

from Commander A. M. Field, Her Majesty's surveying-vessel "Egeria," concerning recent examinations made for the undermentioned shoals reported as existing in Sulu or Mindoro Sea:—

(1.) *Particulars of Memnon Shoal.*

Memnon Shoal, reported as having been passed over by the British steamship "Memnon" in 1889, lying nearly in the centre of the channel between Kinapusan Island and St. Michael Islands, is, within the 100-fathoms line, about three miles long in an east and west direction, with a breadth of $1\frac{1}{4}$ miles, and rises from depths of 190 to 200 fathoms. The least water found on it was eight fathoms, the bottom throughout being live coral with patches of sand. The shoalest parts of the bank under 10 fathoms are on the southern side, and the water deepens somewhat abruptly, whilst to the north-eastward the bank slopes more gradually.

Heavy tide rips marked the north-eastern edge of the shoal, and rendered it apparent, otherwise it did not show distinctly. While the "Egeria" was at anchor on the bank, during spring tides, the current set between S.S.W. and N.N.W., with a maximum rate of 1.2 knots per hour.

NOTE.—Although the examination was not absolutely exhaustive, it is considered probable that no danger exists in the locality.

Position of centre of shoal, lat. $7^{\circ} 28' N.$, long. $118^{\circ} 25' E.$

(2.) *Unsuccessful Search for Rosalia Reef.*

Rosalia Reef, on which the Spanish schooner "Rosalia" was reported to have been lost in 1867, and stated to be situated in $8^{\circ} 53' N.$, long. $119^{\circ} 6' E.$, was unsuccessfully searched for; the area sounded over extended from lat. $8^{\circ} 49' N.$ to $9^{\circ} 0' N.$, and from long. $118^{\circ} 54' E.$ to $119^{\circ} 11' E.$, ten positive soundings varying from 1,115 to 1,154 fathoms were obtained within those limits, the lines of soundings being run $1\frac{1}{2}$ to two miles apart. The search was made under favourable conditions of weather, and there was sufficient swell to make a danger apparent, but there was no indication of shoal water in the area examined. The current set in a W.N.W. direction about half a knot per hour.

NOTE.—Consequent on this search Rosalia Reef has been expunged from the Admiralty Charts, but as this sea has been very imperfectly examined, the danger on which the "Rosalia" was lost may yet be found elsewhere.

(3.) *Particulars of Pasig Shoal.*

Pasig Shoal extends about one mile in a N.N.W. and S.S.E. direction, with a breadth of about five cables, and lies in lat. $9^{\circ} 54' N.$, long. $119^{\circ} 28\frac{1}{2}' E.$ It appeared to be the south-easternmost of a chain of shoal patches, and is probably connected by shoal water with Charybdis Bank and Constancia Shoal. Soundings of six and seven fathoms were obtained on the south-east side of the shoal, but a short distance to the north-west, it appeared very shoal, with depths of two or three fathoms, or less in places.

There is another dangerous patch, with probably about the same depth on it, lying $1\frac{1}{2}$ miles N.N.W. $\frac{1}{2}$ W. from Pasig Shoal, and there was appearance of a third patch about the same distance N.W. of the second.

With the sun in a suitable position, these patches, apparently composed of sand and coral, show distinctly. They stand on a bank, the 100-fathoms edge of which passes about $2\frac{1}{2}$ miles south-east of Pasig Shoal, but appeared to extend a considerable distance in a north-westerly direction. The soundings obtained tend to show that the bank drops steeply to 180 and 300 fathoms

on the west and south-west sides, and equally so on the east side, but to the southward its tail was crossed in 46 fathoms at the distance of $1\frac{1}{2}$ miles from the shoal water, with regular increasing depths, so that it is considered improbable that any shoal exists in that direction.

[Variation 2° Easterly in 1891.]

This Notice affects the following Admiralty Charts:—China Sea, Nos. 1263, 2660*b*; Palawan Island, No. 967. Also, Sailing Directions for the Eastern Archipelago, Part I, 1890, pages 91, 89; and China Sea Directory, Vol. II, 1899, page 293.

No. 233.—CHANNEL AND WESTERN STATION.

SCOTLAND—WEST COAST.—FIRTH OF CLYDE.

Shoals in Lamash Harbour and Approaches.

INFORMATION has been received from Staff Commander W. E. Archdeacon, R.N., in charge of West Coast of England Survey, that a recent survey of Lamash Harbour shows the existence of the undermentioned shoals:—

1. Shoaler ground than heretofore charted extends southward of Holy Island, at the southern entrance to Lamash Harbour; a depth of six fathoms, over gravel, lies with Holy Island Lighthouse bearing N. by W., distant $4\frac{1}{2}$ cables; a depth of $4\frac{1}{2}$ fathoms, over coral, lies with that lighthouse N.N.W., distant $2\frac{3}{4}$ cables; and a depth of $4\frac{1}{2}$ fathoms lies with that lighthouse W. by N., distant $3\frac{1}{2}$ cables.

2. A rocky shoal with 9 fathoms water on it lies with the north extreme of Holy Island bearing N.W. $\frac{3}{4}$ W., distant $5\frac{1}{2}$ cables.

3. Shoaler ground than heretofore charted extends southward of Clackland Point, at the northern entrance to Lamash Harbour; a depth of $4\frac{1}{2}$ fathoms lies with that point bearing N. by E. $\frac{1}{4}$ E., distant 4 cables; three-quarters of a cable N.W. by N. from the $4\frac{1}{2}$ fathoms, there is a depth of 3 fathoms.

4. A depth of $3\frac{1}{2}$ fathoms lies on the northern side of Lamash Harbour, with the New Pier Head Light bearing W. $\frac{3}{4}$ S., distant $7\frac{1}{2}$ cables.

5. A rocky shoal with $5\frac{1}{2}$ fathoms water on it lies in the fairway of Lamash Harbour, with the New pier head light bearing N.W. by W., distant $7\frac{1}{2}$ cables.

The depths given are at low water ordinary spring tides.

[Variation 21° Westerly in 1891.]

This Notice affects the following Admiralty Charts:—Scotland, West Coast, No. 2635; Mull of Cantyre to Ardnamurchan, No. 2515; Firth of Clyde, with plan of Lamash Harbour, No. 2189. Also, Sailing Directions for the West Coast of Scotland, Part II, 1886, pages 281, 282; and Hydrographic Notice, No. 4 of 1889, relating to Sailing Directions for the West Coast of Scotland, page 5.

No. 234.—ALL STATIONS.

ENGLAND—SOUTH COAST.

Plymouth Sound.—Temporary Submarine Mine Fields.

NOTICE is given, that practice with submarine mines will take place between 1st June and 15th August, 1891, in Plymouth Sound, within the undermentioned areas:—

Practice with buoyant mines will take place between Fort Bovisand and the east end of the breakwater; the north-western limit of this mine field will lie with Bovisand Pier Head bearing E. $\frac{1}{4}$ S., distant about $1\frac{1}{2}$ cables; the south-western limit with Bovisand Pier Head N.E. by E., distant about 2 cables; from these limits the