bridge in accordance with plans lodged in this office.

A copy of the notice is subjoined.

Geo. Henry Richards, Admiral and Acting Conservator.

"Notice is hereby given that after the 19th day of July next the Joint Committee of the London and North-Western and Great Western Railways will proceed to remove the existing timber structure, which consists of five openings, each seventeen feet three inches in width, and which carries the Hooton and Helsby Branch Railway over the River Gowy, in the county of Cheshire, and erect in substitution thereof a new bridge of one span, opening sixty-seven feet in width, consisting of steel girders supported by cast-iron cylinders, the approaches being formed of earthwork faced with rock rubble.'

NOTICES TO MARINERS.

(Nos. 228 to 230 of the year 1891.)

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

No. 228.—CHANNEL AND WESTERN STATION.

FRANCE-WEST COAST.

Gironde River-Intended Alterations in Lights and Buoys.

THE French Government has given notice, dated 1st May, 1891, that the following alterations will soon be made in the lights between Royan and Pauillac, Gironde River;

1. Tallais, By, and Mapon Light-vessels will be withdrawn; and thirteen light-buoys will be

placed approximately as follows:-

Six light-buoys (painted red), from each of which will be exhibited a fixed white light, will be placed on the Medoc (western) side of the river channel. The outer of these buoys will be moored near the position of the present black buoy marking Les Marguerites; the second with Pointe de Grave Lighthouse bearing N. 29° W.; the third nearly abreast Richard Lighthouse; and the others in succession at nearly equal distances. The first three buoys (entering the river) will replace the three red buoys now near the positions above given, and which will be withdrawn.

Six light-buoys (painted black), from each of which will be exhibited a fixed red light, will be placed on the eastern side of the channel, each of them being moored almost in the centre of the space between two buoys with white lights. The outer of these buoys will be moored near Banc de St. George; and the others in succession up channel, at nearly equal distances. The first four buoys (entering the river) will replace the four black buoys now near their intended positions, and

which will be withdrawn.

The upper end of the centre of the channel marked by the light-buoys will be indicated by a buoy (painted black), from which will be exhibited a quick flashing light; it will replace a black buoy now near its intended position, and which will be withdrawn.

- 2. The lights of Tallais, By, and Mapon Lightvessels will continue to be exhibited for a certain time after the light-buoys have been placed in position; they will then be discontinued, and the vessels withdrawn.
- 3. The intensity of Pointe de Grave Light will be considerably increased through a sector of 2°, indicating the direction of the up stream channel; in this sector the light will show fixed.

4. The intensity of Ile de Patiras Light will be considerably increased through a sector of 2°, indicating the direction of the down stream channel; this light will only be visible through this sector, and will show an occulting white light every four seconds.

5. Richard Light, now fixed red, will be

altered to fixed white.

Further notices will give the exact positions of the new buoys, and the dates of the successive alterations.

Variation 16° Westerly in 1891.]

This Notice affects the following Admiralty Chart:—Pointe d'Arcachon to Pointe de la Coubre, No. 2664. Also, Admiralty List of Lights on the Western Coasts of Europe, 1891, Nos. 331-335, 329; and Sailing Directions for the West Coasts of France, Spain, and Portugal, 1885, pages 82, 83, 85-87.

No. 229.—NORTH AMERICA AND WEST INDIES STATION.

West Indies.—Venezuela.

Puerto Cabello—Electric Lights on Custom House Discontinued.

WITH reference to Notice to Mariners, No. 90 of 1891, on the exhibition of two electric lights on the roof of the Custom House at Puerto Cabello :-

Information has been received that the two electric lights on the Custom House at Puerto Cabello have been discontinued.

Approximate position, lat. 10° 30' N., long.

This Notice affects Admiralty Plan of Puerto Cabello, on Sheet, No. 513. Also, Admiralty List of Lights on the Eastern Coasts of North America, &c., 1891, No. 1148; and West India Pilot, Vol. I, 1883, page 144.

No. 230.—CHINA, AUSTRALIA, AND PACIFIC STATIONS. Australia.—East Coast.

Triple-Flashing Light on Smoky Cape.

WITH reference to Notice to Mariners, No. 5 of 1890, on the intended exhibition of a light from a lighthouse then in course of erection on Smoky Cape :-

The Government of New South Wales has given further notice, that on 15th April, 1891,

the light would be exhibited :-

Smoky Cape Light is a triple-flashing white light, showing three flashes every thirty seconds in the following order:-Flash of two seconds duration, eclipse two seconds, flash two seconds, eclipse two seconds, flash two seconds, followed by an eclipse of twenty seconds. It is elevated 420 feet above the sea, and should be visible in clear weather from a distance of about 28 miles.

The illuminating apparatus is dioptric, or by

lenses, of the first order.

Approximate position, lat. 30° 55′ 40" S., long.

153° 6′ E.

This Notice affects the following Admiralty Charts:-Pacific, South-west Sheet, No. 780; Melbourne to Cape Horn, No. 788; Australia, Southern portion, No. 27596; Tacking Point to Coffs Islands, No. 1025. Also, Admiralty List of Lights in South Africa, &c., 1891, No. 718*; and Australia Directory, Vol. II, 1889, page 99.

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

9th May to 14th May, 1891.