

No. 48.]	PERTH:	WEDNESDAY,	OCTOBER	22.	E 1879.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~	~~~~~~

No. 435.-C.S.O.

Colonial Secretary's Office, Perth, 22nd October, 1879.

IS Excellency the Governor has been pleased to direct the publication of the following Act of Council, for general information.

By His Excellency's Command,

ROGER TUCKFD. GOLDSWORTHY, Colonial Secretary.

WESTERN AUSTRALIA.

ANNO QUADRAGESIMO TERTIO

VICTORIÆ REGINÆ.

# No. XXVIII.

AN ACT further to regulate the Celebration of Marriage in the Colony of Western Australia.

# [Assented to, 22nd October, 1879.]

HEREAS it is expedient further to amend the law relating to the Celebration of Marriage in the Colony of Western <sup>19th</sup> Vic., No. 11. Australia: Be it enacted by His Excellency the Governor of Western Australia and its Dependencies, by and with the advice and consent 

NO marriage shall be celebrated, except under special license for that purpose to be issued by the Governor, or except after due Notice of intended publication of banns, or intimation in writing of an intention to have to district registrar. such marriage shall be affixed for three consecutive Sundays on the door of the place of worship in which it shall be intended to celebrate such marriage, until one of the parties shall give notice under his or her hand in the form given in the Schedule A to "A."

this Act, or to the like effect, to the district registrar of the district within which the parties, or one of them, shall have dwelt for not less than seven days then next preceding; and shall state in such notice the name and surname, and the profession or condition of each of the parties intending marriage, the dwelling place of each of them, and the time during which each has dwelt therein. But if either party shall have dwelt in the place stated in such notice during more than seven days, it may be stated therein that he or she has dwelt there seven days and upwards.

THE district registrar shall forthwith post a true copy of District Registrar to such notice in a conspicuous place in his office, and shall also enter post notices in his office, and enter same in Marriage a true copy thereof fairly into a book to be for that purpose provided by the registrar general, to be called "The Marriage Notice Book;" and such book shall be open at all reasonable times without fee to all persons desirous of inspecting the same; and for every such entry the district registrar shall be entitled to a fee of one shilling.

> EVERY district registrar shall, on the first day of every month, transmit to the registrar general all such notices received by him during the month preceding, and such notices shall be thereafter kept in the general registry, in such order and manner as the registrar general shall think fit, so that the same may be most readily seen and examined.

AFTER the expiration of seven days from the entry of such 4 tificate of notice to notice, the district registrar, upon being requested so to do by or on behalf of either party mentioned therein, shall issue under his hand a certificate in the form of schedule B to this Act annexed; Provided that no lawful impediment be shown to the satisfaction of the district registrar why such certificate should not issue; and provided that the issue of such certificate shall not have been sooner forbidden, in manner hereinafter mentioned, by any person authorized in that behalf as hereinafter provided; and every such certificate shall state the particulars set forth in the notice, the day on which the notice was received, posted, and entered, and that the full period of seven days has elapsed since the posting and entry of such notice; and for every such certificate the district registrar shall be entitled to a fee of one shilling.

ANY person whose consent to a marriage is required by law, gistrar's certificate may forbid the issue of the district registrar's certificate, by writing or causing to be written at any time before the issue of such certificate, the word "forbidden" opposite to the entry of the notice of such intended marriage in the marriage notice book, and by subscribing or causing to be subscribed thereto his or her name, place of abode, and character as parent or guardian.

> NO marriage in pursuance of such notice shall be celebrated three calendar months after the entry of such notice, nor until the certificate mentioned in the fourth section hereof shall have been produced to the minister or district registrar celebrating the marriage, nor in any case until a declaration upon oath, or a solemn affirmation shall have been made in manner prescribed by the Ordinance 19th Victoria, No. 11, section 4.

> THIS Act shall be taken to be part of the Ordinance 19th Victoria, No. 11, as fully and effectually as if incorporated therewith, and may be cited for all purposes as "The Marriage Law Amendment Act, 1879."

> > In the name and on behalf of the Queen I hereby assent to this Act.

> > > H. ST. GEORGE ORD, Governor.

Marriage notices to be sent to the registrar general.

Notice Book.

After seven days cerbe given on demand. "B"

Proviso.

Further proviso.

Certificate to contain particulars.

Issue of district remay be forbidden.

No marriage to be celebrated till certificate produced and declaration made, norafter three months from entry.

This Act and the said Ordinance, 19th Vic., No. 11, to be read together.

# SCHEDULES.

# Schedule A. NOTICE OF MARRIAGE.

To the District Registrar for the Registry District of Perth, in the Colony of Western Australia.

I hereby give you notice that a marriage is intended to be held within three calendar months from the entry hereof, between me and the other party herein named and described, that is to say :---

Name.	Condition,	Rank or Profession,	Age.	Dwelling place.	Length of Residence.	Place in the Colony in which the other party resides, when the parties dwell in different dis- tricts.
James Smith	Widower	Carpenter	Of full age	Perth	7 days,	-
Martha Green	Spinster		Minor	Bunbury	More than a week.	Bunbury.

Witness my hand this

day of

18

James Smith.

The *italics* in this Schedule to be filled up, as the case may be.

### Schedule B.

# DEPUTY REGISTRAR'S CERTIFICATE.

I, James Broun Roe, District Registrar for the Registry District of Perth, in the Colony of Western Australia, do hereby certify that on the day of , 18 , notice was duly entered in the Marriage Notice Book of the said district, of the marriage intended between the parties therein named and described, delivered under the hand of James Smith, one of the parties, that is to say :---

Name.	Condition.	Rank or Profession.	Age.	Dwelling place.	Length of Residence,	Place in the Colony in which the other party resides, when the parties dwell in different dis- tricts.	
James Smith	Widower	Carpenter	Of full age	Perth	7 days.	Bunbury.	
Martha Green	Spinster		Minor	Bunbury	More than a week.	Bunowry.	

Date of notice received, entered and The issue of this certificate has not been forbidden by any person authorized to forbid the issue thereof. Dated this 8th posted: 1st January, 1880. day of January, 1880. Date of certificate given:

8th January, 1880.

JAMES BROUN ROE. Deputy Registrar.

