

EAST INDIA.

RETURN to an Order of the Honourable The House of Commons, dated 10. February 1848;—for,

A STATEMENT of the Nature and Locality of all MARITIME SURVEYS undertaken by the East India Company in each Year since 1820; stating those completed or still in progress, and, if discontinued before completion, the Reasons for such discontinuance; with COPIES of CORRESPONDENCE, REPORTS, or other DOCUMENTS, originating in *England* or *India*, connected with such discontinuance; also, Statement of the Measures, if any, hitherto taken to connect the Surveys of the East India Company with each other and with those undertaken by Her Majesty's Government, and to provide general and accurate CHARTS and SAILING DIRECTIONS for the Indian Ocean, Coasts of India, Red Sea, Persian Gulph, the Indian Archipelago, China and Eastern Seas, with the Rivers, Harbours, Ports and Channels thereof, for facilitating the Navigation of the Vessels carrying on the increasing Commerce of *India* :—

“ABSTRACT for each Year, since 1820, of the EXPENDITURE in the HYDROGRAPHIC DEPARTMENTS of the East India Company in *England*, and at the different Presidencies of *India*, for all the Maritime Surveys carried on under their Authority, stating under several Heads; namely, the Number and Rank of the Officers employed, and their extra Pay and Allowances; the Number of Men, and the Charge for Wages, Provisions, and Allowances, if any, distinguishing for Officers and Men the Amount; Also, a RETURN of the Number, Class, Description, and Size of SURVEYING VESSELS under each Presidency, and the Numbers and Ranks of Officers and Men so employed in each of such Vessels, with the Total Annual Charge of each Vessel, in each Year; also the Amount for Office Expenses, for Surveying Instruments, and other Surveying Materials, for Charts and Sailing Directions, so as to exhibit the whole Expense incurred by the East India Company, in each of those Years, under that Department :—”

“RETURN of the HYDROGRAPHIC DEPARTMENTS of the East India Company existing at present in *England*, and at the several Presidencies of *India*, stating the Number, Rank, and Pay of the Officers and others Employed, and the Expense of these Establishments at each such place; also, stating under what Superintendence each of the several Departments are placed :—”

“List, Description, Dates of Execution and Publication of all CHARTS and SAILING DIRECTIONS; the Scale of the Charts, and their Size :—”

“Also, a List of all SAILING DIRECTIONS, or MEMOIRS, or other Materials for CHARTS or Sailing Directions in the East India Company's Establishments in *England* and in *India*, distinguishing those Published and Unpublished, stating also the Reasons, if any, which prevent the Unpublished Materials from being Published :—”

“RETURN of the PRICES at which those Charts and Sailing Directions published by or under the direction of the East India Company are severally Sold, and the Names of the Agents and Places in *England* and *India* where Sold; stating also, the Allowances made to Parties selling the same: also what Supply, if any, is kept in *India*, and what Means, if any, are taken to make the same available to the Public :—”

“Statement of any Special GRANTS of MONEY made by the East India Company, in each Year since 1820, to Officers in their service for Surveys; and also of all Payments to Individuals to assist them in preparing and publishing Surveys, Charts, and Sailing Directions for the Indian Ocean, Coasts of India, Red Sea, Persian Gulph, Indian Archipelago, China and Eastern Seas, and of the Measures which have been adopted by the East India Company to render the great Triangulation of the Survey of *India* available for establishing Points on the Coast of *India* for connecting and correcting the Maritime Surveys heretofore made, and for facilitating the carrying on of Surveys :—”

LIST “of all LIGHTHOUSES, FLOATING LIGHTS, BEACONS, BUOYS, or other LAND or SEA MARKS, established by the East India Company, or by any other parties, in any parts of the Indian Ocean, or the Coasts of India, the Red Sea, Persian Gulph, Indian Archipelago, China, and Eastern Seas, with a Description of the Nature of such Light, the Cost of Erection, and the Means adopted for their Maintenance: Also, a Statement of all Applications for erecting LIGHTHOUSES and BEACONS, and for laying down BUOYS and SEA-MARKS for facilitating the Navigation of those Seas, made to the Governments of *India* and at Home, and whether allowed or not, and the Results thereof :—”

“Statement of the Arrangements and Measures made by the East India Company, or in progress, with the view of Surveying and Providing LIGHTS for the Coasts above described, and for facilitating, surveying, improving, and making known to the Shipping the entrance into the Rivers and Harbours, Ports and Channels on the Coasts of *India* :—”

“And also, REPORT from the Commodore Superintendent of the Indian Navy of the Measures required to make the Surveys, Charts, and Sailing Directions for the Seas and Coasts, within the Limits of the East India Company's Charter generally available for the use of the Indian Navy and the Mercantile Marine: Also, what Measures are required to bring the Surveys, Charts, and Sailing Directions hitherto made by the East India Company in connection with each other, and in connection with and to correspond in uniformity of Scale and other particulars with those made in the Indian Ocean, China and Eastern Seas, by or under the Admiralty of Great Britain: Also, stating, in regard to the same Seas and Coasts, what Establishments of Officers and Men, the Size and Descriptions of Vessels, and what other measures are necessary to re-survey of doubtful Positions, to verify existing Charts, to correct known or admitted Errors, to make Surveys of un-surveyed Positions, and to replace obsolete Charts and Sailing Directions.”

East India House, }
12 June 1851. }

JAMES C. MELVILL.

(Mr. Hume.)

Ordered, by The House of Commons, to be Printed,
6 August 1851.

