existence of the two undermentioned shoal heads, north-west of Chapel Island, in the southern approach to Amoy Harbour :-

(a) A shoal, with a depth of  $2\frac{3}{4}$  fathoms over it at low-water springs, situated with Chapel Island light bearing S. 57° E., distant 51 miles, and Lamtia Island summit S. 55° W.

The 3-fathom patch marked on the Chart "position approximate" about 1 mile S. 6° E. from the above shoal has been expunged from the Chart, as it is probable that these dangers are identical.

(b) A shoal, with a depth of  $4\frac{1}{2}$  fathoms over it at low-water springs, situated with Chapel Island light bearing S. 36° E., distant  $3\frac{1}{10}$  miles, and Lamtia Island summit S. 65° W.

There may be less water on this shoal.

A considerable area between Chapel Island and the coast was examined without any other danger being found, but the depths are irregular.

Approximate position, Chapel Island light, lat. 24° 10' N., long. 118° 14' E.

Variation nil in 1903.]

This Notice affects the following Admiralty Charts :- Formosa Island and Strait, No. 1968; The Brothers and Ockseu Islands, No. 1760. Also, China Sea Directory, Vol. III, 1894, page 170; and Supplement, 1898, page 15.

No. 96.-THE KATTEGAT, SWEDEN-GÖTEBORG APPRÓAUH. Buskär Light-Character Altered.

With reference to Notice to Mariners No. 289 of 1902 :-

The Swedish Government has given further notice that, on 1st January, 1903, the character of Buskär Light, in the approach to Göteborg, was altered from red fixed to a group flashing light every ten seconds, thus :- flash, one second ; eclipse, one second; flash, one second; eclipse, one second ; flash, one second ; eclipse, five seconds; it shows red from the bearing of S. 25° W., through west and north, to S. 83° E., and green in other directions.

Approximate position, lat. 57° 38' N., long. 11° 41' E.

Variation 10° Westerly in 1903.]

This Notice affects the following Admiralty Charts :-Baltic, No. 2842*a*; The Skagerrak, No. 2289; The Kattegat, No. 2114; Nidingen to Hono, No. 196. Also, List of Lights, Part III, 1902, No. 73; Baltic Pilot, Part I, 1895, page 58; and Supplement, 1900, page 6.

## No. 97.-CANADA-ST. LAWRENCE RIVER ABOVE QUEBEC.

## Isle a L'Aigle-Beacons Replaced by Leading Lights.

The Government of the Dominion of Canada has given notice, dated 14th November, 1902, that, on the opening of navigation in the spring of 1903, the beacons on Isle a L'Aigle, River St. Lawrence, will be replaced by white fixed leading catoptric lights, visible from a distance

of 2 miles. The front light will be elevated 30 feet above Summer River level, and shown from a pentagonal wooden lantern, standing on a whitewashed concrete base, the whole structure being 30 feet high, erected on the north-western side of the island, with the south-eastern light (57 feet) on Isle St. Therese bearing N. 21° W., distant 3 cables, and Isle Aux Vaches Light S. 59° W.

Approximate position, lat.  $45^{\circ}$   $40\frac{1}{9}'$  N., long. 78° 271' W.

The rear light will be elevated 52 feet above Summer River level, and shown from a square white wooden tower, 52 feet high, standing on a white concrete base, erected at a distance of 21 cables S. 17° W. from the front light.

These two lights in line S. 17° W. lead through the improved channel in the Varennes traverse.

Variation 14° Westerly in 1903.]

This Notice affects the following Admiralty Chart:-Repentigny to Long Point, No. 2787. Also, List of Lights, Part VIII, 1902, page 62; and St. Lawrence Pilot, Vol. I, 1894, page 343.

## No. 98.—FRANCE—NORTH COAST. Sandettié Bank-Light-vessel Experimentally Placed.

With reference to Notice to Mariners No. 493 of 1902:

The French Government has given further notice, dated 8th January, 1903, that a lightvessel, exhibiting a white flashing light every five seconds, at an elevation of 39 feet above the sea, and visible from a distance of 11 miles, has been placed experimentally in a depth of 12 fathoms to the westward of Sandettie Bank. This light-vessel, which has a military mast in the centre, is painted red, and marked "Sandettié " on each side.

The light, having a light-power of 35,000 candles, is dioptric and exhibited from the military top.

Approximate position, lat. 51° 131' N., long. 1° 53<sup>2</sup>/<sub>4</sub>' E.

Also, that a fog siren, during thick or foggy weather, will give a group of three blasts, and one blast alternately in every three minutes, thus :- blast, three and a half seconds; silent interval, three seconds; blast, three and a half seconds; silent interval, three seconds; blast, three and a half seconds; silent interval, eighty seconds; blast, three and a half seconds; silent interval, eighty seconds.

Further notice will be given when the lightvessel is permanently established.

This Notice affects the following Admiralty Uharts :--- North Sea, No. 2182a; English Channel, No. 2675c; Dover and Calais, &c., No. 1406; Calais to River Schelde, No. 1872. Also, List of Lights, 1902, Part II, page 8, Part IV, page 4; Channel Pilot, Part II, page 587; and North Sea Pilot, Part IV, 1901, page 45.

## No. 99.-THE PHILIPPINES-MINDORO ISLAND, WEST COAST.

Ilin Island—Shoal to the Northward of.

The United States Government has given notice, dated 10th January, 1903, that the captain of the steamship "Brutus" reports the existence of a reef of small extent, with a depth of 11 feet over it, in the approach to Mangarin. From it Manadi Island bears N. 59° W., distant 24 miles, From it and the rock off the north-western point of Ilin Island S. 65° W.

Approximate position, lat. 12°  $18\frac{1}{2}$ ' N., long. 121°  $3\frac{1}{2}$ ' E. [Variation 1° Easterly in 1903.]

This Notice affects the following Admiralty Chart :--Semirara, Ilin, &c., No. 971. Also, Eastern Archipelago, Part I, 1902, page 75.

By command of their Lordships,

W. J. L. Wharton, Hydrographer.

Hydrographic Office, Admiralty, London, 27th January, 1903.