NOTE.—This certificate will be void, unless the marriage is celebrated on or before the 30th day of April, 1880.

The *italics* in this Schedule to be filled up, as the case may be.

No. 433.-C.S.O.

# Colonial Secretary's Office, Perth, 21st October, 1879.

IS Excellency the Governor directs the republication of the republication of the undermentioned notice for general information; but in lieu of the words "Mr. Hare," in the last line but one, read "Government Resident or officer acting in that capacity."

### By His Excellency's Command, ROGER TUCKFD. GOLDSWORTHY, Colonial Secretary.

#### Notice.

Office of Commissioner of Crown Lands, Perth, 15th January, 1875. MISTAKEN or "Rabbit" Island, King George's Sound, having been reserved for Acclimatization purposes, and by direction of His Excellency The Governor placed under the care and control of the Resident Magistrate Albany and participation Resident Magistrate, Albany, any person or persons landing there without authority from Mr. Hare will be prosecuted for trespass.

> MALCOLM FRASER, Commissioner of Crown Lands.

No. 432.-C.S.O.

Colonial Secretary's Office, Perth, 17th October, 1879.

PPLICATIONS will be received at this A Office from persons willing to perform the duties of Night Warder at Rottnest. Salary £70 per annum, Also for the situation of Assistant Light Keeper at the same place; salary £50 per annum. Quarters provided in each case.

By His Excellency's Command, ROGER TUCKFD. GOLDSWORTHY, Colonial Secretary.

No. 434.-C.S.O.

Colonial Secretary's Office, Perth, 21st October, 1879.

I IS Excellency the Governor directs the publication of the full publication of the following Notice to Mariners, for general information.

By His Excellency's Command, ROGER TUCKFD. GOLDSWORTHY, Colonial Secretary.

NOTICE TO MARINERS.

# Hydrographic Notice.

### [No. 11.]

#### PACIFIC OCEAN.

#### Notice No. 47.

#### WESTERN PART.

The following information is derived from the surveys and reports of Lieutenant W. U. Moore, commanding H.M. Survey-ing Schooner Alacrity; and from the remarks of officers of Her Majesty's Ships employed on the Australian station, received through Commodore A. H. Hoskins, C.B., Senior Officer, 1877-8. All Bearings are Magnetic. Variation in 1879:

Banks' group 9° Easterly. Fiji islands 10° Easterly. Solomon islands 9° Easterly.

# FIJI ISLANDS.\*

EASTERN GROUP.—The rock shown as bearing S. by W. distant 10 miles from Vanua Vatu; and the rock reported N.W. distant  $4_2$  miles from Frost reef near Mago island, do not exist.

Argo reef.—The correct position of the S.E. horn of the Bukatatanoa or Argo reef is in lat.  $18^{\circ} 21'$  S., long  $178^{\circ} 13'$  W.

VITI LEVU. WEST COAST. '--Kamba island is a low coral island, wooded, 80 feet high, situated on the west side of Thuvu harbour, and connected with the main island of Viti Levu at low water spring tides.

The Coast from Kamba island to Songo, which is an island of much the same character as Kamba, trends W.  $\frac{1}{2}$  N. for about 5 miles, and is fringed by reef which extends from  $1\frac{1}{2}$ cables to one mile from the coast; this reef can be passed over by boats at high water.

Na Tandola harbour.—Songo island is situated on the south and east sides of Na Tandola harbour, which harbour is formed by a break in the reef 14 miles in depth, and 5 cables broad. The best anchorage is in 4 or 5 fathoms, sand, close to Songo island, on the north side of which, landing can be effected in audiant reacher. in ordinary weather.

The swell rolls into this harbour although the prevailing wind is E.S.E., and coasters prefer the more secure shelter of Likuri to the northward.

The Coast from Songo island runs in a north-west direction for 2 miles to a sandy point, from which it trends north for 13 miles to the Tuva river, off the mouth of which is Likuri harbour. Boats can pass over the reef bordering the coast between Na Tandola and Likuri harbours, which extends from the total prior when the section of the trends from one to two miles from the coast.

LIKURI HARBOUR is found by bringing Koromba (Pickerings peak) to bear N.E.  $\frac{1}{2}$  E. when approaching the entrance which is situated about half way along the reef between Vatuloa and Uverite points; the cocca-nut grove on the island of Likuri will attract attention, as it stands out in relief against the land.

The harbour, which is formed by the stream from the Tuva river, lies in a N.E. by E. and a S.W. by W. direction, and is one mile long by  $3\frac{1}{2}$  cables broad. It is well sheltered from all winds and easy of egress, but sailing vessels will find entering difficult with the prevailing wind blowing, and no attempt should be made to enter under sail with the ebb tide unless the wind be from a communding content. wind be from a commanding quarter.

Likuri island half way between Likuri harbour and Tuva river, is low and sandy, being about 700 yards long by from 100 to 200 yards in brendth, and covered with palms, the tops of which are 70 feet above high water. At low water the island is connected with the sandy point 14 miles to the south-east of it. **Anchorage** may be had in Likuri harbour with mount Le Jeune in line with the north point of Likuri island, 3 cables distant from that island, in 3 fathoms, sand and mud.

Tides.—It is high water, full and change, at Likuri island at 6h. 30m. Springs rise 4ft. Neaps range 3ft. The tides run strongly in and out of Tuva river, the ebb being felt most in the harbour.

Tuva river is a tidal stream navigable for boats some 5 or 6 miles from its mouth.

Wind and weather.—The wind prevails at Likuri from E.S.E., between 5 a.m. and 5 p.m. At night, a light breeze generally comes off the land from the north-east. These breezes are locally reported to blow with regularity throughout the year, except in the months of March, April, and September.

The climate is dry, very little rain falls, and bush fires are

The coast from Tuva river to Uverite point, the western extremity of Viti Levu, takes a north-west direction for a dis-tance of 63 miles, and consists chiefly of mangrove. A fringing reef extends throughout for from one to two miles from the shore. Near the land there is a passage for boats and small craft, which connects Likuri harbour with Nandi waters.

From Uverite point to Navula point the bearing is north, and distance about 4 miles. Situated on a stream at the head of the bay between these two points is the native town of Momi. Along this part of the coast is a coral fringe, and overlooking Navula point is a double hill with two peaks, the highest of which is 760 feet.

