eclipsed 4 seconds—visible 4 miles, has been established, in about 7 fathoms of water, to mark the wreck of the steamer "Daini Sakihana Maru," sunk in the eastern approach to Shimonoseki Strait, on the bearings— He Saki Lighthouse ...

220° He Saki Lighthouse ... Kanabuse beacon light ... 270° .. 313° Kanju Shima, southern extremity ...

Honshu.—Gulf of Tokyo.—Funabashi Radio Station.
Time-signal.

The Japanese Government has given notice that radio time signals are sent out from Funabashi Radio Station daily time-signals are sent out from Funabashi Radio Station daily except Sunday at 9 h. 00 m. 00 s., 9 h. 01 m. 00 s., 9 h. 03 m. 00 s., and 9 h. 04 m. 00 s. p.m., standard mean time (135th meridian) corresponding to 0 h. 00 m. 00 s., 0 h. 01 m. 00 s., 0 h. 02 m. 00 s., 0 h. 03 m. 00 s., and 0 h. 04 m. 00 s. Greenwich mean time, respectively.

Each time impulse is preceded by a preparatory signal. The preparatory signal preceding the first time impulse consists of a series of dashes beginning at 8 h. 59 m. 00 s. and continuing until 8 h. 59 m. 55 s. p.m. (135th meridian time).

time).

The preparatory signal preceding the second time impulse consists of a series of dashes, each followed by a dot, thus (—.), beginning at 9 h. 00 m. 30 s. and continuing until 9 h. 00 m. 55 s. p.m. (135th meridian time).

The preparatory signal preceding the third time impulse consists of a series of dashes, each followed by two dots, thus (—..), beginning at 9 h. 01 m. 30 s. and continuing until 9 h. 01 m. 55 s. p.m. (135th meridian time).

The preparatory signal preceding the fourth time impulse

until 9 h. 01 m. 55 s. p.m. (135th meridian time).

The preparatory signal preceding the fourth time impulse consists of a series of dashes, each followed by three dots, thus (—...), beginning at 9 h. 02 m. 30 s. and continuing until 9 h. 02 m. 55 s. p.m. (135th meridian time).

The preparatory signal preceding the fifth time impulse consists of a series of dashes, each followed by four dots, thus (—....), beginning at 9 h. 03 m. 30 s. and continuing until 9 h. 03 m. 55 s. p.m. (135th meridian time).

The preparatory signal in each case is followed by a silent interval of 5 seconds, which is succeeded immediately by the time impulse consisting of a dash 1 second in duration, the beginning of the dash being the instant of the signal.

The following diagram presents a concise graphic illustration of the method of making the signals:—

08 58 108 158 208 258 308 358 408 458 508 558

		0s5s	10s 15s 20s 25s 30s 35s 40s 45s 50s 55s	0s
			9h.	0 m
(2)	9 h. 00 m.		, ,,,,,,,,,,,	1 m. ——
(3)	9h. 01 m.		,,,,,,,,,,,,	2 m
(4)	9 h. 02 m.			3 m
(5)	9h. 03m.		—, ——	4 m. —
	(2) (3) (4)	(2) 9 h. 00 m.	(1) 8 h. 59 m. — — (2) 9 h. 00 m. (3) 9 h. 01 m. (4) 9 h. 02 m.	(3) 9h. 01 m. (4) 9h. 02 m.

The signals from this station are sent out on 4,000-meter waves, while those from Choshi Ko Radio Station are sent

Approx. position : Lat.  $35^{\circ}\,42'\,00''$  N., long.  $139^{\circ}\,59'\,30''$  W.

EAST COAST OF HONSHU.—NEW LIGHT TO BE SHOWN.

Notice is hereby given that newly established Katsuura Lighthouse, on Hiramega Dai, outside of Katsuura Bay, Province of Kadzusa, will be shown as follows on the 1st of March, 1917:-

## Katsuura Lighthouse.

Position.—Lat. 35° 8′ 13″ N., long. 140° 19′ 15″ E. (According to the Japanese Admiralty Chart No. 58.)

Description.—Octagonal concrete tower, painted white.

Height of Light.—60 shaku above the base, 231 shaku above

the water.

Character of Light.—Fourth-order group-flashing white, showing a double flash in quick succession during 8 seconds, followed by an eclipse of 22 seconds.

Illuminated Arc.—From S. 52° 30′ W., through W. and N. to N. 76° 30′ E. (Magnetic bearings taken from seaward.)

Power.—36,000 candles.

Visible Distance. 22 postion miles in clean pickt.

Visible Distance.—22 nautical miles in clear night.

