

THE

NAUTICAL MAGAZINE,

&c.

JANUARY, 1833.

HYDROGRAPHY.

Note .- All Bearings are Magnetic, unless otherwise stated.

1. The Gore Bank, in the Bay of Bengal, Lat. 17° 17' N., Long. 85° 51' E. Least water yet found, 23 fathoms, rocky bottom.

H.M.S. Melville, with the flag of Vice-Admiral Sir John Gore, K.C.B., on board, on her way from Saugor Roads in July last, met with a rocky bank, which we believe has not yet been inserted in any chart. The Admiral observing the water to be much discoloured, ordered the lead to be hove, the result of which will be found in the following statement:

At noon, on the 24th July last, the latitude by DR was 17° 11′ N. and long. by DR 85° 48′ E. No observation for latitude or longitude had been obtained for two days before, the wind having blown constantly from the south-west, with heavy squalls and rain. At 4 P.M. obtained a good observation for the longitude by chronometer, which gave 85° 51′ E., the mean of six watches, the greatest difference between any two being only six miles, and four of them agreeing within two miles of each other. At 4 P.M. observing the water to be discoloured, sounded in 56 fathoms, doubtful. At 5 sounded in 45 fathoms, certain bottom. Wore ship and stood S. b. E. then followed three casts, having 42 fathoms, rocky bottom; then two casts, no bottom with 60 fathoms. At 7 P.M. had two casts, one in 25, the other 23 fathoms. At 7.45 P.M. had two good observations of the pole star, which gave the latitude 17° 30′ N. and 17° 31′ N. agreeing within a mile or two of the dead reckoning.



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By this last cast, the lead appeared to have struck on a plain surface, as the arming and the lead were bruised flat.

At 8.45 55 fathoms, no bottom. 9 75 fathoms, no bottom.

These soundings were taken alternately with the common and patent leads.

During the whole of these soundings the lead came up bruised, and the arming displaced, without any thing attached to it, to indicate the nature of the bottom.

Between 5 P.M. and midnight, the ship's course was S.b. E. ½ E. 4 knots per hour, making one point lee-way. From 9 till midnight sounded occasionally with 55 and 85 fathoms, no bottom.

At 8.4 P.M. latitude by Antares 17° 17′ N. The mean of these three observations will place the rocky bank in lat. 17° 26′ N. and long. (brought forward from 4 P.M.) 85° 51′ E.

It blew a gale from the S.W. with a heavy swell. The ship was under close-reefed topsails and courses, top-gallant-masts and studding-sail booms on deck, and it would have been at risk to have hoisted out boats.

Estimated variation of the compass 3° E.

New Island in the Mediterranean, Lat. 36° 52' N., Long. 1° 41' E.

Lieutenant Baldock, R.N., commanding H.M. steam-vessel Firebrand, fell in with an island in the Mediterranean in August last, of which the following are the particulars:

"On the 22d August last, at 1 P.M. Cape Tenez bore, S.S.W. by compass distant three miles, we were steering eastward along shore, the ship going eight knots. At 4 P.M. we saw a small island right a-head, and at 4.45 we passed outside of it about a quarter of a mile. It appeared to be about three miles from the land, and to be a cable's length across, with a sandy beach. It was also covered with brushwood, and there was no appearance of shoal water about it. The position of it is about 36° 52′ N. and 1° 41′ E. At 6.30 we were on the meridian of the town of Zerzahal, the ship still going eight knots."

Lieut. Baldock further describes this as a very low island, and lying much in the way of steam-vessels passing along the coast.

3. CURRENTS ON THE COAST OF BRAZIL.

A PAPER, of which the following is a copy, has been found on the coast of Brazil, and transmitted to the Admiralty:—

"H.M.S. Maidstone, on her passage to Bahia, lat. in 18° 20' S. at noon, long. 34° 56' W., on the 24th April, Good Friday. All well.

"G. GIFFARD."



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The following document, by which it was accompanied, gives the position where it was found:—

"Papel achado dentro, do Francisco Loerado na pancada da mare na praia de Poxim, 7 de Junho de 1832."

