NOTICES TO MARINERS.

(Nos. 479 to 485 of the year 1891.)

[The bearings are magnetic, and those concerning the visibility of lights are given from seaward.]

No. 479.—CHANNEL AND WESTERN STATION.

England-West Coast.-Bristol Channel. Alterations in Buoyage, &c.

THE Trinity House, London, has given notice, dated 25th September, 1891, that the following alterations in the buoyage, &c., of Bristol Channel bave recently been made:-

(1.) A new conical buoy, painted red, with staff and globe, and named "North Elbow," has been placed in 24 feet water to mark the North Elbow of English Grounds Shoal, with-

Clevedon Pier Head, S.E. by E. 3 E., E'ly,

distant 34 miles.

Swallow Point, S.S.W. & W., W'ly.

(2.) West Cardiff Buoy has been moved three-quarters of a cable S.W. 3 W. from its former position, and now lies in 27 feet water, with—

Middle Cardiff Grounds Buoy, N.E. & N., N'ly,

distant 1 1 miles.

Monkstone Beacon, E. & S.

(3.) New Patch Buoy has been altered in shape to spherical, painted black and white in horizontal stripes, with staff and triangle. It has been moved three cables E. 3 N. from its former position, and now lies in 29 feet water, with—

Monkstone Beacon, N. by E. ½ E. Flatholm Lighthouse, W. by S. ¾ S., distant

(4.) A new can buoy, painted red and white in vertical stripes, and named "South Scarweather, has been placed to mark the south extreme of West Scarweather Shoal, in 57 feet water, with-

Scarweather Light-vessel, W. ½ N., N'ly,

distant 2 p miles.

West Scarweather Buoy, N.W. 3 W., distant

5.) Inner Green Grounds Buoy, Swansea Bay, has been moved three cables S.W. 1 S. from its former position to cover the Outer Knuckle of the shoal, and now lies in 22 feet water, with-

Kelvey Old Mill, N.N.E. ½ E., E'ly. Mumbles Lighthouse, West, S'ly, distant 170

(6.) Flatholm Light has been altered as follows:-The sector of white light shown in the direction of Ranie and West Cardiff Buoys is now visible from the bearing of S. by E. 3 E. to S. 2 E.

(7.) West Middle Ground Buoy will be withdrawn when English and Welsh Grounds Lightvessel is moved to her new position (see Notice to

Mariners, No. 407 of 1891).

(8.) St. Donats Beacon near Nash Point:-The cliff on which this beacon stood (in approximately lat. 51° 24′ N., long. 3° 32′ W.) having fallen away, the beacon has disappeared, and will not be replaced.

The depths given are at low water spring tides. [Variation 19° Westerly in 1891.]

This Notice affects the following Admiralty Charts:—Bristol Channel, No. 1179; Nash Point to New Passage, No. 2682 (1, 2, 3, 6); Cardiff and Barry Roads, No. 1182 (2, 3, 6); Kenfig River to Nash Point, No. 1183 (4); Swansea Bay, No. 1161 (5). Also, Admiralty List of Lights in the British Islands, 1891, No. 665; and Sailing Directions for the West Coast of England, 1891, pages 198, 178, 175, 150, 149, 166.

No. 480.—EAST INDIES, CHINA AUSTRALIA, AND PACIFIC STATIONS.

China Sea.—Carimata Strait.

Reef Reported South-East of Cirencester Shoal. INFORMATION has been received, through the Board of Trade, that Mr. W. Townsend, commanding the steam-vessel "Galley of Lorne," reports having passed, at the distance of about 2 cables, a dangerous reef lying about 10 miles south-eastward of Cirencester Shoal, near the fairway of Carimata Strait:

This reef (Townsend Reef), on which the sea broke, appeared to have little water over it, and to extend (in the shape of a crescent) about one cable in a south-east and north-west direction. The weather at the time was too rough to allow a boat being lowered for further examination.

Position as given (to be considered doubtful),

lat. 3° 0′ 30″ S., long. 109° 5′ E.

This Notice affects the following Admiralty Charts:—Indian Ocean, No. 748b; China Sea, No. 1263; Eastern Archipelago, No. 941a; Carimata Strait, No. 2160. Also, China Sea Directory, Vol. I, 1886, page 378.

No. 481.—NORTH SEA, AND BALTIC STATIONS.

NORTH SEA-NETHERLANDS.

River Ems—Additional Lights, and Alterations in Lighting.

THE Netherlands Government has given notice, that on 1st October, 1891, the following additional lights would be exhibited, and alterations in lighting made, in River Ems :-

(1.) An auxiliary light, shown from the principal lighthouse at Borkum, is a fixed white and red light, elevated 151 feet above the water, and should be visible in clear weather from a distance of seven miles.

The illuminating apparatus is dioptric, or by lenses, of the fifth order.

The light support, placed against the circular dark brown lighthouse, is 141 feet high.

Approximate position, lat. 53° 35' 20" N., long. 6° 39' 50" E.

(2.) Borkum Leading Light, situated near the lifeboat shed, is a fixed and flashing white electric light, elevated 105 feet above the water, and should be visible in clear weather from a distance of 16 miles.

The illuminating apparatus is dioptric, or by

lenses, of the second order.

The lighthouse, 91 feet high, is a sixteen-sided iron tower, painted white and red in bands, with white lantern and green dome.

(3.) A new leading light near Campen is a fixed and flashing white electric light, elevated 203 feet above the water, and should be visible in clear weather from a distance of 21 miles.

The illuminating apparatus is dioptric, or by

lenses, of the first order.

The light support, 214 feet high, is an iron cylinder painted white, with red lantern, supported by a red iron tripod.

Appreximate position, latitude 53° 24′ 25″ N.,

longitude 7° 1' È.

(4.) A new leading light near Watum is a fixed and flashing white and red light, elevated 39 feet above the water, and should be visible in clear weather from a distance of 11 miles.

The illuminating apparatus is dioptric, or by lenses, of the fourth order.

The light is shown from a stone dwelling.

Approximate position, latitude 53° 22′ 30" N., longitude 6° 53′ 35″ E.

The above-mentioned lights, and other lights, in River Ems, at and below Delfzyl, are so