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STATEMENT of the NATURE and LOCALITY of the MARITIME SURVEYS
undertaken by the EAST-INDIA COMPANY, since the Year 1820, and other
Papers connected with that Subject.

From Captain *T. E. Rogers*, Superintendent of Marine, to Major-General the
Honourable Sir *John Hunter Littler*, &c.B., Deputy Governor of Bengal,
dated 23 August 1850.

Honourable Sir,

I HAVE at length the honour to submit herewith the returns to the orders of the Honourable the House of Commons, forwarded to me with Mr. Under-Secretary W. Seton Karr's letter, No. 344, of the 1st May 1848. I regret very much the great delay that has occurred in the preparation of these statements, but it has been entirely unavoidable. The demands on the secretary and the regular current business of this office, and the preparations of the numerous returns of various kinds required of late years from this department, render it extremely difficult to furnish such statements as those referred to, and especially when the information required spreads over a period of nearly 30 years, and it is necessary therefore to search the records of the department for so many years, and when, moreover, in going back so far, they are found to be very imperfect. As it is, without the aid of the clerk in charge of the "Pluto," the delay would have been still greater. An attempt was made at first to cast the whole information, various as it is, into one tabular statement; but after some progress had been made in this attempt, with the aid of Mr. Weston, the naval storekeeper then unemployed, it was found necessary to abandon it and commence again on a new plan, that of separating the information into several distinct statements for each Order of the House.

Both the Orders of the Honourable House, your Honour will observe, bear date the same day, nor is there any indication upon them of the order in which they were issued, or were required to be replied to; I take them according to their positions as they were forwarded to me; I may observe too that the tenor of both is so similar, that at a first glance the one might almost be taken to be a duplicate of the other. Both relate to surveys. The distinction appears to be, that the first, according to the order in which they have reached me, includes the mention of lights and buoys.

The returns to both Orders are comprised in the statements of which a list is annexed. Those that contain the information called for in the first Order relating to lights and buoys are numbered from 1 to 6, and I believe they will be found to furnish all that is required by the Order, or that can be of any use in elucidation of the subject of inquiry. It is proper to remark, that much of the information contained in these answers to the first Order of the House of Commons is a repetition of that already supplied in the answers to the printed questions of the Admiralty, which were received some time after the Orders of the House reached me, but admitted of readier reply from the form in which the information required was asked for, the distinct and specific character of the questions, and the most limited range of the inquiry. All but the first paragraphs of this first Order belong to the Commodore Superintendent of the Indian Navy to answer.

The statements that supply the answer to the second Order of the Honourable House, relating to maritime surveys, charts, and sailing directions, are lettered
659.

for distinction from (A.) to (D.), and contain, I believe, all that is required in the Order, in so far as the records of this department enable me to furnish the information.

In the first Order of the House no period for which the returns are required is specified, but in the second 1820 is mentioned. I have gone back to that date in the statements, supplying the answers to both returns, except Statement No. 5, which the records in respect to buoys do not enable me to carry further back than the year 1828.

With regard to sailing directions, in the cases of most of the surveys executed under this Presidency within the periods included by the returns, the directions are those noted in the margin, copies of which are forwarded herewith.

Sailing directions for the Sand Heads.	
Ditto - ditto - for Akyab Harbour.	
Ditto - ditto - from the south-west coast of Cheduba to Foul Island.	

In the first paragraph of the second Order, information is required as to what measures are adopted to connect the surveys of the East India Company with each other, or with those of Her Majesty's Government. Nothing of the kind is done at this Presidency, for the hydrographical department was abolished many years ago. This fact furnishes a sufficient answer, as far as this Presidency is concerned, to the third paragraph of the second Order, calling for a return of the hydrographical departments in India.

The information called for in the paragraph of the second Order of the Honourable House, as quoted in the margin, may be given here. All the charts executed under the auspices of the Honourable Company are published by Messrs. Allen & Co., of Leadenhall-street, and a list of them is contained in the printed pamphlet submitted herewith, as sent out by the Honourable Court. The pamphlet also shows their prices. The charts of all surveys executed here are transmitted through Government to the Honourable Court, and when these are published, copies are sent out by that

“ 5. Return of the prices at which these charts and sailing directions, published by or under the direction of the East India Company, are severally sold, and the names of the agents and places in England and India where sold, stating also the allowances made to parties selling the same. Also what supply, if any, is kept in India, and what means, if any, are taken to make the same available to the public.”

authority to this Presidency, chiefly for the use of this department. In some cases many more are received than are required by our own vessels. The charts of surveys of the Sand Heads are also lithographed in this country, a large number of copies being struck off. In regard to these and all charts of which there are spare copies, these are supplied when required to commanders of merchant vessels, at an advance of 30 per cent. on prime cost. The prices of charts published at home are, as stated above, shown in the printed pamphlet referred to, and 30 per cent. is added to those prices. The charts of the Sand Heads lithographed here, which are sent by this department to the collector of Government customs for sale, are sold at two rupees a copy. I am not aware that the Honourable Court have any agencies in India for the sale of charts, and consequently no allowance is made to any one for selling them. It is not considered fair to come into competition with private vendors of charts, and none are supplied to any but the Government vessels, except when they are not procurable elsewhere.

I am unable to state, as required in the concluding passage of the second Order of the House of Commons, to what extent the great trigonometrical survey of India has been rendered “available for establishing points on the coast of India, for connecting and correcting the maritime surveys heretofore made, and for facilitating the carrying on of surveys;” but, as regards the coasts and islands of the Bay of Bengal from the Sand Heads down to the southern promontory of Ceylon on the western side, and down along the shores of Chittagong, Arracan, and Tenasserim to Junk Ceylon, with the isles and islets facing the last-named coast, and the Andaman archipelago, I believe that the geographical position of every important point has been correctly ascertained and laid down.