## SHIMONOSEKI STRAIT.

Notice is hereby given that the following lighted buoy has been moored on the south-west side of Gomiyose Su, west entrance to Shimonoseki Strait:

# Gomiyose Su Lighted Buoy.

Gomiyose Su Lighted Buoy.

Description.—Iron frustum of cone, painted black, surmounted by a lattice-work supporting a lantern.

Height of Light.—10 shaku above the water.
Character of Light.—Pintsch gas occulting green, light
4 seconds, eclipse 4 seconds.

Illuminated Arc.—The whole horizon.

Visible Distance.—4 nautical miles in clear night.

Depth of Water.—About 5 fathoms at L.W.S.T.

Magnetic Bearings taken from the Buoy.—Wakamatsu Lighthouse, N. 88° 30′ W.; Shira Su Lighthouse, N. 51° 30′ W.;

the stone post of Maiko Jima, N. 5° 5′ E.

#### WEST INDIES.

PUERTO RICO, NORTH-EAST COAST.—CAPE SAN JUAN LIGHT. -ALTERATION IN CHARACTER.

Position.—Lat. 18° 23′ N., long. 65° 37½′ W. Abridged Description.—Lt. gp. fl. (2), ev. 20 secs., 260 ft.,

Details.—The alternating fixed and flashing white and red light has been replaced by a group flashing white light showing two flashes every twenty seconds—thus, flash ½ sec., eclipse

 $4\frac{1}{2}$  secs.; flash  $\frac{1}{2}$  sec., eclipse  $14\frac{1}{2}$  secs.

Remarks.—The light has a power of 22,000 candles.

Variation.—3° W.

#### BRAZIL.

### PORTS CLOSED BY NIGHT.

Mariners are warned that entry and exit of vessels to all ports on the coasts of Brazil, between sunset and sunrise, is prohibited until further notice.

### CENTRAL AMERICA.

PACIFIC COAST.—PANAMA.—PANAMA CANAL APPROACH.-ALTERATION IN LIGHTING.

Position.—Balboa, lat.  $8^{\circ}$  57½ N., long.  $79^{\circ}$  34′ W.

1. Rear Leading-light No. 2.—Alteration: The entrance channel rear leading-light has been altered from flashing

white to occulting white every five seconds.

2. Light-buoys.—Alteration: The lights on the two light-buoys, marking the entrance to the dredged channel, have been altered as undermentioned:—
(a.) No. 1, from fixed white to flashing white.
(b.) No. 2, from fixed red to flashing red.

#### PANAMA.—LIMON BAY.—CHANNEL CLOSED.

Until further notice all vessels entering Limon Bay will use the channel between the East and West Breakwaters. The channel between the East Breakwater and Margarita Island is closed to navigation.

#### CANADA.

BRITISH COLUMBIA.—VANCOUVER ISLAND, JUAN DE FUCA STRAIT. — CARMANAH LIGHTHOUSE. — OCCASIONAL FOG-SIGNAL DISCONTINUED.

Position.—Carmanah Lighthouse, lat. 48° 36¾' N., long.

124° 45′ W.

Details.—The steam whistle, formerly used in answer to signals of passing vessels during foggy weather, has been discontinued, and is to be expunged from the charts.

Remarks.—Reference to this whistle has already been de-

leted from the Admiralty List of Lights, 1917.

# NEW SOUTH WALES.

PORT OF NEWCASTLE. -- ALTERATIONS IN FAIRWAY LEADING-

Notice is hereby given that on 1st May, 1917, the use of the present fairway leading-marks at the Port of Newcastle will be discontinued, and new leading-marks of the following descriptions will be brought into use in their stead :-

### Main Bar Leads.

Front Tower,-

Structure.—Steel-framed tower painted white.

Position.—Immediately at the back of Market Wharf,
Character of Light.—Fixed red.

Height of Light above Mean Sea-level.—1071 ft.

Back Tower,-

Structure.—Steel-framed tower painted red.

Position.—Off the west end of Church Street.

Character of Light.—Fixed white.

Height of Light above Mean Sea-level.—1373 ft.

These Main Bar leads, when in line, will bear S.  $47^{\circ}$  30′ west mag., and will lead in over the bar at a minimum depth of 23 ft. 6 in. at low-water ordinary spring tides.

### Coal Channel Leads.

Front Tower.-

Structure.—Steel-framed tower painted white.

Position.—Western slope of Nobby's.

Character of Light.—Fixed red. Height of Light above Mean Sea-level.—79 ft.

Back Tower,-

Structure.—Steel-framed tower painted red. Position.—Western slope of Nobby's. Character of Light.—Fixed white. Height of Light above Mean Sea-level.—100 ft.

These Coal Channel leads, when in line, will bear N. 59° 22½' east mag., and will lead in mid-channel from the inter-