

thus:—blast, three seconds; silent interval, twenty-seven seconds.

Approximate position, lat.  $49^{\circ} 29\frac{1}{2}'$  N., long.  $0^{\circ} 5\frac{1}{2}'$  E.

2. A white fixed light, elevated 49 feet above high water, and visible in clear weather from a distance of 11 miles, will be established in an iron trellis-work turret, painted white, erected on the head of the new south breakwater, the light power being 590 candles. During thick or foggy weather a bell will be struck by machinery twelve times every minute.

3. The centre of the north-western entrance to the newly-dredged channel will be marked by three red fixed leading dioptric lights. The front light will be elevated 39 feet above high water, visible from a distance of 11 miles, and shown from a metal support, painted white, with a wooden topmark erected on the new northern breakwater about  $3\frac{1}{2}$  cables from its head. The middle light will be elevated about 72 feet above high water, visible from a distance of 14 miles, and shown from a similar support, erected at a distance of about  $1\frac{3}{8}$  cables S.  $75^{\circ}$  E. from the front light, the light power of these two lights being 3,500 candles.

The rear light (electric) will be elevated 131 feet above high water, visible from a distance of 15 miles, and shown from the north cupola of the Exchange, situated a distance of about  $7\frac{1}{2}$  cables S.  $75^{\circ}$  E. from the front light, the light power being 5,000 candles.

4. The white fixed light at present exhibited on the old North Mole Head will be replaced by a provisional green fixed light, visible from a distance of 7 miles; this light in line with the red flashing light on the new north breakwater head will mark the northern edge of the second section of the newly-dredged channel, and in line with the fixed white light on the new south breakwater head, will mark the southern edge of the same channel. The light power of this light over the channel will be 130 candles:

5. The newly-dredged channel in the north-west passage will also be marked by five light-buoys moored about 30 yards from the limits, those on the northern side being painted black and marked A 1, A 3, A 5, each exhibiting a red fixed light, those on the southern side being a buoy painted in black and white horizontal bands marked A 2 and exhibiting a white occulting light every six seconds, thus:—light, four seconds; eclipse, two seconds; and a buoy painted red, marked A 4, exhibiting a white fixed light.

When the state of the works admits of it, the provisional red fixed light on Boulevard Maritime near St. Adresse, the lights on the heads of the north and south piers, and the green light in the Avant Port will be discontinued; the light-buoys Nos. 1, 3, 5, 7, and 11, and the buoys marking banc de l'Éclat will also be withdrawn.

[Variation  $15^{\circ}$  Westerly in 1905.]

Further notice will be given when received.

This Notice affects the following Admiralty Charts:—English Channel, No. 2675c; Cape Levi to Fécamp, No. 2618; Havre to River Durdent, No. 2146; Le Havre, No. 2990. Also, List of Lights, Part IV, 1905, page 13, Nos. 51, 52, 53, 54; Channel Pilot, Part II, 1897, pages 489, 493, 494; and Supplement, 1900, pages 53, 54, 55.

## No. 679.—BALTIC—GULFS OF FINLAND AND BOTHNIA.

### *Warning Rockets from Light-Vessels—Amended Description of.*

With reference to Notice to Mariners No. 462 of 1903:—

Information, dated 1st July, 1905, has been received from the Russian Government that when, from any of the light-vessels under control of the Directorate of Lights and Pilotage in Finland, in the Finland Fiords of the Gulfs of Finland or Bothnia, a vessel is observed to be standing into danger, several rockets, each of which gives two reports, one on being fired, the other in the air, will be fired as a warning. When star rockets are used these characteristics will be maintained.

This Notice affects the Admiralty List of Lights, Part III, 1905, Nos. 776, 808, 811, 949, 969, 979, 980, 993, 998. Also, Baltic Pilot, Part II, 1904, pages 341, 329, 323, 429, 439, 399, 451, 455.

## No. 680.—SWEDEN—EAST COAST.

### *Arholma—Leading Lights Established.*

The Swedish Government has given notice that, on 6th July, 1905, two unwatched leading lights would be established on Arholma.

a. The front light would be a red occulting light every four seconds, elevated 31 feet above the sea. The light, which is of the 4th order, would be shown from an octagonal iron box standing on a concrete beacon, the whole structure being white.

Approximate position, lat.  $59^{\circ} 50' 45''$  N., long.  $19^{\circ} 6' 25$  E.

b. The rear light would be white fixed, of the 6th order, elevated 52 feet above the sea, and shown from an iron box standing on a concrete beacon, erected at a distance of 3 cables S.  $10^{\circ}$  E. from the front light.

These lights in line S.  $10^{\circ}$  E. lead through the channel from Simpnasklubb, until within the white sector of Sved-udden light. They will be exhibited annually from 6th July to 6th June.

[Variation  $6^{\circ}$  Westerly in 1905.]

This Notice affects the following Admiralty Chart:—Stockholm to Skärgård, No. 3498. Also, List of Lights, Part III, 1905, page 195; and Baltic Pilot, Part II, 1904, page 158.

## No. 681.—SOUTH AUSTRALIA.

### *Port Adelaide River—Leading Beacon Lights.*

The Government of the State of South Australia has given notice that, on and after 1st June, 1905, leading beacon lights would be established at the entrance to Port Adelaide