet above sea level. Within this is a flat, which stands at an elevation of about 10 to 12 feet above sea level. A cut made through the west beach crest, for a tram line, reveals a former crest at perhaps 10 feet below the maximum present crest. J.D.Hague (1862) suggests that ~~that~~ ^{present} the additional crest ~~might~~ ^{may} have been added during a period of subsidence, followed by a subsequent elevation. But the writer believes no such explanation necessary, as the force of the waves and wind during violent westerly gales, should be sufficient to account for the high west crest. The central flat is also surrounded on the other three sides by lower sand ridges, about 100 feet wide. The guano deposits were located on this central flat, especially toward the east, where there are at present several large mounds which probably date from this period of guano digging. ^{Near the center is a sup of brackish water.} On the north are a series of parallel ridges, such as those found on the weather side of the other two islands.

Guano Deposits. For a description of the guano deposits on these three islands, and their analysis, see J.D.Hague, Phosphate Islands of the Pacific Ocean, American Journal of Science, vol.34, pp.224-243, 1862.

Climate. The climate of Jarvis, Howland and Baker has been discussed by Hague (1862) and Christophersen (1927). Although no extensive observations on the climate of these islands had been made prior to the establishment of parties by the Bureau of Air Commerce, some idea of the conditions may be had from the vegetation and general environment. Rainfall is light, falling as light showers usually just before dawn. Hague presents an explanation for this rainfall phenomenon which seems logical. He states that the rising column of warm air from the hot sand stretches of the island prevents the formation of clouds immediately overhead. He says, "I have often observed the remarkable phenomenon of a rain squall approaching the island, and just before reaching it, separating into two parts, one of which passed by on the north, the other on the south side, the cloud having been cleft by the column of heated air rising from the white coral sand."

The temperature is reported as exceedingly even, ranging from 76° F. at sunrise to 88° F. during the hottest part of the day.

As the results of ~~more than~~ ~~nearly~~ ~~years~~ observations by the parties on the three islands during 1935-36, ^{greatly increased} now now available to me, will ~~soon be available~~, ^{our knowledge of the climate of these isolated islands.} nothing further will be said concerning climate here.

II. Plant life and agricultural possibilities.

The plants of Jarvis, Howland and Baker, as observed by the Whipporwill party in 1924, are discussed by Dr. Erling Christophersen in B.P. Bishop Museum Bulletin 44, 1927. Observations on the soils are also presented. Since that time but two additional species have been collected, one on Jarvis and one on Baker. The present plant life on these three islands may be summarized as follows:-

Family	Genus and species	common name	Jarvis	Howland	Baker.
Gramineae	Eragrostis amabilis,	grass			X
"	Eragrostis falcata,	grass	X		X
"	Cynodon dactylon,	Bermuda grass			X
"	Lepturus repens,	Bunch grass	X	X	X
"	Syntherisma pelagica *	grass			X
Cyperaceae	Fimbristylis cymosa var. microcephala	sedge			X
Urticaceae	Fleurya ruderalis,	purple nettle			X
Amarantaceae	?Amaranthus viridis,	weed	X		
Nyctaginaceae	Boerhaavia tetrandra,	running herb	X	X	X
Aizoaceae	Sesuvium portulacastrum,	pickle weed, herb,	X		
Portulacaceae	Portulaca lutea,	fleshy pig weed,	X	X	X
"	Portulaca oleracea,	red-stemmed pig weed,		X	X
Zygophyllaceae	Tribulus cistoides,	puncture vine,	X	X	X
Euphorbiaceae	Euphorbia hirta,	spurge weed,			X
"	Phyllanthus niruri,	small-leaved spurge,			X

			Jarvis	Howland	Baker
Tiliaceae	Triumfetta procumbens,	beach runner,			X
Malvaceae	Abutilon indicum,	shrubby herb,	X		X
"	Sida fallax,	ilima shrub	X		X
Convolvulaceae	Ipomoea grandiflora,	morning glory,			X
Boraginaceae	Cordia subcordata,	kou tree,		X	
Total number of species:			9	6	17

* Note: Syntherisma pelagica is a new species described by Dr. F. B. H. Brown for the species formerly reported as Panicum stenotaphroides; Dr. E. Christophersen now (1935) believes this to be a species called Digitaria pacifica Stapf.