Your Honor will easily conceive that the difficulty of furnishing full and correct information relative to surveys and charts has been greatly enhanced by the

the want of a hydrographical department here, that which once existed having been abolished, as stated above, to collect and record all the statistics and other details of hydrographical researches.

It is not in my power to say anything to what is already stated herein that would throw any further light on the subject of lights or surveys. I have to express my regret that I have not yet received the chart of Lieutenant Fell's survey of the Coromandel Coast, finished in 1848, from the Patient Shoal to Bimlipatam and the Santapilly Rocks. He has explained that it has been delayed by his having accidentally mislaid one of his books of angles. I expect to receive it soon, and also the chart of his survey of the Pegue Coast, extending from Cape Negrais eastward to the entrance of the Situng River. Both will be submitted for transmission to the Honourable the Court as soon as they are received.

I am, &c.

Fort William,
Marine Superintendent's Office,
23 August 1850.

(signed) *T. E. Rogers,*
Superintendent.

(No. 488.)

Copy of this letter, with the statements in original therewith received, forwarded to the Home Department of the Government of India, with reference to the letter from the department No. 384, dated 15 April 1848.

By Order of the Honourable the Deputy-Governor of Bengal.

Fort William, 28 August 1848.

(signed) *W. Seton Karr,*
Under Secretary to the Government
of Bengal.

LIST of STATEMENTS furnishing the Information called for in two Orders of the Honourable The House of Commons, dated 10 February 1848.

FIRST ORDER, relating to LIGHTS, BUOYS, and MOORINGS.

No. 1. Lighthouses in existence.

No. 2. Floating Lights in existence.

No. 3. Lights proposed but not carried out.

No. 4. Lights abandoned.

No. 5. Channel buoys proposed or recommended by different officers, and of those mentioned by the Bengal Government during the official years from 1820-21 to 1848-49.

No. 6. Statement showing the expense incurred for Channel Buoys by the Bengal Government from the official years 1828-29 to 1848-49, including the construction, repairing and other charges under that head.

SECOND ORDER, relating to MARITIME SURVEYS, CHARTS, AND SAILING DIRECTIONS.

(A.) Surveys proposed, commenced, completed or rejected, also those in progress, 1820-29.

(B.) List of Rank and Pay Officers employed in Marine Surveys between the official years 1820-21 and 1848-49.

(C.) Statement of all Charges incurred on account of Surveys executed under the Bengal Presidency, from the year 1821-22 to the year 1849-50.

(D.) List of Charts in the office of the Superintendent of Marine, of all Surveys that have been executed between the official years from 1820-21 and 1848-49, under the orders of the Bengal Government.

(signed) *J. Sutherland*, Secretary.

Fort William, Superintendent's Office,
23 August 1850.

APPENDIX TO REPORT.

DESCRIPTION, Dates of Execution, and Publication of the CHARTS and SAILING DIRECTIONS, with the Scale of the CHARTS, and their Size, published by the Authority of the Honourable East India Company, from 1820 to 1849; inclusive.

Five per cent. is charged on the price of the Charts sold to private persons. The prices annexed to the Charts does not include mounting.

Sheets : Number.	Names of Charts.	Author.	Size of Sheet and Scale of Chart.	Date of Publication.	Date of Execution.	Price.	REMARKS.
	COAST OF AFRICA :		<i>In. tenths.</i>			<i>£. s. d.</i>	The following are the abbreviations used in this list:—
2	N. E. Coast of Africa, from Ras Gulwainee to Ras Hafoon.	-- Lieutenant T. G. Carless, I. N., assisted by Lieutenants Jardine, Sheperd and Greive, and Messrs. Ball, Whitburn, Selby and Scott, Midshipmen, I. N.	d. = 15 0 Imp.	15 August 1848	1838	- 5 -	Showing the Size. Demy - - D. Medium - - M. Royal - - R. Super Royal - S. R. Imperial - - Imp. Elephant - - E. Colombier - C. Atlas - - A. Double Elephant D. E. Antiquarian - Ant. Emperor - - Emp.
2	African Coast from Sibal Jarne to Sayara.	-- Lieutenants Barker and Christopher, I. N.	d. = 15 0 Imp.	15 May - 1844	1841	- 5 -	
	RED SEA :						Showing the Scale. d. Degree of latitude. m. Geographic mile.
2	Northern part of the Red Sea.	-- Commander R. Moresby and Lieut. T. G. Carless, I. N.	d. = 6 0 D. E.	1 August 1836	1834 and 1835	- 12 -	The figures denote inches and tenths of an inch. Thus:—D. E. d = 1 5 implies that the chart is printed on a sheet of double elephant, and that its scale is one inch and a half to the degree of latitude.
2	Southern part of the Red Sea.	-- Commanders Elwon and Moresby, and Lieutenants Pinching and Carless, I. N.	The same. D. E.				
1	Survey of the principal Harbours and Anchorages in the Red Sea, south of Jiddah.	-- Commanders Elwon, S. B. Haines, and Lieutenant Pinching.	-- Plans of harbours, various scales. M.	14 February 1843	1829 and 1837	- 3 -	The size of the sheet when not measuring the exact dimensions of any of the above, is given to the one it approaches nearest to.
1	Principal Harbours and Anchorages in the Red Sea, north of Jiddah.	-- Commander Moresby, and Messrs. F. Jones, I. N., Greive and Ford, Midshipmen, I. N.	The same. A.	8 February 1843	not stated	- 2 -	
1	Arabian Sea, extending from 10° south latitude to Suez, and from 39° to 63° east longitude.	-- Captain James Horsburgh.	d. = 1 0 C.	1 February 1816, with additions up to 1846.	- - -	- 7 6	Second edition.
	S. E. COAST OF ARABIA AND ISLANDS :						
1	Island of Socotra	-- Commander S. B. Haines, Lieutenants Welsted, Sanders, and Messrs. Rennie, Cruttenden and Fleming, Midshipmen, I. N.	m. = 0 5 C.	1 August 1835	not stated	- 3 -	
1	S. E. Coast of Arabia, from the Straits of Babelmandel to Inisenaat, with several Plans.	-- Commander S. B. Haines, assisted by Lieutenants Welsted, Sanders, Jardine and Sheperd, Messrs. Ball, Stephens, Rennie, Cruttenden, Green and Barrow, Midshipmen.	d. = 6 0 plans of various scales. Ant.	16 Sept. - 1839	1836	- 4 6	
1	The several Bays near Cape Aden.	-- Commander S. B. Haines, and assistants.	m. = 1 0 C.	15 August 1839	1836	- 3 -	
1	Kooria Moorria Bay, and Islands.	The same - -	m. = 0 5 C.	14 May - 1840	1837	- 3 -	
	PERSIAN GULF AND COAST OF ARABIA :						
1	Survey of the Harbours of Matra and Mucsat.	-- Lieutenants G. B. Brucks and S. B. Haines.	m. = 8 0 Imp.	1 July - 1831	1828	- 2 -	