The foregoing is a very satisfactory corroboration of the observations of Baron Roussin, on the currents of this coast:—At p. 49 of his 'Pilote du Bresil,' he says, "D'après une suite presque infinie d'observations sur les courans, nous avons évalué leur vîtesse moyenne sur la côte, depuis l'île Sainte Catherine jusqu' à Pernambuco, a 0,6 de mille par heure dans les deux moussons; elle est souvent au-dessous de cette quantité, rarement au dessus, quelquefois nulle."—And respecting their direction, he observes, "Du dix huitième au onzième degré, (of south latitude,) les eaux portent au nordouest pendant la mousson au sud."—This has been the case in the present instance. The course and distance between the place where it was thrown into the water, and where it was found, is N. 8° W., (true,) about 500 miles; thus giving it a rate of 10', 4 per day, or nearly half a mile per hour in that direction. This is what Major Rennell terms the drift current, but it is in direct opposition to the Brazil current, which he considers to set southward.

4. Shoal in the Straits of Malacca.

WE have received the following extract from the log of the H.C.S. Duke of Sussex, Whitehead commander, Straits of Malacca:—

"On the 17th of August, 1831, standing to the southward and westward, with a light south-easterly breeze, and between two or three miles to windward of the easternmost patch on the south sand, while taking the following bearings: Parcelar Hill, N. 19° W.; Cape Rachado, S. 88° E.; we suddenly shoaled from 24 fathoms to 19 and 13; hove about, and while in stays had a cast of half ten. Sent the cutter away with an officer; pulling in the ship's wake, (then on the other tack,) from no ground we struck 14 fathoms; two boats' lengths to the southward, 9 fathoms; then 5½, 4; pulled back to 14 fathoms, and skirted the shoal; in 9, 10, and 12 fathoms this patch appeared very small, and steep too. The circumstance of its extending further in to the channel than any sand on the charts, renders it necessary that ships standing to the south-west should in this part of the straits proceed with much caution."

5. Borneo and Rover Shoals in the Mozambique Channel.

WE have been favoured with the following account of a very dangerous shoal by Captain Horsburgh, the hydrographer to the Hon. East India Company; and, although we presented it to our readers with the Index to our first volume, we think it of sufficient importance to repeat here; more especially so, as an English whaler has been recently lost near it. It lies in the northern entrance of the Mozambique Channel, about half-way between the Comoro Islands and the north end of Madagascar.

"Rover, 21st April, 1831.—At 1h. 30m. P.M. discovered a large and dangerous shoal, in lat. 12° 22′ S., long. 46° 19′ 45″ E., extending about ten miles E.S.E. and W.N.W.; four or five miles of which dries at half ebb, and



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the other parts are covered with high breakers. When the middle part of the shoal bore N. by E. ½ E. about five or six miles, had soundings from 12 to 10, 9, and 8 fathoms sand and rocky ground. From hence we stood to the W. S.W. and made Mayotta, and found our observations correct by the mean of two lunar observations and chronometer."

The following extract of a letter, from the Agent to Lloyd's at the Cape of Good Hope, has been forwarded to the Admiralty by John Bennet, Esq., Secretary to Lloyd's:—

"The Borneo whaler, belonging to London, Ross, Master, struck on an unknown coral shoal, in lat. 12° 14′ S., long. 46° 7′ E. on the 22d July, at 10h. 30m. P.M., and every effort to get her off proving ineffectual, the crew took to their boat, and landed at Johanna, from whence they have arrived here, in H.M.S. Isis. The Borneo had 1950 barrels of oil, and 7 tons of whalebone on board.

"Cape of Good Hope, 29 Sept. 1832.

