

This shoal consists of a rocky patch, with $3\frac{1}{2}$ fathoms on it, and 6 to 7 fathoms close around. It lies with the following bearings and distances:—

Flagstaff at Turanga-nui River Entrance, N. by E. $\frac{3}{4}$ E., distant about $1\frac{1}{4}$ miles.

Tua Motu Rock, E. by S. $\frac{1}{2}$ S.

SOUTH PACIFIC OCEAN.
TONGA OR FRIENDLY ISLANDS.
TONGATABU ISLAND.

(2.) *Position of Dido Reef.*

The following information has been received from Commander Watson, H.M.S. "Miranda," relative to Dido Reef, north-east coast of Tongatabu Island:—

Dido Reef was seen from the "Miranda," marked by two lines of breakers, which extended in a N.N.W. direction, about three quarters of a mile and a quarter of a mile respectively. From the colour of the water, the least depth on the reef appeared to be about 4 fathoms. It lies with the north extreme of the Eastern Reef, Tongatabu Island, bearing S.S.W. $\frac{1}{2}$ W., distant $3\frac{1}{2}$ miles.

Position, lat. $20^{\circ} 56\frac{1}{2}'$ S., long. $174^{\circ} 55'$ W.

(3.) *Shoal between Makkahāa and Eastern Reefs.*

Also, of the existence of a shoal, lying in the fairway of the southern part of the channel, between Makkahāa and Eastern Reefs, northern side of Tongatabu Island.

This shoal, seen from the masthead of the "Miranda," appeared to be of very small extent. It lies with the following bearings and distance:—

Eastern extreme of Maneema Islet, S. 7° E.

Northern extreme of Makkahāa Islet, S. 84° W., distant 5 cables.

The channel, about one cable in breadth, between this shoal and the sunken rock on the south-west end of Eastern Reef, appeared to be clear. Between the shoal and reef fringing Makkahāa Islet, the channel is narrow.

SAMAON OR NAVIGATOR ISLANDS.
TUTUILA ISLAND.

(4.) *Shoal in Pago Pago Harbour.*

Also, of the existence of a shoal lying in the western part of Pago Pago Harbour, south side of Tutuila Island.

This shoal, of sand, about 20 yards in extent, with 15 feet on it at low water, and 5 to 9 fathoms close around, lies with the following bearings and distance:—

Point next westward of Observation Spot, N. 72° E.

West point of Fonga Tonga Bay, S. 49° E.

Northernmost large house, Pago Pago, N. 85° W., distant 3 cables.

[The bearings are magnetic. Variation. (1) $14\frac{1}{2}^{\circ}$, (2), (3) 10° , (4) 9° Easterly in 1883.]

By command of their Lordships,

Fredk. J. Evans, Hydrographer.

Hydrographic Office, Admiralty, London,
13th October, 1883.

This Notice affects the following Admiralty Charts:—

(1.) Mayor Island to Poverty Bay, No. 2527; Poverty Bay to Cape Palliser, No. 2528. Also, New Zealand Pilot, 1875, page 106.

(2.), (3.), (4.) Pacific Ocean, No. 780 (2); Tonga or Friendly Islands, No. 2421 (2); Tongatabu, No. 2363 (3); Samoan or Navigator Islands, with plan of Pago Pago Harbour, No. 1780 (4). Also, Hydrographic Notice, No. 3 of 1876, page 1.

NOTICE TO MARINERS.

(No. 313).—NORTH SEA—EIDER RIVER
ENTRANCE.

Inner Eider Light-vessel—Tidal and Pilot Signals.

THE German Government has given notice, that on 15th October, 1883, the following tidal and pilot signals will be established on board Inner Eider Light-vessel, Eider River Entrance:—

A red pendant at the foretop signifies, entrance is clear.

A double cone at the middle of the yard (crossing point of yard and mast), $6\frac{1}{2}$ feet water on the bar.

A double cone at the middle of the yard, and double cone above signify $9\frac{3}{4}$ feet water on the bar.

A double cone at the middle of the yard, and double cone below, 13 feet water on the bar.

A horizontal cylinder at the middle of the yard signifies, $16\frac{1}{4}$ feet water on the bar.

A horizontal cylinder at the middle of the yard, and double cone above signify, $19\frac{1}{2}$ feet water on the bar.

A horizontal cylinder at the middle of the yard and double cone below 23 feet water on the bar.

A horizontal cylinder at the middle of the yard, and cylinder above $26\frac{1}{4}$ feet water on the bar.

A horizontal cylinder at the starboard (from seaward) yard arm signifies $1\frac{1}{2}$ feet more water than is shown by signal.

Example.—Red pendant at the foretop; one double cone at the middle of the yard with double cone below; a horizontal cylinder at the starboard yard arm, signify entrance clear, with a depth of $14\frac{3}{4}$ feet.

With the tide rising, the signal is not altered until the water has risen $1\frac{1}{2}$ feet; but with the tide falling, the signal is altered when the water has fallen below the last signalled depth.

In heavy weather, the yard of the light-vessel has to be topped up or struck, the red pendant at the foretop then only indicates whether the bar is passable.

The pilot signals shown from the foretop of the light-vessel:—

A red flag, indicating pilots can be obtained.

A white flag no pilots on board.

will from the same date be hoisted at the mizen top.

By command of their Lordships,

Fredk. J. Evans, Hydrographer.

Hydrographic Office, Admiralty, London,
13th October, 1883.

This Notice affects the following Admiralty Chart:—Eider River to Blaavand Point, No. 1887. Also, Admiralty List of Lights in the North Sea, 1883, No. 228; and North Sea Pilot, Part IV, 1878, page 227.

NOTICE TO MARINERS.

(No. 314).—SOUTH AMERICA—EAST COAST.
RIO DE LA PLATA.—MALDONADO BAY.

(1.) *Wreck South-West of Punta del Este.*

INFORMATION has been received, that an Austrian vessel lies sunk (mast-heads showing above water) in the southern approach to Maldonado Bay, with Punta del Este (East Point) Lighthouse, bearing N.E. $\frac{1}{2}$ E., distant $2\frac{1}{2}$ miles.

MONTE VIDEO.

(2.) *Shoal Reported S. S. W. of Brava Point.*

Also, of the reported existence of a shoal, supposed to have been formed by a wreck, with about fifteen feet water on it, lying in the approach to Monte Video, with Brava Point bearing N.N.E., distant about $2\frac{1}{2}$ miles.