Sheets : Number.	Names of Charts.	Author.	Size of Sheet, and Scale of Chart.	Date of Publication.	Date of Execution.	Price.	Remarks.
	PERSIAN GULF AND COAST OF ARABIA—contd.		<i>In. tenths.</i>			<i>£. s. d.</i>	
1	Battnah and Burka Coast -	- - Commander G. B. Brucks and Lieutenant S. B. Haines.	d. = 12 0 S. R.	July - - 1831	1828	- 2 -	
1	Entrance to Gulf of Persia and Coast of Arabia, from Ras Goberindee to Muscat.	The same - - -	d. = 12 0 S. R.	1 June - 1831	1828	- 2 6	
1	Coast of Arabia from Ras Goberindee to Ras Soote.	The same - - -	m. = 2 0 A ^s .	1 June - 1832	1828	- 3 -	
	Gulf of Persia, constructed from the trigonometrical surveys made by orders of the Honourable the Court of Directors.	Commander G. B. Brucks	d. = 4 0 E.	1 January - 1832	1830	- 4 -	
5	Persian Gulf, Arabian side, extending from Cape Moosendom to the Euphrates.	-- Lieutenants J. M. Guy, G. B. Brucks, W. E. Rogers, and R. Cogan, I. N.	d. = 12 0 2, 1st sheets, E. 3, or ditto, C.		{ 1st, 15 April 1826 2d, 1 Sept. 1826 3d, 8 July 1826 4th, 1 Jan. 1829 5th, 1 Sept. 1828 }	1822 to 1825	{ 3s. each. - 15 - }
1	Island and Harbour of Bohrein, Arabian side of Persian Gulf.	- - Lieutenants G. B. Brucks and W. E. Rogers.	m. = 0 5 R.	16 June - 1828	1825	- 2 6	
1	Anchorage off El Katiff -	The same - - -	m. = 0 5 $\frac{1}{2}$ D.	1 March - 1828	1825	- 2 -	
1	The Harbour of Grave or Quade.	-- Lieutenants J. M. Guy and G. B. Brucks.	m. = 0 5 D.	1 January - 1828	1825	- 2 -	
1	Entrances to the Rivers at the head of the Persian Gulf.	- - Lieutenants G. B. Brucks and S. B. Haines.	m. = 1 0 A ^s .	2 May - 1831	1827	- 3 -	
1	Coast of Persia from Ras Tuloop to Bushire.	- - Lieutenants G. B. Brucks and R. Cogan.	d. = 12 0 R.	1 April - 1828	1826	- 2 6	
1	Bushire Roads - - -	The same - - -	m. = 2 0 R.	1 February - 1828	1826	- 2 -	
1	Coast of Persia from Bushire to Bassadore.	- - Lieutenants G. B. Brucks and S. B. Haines.	d. = 12 0 C.	1 May - 1831	1828	- 3 -	
2	Clarence's Straits, Persian Gulf.	- - Commander G. B. Brucks and Lieutenant S. B. Haines.	m. = 1 0 1st sheet, C. 2d sheet, S. R.		{ 1st, Nov. - 1831 2d, 1 Sept. 1831 }	1828	- 5 -
1	Coast of Persia and Beloochistan, from Kooe Mubarrack to Kurrachee, with four Plans of Bays on same sheet.	The same - - -	d. = 4 0 plans on various scales. D. E.	1 August - 1832	1829	- 3 -	
	COAST OF SCINDE, KATTIWAR, GULFS OF CUTCH AND CAMBAY, &c. :						
1	Soonmiance Harbour - -	- - Lieutenants C. W. Montrou, assisted by Lieutenant Trushard, Messrs. Fergusson and Holt, Midshipmen, and Lieutenant Robertson, 25th Reg. N.I.	1,000 yds. = 1 0 D.	14 June - 1843	1842	- 1 6	
1	Kurrachee Harbour - -	- - Lieutenant T. G. Carless, assisted by Lieutenants Sheperd and Greive, and Messrs. Ball, Whitburn, Selby and Scott, Midshipmen.	m. = 4 0 Imp.	25 May - 1844	1838	- 2 -	
1	Entrance to the Gulf of Cutch, with the Island and Harbour of Bate.	-- J. T. Jones, Midshipman, I. N.	d. = 20 0 $\frac{1}{2}$ D.	1 September 1834	1833	- 1 -	
1	Gulf of Cutch - - -	Lieutenant Middleton, I. N.	m. = 0 4 C.	1 July - 1823	1821	- 3 -	
1	Coast of Kattiwar from Dio to Dwarka.	- - Lieutenant H. R. Whitlocke, I. N.	d. = 20 0 S. R.	1 January - 1835	1833	- 2 6	
2	Kattiwar Coast from Diu Head to Perim Island -	-- Lieutenant R. Ethersey, I. N., assisted by S. H. Buckler.	d. = 36 0 R.	3 March - 1845	1836	- 4 -	
1	Diu Harbour - - -	- - Lieutenant H. R. Whitlocke, assisted by Messrs. Hawes and Garrett.	m. = 4 5 D.	1 November 1834	1833	- 1 -	
1	Gulf of Cambay - - -	-- Lieutenant R. Ethersey, assisted by Messrs. Fell, Whitburn and Campbell, Midshipmen.	d. = 29 0 C.	1 January - 1845	not stated	- 3 -	
1	Malacca Banks - - -	- - Lieutenant R. Ethersey, assisted by Mr. W. E. Campbell, Midshipman.	d. = 25 0 Imp.	3 March - 1845	1837	- 1 6	
2	Bombay Harbour - - -	- - Lieutenant R. Cogan and Mr. G. Peters, Midshipman.	m. = 2 0 R.	1 May - 1833	1829	- 4 -	

