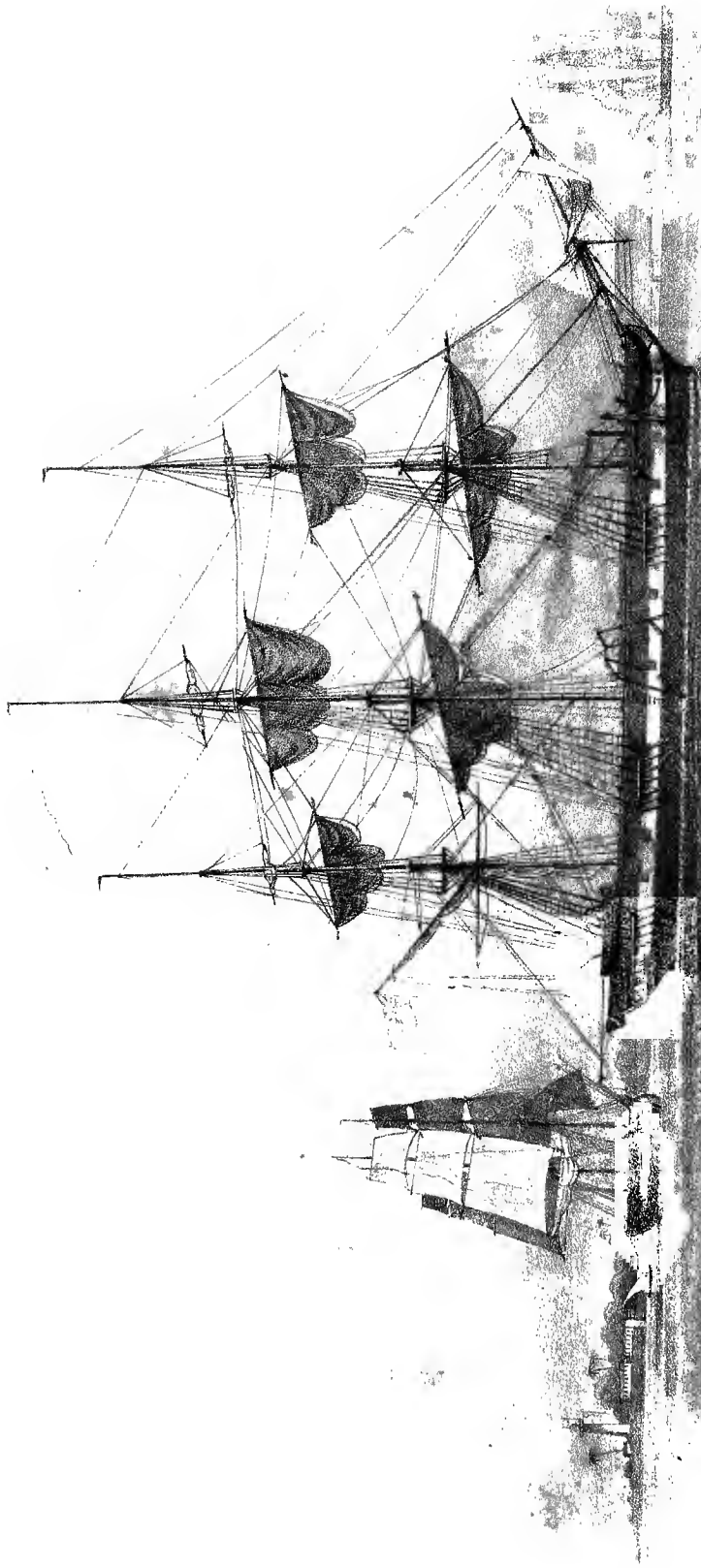


ASIA

ANALYSIS  
OF  
ONE HUNDRED VOYAGES  
TO AND FROM  
INDIA, CHINA, &c.



Build & Co. Bldg. 83 Cornhill.

The Ship "M. L. L. L." 400 Tons, fitted with McMillen Patent Propellers.  
Messrs Gardue, Uryuhart & Co., Owners; ——— James Black, Commander.

