### NOTICE TO MARINERS.

# (No. 43.) England-West Coast. LIVERPOOL BAY.

THE Trustees of the Liverpool Docks and Harbour have given Notice, that on the 12th of October and following days, the undermentioned changes would be made in lighting and buoying the approaches to the port of Liverpool.

# Formby Light-Vessel.

The Formby light-vessel, which was moored in the fairway, between Taylor bank and West Middle shoal, in the approach to the river Mersey, would be moved N.W. <sup>2</sup>/<sub>3</sub> N. 1 mile to the elbow of the Queen's and Crosby channels, in 22 feet at low water, with the following bearings and distances: Crosby lighthouse S.E. by E. ½ E. easterly,  $4\frac{3}{4}$  miles; Crosby light-vessel S.E.  $\frac{1}{4}$  S. nearly 3 miles; N.W. Mark E. by N. northerly,  $4\frac{1}{8}$  miles; Q fairway buoy N.W. by W.  $\frac{1}{2}$  W. westerly, nearly  $1\frac{3}{4}$  miles; V 3 red can buoy S. by W. westerly, nearly ½ a mile; V 3 black nun buoy S.W.  $\frac{1}{2}$  a mile.

## Buoys changed in position.

Q Fy, black pillar buoy would be moved N.W. W. 155 fathoms into a depth of 5 fathoms at low water, with Formby light-vessel and Crosby lighthouse in line S.F. by E.  $\frac{1}{2}$  E. easterly, distant  $1\frac{3}{8}$  miles from the former; Bell beacon and N.W. light vessel in line S.W.  $\frac{1}{2}$  W. nearly, and distant 1 mile from Bell beacon.

be moved N.W.  $\frac{1}{2}$  W. about  $3\frac{1}{2}$  cables lengths' into a depth of 11 feet, with Formby light-vessel E.S.E.  $\frac{1}{2}$  E. 1 mile; Q Fy, buoy N.W.  $\frac{3}{4}$  W.  $\frac{1}{4}$  a mile; Q l, black and white nun buoy N.N.E.  $\frac{3}{8}$  of a mile. Q 1, chequered red and white can buoy would

Q 1, chequered black and white nun buoy would be moved N.W. by W. 3 W. about 4 cables' lengths, and moored in 11 feet, with Formby light-vessel S.E. ½ E. 1 mile; Q Fy, buoy W.N.W. 3/4 W. 5/8 of a mile; and Q 1, red and white can buoy S.S.W. 3/8 of a mile.

V 2, black nun buoy would be moved S.W. 32 fathoms into a depth of 25 feet, with Bell beacon W.N.W. nearly,  $1\frac{1}{4}$  miles; Crosby lighthouse W.N.W.  $\frac{1}{4}$  W.; and V. 3, black buoy E.  $\frac{1}{4}$  N. about  $5\frac{1}{2}$  cables' lengths.

V 3, red can buoy N.E. by N. 30 fathoms into 12 feet, with Formby light-vessel bearing N. by E. easterly, distant \$\frac{3}{8}\$ of a mile; V 3, black numbuoy W. \$\frac{1}{4}\$ of a mile; and C. 1, red can buoy S.E. by E. easterly, \$\frac{5}{8}\$ of a mile.

S V 1, striped horizontally red and white can buoy would be moved N.W. by W. \$\frac{1}{3}\$ W. 185 fathoms and moored in 12 feet, with S V 1, striped harizontally red, and white num buoy N E. \$\frac{3}{2}\$ N.

horizontally red and white nun buoy N.E.  $\frac{3}{4}$  N. nearly 2 cables' lengths; V 2, red can buoy W. by N. nearly  $\frac{3}{4}$  of a mile, and C 1, red can buoy E. by N. northerly nearly  $\frac{1}{3}$  a mile. V 4, red can buoy would retain its position and

colour, but its denomination would be changed to

 $\mathbf{C}$  1.

C 1, red can buoy, hitherto, would be denominated C. 2, and moved E.S.E. 1/4 E. nearly 13/4 cables' lengths into a depth of five fathoms, with C. 1, red can buoy N.W.  $\frac{3}{4}$  N. 1 mile; C 3, red can buoy with perch S.E.  $\frac{1}{4}$  E.  $\frac{3}{4}$  of a mile; C 2, black nun buoy N. by E. nearly 1/2 a mile.