Sheets : Number.	Names of Charts.	Author.	Size of Sheet, and Scale of Chart.	Date of Publication.	Date of Execution.	Price.	Remarks.
GULF OF CUTCH, KATTIWAR COAST, &c.—cont^d.							
			<i>In. tenths.</i>			<i>£. s. d.</i>	
1	Angenwell Harbour - -	Lieutenant W. E. Rogers	m. = 2 0 $\frac{3}{4}$ D.	1 March - 1828	1826	- 1 -	
1	Laccadive Islands - -	Lieutenant R. Moresby -	d. = 6 0 E.	-- 1 July 1830, corrected to 1845.	1828	- 2 6	
3	Maldeeve Islands - -	-- Commander R. Moresby and Lieutenant F. T. Powell.	d. = 14 5 1 sheet, D. E. 2 sheets, R.	{ Sheet, 1st, 16 April 1838 2d, 10 Dec. 1839 3d, 10 Dec. 1839	1835	- 10 -	
1	Maldeeve Islands reduced from the above.	James Horsburgh - -	d. = 2 5 M.	-- First edition, 26 March 1814, corrected to 1841.	1836	- 5 -	-- Second edition.
1	Chagos Archipelago - -	-- Commander R. Moresby and Lieutenant F. T. Powell, I. N.	d. = 12 0 C.	2 December 1839	not stated	- 3 -	
1	Principal groups in the Chagos Archipelago.	The same - - -	m. = 1 0 S. R.	10 July - 1839	not stated	- 2 -	
1	Coast of Tinnevely - -	Mr. J. J. Franklin, R.N.	d. = 30 0 C.	30 April - 1846	1842	- 3 -	
1	Coast of Madura - -	-- Lieutenants Powell and R. Ethersey, I. N., and Mr. Franklin, R. N.	d. = 30 0 C.	30 April - 1846	1838	- 3 -	
1	Western side of Palk's Straits	-- Lieutenants Powell, R. Ethersey, assisted by Acting-lieutenants Jones and W. Christopher, and Messrs. Selby, Heming, Greive and King, Midshipmen.	d. = 30 0 C.	30 April - 1846	1836	- 3 -	
1	Roadstead and Harbour of Tuticorin.	-- Mr. Franklin, R. N., assisted by Messrs. Brooking and Canner.	m. = 4 0 A ^s .	1 July - 1846	not stated	- 3 -	
1	Paumben Pass - - -	-- Lieutenants Powell and Ethersey, assisted by Acting-lieutenant Jones, and Messrs. Macdonald, Christopher, Riddle, Heming, Greive, and King, Midshipmen, I. N.	1,000 yds. = 2 0 Imp.	10 July - 1839	1838	- 2 -	
BAY OF BENGAL, &c.:							
1	Bay of Bengal - - -	James Horsburgh - -	d. = 1 4 Imp.	1 June - 1825	not stated	- 6 -	
1	Bay of Bengal - - -	James Horsburgh - -	The same - -	-- Second edition, corrected to 1844.	not stated	- 6 -	
1	Pulicat and Arnegon Shoals	-- Captain William Maxfield, I. N.	d. = 29 1 A ^s .	25 March - 1822	1821	- 2 -	
1	Mootapilly Bay - - -	Captain Charles Court -	m. = 0 5 R.	1 July - 1830	1816	- 1 6	
3	False Point to Saugor Roads	-- Captain W. Maxfield, I. N., with additions by Commander R. Lloyd, I. N.	d. = 30 0 C.	- 1 December 1819, corrected to 1831.	not stated	- 8 -	-- Second edition.
1	The Sands and Channels forming the entrance into the River Hooghly, including Balasore Roads.	-- Commander R. Lloyd, assisted by Mr. H. Weston, commanding a ^t vessel, and by Messrs. Powers and Keyman, pilot service.	d. = 15 0 E.	1 November 1842	1841	- 3 -	
1	River Hooghly from Calcutta to Saugor Roads.	-- Commander R. Lloyd, assisted by Lieutenant C. Montriou and Mr. Powers.	m. = 1 0 Ant.	1 August - 1839	1836	- 4 6	
3	Sea-face of Soonderbunds -	-- Commander R. Lloyd, assisted by Lieutenants J. A. Young, Boscawen, Montriou, Fell and Rennie, I. N., and Mr. Weston.	d. = 15 0 D.	1 November 1842	not stated	- 6 -	
1	Chittagong or Kornafalee River.	-- By Lieutenants J. A. Young and Rennie, under the direction of Commander Lloyd, I. N.	1,000 yds. = 1 0 M.	1 November 1842	1840	- 1 6	
2	Chittagong to Arracan River	-- Captain Ross, I. N., F.R.S.	d. = 16 0 C.	{ Sheet, 1st, 1 Feb. 1835 2d, 1 May 1835	1833	- 3 -	-- Two editions of the second sheet have been published.
1	Coast of Arracan from Akyab to 17° 50' north.	-- Captain D. Ross, I. N., with additions by Commander R. Lloyd, I. N., and Captain Holstead, R. N.	d. = 15 8 C.	- - 1 May 1834, corrected to 1842.	not stated	- 3 -	
1	Arracan River - - -	Lieutenant R. Lloyd, I. N.	m. = 1 0 Imp.	1 February 1834	1832	- 2 -	
1	Cheduba Straits and Coast of Ramree.	Captain D. Ross, I. N. -	d. = 30 9 Imp.	25 May - 1834	1832	- 2 -	First edition.
1	The same - - -	-- Captain D. Ross, I. N., and Captain Holstead, R. N.	The same - -	Corrected to 1842	1832	- 2 -	-- Second edition.
1	A Plan of Kyouk Phyoo Harbour.	Captain Bowman - -	m. = 1 0 $\frac{1}{2}$ D.	20 August - 1829	not stated	- 1 6	