From Navula point the coast runs for 2 miles in a N.N.E. direction, then trending to the eastward and forming a bay  $7_2^{\circ}$  miles long and  $2_2^{\circ}$  miles in depth, into which flows the main or north mouth of the Nandi river.

From Nandi river the coast runs N. 3 W. for 3 miles to the south point of Nandi bay. For a description of which bay see Hydrographic Notice No. 13, Pacific Ocean No. 36, of 10th May, 1877.

Nandi bay ends at Vunda point, which lies north 5 miles from Iakuilau island. A rock awash at high water lies at the edge of the fringing reef W.S.W.  $1\frac{1}{2}$  cables from Vunda point. From Vunda point to Na Korokoro point the general direction of the coast is N. by W. and distance  $2\frac{5}{2}$  miles. The entrance to the Ndrekiti river lies between the two points, and a narrow coral fringe borders the coast.

Climate of the west coast of Viti Levu is dry and exhilarat-ing. The wind by day is from north-west during the trade-wind season, and a south-east wind generally comes off the land at wicht at night.

Between Nandi bay and the Mamanutha islands the winds are very baffling, within a few minutes on the same spot strong puffs from opposite directions being often experienced.

The barrier reefs of the west coast of Viti Levu com-mence at Uverite point, and extend in a north-west direction for 34 miles. A space of 17 miles then intervenes, directly to leeward of Viti Levu, where there is no barrier. The Viwa (Biva) reef, north of this space, is the westernmost danger of the Fiji group.

Passages to Nandi.—The only safe passages through the reefs to Nandi for sailing ships are the Navula and Malolo passages. The Navula passage is to be found by bringing Mount Evans in line with the north summit of Double hill bearing N.E. The channel lies E.N.E. and W.S.W., is about one mile in length, and five cables in breadth in the narrowest part, fringed with coral heads on the south side, and having a depth of from 18 to 50 fathoms in the middle. Sailing vessels should not attempt to beat through against the tide.

Steam vessels bound from Nandi to the eastward might make use of the Navula passage with advantage, as it enables them to make southing in smooth water.

Navula reef is a patch of coral, awash at low water,  $2\frac{2}{4}$  miles long by 14 broad, situated  $2\frac{2}{4}$  miles west of Navula point. Between this reef and Tavarua island there is a passage suitable for small craft, one mile wide, in which, however, are coral heads having upon them from 12 to 18 feet at low water.

Malolo passage leads between the two sand islands of Tavarua and Namotu (Spieden and Waldron of Wilkes). It may be readily found from seaward by bringing mount Evans to bear N.E. by E. and steering on that course until the islands are recognized. The direction of the channel, which is 7 cables long by six cables broad, is north-east and south-west, the depth in the middle being from 13 to 28 fathoms. Sailing

vessels would find this a preferable passage to the Navula; but unless they have a commanding breeze it is not prudent to enter with the ebb tide.

Directions.—After clearing Malolo passage mount Evans should be steered for until Inkuilau island is seen, when anchor-age in Nandi bay can be chosen as convenient.

Tavarua island is 500 yards in diameter, surrounded by a coral reef and covered evenly with trees and bushes, making its entire height 40 feet.

Namotu island, 300 yards in diameter, is surrounded by a coral reef, and is easily distinguished by its cocca-nut trees, the highest of which are about 40 feet high.

Wilkes passage is a narrow channel between Namotu and the Malolo barrier reef.

Malolo barrier reef lies N.W. by W. and S.E. by E., is  $\$_{2}^{h}$  miles long, and awash at low water. It has two prominent horns in the middle, and the north-west end has numerous rocks scattered to the north of it. The southerly swell breaks with great violence on the horns of the reef.

MAMANUTHA REFS lie north-west of the Malolo barrier reef, and between them are numerous passages. The south-east Mamanutha reef is awash at low water, as is also the south end of the next reef to the north of it; but the remainder are sunken dangers having from 6 to 30 feet of water on them. Their edges are not well defined, and they break only in bois-taneous worther terous weather.

The northern of the Mamanutha reefs is named after the S.S. Tartar which struck on it in 1874.

Eastward of the meridian of 177° East, between the parallels of Viwa and Monu, a number of banks were found on which the sea only breaks occasionally. This part affords unsafe naviga-tion for sailing vessels, as the wind is uncertain, calms not unfrequent, and there are no anchorages except at Waia.

Winds,—The prevailing S.E. wind interrupted by the large island of Vitu Levu finds its way to this part sometimes as a north-east and sometimes as a south wind, but is not to be relied upon for many hours, and violent gusts from off the land are occasionally experienced at night.

Viwa reef.-The island of Viwa (Biva of Wilkes), about 100 feet high, is surrounded by coral reef, and difficult to see at night

Inside the barrier.—The space inside the barrier reefs is studded with coral reefs and islands, but navigation is practi-cable if carefully conducted from the masthead with a favorable light.

Nandi water, the name given to the space inside the barrier reefs southward of Vunda point, has fewer coral reefs than the northern part, owing probably to the fresh water of the Nandi river flowing into it. Inmediately between the Malolo and Navula passages and Nandi, the bottom is fairly even (from 10 to 20 fathoms), and affords good holding ground, in mud.

Itai, Lovuka, Kandavu, Navini, and Malamala are small sand islands covered with bushes and trees in the Nandi waters. There are also several sand cays.

MALIOLO ISLANDS consist of Malolo, Malolo lai-lai, Ngualito, Mathiu, Wadingi, and Vatu Mbulo. The last three are mere rocks. Malolo island only is inhabited. It has a conspicuous peak in the centre, 750 feet high, is of a light color, covered with grass, and has two villages which contain about 250 inhabitants.

250 inhabitants. MAMANUTHA ISLANDS, thirteen in number, are divided into two groups, called by the natives Mamanutha ethake and Mamanutha ira, or the windward and leeward Mamanuthas. Mamanutha ethake consist of Mana, Mata-manoa, Nautanivono, Tavua, Mondriki, Monu, Yanuya, and Tokoriki. Of these, the highest and most singular in appear-ance is Monu, which has a remarkable thumb peak to the westward of, and nearly as high as its summit, 730 feet above high water. The only islands which are inhabited are Tavua and Yanuya. high water. and Yanuya.