C 3, red can buoy with perch would be shifted in a N.N.W.  $\frac{1}{4}$  W. direction nearly  $3\frac{3}{4}$  cables' lengths, and placed in  $7\frac{1}{4}$  fathoms, with Crosby light-vessel E.S.E. nearly  $\frac{1}{3}$  of a mile; C 4, red can buoy S. by E.  $\frac{1}{2}$  E.  $1\frac{3}{4}$  miles; and C 3, black nun buoy N. by W.  $\frac{1}{4}$  a mile.

C 4, red can buoy would be moved N.N.W. 14 cables' lengths into a depth of 4 fathoms, with C 3, red can buoy with perch N. by W. 1 W. 13 miles; C 5, black nun buoy N.E. 4 E. nearly 1 mile; and C. 6, black nun buoy S.E. ½ E. nearly l¼ miles.

F 2, red can buoy would take the position of F

3 red can buoy.

F 3, red can with perch would be moved S.  $\frac{1}{2}$ W.  $1\frac{1}{3}$  miles, and moored in 3 feet at low water off the south spit of Jordan bank on the rothwestern side of the entrance to Formby pool from Crosby channel, with C 4, black nun buoy S.S.W. 1 mile; F 2, red can buoy N.  $\frac{1}{2}$  E. nearly  $\frac{1}{3}$  of a mile; Formby life-boat flagstaff N.E. 3 E; F 2, black nun buoy N.F. 1/5 N. rather more than 1/2 a

K 1, black nun would be moved W. 4 N. nearly  $4\frac{1}{3}$  cables' lengths to the western extremity of the shoal part of the Newcome knoll, with N.W. lightvessel W. 1 N. 2 miles; Bell beacon N. by E 1 E. easterly  $2\frac{3}{4}$  miles; and H 1, chequered black and white nun buoy S.  $\frac{3}{4}$  E.  $2\frac{1}{2}$  miles.

#### New Buoys.

Q 2, chequered black and white nun buoy would be placed on the south-western edge of Zebra flat in a depth of 11 feet at low water, with Formby light-vessel S.E.  $\frac{1}{2}$  a mile; Q 1, chequered black and white nun buoy N.W. by W. nearly  $\frac{1}{2}$ a mile; and Q 2, chequered red and white can buoy S.W. by S.  $\frac{3}{8}$  of a mile.

Q 2, chequered red and white can placed on the north-eastern edge of Little Burbo, in 12 feet, with Formby light-vessel East  $\frac{1}{2}$  a mile; Q 1, red and white can buoy N.W. by W.  $\frac{1}{2}$  a mile; Q 2, black and white nun N.E. by N.  $\frac{3}{8}$  of a mile.

F 2, black run buoy in 6 feet, on north-west side of the northern spit of Formby bank and west side of entrance to the New cut, with F 2, red can buoy N. by W.  $\frac{1}{2}$  W. nearly 1 mile; F 3, red can buoy S.W.  $\frac{1}{2}$  S.  $\frac{1}{2}$  a mile; Formby life-boat flagstaff N.E. by E.  $\frac{3}{4}$  E. nearly 1 mile.

B P, chequered black and white nun buoy on shoalest part of Beggars patch, with Spencer spit buoy W by N  $1\frac{1}{8}$  miles; Leasowe lighthouse S. by E.  $\frac{1}{2}$  E.  $1\frac{1}{8}$  miles; and R 2, red can buoy S.E. by E.  $\frac{3}{4}$  E.  $\frac{1}{2}$  a mile.

# Buoys Removed.

In consequence of changes in the banks the following buoys are now rendered unnecessary, or inconveniently placed, and would therefore be removed, or where requisite, superseded by new arrangements:-

C 2, red can. F 4, red can. Z 1, black and white striped horizontally. B 1, black and white chequered nun. B 2, black and white chequered

These alterations make the Queen's channel the channel to be used at night. In the Victoria channel the positions of the buoys are adapted to the growth of the banks, and their general arrangement is maintained as before; it may be navigated by daylight, great care being taken to make due allowance for the tide which, during both flood and ebb, sets across this channel and over the banks on either side of it. The navigation of the Crosby channel in thick weather will be facilitated by equalizing the distances and straightening the line of buoys.

Directions.—From a position 2 miles north of point Lynas to the Fairway buoy of the Queen's channel, is E.S.E. ½ E. 39 miles, that line of bearing passing 4 miles north of the N.W. lightvessel and 3 of a mile north of the Bell beacon. From the Fairway buoy the Formby light and