Sheets: Number.	Names of Charts.	Author.	Size of Sheet, and Scale of Chart.	Date of Publication.	Date of Execution.	Price.	Remarks.
BAY OF BENGAL, &c.—continued.							
1	Kyook Phyoo Harbour and Combermere Bay.	-- Captain D. Ross and Commander Lloyd, I.N., and Captain Holstead, R.N.	2,000 yds. <i>In tenths.</i> = 1 0 Imp.	-- 1 October 1833, corrected to 1843.	1832	£. s. d. - 3 -	-- Two editions of this chart.
2	Coast of Ava, from latitude 18° to Cape Negrais.	Captain J. Crawford, I.N.	d. = 30 6 1st sheet, C. 2d sheet, near C.	<i>Sheet.</i> 1st, 1 Dec. 1827 2d, 1 April 1829	1826 & 1827	- 6 -	
1	Eastern Peninsula of India -	James Horsburgh - -	d. = 1 0 C.	-- 12 Feb. 1813, corrected to 1833.	not stated	- - -	-- Second edition.
1	Rangoon River - - -	Captain D. Ross, I.N. -	m. = 1 25 Imp.	1 January - 1827	1825	- 2 -	
1	Plan of Martaban River -	-- Major Jackson, Deputy Quartermaster-general.	d. = 9 5 D.	1 December - 1826	not stated	- 1 6	
1	Moscós Islands - - -	Captain Charles Court, I.N.	d. = 15 0 M.	1 December - 1826	not stated	- 2 -	
MARTABAN, TENASSERIM COASTS, &c.:							
2	Martaban to Tavoy Point -	-- Captain D. Ross, F.R.S., I.N.	d. = 15 3 R.	<i>Sheet.</i> 1st, 30 July 1829 2d, 1 Aug. 1829	1828	- 4 -	
1	Tavoy River - - -	Lieut. R. Moresby, I.N.	m. = 0,75 R.	1 January - 1827	1824	- 2 -	
1	Tenasserim Coast, from Tavoy Point to Mergui.	-- Captain D. Ross, F.R.S., I.N.	d. = 30 5 C.	16 November 1829	1828	- 3 -	
1	Mergui Harbour - - -	-- Lieutenants J. A. Young and Fell, under the direction of Commander R. Lloyd.	1,000 yds. = 2 0 Imp.	10 July - 1841	not stated	- 2 -	
2	Mergui Archipelago, from Iron Island to the Sayer Islands.	-- Captain D. Ross, F.R.S., I.N.	d. = 14 5 1st sheet, C. 2d sheet, Imp.	<i>Sheet.</i> 1st, 1 Nov. 1832 2d, Feb. 1838	1828 & 1831	{ 3 s. each - 6 -	
2	The same - - - -	-- The same, with additions by Commander Lloyd, I.N.	The same - -	-- The same, with additions to 1839.	The same	- 6 -	-- Second edition.
1	Hastings Harbour, Mergui Archipelago.	Captain D. Ross - -	m. = 1 0 S. R.	2 November 1829	1828	- 2 -	
1	General Chart of the River Hooghly, and the Approaches to it.	-- Captain R. Lloyd, I.N., and his assistants.	d. = 12 5 A ^s .	-- 1 January 1840 additions to 1845.	not stated	- 7 -	-- Compiled by J. Walker, Geographer to the East India Company.
1	Moulmein River, and the Eastern Coast of the Gulf of Martaban, from Amberst Point to the Sitang River.	Lieutenant W. Fell, I.N.	-- Scale of plan of River, m = 1 0 Coast, d = 25 2 E.	22 November 1848	1847	- 2 -	
1	Cheduba Roads and Ramree Harbour.	Lieutenant R. Lloyd, I.N.	m. = 0 25 D.	15 June - 1829	not stated	- 1 -	
STRAITS OF MALACCA, CHINA SEAS, &c. &c.:							
1	Straits of Malacca and Singapore.	James Horsburgh - -	d. = 5 0 C.	-- 1 March 1826, additions to 1844.	not stated	- 7 6	-- Second edition.
1	Plan of the Arroa Islands, Straits of Malacca.	Captain D. Ross, I.N., &c.	m. = 1 0 D.	1 August - 1820	1819	- 1 6	
1	North and South Sands, (Straits of Malacca).	-- The same, assisted by Lieutenants Maugham and Crawford.	d. = 14 9 Imp.	1 September 1820	1819	- 2 -	
1	Plan of Singapore Harbour -	Captain D. Ross - -	m. = 2 0 $\frac{3}{4}$ D.	1 January - 1820	1819	- 1 2	
1	Singapore Harbour, and Islands in its vicinity.	The same - - -	1,000 yds. = 0 5 M.	1 May - 1830	1827	- 2 -	
1	Plan of the Harbour near Singapore.	The same - - -	1,000 yds. = 2 0 $\frac{3}{4}$ D.	30 May - 1829	1827	- 1 -	
1	Western Coast of Sumatra, with various Plans.	James Horsburgh - -	d. = 2 5 C.	10 August - 1832	not stated	- 6 -	Compilation.
1	Northern Pepper Ports (West Coast of Sumatra).	Samuel Ashmore - -	d. = 10 2 S. R.	1 October - 1822	1821	- 2 -	
1	East Coast of Sumatra, from Diamond Point to the southern entrance of Brewer's Straits.	-- Lieutenants W. Rose and R. Moresby, I.N.	d. = 10 0 A ^s .	1 January - 1824	1822	- 3 -	
1	Islands eastward of Bintang	Captain D. Ross, I.N. -	d. = 15 0 $\frac{3}{4}$ D.	1 August - 1820	1819	- 1 -	
1	East Coast of the Malay Peninsula.	-- Lieutenant John Crawford, I.N.	d. = 4 0 $\frac{3}{4}$ D.	1821	1820	- 1 -	
1	Straits of Durian - - -	-- Lieutenants W. S. Collinson, Hawkins, and R. Moresby, I.N.	m. = 0 75 Imp.	1 November 1823	1822	- 2 -	
2	Tanjong Bon and Pulo Bareliah, to the southern entrance to the Straits of Durian.	-- Lieutenants Collinson and R. Moresby.	d. = 22 8 S. R.	not stated	1823	- 4 -	
1	Ilchester Shoal - - -	Captain D. Ross - -	d. = 11 5 $\frac{1}{2}$ D.	14 September 1820	1819	- 1 -	
1	Tracks of the H. C. S. "General Harris," on her passage from China to Gaspar Straits.	No name - - -	d. = 7 8 D.	2 January - 1826	1825	- 1 6	