The latitude assigned to these shoals by the foregoing authorities, differs from that given to the Firebrass shoal, mentioned by Captain Horsburgh, at page 190 of the first volume of his East India Directory; and it would appear that there are other dangers in the neighbourhood of it, the positions of which seem to be very doubtful. The shoal on which the ship Firebrass struck, in 1682, is doubtful in position, being given in latitude 13° 16′ S., and also in 15° 30′ S.; and it has, moreover, 10 feet water over it; whereas the bank seen by the Rover dries at half-ebb. The bank on which the Devonshire sounded, in 1766, in the same part, is also to the southward of 12° 45′ S. from all of which, we may safely conclude, that these shoals are totally distinct from either; and, as Captain Horsburgh very justly observes, "Ships that pass to the eastward of this island, (Mayotta,) ought to keep a good look-out, as there possibly may be dangers on some of these doubtful banks, situated between it and Madagascar, which are not yet ascertained." We consider the loss of the Borneo as a verification of Captain Horsburgh's opinion. Some banks are inserted very nearly in the above positions, in M. D'Apres' chart, published in 1775.

6. Bristol Channel, and Entrance to the River Perrott.

" Notice to Mariners.

"Trinity-House, London, 29th Nov. 1832.

"Notice is hereby given, That, in conformity with the intention expressed in the advertisement from this House, under date the 23rd ultimo, Leading Lights towards the entrance of the river Perrott, will be exhibited on the evening of Saturday, the 1st of December next, in two New Light Towers, which this Corporation has caused to be erected for that purpose, and for the general advantage of navigation in the Bristol Channel.



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"These Towers are situated at some distance to the northward of the present Light-house, and bear from each other S. 71° E. and N. 71° W., distant 1500 feet. Masters of vessels, and other mariners, bound up the river Perrott, are to observe, that these Lights, kept upon that line of bearing, will lead in the best water, between the Gore and Stert sands; and they should be particularly careful, in approaching, to have the Lights in one, before the Flatholm Light is shut in with the west-end of Steepholm Island;—observing, that this last-mentioned Light will be open upon the bearing of N.N.E. ½ E. Vessels may then proceed upwards, with the Lights in one, until the tower of Burnham Church bears S.E. by S., when they may steer to the southward, up Burnham Reach, and come to anchor as heretofore.

"To mariners navigating the Bristol Channel, in the vicinity of these Lights, a bearing of the Upper Light will be found particularly serviceable to clear the Culver Sand and One Fathom Bank.

" Description of the Lights.

"The Eastern or Upper Light will burn at an elevation of 91 feet 6 inches above the level of the sea, at high-water spring tides, and the Light therefrom will intermit,—its duration being 3½ minutes, (during which space its brilliancy will be visible from N. by W. ½ W. to W. by N.) and the period of its entire obscuration, 30 seconds.

"The Western or Low Light, which will burn at an elevation of 23 feet above the same level, will be shewn without intermission, and the brilliancy thereof will be visible from N.W. by W. ½ W. to W. by N.

"The present Light at Burnham will be discontinued, on the exhibition of the Lights above mentioned.

" N.B. All the foregoing bearings are by compass,

"By order, "J. HERBERT, Secretary."

NAVIGATION OF THE BRITISH CHANNEL.

" Notice to Mariners.

"GRIBBEN HEAD, NEAR FOWEY, Coast of Cornwall.

" Trinity-House, London, 16th Nov., 1832.

Sketch of the Beacon. 38186 ı 1

"Notice is hereby given, That, in compliance with the request of numerous shipowners, masters of vessels, and others interested in the navigation of the British Channel, this Corporation has caused a Beacon to be erected upon the point of land called Gribben Head, to the westward of the entrance to the port of

"By the erection of this Beacon Tower, which is 85 feet in height, and stands upon an elevation of 257 feet above the level of the sea, the said headland, called the Gribben, is rendered readily distinguishable; and the recurrence of those accidents will be prevented, to which masters of vessels, and other mariners, have heretofore been exposed, by mistaking the same for St. Anthony's Head, at the entrance of Falmouth Harbour, or for any other headland upon that part of the coast." By order,

"J. HERBERT, Secretary."

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8. New Lights of Christiansand and Fehmern.

In our last number we alluded to some new Lights in the Sleeve and Baltic. We have now to present our readers with the following corrected statements of two of them :-

NEW LIGHT ON FEHMERN ISLAND.—Entrance of the Baltic.

"A new light has been erected on the north-east side of the island of Fehmern, by the orders of the Danish Government.

"It stands on the Oldenburgh Huk, in the vicinity of the dangerous Putt-

gardens reef.

