

This Notice affects the following Admiralty Charts:—Bay of Fundy to Block Island, No. 2492; Penobscot Bays, No. 620. Also, Admiralty List of Lights on the Eastern Coasts of North America, 1890, No. 524; and Sailing Directions for the Principal Ports of the United States, 1882, page 21.

No. 37.—NORTH AMERICA AND WEST INDIES STATION.

UNITED STATES—MASSACHUSETTS.
NEWBURYPORT HARBOUR.

Merrimack River Entrance—Leading Lights.

THE United States Government has given notice, that on 6th January, 1891, two leading lights would be exhibited from posts recently erected on Salisbury Beach to indicate the present channel for entering Merrimack River, approach to Newburyport Harbour:—

The front light on Salisbury Beach is a fixed red light, elevated 22 feet above high water; it is situated with Newburyport Harbour Lighthouse bearing S. $\frac{1}{2}$ W., distant three-eighths of a mile, and Black Rock Beacon W. by N.

Approximate position, lat. 42° 49' 15" N., long. 70° 49' 10" W.

The rear light on Salisbury Beach is a fixed white light, elevated 32 feet above high water; it bears approximately N.W. by W. from the front light, distant 142 yards.

[Variation 13° Westerly in 1891.]

This Notice affects the following Admiralty Charts:—Bay of Fundy to Block Island, No. 2492; Fletcher's Neck to Cape Cod, No. 2482. Also, Admiralty List of Lights on the Eastern Coasts of North America, 1890, page 72; and Sailing Directions for the Principal Ports of the United States, 1882, page 28.

No. 38.

NORWAY—WEST COAST.

Sunken Rock and Shoal Ground South-westward and Westward of Melsten Island.

THE Norwegian Government has given notice, dated December, 1890, of the existence of the undermentioned sunken rock and shoal ground lying in a south-westerly and westerly direction respectively from Melsten (Melstenen) Island:—

1. A pinnacle rock (Lilletaren), with 29 feet water on it, lies with the south extreme of Melsten Island bearing N.E. by N., distant about seven cables.

Approximate position, lat. 65° 10 $\frac{1}{4}$ ' N., long. 11° 50 $\frac{1}{2}$ ' E.

2. Shoal rocky ground (Stenstareno), the shoalest pinnacle of which, with three feet water on it, lies with the south extreme of Melsten Island bearing S.E. by E. $\frac{1}{2}$ E., distant about 1 $\frac{1}{2}$ miles; the shoal ground extends from this pinnacle six cables north-eastward, and four cables south-westward, southward, and eastward.

Approximate position of shoalest pinnacle, lat. 65° 11 $\frac{1}{4}$ ' N., long. 11° 48 $\frac{1}{2}$ ' E.

[Variation 12° Westerly in 1891.]

This Notice affects the following Admiralty Chart:—Lekö to Dönnäsö, No. 2309. Also, Norway Pilot, Part II, 1880, page 285.

No. 39.—MEDITERRANEAN STATION.

MEDITERRANEAN.—ITALY—WEST COAST.

Leghorn—Dredging Operations.

WITH reference to Notice to Mariners, No. 560 of 1890, on dredging operations in the northern entrance to the Port of Leghorn (Livorno), between the northern extremity of the Curved Mole and the Northern Inner Mole Head:—

The Italian Government has given further notice, dated 29th December, 1890, that the operations above referred to are completed. Also that dredging has been commenced in the inner harbour in order to deepen the water in places to 26 feet. Mariners using the inner harbour should be careful to avoid the works in progress.

NOTE.—Between the northern extremity of the curved mole and the northern inner mole head, it was found impossible to deepen the water to 26 feet throughout, on account of the hard nature of the bottom; this depth is only to be found for the distance of about half a cable from the northern extremity of the Curved Mole.

This Notice temporarily affects the following Admiralty Plan:—Leghorn Roadstead, with Plan of Port Leghorn, No. 2554. Also, Mediterranean Pilot, Vol. II, 1885, pages 109, 113; and Hydrographic Notice, No. 1 of 1889, relating to Mediterranean Pilot, Vol. II, page 4.

No. 40.—CHINA, AUSTRALIA, AND PACIFIC STATIONS.

NORTH PACIFIC OCEAN.

Particulars of Parece Vela or Douglass Reef.

THE following information has been received from Captain E. G. Hulton, Her Majesty's ship "Amphion," concerning Parece Vela or Douglass Reef, the result of examination of the locality made on 3rd December, 1890:—

Parece Vela or Douglass Reef, composed of coral with three rocky heads showing above water, extends about 2 $\frac{1}{4}$ miles in an east and west direction, with a breadth of about four cables; the western rocky head is about ten feet high, the middle head (mushroom shaped) about eight feet, and the eastern head (a pinnacle, and probably often covered) about two feet; boat entrances to a lagoon in the centre of the reef apparently exist on the north-eastern and south-western sides.

Approximate position, lat. 20° 27' 50" N., long. 136° 13' 15" E., or about seven miles eastward of the position hitherto assigned it.

NOTE.—The sea appeared to break at the distance of about one mile in a north-west direction from the west extreme of the reef, but the state of the weather prevented examination of the spot.

This Notice affects the following Admiralty Chart:—Pacific Ocean, North-west Sheet, No. 781. Also, China Sea Directory, Vol. IV, 1884, page 204.

No. 41.—CHANNEL AND WESTERN, AND ALL FOREIGN STATIONS.

WEST INDIES.—TRINIDAD—EAST COAST.

Amended Particulars of Emerald Shoal.

WITH reference to Notice to Mariners, No. 109 of 1890, on the existence of Emerald Shoal, with a depth of 7 fathoms, lying about 17 miles E. by S. from Galera Point, the north-east extreme of Trinidad:—

The following amended particulars of the shoal have been received from Captain J. H. Rainier, Her Majesty's ship "Tourmaline," the result of further examination of the locality made in July, 1890:—

Emerald Shoal, composed of live coral, sand, and shells, extends within the 10-fathoms line about two miles in a north-east and south-west direction, with a breadth of about 1 $\frac{1}{2}$ miles, the depths around generally increasing to 12 and 20 fathoms, but there are two patches of 7 and 10 fathoms respectively lying about one mile southward of its south extreme; the shoalest spot found with a depth of 6 fathoms lies on its north-east edge.