Mamanutha rocks are situated upon a reef between the two groups of islands: the highest is 3 feet above high water.

Mamanutha ira islands are unihabited, and consist of Yavurimba, Kandomo, Vanua Levu, Na Vandra and Eori. The highest is Na Vandra, which has a well defined summit 420 feet above high water. The same coral reef surrounds this island, Vanua Levu, and a large rock called Naniukaleile.

Camel rock, situated on a reef N.W. by W. about a mile from Kandomo, is conspicuous and 15 feet in height, taking its name from its resemblance to a camel in a recumbent position.

Vomo island is flat-topped, 380 feet high,  $9\frac{1}{2}$  miles E. by N.  $\frac{1}{2}$  N. of Yavurimba. It is of a light colour, being covered with grass, and surrounded by a coral reef, on the north-west end of which is a rock 200 feet high, called Vomo hai hai.

White rock is a small islet, 7 miles N.N.W. from Vomo. It is covered with guano and 40 feet high.

WAIA GROUP.—Off the north-west coast of Viti Levu, and distant from it 30 miles, is a chain of volcanic islands occupying a space of about 50 miles in a N.N.E. and S.S.W. direction, called the Yesawa group. The most southern of this chain are the islands of Weia, Waia laidi, and Kowata, which by themselves form a small group. Standing out from the high ridges of Waia are several remarkable thumb-shaped peaks.

WAIA ISLAND is irregularly shaped,  $3_2^{\pm}$  miles long by  $2_1^{\pm}$  broad, the general direction of both its eastern and western shores being about north and south. It has several singularly sharp peaks, the highest, which is towards the north-east end of the island, being 1,870 feet above the sea. A rugged, well-defined mountain overlooks the south-west cape. It is 1,660 feet high, and perpendicular on its western face. The south-west cape is terminated by a quoin-shaped hill 270 feet high.

Situated 6 cables from the north-east cape of the island is a rocky islet 40 feet high, with a few bushes on its summit, called Windy rock. Waia has five villages and a population not exceeding 500.

Waia lailai is of a more even shape, but it has one remark-able thumb peak, which is, by a few feet, the highest point of the island. It overlooks the southern coast and is 1,160 feet high. Waia lailai is connected with Waia by a coral reef, which can be accessed by boots of high water be crossed by boats at high water.

Kowata has an irregular summit which is 570 feet above the sea. A channel 24 cables wide separates this island from Waia lailai. The south cape of Kowata has been named Reef-topsail point.

Anchorages.—There are two anchorages at Waia island, called Alacrity bay and Watering bay. Alacrity bay, which is on the south side of the island, is fairly protected from all points but south, from which direction a considerable swell rolls into the bay at times.

a considerable swell rolls into the bay at times. Directions.—Entering Alacrity bay, keep the south-west high peak of Waia bearing N. by W.  $\frac{1}{2}$  W. until the summit of Waia lailai bears E. by S., when steer for the black rocks on the shore reef at the head of the bay, keeping clear of a 2-fathom patch on the port hand; and anchor in 14 fathoms, sand and mud, off the village of Yalombi, left extremity of Waia lailai and the right extremity of Waia being in line, and the two islands appearing as one. No water or supplies were to be obtained.

Caution.—Sailing vessels entering Alacrity bay with north-east winds should reduce their sail on rounding this point, as heavy squalls sweep down the gullies and between the islands.

Watering bay is situated on the north side of the island. It is two miles long and one mile in depth. At high tide good water can be easily obtained from a stream at the head of the bay.

Directions.—In entering Watering bay run in until Windy rock is lost sight of behind the north-east cape of Waia, and the north-west cape bears W.N.W., or summit of Waia bears E.N.E., when anchorage can be had in 20 fathoms, mud. In this position a vessel would not feel the swell raised by north-east winds, and be in a good position for weighing.

Two coral heads with 12 and 15 feet of water on them lie just outside the bay, and there are many shallow coral banks between Waia and Viwa which have not been examined.

Naviti island (Vaviti of Wilkes) was found by the *Alacrity* to be 740 feet high.

#### BANKS GROUP. ‡

BANKS (HOUP,  $\ddagger$ Lieut. Musters commanding H.M. Schooner *Conflict* found good anchorage where fresh water could be obtained, near the south-west point and on the west coast of Santa Maria island, in 7 fathoms, sandy bottom, with the following marks— Black sandy beach (only beach in the bay) bearing East. S.W. point of Santa Maria island S. 9° W. After rounding the south-west point of Santa Maria island a large bay opens out, and the depths will be found to decrease gradually as the anchoring ground is approached.

### SOLOMON ISLANDS. §

GUADALCANAR.—Marau Sound,  $\mathbb{T}$  on the south-east side of the island, is a secure anchorage in all winds, pro-tected from the sea by a chain of islands encircled by a barrier reef; during the S.E. trades the southern passage is the one recommended.

Performinented. Directions.—Approaching Guadalcanar from the south-ward: the southern island of the group can be seen in clear weather about 10 miles distant, and should be steered for until the barrier reef is made out at a distance of about 5 miles. Ferguson island, which is small and situated to the westward, will then be observed; this steered for on about a N.N.W. bearing leads through the reef passage. Careful look-out is necessary, as two shoal patches lie in the centre of the channel to the sound, off Ferguson island. Applements and he found under Henry englished her the

Anchorage may be found under Ferguson island, but the principal one is in the sound about  $1\frac{1}{4}$  miles further to the north-west. A large island, the highest peak of which bears about N.N.W. from Ferguson island, also bears about E. by N. from the entrance to the sound, and is a good mark for finding it. At the entrance is a rock awash.

Fresh water of good quality can be obtained from a creek situated about a mile W.S.W. from the rock awash just alluded

Soundings average from 8 to 12 fathoms over a bottom of mud between the rock awash and creek. The main passage to the northward appeared clear of dangers with the exception of the reefs extending off the different islands, which a careful look-out can avoid.

