AFRICA—WEST COAST.—ELMINA BAY. (2.) Non-existence of Harbour Light on Fort St. George

Also, with reference to Notice to Mariners, No. 198, of 10th June, 1889, on the exhibition of a harbour light from the flagstaff on Fort St. George, Elmina Bay :-

Information has been received that there is no

harbour light at Elmina.

NOTE.—There is no established system of communication by signals on Fort St. George, Elmina Bay.

By command of their Lordships, W. J. L. Wharton, Hydrographer, Hydrographic Office, Admiralty, London, 1st October, 1889.

This Notice affects the following Admiralty Charts: - British Islands to Mediterranean Sea, No. (1): Bay of Biscay, No. 1104 (1); Cape Peñas to Pontevedra Bay, No. 1053 (1); San Ciprian Bay to Cape Finisterre, No. 1755 (1); Cape Three Points, No. 1859 (2); Elmina Bay, on Sheet of Plans, No. 1713 (2). Also, Admiralty List of Lights on the Western Coasts of Europe, &c., 1889, No. 418, pages 82, 112; Sailing Directions for West Coasts of France, Spain, and Portugal, 1885, pages 229, 231; and Africa Pilot, Part I, 1885, page 260.

NOTICE TO MARINERS. (No. 350 of the year 1889.) NORTH AMERICA—ALASKA.—STEPHENS PASSAGE.

Sunken Rock South-West of the Twins. THE United States Government has given notice, on the authority of Lieutenant H. B. Mansfield, commanding the U.S. surveying steam-vessel "Patterson," of the existence of a sunken rock lying about two miles south-west of the Twins, near the fairway of the southern entrance to Stephens Passage:

This rock, about 35 yards in extent, and not marked by kelp, has 18 feet water on it, with 20 to 30 fathoms around; it lies with the following

bearings :--

The Outer Twin Islet, N.E. & E.

North Extreme of Sunset Islet, N. by W. 1 W. Position, to be considered doubtful, lat. 57° 20½' N., long. 133° 35' W.

[The bearings are magnetic. Variation 29°

Easterly in 1889.]

By command of their Lordships, W. J. L. Wharton, Hydrographer. Hydrographic Office, Admiralty, London, 1st October, 1889.

This Notice affects the following Admiralty Chart :- Port Simpson to Cross Sound, No. 2431.

> NOTICE TO MARINERS. (No. 351 of the year 1889.) AFRICA-EAST COAST.

MOUTHS OF RIVER ZAMBESI. Information Concerning River Chinde.

THE following information concerning River Chinde (the branch of the delta of the Zambesi, which runs from Chinde Village to the river called Inhaombe on the charts) has been received from Lieutenant and Commander A. F. Balfour, Her Majesty's surveying-vessel "Stork," result of an exploration made in July, August, 1889 :-

River Chinde Entrance lies in (approximately) lat. 18° 34′ S., long. 36° 32′ E.; at the outer bar-between reefs on which the sea breaks-its breadth is about eight cables, decreasing to about two cables at Mitaone Point, on the northern I,

side of the entrance. Foot Point, on the southern side of the entrance is about two miles south-west of Mitaone Point.

The outer bar had at the time of examination a depth of seven feet at low water spring tides, the inner bar (between the outer bar and Mitaone Point) a depth of eight feet. It is high water full and change about 4h. 30m., spring tides rise 12 feet. Velocity of the ebb stream in the river about two knots (dry season).

Two beacons have been erected on Mitaone Point about one cable apart, which kept in line, bearing N. $20\frac{1}{2}^{\circ}$ W., lead into the river; they consist of poles, one surmounted by a white triangle, the other by a white disc with a black

ball in the centre.

Directions.—Approaching the river entrance, keep the western of four palms on Mitaone Point bearing N.W. by N., until the beacons come in line bearing N. 2012° W.; cross the bars and proceed with the beacons in line till about one cable distant from Mitaone Point, when the course should be altered along the northern bank of the river, till Foot Point bears S.W. by S.; a course S.W. by W. should then be steered, and anchorage taken up in about three fathoms at low water, with Foot Point bearing S.E. by E. & E., distant about eight cables.

The "Stork" proceeded up the River Chinde a distance of 18 miles to its junction with the River Zambesi (in lat. 18° 34′ S., long. 36° 15′ E., approx.) and the least depth was 12 feet at low water. Thence she proceeded five miles up the Zambesi, where it became barred by rocks. Her boats ascended 120 miles to Morambala on the

Shiré.

Note.—As the bars at the mouths of the Zambesi are subject to considerable change, the depths given are not to be depended on.

The bearings and course are

Variation 17° Westerly in 1889.]

By command of their Lordships, W. J. L. Wharton, Hydrographer. Hydrographic Office, Admiralty, London, 2nd October, 1889.

This Notice affects the following Admiralty Chart:—River Zambesi to Mozambique Harbour, Also, Africa Pilot, Part III, 1889, No. 1810. pages 214, 217.

> NOTICE TO MARINERS. (No. 352 of the year 1889.) SULU OR MINDORO SEA.

PALAWAN ISLAND-SOUTH-EAST COAST. (1.) Amended Position and Particulars of Shoal Eastward of Ursula Islet.

WITH reference to Notice to Mariners, No. 242, of 9th July, 1889, on the existence of a shoal (on which the British steam-vessel "Wakefield" struck on 4th May, 1889), with $3\frac{1}{2}$ fathoms water on it, lying about 26 miles eastward of Ursula Islet, south-east coast of Palawan Island:-

The following additional particulars have been received through the Board of Trade:-

The shoal (Wakefield Shoal), of coral and sand, appeared to extend from 1 to $1\frac{1}{2}$ miles in an E.N.E. and W.S.W. direction, with a breadth of about 2 cables; the shoal spot $(3\frac{1}{2}$ fathoms) is on its south-west side, and close around the shoal the lead gave no bottom at 90 fathoms; it lies with the following bearings:— Church Point, N. 70° W.

Mantalingalian Hill, N. 28° W. Position, lat. 8° 21' N., long. 117° 55½' E., or about 2 miles westward of that previously given. Note. The means by which the position of