"Upon it, and at the height of 92 Danish feet (96 English) above the level of the sea, is placed a lamp, which may be seen when the eye is ten feet above the water around the whole island, at the distance of 15 miles, until the land is approached within one to two miles. Within this distance, on any bearing between S. 7° W. and S. 15° E. by compass, the light will then be hid by the hill of Catharinenhof.

"The light consists of six lamps, with reverberators, which are made to turn round by clock-work in three minutes, during which interval a strong light will be seen six times, each light showing itself for about 10 seconds, and disappearing afterwards for 20 seconds, although, when near, the reflection of the lamps will be perceivable between the appearances of the lights.

"The light on Fehmern will be distinguished by its revolving lights from

the others in the neighbourhood, which are fixed lights.

"From the lights on Giedserodoe, the south point of Falster, the Fehmern light bears west, 9° north, 25 miles, and from the light upon Fakkebierg, the south end of Langeland, S. 33° E. 23 miles by compass.

"The light on Fehmern will commence burning next month, and will be kept constantly lighted, from Easter to Michaelmas one hour, and from

Michaelmas to Easter, one half hour after sunset to sunrise.

" Copenhagen, October, 13."

9. NEW LIGHTS AT CHRISTIANSAND .- Coast of Norway. (Translation.)

"As soon as possible after the middle of November next (the date will be advertised at a future period,) a light will appear on Oxoe island, east of Flekkeroe, at the eastern entrance to Christiansand, 135 feet above the surface of the sea."

"Within a distance of 4 Norway miles, (24,3 nautical,) the light will be seen in clear weather with a steady brightness, during 2 minutes and 55 seconds, at the end of which time it will undergo a short eclipse, succeeded by a steady light, and then another eclipse; after which the light again shows itself for 2 minutes 55 seconds, as before, with a steady light. Between each of the strong lights is an interval of 4 minutes. At a distance of 5 miles, (30,4 nautical,) the strong light is observable. The light will be seen from all points of the compass, and will burn throughout the year; the light-house is white, and serves as a seamark by day.

"In connexion with the light on Oxoe, a harbour light will also be lighted

on Oderoe Island, 1 Norway mile (6 nautical miles) distant from Oxoe,

· Allowing these to be Stockholm feet, they would be equal to 131 English.



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bearing N.W., ½ W. The light on Oderoe Island will be seen in clear weather from the lower rigging, bearing N.W., ¾ N. and, by steering this course, and continually keeping Oderoe light in sight, all rocks and shoals will be avoided until within 20 fathoms of the light, when the course must be altered to N.W. b. W. ¼ W. Continuing on the last-mentioned course, steering in betwixt Oderoe Island and Dybingsholmen house, 2 lower lights on Oderoe light-house will be seen, the one after the other. Having passed 5 cables' lengths from this light, a vessel may then anchor in 30 or 40 fathoms.

"The light on Oderoe is 261 feet (25 English) above the surface of the sea, and is lighted and extinguished at the same time as Oxoe light, with the exception of the last-mentioned two lights, which are not lighted between

the 31st of May and 1st of August.

"It is to be observed, that the channel between the shoals near Oxoe and Groningen, where Oderoe light is visible, is three or four cable lengths wide. In the middle of this channel, the light appears most luminous on the course to be steered, viz. N.W. 3 N. On each side of this line of bearing, the strength of the light diminishes, and at last disappears; in which case, a vessel will be 1½ to 2 cables' lengths from the nearest shoal.

"Christiania, October 16."

10. New Light on Douglas Head, Isle of Man.

"A Light-house has been erected upon Douglas Head, in the Isle of Man, and will be lighted on the 21st December, 1832.

"The Light will be stationary, and appear like a star of the first magnitude

at the distance of 15 miles.

"The bearings and distances are as follow: from Clayhead, in the said Island, W. by S. ½ S., 5 miles. From Langness Point, E. by N. 8½ miles. The Light will not be visible from Langness Point; but, with an offing of 3 miles from that Point the Light will be seen bearing N.E. ½ E.; and the Calf Lights at the same time bearing N.E. ½ W. ½ W. ("Versile repring for Dearlies between W. ½ W. 1. N. ½ W. by S. 1. S.