#### KERMADEC ISLANDS.

DOUBTFUL DANCER.—A shoal marked on the chart as having 2 fathoms of water on it, in lat. 31° 9′ S., long. 178° 10′ W., was not seen from H.M.S. Nymphe (Oct. 1875), nor could bottom be obtained in this locality with 55 fathoms of line. The position of this shoal may therefore be considered doubtful doubtful

# Hydrographic Office, Admiralty, London, 19th May, 1879.

\* See Admiralty chart-Fiji or Viti group, No. 2601; also Kandavu passage, &c., No. 345. i In continuation of Hydrographic Notice. No. 18 of 1878. I See Admiralty chart of Now Caledonia, New Hebrides, &c., No. 1880; also Nos. 780 and 2083: also, Hydrographic Notices, Islands in the Pacific ocean, 1856-1878, page 77, and Nos. 21, 35, and 37. § See Admiralty chart of Solomon islands, No. 214. I Lient. Musters, August 1878.

Hydrographic Notice.

No. 13. PACIFIC OCEAN. Notice No. 48.

#### WESTERN PART.

The following information, derived for the most part from the remarks and observations of officers of Her Majesty's ships employed on the Australian station, has been received through Commodore A. H. Hoskins, C.B., Senior Officer, 1878.

All Bearings are Magnetic. Variation in 1879 : New Caledonia 10° Easterly. Fiji Islands 10° Easterly. Solomon Islands 9° Easterly. New Hebrides 9° Easterly.

ISLANDS OF THE SOUTH PACIFIC. TONGA OR FRIENDLY ISLANDS. Reported Breakers a in lat. 20° 54' S., long. 175° 28' W. orth-west of Tongatabu were not seen from the masthead of

the Imperial German Corvette Ariadae, but a phenomenon caused by the sun shining through breaks in the clouds having all the appearance at first sight of breakers was observed in the neighbourhood. Afterwards, this similarity ceased to exist, and it is possible that a kindred cause led to breakers being reported hereabouts.

reported hereabouts. La Rance banks b were searched for by Captain von Werner of the Imperial German corvette Ariadae October 1878, under favourable circumstances, but no trace of shoal water could be discovered in their assigned position. H.M.S. Nymphe also passed over the position of La Rance banks (lat  $24^{\circ}$  10'S, long. 176° 0' W.), good observations having been obtained, the day bright and clear, but nothing could be seen from the masthead, nor could bottom be found with 35 fathoms of line. These reports corroborate the statement that the position of La Rance banks may be considered doubtful. ETH ISLANDS c

#### FIJI ISLANDS. c

Maafu rock described as having 18 feet of water over it at low tide and situated in lat. 17° 54′ S., long. 178° 56′ W., is about 5 yards in diameter and difficult to see in fine weather. It breaks only in gales. The discolored water in its neighborhood indicates 6 and 9 fathoms, the whole patch being hardly a cable in dimensional statement of the statement of t in diameter.

Boehm rock.—A coral patch awash at low water, and about a cable in diameter has been found in lat.  $17^{\circ}$  13' S., long.  $179^{\circ}$  7' W.,  $1_{2}^{\circ}$  miles N.N.E. of the small craft harbor at Kanathea.

# Danger marks.—The east extreme of Kanathea in line with the centre of Mango island, bearing S. ½ E. leads over the rock.

# NEW HEBRIDES. d

NEW HEBRIDES. d AMBRYM ISLAND.—Rodds anchorage during the south-east trade wind is secure for vessels of any size. The high peak at the north end of Ambrym island bearing S.S.E., and the white sandy beach bearing East, are good marks for the anchorage. This beach being the only one in the vicinity is easily recognised. The soundings decrease gradually from 20 fathoms sandy bottom. The natives appeared friendly but shy, and no supplies could be obtained (1878).

API ISLAND,—About a mile south of Pane and from a half to three quarters of a mile outside the fringe reef on the west coast of Api island, is a circular coral knoll, about 100 yards in diameter and awash at low water, which is flat, and has deep water around, excepting on the south side, where a tongue runs out for about 100 yards.

TANNA ISLAND.—Port Resolution.—From infor-mation received from the British Consul at Noumea it appears that in Angust 1378, about a fortnight after H.M. schooner Renard had completed a re-survey of Port Resolution rendered necessary by the volcanic upheaval which took place in Tanna island in January and February 1378, another earthquake and extensive upheaval took place, and port Resolution as a harbor is reported to be almost entirely destroyed.

Havannah harbor e.-The plan of Havannah harbor, al-though accurate in position as placed upon the chart, appears incorrect in detail and should be used with caution.

St. Bartholomew island.—Anchorage for small craft may be obtained at the east end of St. Bartholomew island inside some small islets which are connected at low water with that island.

#### LOYALTY ISLANDS. f

LOYALTY ISLANDS, *j* Tiga or Boucher island.—The eastern point of this island was found by Lieutenant G. E. Richards, commanding H.M. schooner *Remard*, to be in long. 168° 17′ E., or 15 miles eastward of the position shown upon the chart. Ndundine or Molard island and Markan point (the north-west point of Maré or Britannia island) are also a corresponding distance too far to the westward, and probably the whole of Maré island is equally out of position. The latitudes of the above-named places correspond with those in which they are at present placed upon the chart.

#### NEW CALEDONIA. g

NEW CALEDONIA. g D'ENTRECASTEAUX REEFS.—Middle Huon island, situated upon the tongue of the D'Entrecasteaux reef, is about two miles in length N.E. and S.W. by three quarters of a mile wide, bordered with white sand beach. It is about 12 feet above high water, and covered with trees about 20 feet high. A mole has been built by an Australian Company from the north-west side of the island out into deep water, for the purpose of loading boats with the guano which is here found. The Louisa anchored a quarter of a mile off shore with the flag-staff (on Middle Huon island) bearing S. by E. in a depth of 6 fathoms, coral and rocky bottom. Anchorage may also be obtained about a mile from the shore in from 14 to 20 fathoms on the north side of the island. At a distance of 9 or 10 miles westward of Middle Huon island is a reef, which is said to extend from North Huon islet to Surprise islet with passages leading through it. The distance between South Huon and Middle Huon islets is about three miles.

about three miles.