It will be seen that, with the exception of the stunted and nearly leafless groves of kou trees on Howland, all the plants on these three islands are either herbs or low shrubs. The excess number on Baker may be explained by the fact that many of the species are weeds, obviously introduced by the guano diggers, as even today they are found only along the high west ridge in the vicinity of the sites of the former guano diggers' houses. The bunch grass, sedge, nettle, Boerhaavia vine, pickle weed, two species of pig weed, puncture vine, spurge weeds, beach runner, and ilima shrub are species widespread through the tropical Pacific islands.

There ^{was (in 1935)} is a single stunted coconut palm on Jarvis island, planted in 1924. Several others planted at the same time have not survived. It is a question whether those which were planted in 1935 will become established. The reason for this failure is partly the low rainfall and heavy winds; but largely the fact that the sea birds roost on any elevation. Three large boobys were seen roosting on the top of the Jarvis Island palm. On islands like Palmyra, Washington, Fanning, Pukapuka, Nassau, Sydney, Hull, and the Tokelau islands, where there is sufficient moisture to make the coconuts sprout readily, there are also trees which furnish a roosting place for the birds, and relieve the pressure from the palms. The environment of these three islands might be described as distinctly xerophytic and unfavorable for plant growth other than that accustomed to such an environment.

Agricultural possibilities. The attempts which were made to grow coconut palms and garden crops on Jarvis Island are described by Pvt. Wyman W. Graf. I will try to summarize his report here as it is representative of conditions on all three islands.

Five sprouted coconuts from Palmyra were set out on March 28, 1935, and seven more from Samoa (Swains Island) on April 23. A garden bed was planted to seeds of onions, cabbages, radishes, celery and lettuce on March 31; another ^{bed,} to sprouted onions on April 1; and a third to seeds of onion, lettuce, radishes, cabbage, zinnia

(flowers) and arctotis (flowers), on April 6. The seeds were attacked by field mice.

The results showed that coconut palms at this season of the year just about hold their own, without making any growth. Only the radishes developed. Some of the other seeds sprouted, but dried up between showers. It was decided that this type of cultivation was not practicable without fresh water irrigation, and protection from sun, mice, and insects.

III. Archaeological Sites.

There remains on these three islands very little evidence of the presence of natives prior to the period of the guano diggers. This does not mean that they were not visited by Polynesians. There is considerable evidence to show that certain of the Phoenix islands (now uninhabited), and ~~that~~ Fanning, Christmas, Washington, Malden, and other islands were well known to Polynesians prior to their discovery by early white navigators. But there is nothing at present to show that Jarvis, Howland, and Baker were formerly inhabited before the guano diggers lived upon them.

A report on the archaeological findings of the Whippoorwill expedition (1924) has been prepared by Kenneth P. Emory and published by B.P. Bishop Museum as Bulletin 123, 1934. Emory had not visited these three islands, but his extensive knowledge of similar islands further south gave him a good background for interpreting the field notes of Dr. C. M. Cooke, Bruce Cartwright and other ^{scientists} on the Whippoorwill.

Jarvis. No ancient archaeological structures were found on Jarvis Island. Two platform graves were attributed to the period of the guano diggers.

Howland. A quotation from J.D. Hague (1862) indicates that in 1860 there were evidences of previous human occupation on Howland. He notes excavations and mounds in the center of the island among the Cordia thickets, the largest being several hundred feet long by 100 feet wide, and 10 to 15 feet deep. As guano digging on this island dates from 1857, this may have been the work of this enterprise. The fragments of a canoe, hut, blue bead, etc. noted by Hague were ^{suggested} noted by Emory as indicating only comparatively recent occupation. ^{Emory} ~~he~~ states, however, that the presence on the island of kou (Cordia) trees and of the Polynesian rat, as well as of paths made of water worn stones might indicate visits to the island by Polynesians at an earlier date. Dr. Cooke and Mr. Cartwright noted 13 sites in 1924, including six paved paths, various piles of coral and shell, and a rough pavement of slabs.