Sheets : Number.	Names of Charts.	Author.	Size of Sheet and Scale of Chart.	Date of Publication.	Date of Execution.	Price.	Remarks.
	STRAITS OF MALACCA, CHINA SEAS, &c. &c.—cont^d.		<i>In tenths.</i>			<i>£. s. d.</i>	
1	Island of Thwart-the-way, with the Passages between that Island and Hog Point, and the Button and Cap Rocks.	-- Captain Maxfield and Lieut. J. S. Criddle, I.N.	m. = 0 5 D.	1 November 1820	1819	- 1 6	
1	Track of the H. C. S. "Scaleby Castle" through the Gillolo Passage.	-- Mr. W. R. Blakely, chief officer.	d. = 9 8 R.	1 February - 1823	not stated	- 2 -	
2	China Seas - - -	James Horsburgh - -	d. = 2 0 D. E.	<i>Sheet.</i> 1st, 1 Oct. 1821 additions to 1844 2d, 1 July 1831	} not stated	- 15 -	- Two editions published.
1	Passages leading the Lymoon	- - W. R. Blakely, assisted by John Vaux, Charles Evans, and Charles W. White, H. C. S.	m. = 1 0 $\frac{3}{4}$ D.				
1	Canton River - - -	James Horsburgh - -	d. = 25 6 A ^o .	1 July - 1831	not stated	- 7 6	
1	South-east Coast of Hainan -	Captain D. Ross - -	d. = 14 0 D.	1 June - 1822	not stated	- 1 6	
1	Lintin to the Bocca Tigris -	Lieutenant D. Ross -	m. = 1 0 $\frac{3}{4}$ D.	not stated	not stated	- 2 -	
1	The Dhaulie's Track, between the east coast of China and western part of Formosa.	Mr. George Baxland -	d. = 5 5 Imp.	18 August - 1828	1827	- 2 -	
1	Plan of the Soundings on the S.E. Coast of China.	Lieutenant Parkyns, R.N.	d. = 20 0 $\frac{3}{4}$ D.	10 June - 1825	1824	- 1 -	
1	Killon Harbour and Merope Bay, in the Island of Formosa.	-- Lieutenant G. Parkyns, R.N., and Mr. J. B. Livesay.	m. = 13 0 R.	1 July - 1825	1824	- 2 -	
1	East Coast of China - -	James Horsburgh - -	d. = 2 9 D. E.	12 February 1835	not stated	- 8 6	
3	Eastern Passages to China -	The same - - -	d. = 2 0 C.	<i>Sheet.</i> 1st, 1 May 1824 2d, 2 June 1828 3d, 2 Jan. 1826; sheet 1st, corrected to 1845; 2d, corrected to 1839.	} not stated	1 11 6	
1	Islands and Channels at the S. W. extremity of the China Seas.	James Horsburgh - -	d. = 11 2 C.				- - 1 Dec. 1821, corrected to 1847.
1	Passages through the Barrier Reefs, &c. &c.	The same - - -	d. = 15 0 $\frac{3}{4}$ D.	28 January - 1830	not stated	- 4 -	
1	Plan of the Channel to the eastward of Fansyack.	-- W. R. Blakely, John Vaux, Charles Evans, and Charles W. White, E.I.C. maritime service.	m. = 1 0 $\frac{3}{4}$ D.	1 November 1830	1829	- 1 -	
INDIAN OCEAN :							
1	Madagascar Archipelago -	- - Captain T. Moresby, C.B., R.N.	d. = 6 0 C.	20 May - 1824	1822	- 2 -	
1	Indian Ocean, from Kerguelen's Island to the Saya de Malha Bank.	James Horsburgh - -	d. = 0 5 A ^o .	- - 10 Nov. 1814, additions to 1833.	not stated	- 7 6	- - Second edition.