South Huon island is very similar to Middle Huon island, from which it bears S.W. by S. distant 3 miles. Coral reef sur-rounds it on all sides for a distance of about half a mile, and anchorage may be obtained on its north-west side in 25 fathoms about a mile off shore.

Surprise island.—The flagstaff upon which stands in lat. 18° 31′ S., long. 163° 8′ E., is about 2 miles long by a mile wide in an east and west direction, situated on a coral reef, covered with trees, and surrounded by a white sandy beach.

Soundings.—Northward of the east end of Surprise island at a distance of about three quarters of a mile is a depth of 10 fathoms, and 1<sup>‡</sup> miles distant in the same direction, 20 fathoms.

fathoms, and 14 miles distant in the same direction, 20 fathoms. Coral reef.—About 13 miles north of Surprise island is an isolated coral reef about 23 miles long, east and west by three quarters of a mile in breadth. On the north side of this reef, anchorage may be obtained in from 10 to 20 fathoms, at dis-tances varying from a quarter to a mile from the reef. Eastward of Surprise island, D'Entrecasteaux reef is said to branch off in two parts to the east and N.E., the latter branch connecting with the reef extending from Middle Huon island.

Directions.—Vessels bound to Surprise or the Huon islands from the southward should steer for the north end of New Caledonia, then continue along the French reefs which are generally distinctly visible, until abreast their northern end,

which is marked by two black rocks appearing detached about 2 miles distant from the reef. From thence, steer northward towards Surprise island which is visible from a distance of 12 miles, and the west end of which can be rounded at the distance of about a mile. Inside the D'Entrecasteaux reef the sea is smooth, but as the tides run strong at times, it is well not to enter without a com-manding breeze. Should a vessel pass Surprise island too late to reach the Huon islands during daylight, anchorage should be taken up near that island until the next morning. If unable to reach Surprise island before dark it is recommended to stand to sea-ward.

Anchorage.—If intending to stay at the Huon islands, vessels should moor, laying out the heaviest anchor to the south-east. The bottom of coral and rocks affords fair holding ground.

Tides.—It is high water, full and change at the Huon islands at about 5h. 40m. Rise and fall of tide about 6 feet.

Winds.—In this neighborhood the south east trade wind prevails, interrupted at times by north-west and west winds. For the first four months of the year a prolonged stay here is not considered safe, as at that time hurricanes are not un-common in this part of the Pacific.

A shoal having over it  $2\frac{3}{4}$  fathoms at low water, has been found in the Moučo passage on the west coast of New Caledonia, bearing N. 53° E., distant 3 cables from the beacon upon the isolated rock situated 200 yards from the west reef which forms the channel.

From the shoal, the west point of Grinoult island is in line with a white mark on the land behind the peninsula of Neponi, and Adio peak is open 3° northward of the north point of Sonè islet.

#### NORFOLK ISLAND. h

Sunken danger.—From information received from the inhabitants of Norfolk island, a sharp pinnacle rock having 12 feet over it at low water, lies due south of the west end of Nepean island, distant three quarters of a mile. This is the rock on which the ship Mary Hamilton struck and became a total wreck.

#### SOLOMON ISLANDS.i

GUADALICANAR-Marau sound was entered by H.M. Schooner *Beagle* through a passage half a mile wide on the enst side of Malpala island. No soundings could be obtained until some two miles inside the outer reef. Anchorage was found in 10 fathoms close to the mainland and southward of the island south of Malpala.

The sound is of considerable extent, studded with small islands and affords many good anchorages, though in rather deep water; there are three entrances, the southern one of which is about a mile in width.

Shoals.—Lieutenant de Hoghton, of the Beagle, reports two shoals off the south coast of Simbo island extending about three-quarters of a mile in an east and west direction and the same distance apart. From a position between the shoals the following were the bearings taken—

S.W. end of Simbo island ... N 30° W. ...

N.E.	., .,	 	$N. 8^{\circ} E.$
S.E.	., Ronongo	 	N. 18° E.

The depth upon the northern shoal was found to be 5 fathoms, that upon the southern shoal 64 fathoms, the bottom consisting of coral rock and sand.

COUROMBANGARA ISLAND.—Ariel cove situ-ated on the west coast of this island is about three-quarters of a mile deep in a N.N.E. and S.S.W. direction, and has a narrow enfrance, about 80 yards across between two reefs which extend from either shore, opening out inside to a breadth of half a mile. A fringe of sandy mud extends for a short distance around the shores of the cove. No natives were seen. j

Fresh water of excellent quality can be obtained in small boats from a stream at the head of the cove.

boats from a stream at the head of the cove. Directions.—Having entered the passage through the reefs on the north-west const of New Georgia, steer a northerly course, and inside the first of two points visible off the west extremity of Courombangara island, Ariel cove will be found. NEW GEORGIA.—H.M. Schooner Beagle passed over two shoals, extending parallel to each other for about three-quarters of a mile in a W.S.W. and E.N.E. direction, from 4 to 5 miles south of East island. The least water obtained was 5 fathoms, coral bottom; but from the appearance of the water, and numerous tide rips, it was considered that shoaler water existed. existed.

Foul ground apparently extends for some distance eastward of East island.

Montgomery island has a small reef off its western

NEW GUINEA-NORTH-EAST COAST. Breakers.-In the space between Rich island and Crown island off the north-east coast of New Guinea, breakers were sighted by Mr. W. Symington, commanding the steamship Hankow, March 10th, 1377, and by careful observations he placed the position of the centre of the breakers in 14. 4° 55' S., long. 146° 50' E., and estimates their extent at about a mile each way.

Pallas reef was reported in June 1878 by a Bremen barque of that name to be situated in lat.  $3^{\circ} 37'$  S., long. 145° 40′ E., or about 50 miles from the north-east coast of New Guinea and the same distance from the Schouten islands. The *Pallas* passed close to the reef which was clearly visible; the sea was calm, and the depth of water upon the reef estimated at a few feet. k

Hydrographic Office, Admiralty, London, 5th July, 1879.