Baker. No record is made of archaeological observations on Baker Island in 1924. The Dana Coman expedition brought back some evidence of native sites on Baker, but the details are not available to me. From a newspaper account, and certain artifacts loaned for study, it would appear that on the south side of the island were found ^{stone pounders,} some piles of chips, stone paths, and what was supposed to be house sites. These are not necessarily very ancient, however, because the three poi pounders which were found are steel cut, and among the piles of chips were found fragments of iron. The coconut groves, fresh water pond, house sites, etc. mentioned in the newspaper are apparently figments of the imagination, or suppositions based on very insufficient evidence. All these ^{facts findings} might easily be accredited to the period of the guano diggers, for a number of Hawaiian men were introduced to Baker to work the guano deposits, and the crude pounders are such as they might have made from the rather poor material found in ships ballast.

IV. LAND ANIMAL LIFE, A. Mammals.

Species of rats are found on ~~Jarvis~~ Howland and Baker, and mice on Jarvis. The Howland rat is a species related to other native "Polynesian rats" throughout the Pacific Islands. It was probably introduced by the early Polyneseians, and its relationship to Rattus concolor of southeastern Asia is another bit of evidence as to the origin of the Polyneseians in that region. The species of rat on Baker is the Norway or wharf rat. In contrast to the native rat, which apparently lives in harmony with the birds and other land animals, the Norway rat ~~apparently wars~~ on the birds, and may be responsible for the absence of terns on Baker, to be mentioned below. The mice, ~~mentioned above as~~ on Jarvis, are very abundant and cause some little damage to vegetation other than the long established herbs. On all the islands the rodents live in holes in the ground, being nocturnal in habit.

B. Birds. All the species of birds found on Jarvis, Howland and Baker belong to three orders of ~~birds~~, and are either sea birds or migratory species. The following is a summary of all the different species seen or recorded; special notes as to distribution or occurrence on individual islands ^{being} will be given ^{below} later.

I. Order PROCELLARIIFORMES

Family Procellariidae (Petrels and Shearwaters).

1. Puffinus iherminieri, a shearwater, with a rather slender bill, small hook at the tip; brown on back, white beneath; length, 11.5 inches, wing, 7.5 inches, culmen (upper edge of bill) 1 inch; tail, 3.5 inches.

2. Puffinus nativitatus, Christmas Island shearwater, back and lower parts uniformly dusky black, primaries and tail feathers black; length, 15 inches, wing, 9.1 inches, tail, 3.8 inches, culmen, 2.3 inches, curved at tip.
3. Pterodroma parvirostris, a petrel, tube nosed like the two above, bill robust, short, with large hook; dark sooty brown ~~on~~ on back and wings, lighter brown across breast; rest of under surface white; length, 15 inches, wing, 10 inches, tail, 4.5 inches, culmen, 1.3 inches.

II. Order PELECANIFORMES

Family Phaethontidae (Tropic birds).

4. Phaethon rubricauda, the red-tailed tropic bird; plumage close and satiny, general color white, tinged with pink or salmon, and with some black spots, especially a black crescent before the eyes; two long central tail feathers, crimson with black shafts; bill red; young barred and streaked with black; ~~feet yellowish, length 25-29 inches~~ length (including tail), 30-36 inches, wing, 12.5-13 inches, tail (including middle feathers) 16.5 - 20 inches, culmen, 3.5 inches.

Family Sulidae (Boobys and gannets).