SAILING DIRECTIONS.

Vols. : Number.	TITLE OF BOOK.	AUTHOR.	Date of Publication, and Price,
1	Sailing Directions for the Red Sea.	- - Commanders Moresby and Elwon, I.N.	London, 1831 - 3s.
1	Nautical Directions for the Maldiva Islands and the Chagos Archipelago.	- - Commander R. Moresby, I. N.	London, 1840 - 2s.

(True copy.)

(signed) *P. M. Melvill*, Lieutenant-Colonel,
Secretary to Government.

LIST OF CHARTS, &c.—*continued.*

Sheets: Number.	Names of Charts.	Author.	Size of Sheet, and Scale of Chart.	Date of Publication.	Date of Execution.	Price.	Remarks.
✓ 1	Moulmein River and Eastern Coast of the Gulf of Martaban.	Lieutenant Fell - -	-- 32 by 27 inches; 5 miles = $2\frac{1}{10}$ inches.	22 November 1848	1847	<i>£. s. d.</i> - 2 -	
✓ 1	Islands of Rameseram and Manaar.	-- Lieutenants Powell and Ethersey.	-- 40 by 26 inches; 1 mile = $\frac{1}{2}$ inch.	20 February - 1850	not dated	- 3 -	
✓ 4	West Coast of Ceylon -	-- Mr. J. J. Franklin, R. N., and Lieutenants Powell and Ethersey, I.N.	-- 26 by 20 inches; 1 mile = $\frac{1}{4}$ inch.	20 February - 1850	1845	- 1 6 each sheet	
✓ 1	Calicut Roads, and Entrance to Beypoor River.	-- Lieutenant Montriou and Mr. A. D. Taylor.	-- 24 by 23 inches; 1,000 yards = 1 inch.	25 February - 1850	1846	- 1 6	
✓ 1	Viziadroog, or Gheriah Harbour.	-- Lieutenant Montriou and Mr. A. D. Taylor.	-- 22 by 21 inches; 500 yards = 1 inch.	1 March - 1850	1844	- 1 6	
✓ 1	Cochin Harbour and Roads	-- Lieutenant Robinson and assistants.	-- 22 by 13 inches; 1 mile = 4 inches.	22 April - 1850	1835	- 1 -	
✓ 1	Entrance to the Red Sea -	Commander Haines -	-- 40 by 26 inches; 1 mile = 1 inch.	2 May - 1850	1835	- 3 -	
✓ 1	Dewghur Harbour - -	-- Lieutenant Montriou and Mr. A. D. Taylor.	-- 33 by 26 inches; 250 yards = 1 inch.	20 May - 1850	1844	- 2 -	
✓ 1	Islands westward of Socotra	-- Lieutenant Grieve and Mr. Ward.	-- 40 by 26 inches; 4 miles = inch.	25 May - 1850	1848	- 3 -	
✓ 1	South-east Coast of Arabia, sheet II.	-- Commanders Haines and Sanders, and Lieutenant Grieve.	-- 40 by 26 inches; 1° = $6\frac{2}{10}$ inches.	1 August - 1850	not dated	- 3 -	
✓ 1	Anchorage of Rutnagheriah	-- Lieutenant Montriou and Mr. A. D. Taylor.	-- 26 by 20 inches; 500 yards = 1 inch.	1 January - 1851	not dated	- 1 6	
✓ 1	Bay and entrance of Rajapoor River.	-- Lieutenant Montriou and Mr. A. D. Taylor.	-- 31 by 26 inches; 250 yards = 1 inch.	1 January - 1851	1844	—	
✓ 1	Coringa Bay - - -	Lieutenant Fell - -	-- 24 by 24 inches; 1,000 yards = 1 inch.	-- now in course of engraving.	1846	—	
✓ 3	Coromandel Coast - -	Lieutenant Fell - -	-- 40 by 26 inches, and 32 by 26 inches; 4 miles = 1 inch.	-- now in course of engraving.	1848	—	
✓ 1	North-east Coast of Africa -	-- Lieutenants Barker and Grieve.	-- 40 by 26 inches; 1° = $6\frac{2}{10}$ inches.	-- now in course of engraving.	1847	—	

East India House, May 1851.

(signed) John Walker.