- bitl July, 1879.
  a See Hydrographic Notice, No. 15 of 1877, in which the report is taken from the United States Hydrographic Notice, No. 53 of 1876.
  b Annalen der Hydrographic, Heft 2, February 1870.
  c See Admiralty chart No. 1380, of New Hebrides.
  e Admiralty plan No. 138, of Havannah harbour.
  f Admiralty chart No. 138, of Statement Neurophysical Statement, No. 280.
  g See Admiralty plan No. 138, of Flavannah harbour.
  f Admiralty chart No. 138, of Statement Neurophysical Statement, No. 139, of New Caledonia; also Nos. 780 and 2488, together with Hydrographic Notices of the Pacific Ocean, 1850-1873 and Nos. 251 odf.
  k Navigating Lieutenant W. J. Symons, H.M.S. Wolverene, 1878. See Admiralty chart, No. 138, of Solomor Biends.
  i Lieutenant de Hogithon, II.M. Schooner Beagle, 1878.
  k See Annals of Hydrography, 1879, p. 24.

284

In

#### NOTICE TO MARINERS.

### [No. 95.] NEW ZEALAND.

#### NORTH ISLAND-EAST COAST.

(1) SUNKEN DANGER IN POVERTY BAY. The Government of New Zealand has given Notice, of the existence of a sunken rock or shoal in Poverty bay :---

This danger (Hawea rock) on which the steam vessel Hawea touched when entering the bay on 12th March, 1879, lies with the following bearings, viz. :-

... N.E. § N. ... E. § S.

Nore.—Pa hill is a conical hill (470 feet high) situated about half way up the bay on the north side, and these bearings place the danger about  $1\frac{1}{4}$  miles from the north shore of the bay.

(2) BREAKERS BETWEEN PORTLAND ISLAND AND BULL ROCK.

Also, that with a high south-easterly sea running, heavy breakers have been observed between Portland island light-house and Bull rock, distant about 2<sup>1</sup>/<sub>2</sub> miles from the island.

#### NEW CALEDONIA-SOUTH COAST.

#### (3) HARBOUR LIGHT AT PORT NOUMEA.

The French Government has given Notice, that a harbour light is exhibited when the moon is not visible, in front of the Harbour Master's house at port Noumea, New Caledonia :---

The light is a fixed red light, visible in clear weather from a distance of 6 miles. The illuminating apparatus is catoptric, or by reflectors of the fifth order.

Position, lat. 22° 16′ 20″ S., long. 166° 27′ 5″ E.

(The bearings are Magnetic. Variation  $14\frac{3}{4}$  Easterly in 1879.) By Command of their Lordships, FREDK. J. EVANS, Hydrographer.

Hydrographic Office, Admiralty, London, 28th June, 1879.

This Notice affects the following Admiralty Charts :---

New Zealand islands, No. 1212; Mayor island to Poverty bay, No. 2527; Poverty bay to cape Palliser, No. 2528: Also, New Zealand Pilot, 1875, page 105.
 New Zealand islands, No. 1212; Poverty bay to cape Palliser, No. 2528: Also, New Zealand Pilot, 1875, page 109.

(3) New Hebrides and Loyalty islands, No. 1380; New Caledonia, No. 9360; Uen island to port St. Vincent, No. 2907; port Noumea, No. 480: Also, Admiralty list of Lights in South Africa, &c., 1870, page 44.

# Western Australian Agricultural Association.

#### PATRON:

His Excellency the Governor.

#### **President**:

# Hon. R. T. Goldsworthy, C.M.G.

THE Fourth EXHIBITION of this Asso-ciation will be held at the Content of the state ciation will be held at the Society's Show Grounds, Perth, on WEDNESDAY, November 12th, 1879. Doors open to the public at 12 noon; admission, 1s. each.

A Band will be in attendance.

The ANNUAL DINNER will be held at 8 p.m. on the Show day. Tickets, 10s. 6d. each, to be had of the Committee.

On THURSDAY, November 13th, 1879, the Annual General Meeting will take place at 3 p.m, to which the public are invited.

# SCHEDULE OF PRIZES FOR 1879.

SHEEP.	£	s.
Imported—Best Fine Wool Ram	10	0
Best Long Wool Ram	10	0
Colonial—Best Long Wool Ram	5	0
Second Best	<b>2</b>	0
Best 10 Long Wool Ewes	<b>5</b>	0
Second Best	<b>2</b>	0
Best 10 Long Wool Lambs	<b>5</b>	0
Second Best	<b>2</b>	0
Best Fine Wool Ram	<b>5</b>	0
Second Best	<b>2</b>	0

				£	s.
	Best Pen of 10 Fine Wool	$\mathbf{Ewes}$		<b>5</b>	0
	Second Best			<b>2</b>	0
	Best Pen of 10 Fine Wool			5	0
	Second Best		•••	<b>2</b>	0
	Best 10 Fat Wethers			<b>5</b>	0
	Second Best			<b>2</b>	0
	Best Fine Fleece	•••		1	0
	Best Long Wool Fleece	•••	•••	1	0
	CATTLE.				
ported-	—Best Bull		•••	10	0
lonial—	-Best Bull		•••	10	0
	Second Best	•••		5	0
	Best Dairy Cow in Milk	•••		5	0
	Second Best			3	0
	Best Cow for Breeding	•••	• • •	7	0
	Second Best			3	0
	Best Pen of 4 Fat Beasts,	grazed		8	0
	Second Best			4	0
	Best Stall-Fed Fat Beast	•••	•••	5	0
	HORSES.				
iported-	-Best Blood Entire	•••		10	0
	Best Cart Entire				
	דאר יד יי די די דאר	<b>,</b>		0	~

Imported—Best Blood Entire		•••		10	0
Best Cart Entire				10	0
Colonial-Best Entire for Ind	ian	Market	•••	8	0
Second Best				4	0
Best Mare for India	n N	larket	•••	5	0
Second Best				3	0
Best Cart Entire				8	0
Second Best	•••			4	0
Best Cart Mare				5	0
Second Best		•••		3	0

### PIGS.

Imported—Best Boar				 3	0
Colonial—Best Boar	•••	•••	•••	 <b>2</b>	0
Best Sow		•••		 <b>2</b>	0
Second Best	•••	• • •	•••	 1	0