5. Sula cyanops (or Sula dactylatra), "blue faced booby", yellowish mask and bill; plumage of head and neck as well as most of the upper parts pure white, most of tail and tips of wings brown; feet yellowish; length 25 - 29 inches, wing, 15 - 17 inches, tail, 8 - 10 inches, culmen, 3.6 - 4.3 inches, depth of bill, 1.4 - 1.6 inches; a larger and heavier bird than #6.
6. Sula piscator, red-footed booby; bluish bill and face; most of the plumage, including much of the tail, white; feet reddish; length 23 - 27 inches; wing, 15 inches, tail, 6.7 - 7.3 inches, culmen, 3.5 inches, depth of bill, 1.4 inches. This species prefers to nest in bushes if any are present; they nest abundantly in the kou thicket on Howland.
7. Sula leucogaster (formerly Sula sula), Brown vested or "common" booby; plumage on upper parts, including head, neck, and chest brown, lower parts white (as if the bird had on white trousers and a brown cutaway coat); length, 30 - 31 inches, wing, 15.5 inches, tail, 7.5 inches, culmen, 4 inches.

Family Fregatidae (man-o'-war birds).

8. Fregata minor palmerstoni, frigate bird; large, sooty black, with purplish and more or less metallic gloss on the wings; male with red throat pouch, which can be blown up like a child's red balloon, as a sexual attraction; females with a few white markings; partly grown birds have more white, especially white heads; young birds are entirely covered with white down; bill long, dark brown, hooked at tip; feet not webbed, which prevents it from alighting on water and taking off again; thus being responsible for its habit of robbing the industrious boobys and other birds of their fish; length, 37.5 - 41 inches, wing, 23 - 25 inches, tail, 15 inches, culmen, 5 inches.

III. Order CHARADRIIFORMES

Suborder Charadrii

Family Charadriidae. (Plover, migratory species)

9. Pluvialis dominica fulva, Pacific golden plover; lacks hind toe; summer adults: mottled black, golden, and ashy; chin, throat and lower parts dusky; forehead, sides of head and neck white; winter adults: no black on under parts, which are ~~white~~ whitish or grayish brown; less yellow above than in summer; length, 9 - 10 inches, wing, 6.5 inches, tail, 2.7 inches, culmen straight, slender, .8 - 1 inch.

spend most of the day at sea, fishing, they are not likely to be seen. The most common species are nos. 5, 8, 14, and 17. Less common are nos. 6, 7, 13, 15, 18. Least commonly seen are nos. 1 - 3, 4, and 16. Of the migratory birds: no. 12 is the most common; no. 10 is conspicuous because of its size, although only a few individuals were seen.

Usually it is possible to recognize the young by association with adults of the same species. This may not be possible in the case of the boobys, because over a long period all of them differ from the adults in plumage, even long after they are able to fly about and shift for themselves. All three species are rather uniformly sooty gray or brownish in color. The young of No. 7 (brown-vested "common" booby, which is comparatively rare) may be told by the fact that their head, neck, and breast is darker than these parts on the other two species. The other two may be told apart by the color of their bill and feet, the "red-footed" booby having red feet and a blue face, and the "blue-faced" booby having yellow feet and a yellowish or olive-green ~~face~~ face.

Private Wyman W. Graf has some interesting and valuable notes on the species of birds which he observed on Jarvis Island; but his nomenclature requires a conversion table. This I am attempting to furnish as follows:

Graf's name	Equivalent no. and name in the above list.
1. White Breasted Booby	7. <u>Sula leucogaster</u> , Brown vested booby.
2. Black and White Booby	5. <u>Sula cyanops</u> , "Blue faced" Booby.
3. Blue-Bill Tern	6. <u>Sula piscator</u> , "Red footed" Booby.
4. Brown Tern (later found to be of Blue-Bill type)	Probably young booby, species not certain.
5. Frigate	8. <u>Fregata minor palmerstoni</u> , frigate bird.
6. Boatswain's Bird	4. <u>Phaethon rubricauda</u> , red-tailed tropic bird.
7. Speckled Love Bird	13. ? <u>Sterna lunata</u> , gray-backed tern.
8. Black and white Love Bird	14. <u>Sterna fuscata</u> , sooty or wideawake tern.
9. Gray Love Bird	16. <u>Procelsterna cerulea</u> , gray tern.
10. White-head Snipe	Petrel or shearwater, probably no.1. (no. 1)
11. Black snipe (later found to live in holes in the sand.)	" " " no.3.
12. White Love Bird	18. <u>Gygis alba</u> , white tern or love bird.
13. Black Wanderer.	Its habits suggest a migratory bird; its size would compare well with the curlew; its bill and color suggest the blue reef heron, not known here.