"Vessels running for Douglas, between E. by N. ½ N., to W. by S. ½ S., will see the Light at 15 miles' distance.

Isle of Man, 30th November, 1832.

GEOGRAPHICAL COLLECTIONS.

Name of				Variat	Tide.	
Place.	Particular Spot.	Lat. South.	Long. West.	East.	H.W. at F. & C.	Direction of Flood, and Rise of Tide.
Port St. Julian	Rock Shag Island, in Harbour Wood's Mount Cape Curioso Extremity.	49 14 00 49 11 10 49 41 18	67 38 02 67 43 34 67 34 30 67 34 30	22°17′		Northward, rises 38 feet, (observed off the River's Mouth.)
BrokenCliffPk.	Observatory opposite Sea Lion Island Mount Entrance Station up the River Brink Summit Summit	50 07 30 50 14 30	68 25 00 68 19 10 68 52 55 69 08 00 68 31 15 68 49 30 69 00 40	20 54	10 15	33 feet. Northward.



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VOYAGES AND MARITIME PAPERS.

I .- Notes on the Schelde.

THE mouth of the West Schelde lies between the islands of Walcheren, on the north, and Cadsand on the south side, the shortest distance across it being nearly three statute miles. A great many very dangerous sand-banks, extend about 19 miles from the nearest land off the mouth of the Schelde, and render the navigation extremely hazardous, particularly in hazy weather. After a few days of this weather, the mariner frequently finds his ship in shoal water, having been drifted about by the tides, so that he is unable to account for his position, and his only resource is his lead. At about six leagues to the eastward of Ostend, we arrive at the entrance of the river Sluys, on the bank of which, about four miles up, is the strong fortification of the same name, now in possession of the Dutch; the Belgian lines being at West Capel, distant about three miles to the westward of it. On this line of coast are situated the villages of Wendune, Blankenburgh, Heyst, and Knocke; and several distant steeples may be seen in the interior, the most conspicuous being those of the city of Bruges Few travellers are aware of the benefit of these steeples to mariners. serve as a guide to them in clear weather, to extricate them from numerous dangers on the coast. The entire face of the country here, with the exception of the sea-coast, is low and flat. Between Ostend and Wendune are a range of sand-hills, the highest of which is called the Spanish Sand-hill; and from thence to Blankenburgh the coast is also low, having dykes to oppose the effects of the North Sea. Proceeding from Blankenburgh to the eastward, the land again rises into hillocks of sand, and continues so until we pass the village of Knocke. Here the sand-hills terminate in a low flat, extending nearly across the mouth of Sluys river to the island of Cadsand, leaving a narrow channel for small vessels to pass up to Sluys. The highest of these sand-hills is between the villages of Heyst and Knocke, and serves as a sea-mark.

From the mouth of Sluys river, at the distance of 9½ miles to the eastward, lies the town and fortification of Flushing, on the south shore of the island of Walcheren. In this route we leave the island of Cadsand on the south, or right hand. The west and north-west sides of this island are bounded by low sand-hills, at the termination of which, to the eastward, is a battery, commanding the passage of the Weilinge channel, to or from Flushing. Large ships must pass within 1½ mile of this battery, and small vessels within two miles of it. Proceeding from thence four miles farther to the eastward along the dykes, we find here and there a low, solitary sand-hill, until we arrive at Weelpen signal-house, surrounded by a few sand-hills, on the north part of Cadsand island.

The island of Cadsand (like the most part of Flanders) is thickly wooded, and the only conspicuous object on it is the steeple of Groede; nevertheless, in some positions, the turrets of the churches, Cadsand, Nieuflich, Breskens, Hoogplaat, and Bierfleit, are seen; the latter being within a fortification of that name.

From the north part of Cadsand island, the distance by water to the city of Antwerp, following the serpentine course of the river, is 55½ miles. The obstacles that endanger its navigation by vessels are many; particularly when both sides of the river are occupied by an enemy. The first and greatest impediment is the frequent shifting of the shoals in the river, and the consequent uncertainty in the depth of its channels. From the shallow nature of the river,



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