#### POULTRY.

Best Dorking Cock and Hen		$0 \ 10$
Best White Faced Spanish		0 10
Best Black Poland		$0 \ 10$
Best Silver Poland		$0 \ 10$
Best Golden Poland		$0\ 10$
Best Hamburgh	•••	$0 \ 10$
Best Game	•••	$0 \ 10$
Best Brahma Pootra		$0 \ 10$
Best Cochin		$0 \ 10$
Best Crossbred Fowls		$0 \ 10$
Turkeys—Best Cock and Hen		$0 \ 10$
Guinea Fowl—Best Cock and Hen	•••	$0 \ 10$
Geese—Best Gander and Goose		$0 \ 10$
Ducks—Best Aylesbury Drake and Duck		$0 \ 10$
Best Common Drake and Duck		$0 \ 10$

#### AGRICULTURAL PRODUCE.

Best Bag of Wheat					$0\ 15$
Best Bag of Barley					$0\ 15$
Dont Dog of Oata		•••			$0\ 15$
Best Bag of Indian Cor	n				$0\ 15$
Best Collection of Roots	3				$0\ 15$
Best Load of Hay		•••	•••	•••	$2 \ 0$

#### DAIRY PRODUCE.

Best 3lbs. of Fresh Butter, rolled in pound	s	~	10
Second Best	•••	0	7
Best Keg or Jar of Salt Butter, not less the	ın		
10 lbs	•••	1	0
Second Best	•••	0	10
Cheese—Best Cheese (not less than 101bs.)	•••	1	0
Second Best		0	10
Bacon-Best 2 Flitches and 2 Hams, cured			
in this Colony	•••	<b>2</b>	0

#### WINE.

Best Red, 2 bo	ottles		 		<b>2</b>	0
Second Best			 		1.	0
Best White			 		<b>2</b>	0
Second Best		÷	 		1	0
Best Sweet			 		<b>2</b>	0
Second Best		• • • •	 	•••	1	0

#### DRIED FRUITS.

Best Raisins, not less than 14lbs		1 0
Best Currants, not less than 71bs	•••	$1 \ 0$
Best Dried Apples, not less than 3lbs.	•••	0  15
Best do. Peaches, do		$0\ 15$
Best do. Figs, do		$0\ 15$
Best Collection of Dried Fruits		1 0

285

#### FRUIT AND VEGETABLES.

	•			£	s.
Best Collection of Fruit in Se	ason			0	10
Best Collection of Potatoes				0	10
Second Best			•••	0	5
Best Cabbage, 6 heads	•••			0	5
Best Red Cabbage, 3 heads	•••		•••	0	5
Best Cauliflowers, 3 heads		•••		0	5
Best Lettuce, 3 heads	•••	•••	•••	0	5
Best Broad Beans, 2 quarts	•••	•••	•••	0	5
Best French Beans, 2 quarts	•••	•••	•••	0	5
Best Peas, 1 gallon		•••	•••	0	5 5
Best Turnips, 2 kinds, 6 of ea		•••	•••	0	
Best Carrots, 1 dozen	•••	•••	•••	0	5 5
Best Parsnips, 1 dozen		•••	•••	0	э 5
Best Asparagus, 2 dozen head		•••	•••	0	
Best Celery, 6 heads	•••	•••	•••	0	$\frac{5}{5}$
Best Brace of Cucumbers	•••	•••	•••	0	э
INDUSTR	IAL.				
Sericulture-Best 6lbs. of Cod	coons			<b>2</b>	0
Best Gallon of Olive Oil in w	hite bo	ttles		0	15
Best Sample of Honey, 6 whit	te bottl	es		0	15
Best 6 White Bottles of Pickl				0	15
Best Collection of Jams				0	15
Best Bottled Fruit, 6 white b	ottles		•••	0	15
CARRIAO	ES.				
Best Collection of Colonial M	anufac	ture (	not		
less than 6), combining stre					
ness				3	0
Second Best Collection				<b>2</b>	0
AGRICULTURAL I	MPLE	MENT	'S.		
Imported-Best Collection (n	ot less	than 6	)	3	0
Colonial Manufactured-Bes	t Collec	tion (	íot		
less than 3)				3	0
Second Best Collection		•••	•••	<b>2</b>	0
EXTRA PR					
By The Hon. R. T. Goldswort	thy, C.	М.G.,	for	<b>2</b>	<b>2</b>
By Mr. E. T. Hooley, for the	Best I	Iunter	to		
be tried at the leaping B					
Yard				<b>2</b>	0

#### CONDITIONS.

1.-Subscribers of one guinea may compete for all or any of the Society's prizes. Non-Subscribers may compete for prizes of 20s. or under by payment of an entrance fee of 5s. each.

2.—All entries for competition must be forwarded to the Secretary 7 clear days before the day of exhibition.

3.—Samples of Wine (2 bottles of each), accompanied by a declaration that such samples

are the pure juice of the grape, must be sent in charge of the Secretary, to the show ground, Perth, where the Secretary will be in attendance from 11 a.m. to 4 p.m. on Wednesday, the 5th November.

4.—Tradesmen who are subscribers will be afforded facilities for the exhibition of their wares. Notice of space required must be sent to the Secretary 7 days before the day of exhibition.

5.—All exhibits must be on the Show Ground by 9 a.m., or they will not be allowed to compete.

6.—The judges will enter on their duties at 10. a.m. precisely.

7.-The Judges will withhold prizes from such exhibits as they may deem unworthy.

8.—No person, except the committee or those in charge of stock, will be permitted to remain on the ground whilst the Judges are awarding the prizes.

9.—The Exhibition will be open to the public at 12 noon and close at 6 p.m., and no stock or other exhibit shall be removed before 6 p.m. Non-subscribers to pay 1s. entrance. Sub-scribers must produce their Admission Ticket before entering Show Yard.

10.—The breeder's name shall be given for all stock if possible.

11.—Persons contravening any of the Society's Rules shall forfeit all prizes which may be awarded to them.

12.—Three guineas will be charged for each Publican's Booth, and one pound for each Refreshment Stall. Applications for same to be made to the Honorary Secretary, who will fix respective positions two days before the day of Exhibition. Persons not allowed to vend goods on the Show Ground until they have each subscribed 5s.

By order of Committee,

F. B. SHENSTONE FLINDELL,

Hon. Secretary.

Guildford, September 12, 1879.

286

By Authority: RICHARD PETHER, Government Printer, Perth.