Family Scolopacidae (Curlew, snipe, etc, migratory species)

10. Numenius tahitiensis, bristle-thighed curlew; dusky brown above, varied with buff; tail and its coverts, ochraceous, barred with dark brown; dull buff above; brown streaks on the chest, neck, and cheeks; thigh feathers ending in long bristle points; bill long and curved downward; length, 17 inches, wing, 9 inches, tail, 3.7 inches, culmen, 3 - 3.3 inches.
11. Heteroscelus incanus, wandering tatter; general color uniform ash-gray, whitish beneath; length, 10.5 - 12 inches, wing, 6.5 inches, tail, 3 inches, culmen, 1.5 - 1.7 inches.
12. Arenaria interpres, turnstone; upper parts dark and rufous; white on head, rump, throat, and belly; distinct contrast between dark and light, especially noticeable when in flight; length, 8 - 9 inches, wing 5.7 inches, tail, 2.5 inches, culmen, .9 inches.

Suborder Lari

Family Laridae (Gulls and Terns)

13. Sterna lunata, gray-backed or bridled tern; Upper parts dark ashy or sooty gray, paler on back of neck; forehead white; broad white strip through eye and ~~side~~ on under parts; head and neck black-bridled; length 16.5 inches, wing, 10.8 inches, the primaries chiefly smoky gray; culmen, straight, sharp pointed, 1.6 inches.
14. Sterna fuscata (= Sterna fuliginosa), sooty or wideawake tern; upper parts sooty black; forehead, sides of head, and under parts white; length, 15 - 17 inches, wing, 12 inches, tail, 7 inches (forked for more than 3 inches), culmen, 1.8 inches.
15. Thalasseus bergii cristatus, black and white tern; top of head, back of neck, and above the eyes, black; back and wings light gray; wing feathers edged with white, the 1st primary darker; white beneath; bill long, heavy, and brown; feet black; length, 18 - 19 inches, wing, 13.5 inches, tail, 5.5 - 7.5 inches, culmen, 2.3 inches.
16. Procelsterna cerulea, small gray tern (or gray love bird); entirely quaker gray; bill black, pointed, very slender; wings a little darker gray; feet black; length, 10 inches, wing, 7 inches, tail, 4 inches, culmen, 1 inch.
17. Anous stolidus, noddy tern, uniformly sooty brown, hoary to lavender or nearly white on crown and forehead, especially in summer; length, 13 - 16 inches, wing, 10 - 11 inches, culmen, 1.75 inches.
18. Gygis alba, white tern or love bird; pure white, except black eyes; slender, delicate; curious, hovering overhead; length, 12 - 13 inches, wing, 9.5 inches, tail, 4.5 - 5 inches, culmen, 1.8 inches.

Bird Distribution

These birds are rather uniformly distributed: i.e., they are likely to be met with on any of the central Pacific islands, and especially on the three under discussion, with the following expectations and limitations. There are at present no terns on Baker Island. This is thought to be due to the presence on that island of the Norway rat, which may have devoured both them and their eggs. The migratory birds (nos. 9 to 12) nest in the cold arctic regions in the summer time, and are to be found on these islands mainly during the winter months. Nos. 1 to 3 nest in holes in the ground, and as they

C. Reptiles. The wide spread "mourning gecko", (Lepidodactylus lugubris) has been collected on Jarvis, Howland, and Baker. It may be recognized by its granular appearance of the minute scales which cover its body, especially the head, the small, pad-like toes, and its ability to change from light to dark according to the background or environment in which it finds itself.

The "snake-eyed skink" (Ablepharus bontoni) has been collected on Baker and Howland. It has the top of the head covered with large scales which are symmetrically placed forming a mosaic-like pattern. The eye lid is immovable, giving a wide-awake appearance at all times. The color is dark olive-green, with silvery metallic stripes, above, lighter below, and with a brown tail.

No other ^{land} reptiles have been reported from these islands. Turtles, some of large size, may occasionally visit the islands.