AN ANALYSIS  
OF  
ONE HUNDRED VOYAGES  
TO AND FROM  
INDIA, CHINA, &c.  
PERFORMED BY  
SHIPS IN THE HON<sup>BLE</sup> EAST INDIA COMPANY'S SERVICE;  
*With Remarks on the Advantages of Steam-Power*  
APPLIED  
AS AN AUXILIARY AID TO SHIPPING;  
AND SUGGESTIONS FOR IMPROVING THEREBY THE COMMUNICATION  
WITH INDIA, VIÂ THE CAPE OF GOOD HOPE.  
TO WHICH IS ADDED  
AN APPENDIX,  
CONTAINING  
A DESCRIPTION OF MELVILLE'S PATENT PROPELLERS,  
WITH PLANS OF THE ENGINES, MACHINERY, &c.

---

By HENRY WISE,

LATE CHIEF OFFICER OF THE HONOURABLE COMPANY'S SHIP EDINBURGH.

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London:

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AND

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1839.

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ENTERED AT STATIONERS' HALL.

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S. M'DOWALL, Printer, 95, Leadenhall Street.

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TO JOHN MELVILLE, Esq.

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DEAR SIR,

Your invention for propelling ships when becalmed, opens a wide field for the exercise of British enterprise, and will doubtless form a new era in the maritime annals of our Country.

The experience of modern times has amply shewn, that improved modes of communication, are amongst the most efficient means of advancing the civilization and happiness of mankind. Every additional invention, for the furtherance of this great object, cannot but be hailed with satisfaction by the Public; and I know of none, which in our day promises to confer more extensive benefits on the commerce and navigation of the Country, than your plan of propelling vessels, which, as being applicable to those of every form or construction, and to all kinds of situations, whether on seas, rivers, or canals, may be truly designated as *universal*.

For this attempt to illustrate the advantages of it, I rely on your indulgence; and remain,

DEAR SIR,

Yours faithfully,

HENRY WISE.



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## P R E F A C E.

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THE absence of any thing like practical detail in the various suggestions hitherto submitted for improving the communication with India, *viâ* the Cape of Good Hope, and the non-appearance of any work exhibiting the vast advantages of steam-power applied as an *auxiliary aid* to shipping, occasion this intrusion upon public attention.

In order to establish the necessity of such an additional resource on grounds beyond all question, it was requisite to ascertain correctly the actual delay experienced during distant voyages in consequence of calms and light airs: this has been effected, and from data that none can dispute—the log-books of ships in the Honourable East India Company's Service.

Every unprejudiced mind will admit, that if vessels so well navigated, manned, and stored as the Company's ships were, have been subjected to such serious detention, those less efficiently appointed will experience as much, if not greater, delay.

I have endeavoured to point out in what situations steam-power as an occasional assistance will be most effectual; and have much pleasure in communicating the mass of useful information derivable from *an analysis of one hundred voyages* performed by

ships in the Honourable East India Company's service ; which to the young Commander will I trust be of important utility. The records of the first commercial navy in the world, are here brought under his observation in a condensed form ; and the actual experience of former navigators, faithfully detailed for his guidance.

Many of my professional readers must have observed, the eager anxiety evinced by Masters not conversant with East India voyages, for the possession of old journals : the collection here offered, will I hope satisfy this desire. A careful inspection of the different routes exhibited in the annexed Tables, assisted by that invaluable work, "HORSBURGH'S DIRECTORY," will enable the inexperienced Commander, to trace in the good or indifferent passage to India, the causes of success or failure : he may consequently endeavour to emulate the one, and avoid the other.

The Commander proceeding to India on his *first voyage*, will find material support, and be inspired with confidence in all doubtful situations, by comparing his track, with that of a ship which left port about the same season of the year as his own (it being correctly ascertained, that during particular months, the winds and weather in certain localities are remarkably similar) : the comfort, satisfaction, and success, attending an adherence to the route of the more experienced, he will soon learn to estimate.

My best acknowledgments are due to the Honourable the Court of Directors of the East India Company, for the use of their valuable journals, and to my friend MR. GEORGE COLEMAN, for the assistance he has kindly rendered me in the construction of this analysis :—his well-known experience as a practical navigator, will I hope be considered a sufficient guarantee for the accuracy of the several Tables.

To the ship-owner or merchant I need offer no apology for this undertaking:—every endeavour to improve navigation, or save time, they will readily appreciate, and consider the importance of the object I have in view, rather than my very imperfect execution of it.

H. W.

CANTON PLACE, EAST INDIA ROAD,

JUNE, 1839.



REMARKS  
ON THE  
ADVANTAGES OF STEAM-POWER  
APPLIED AS  
AN AUXILIARY AID TO SHIPPING, &c.

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TO a maritime nation like Great Britain, there cannot be a subject of deeper interest than the one I am about to notice : the importance of it demands a consideration that my humble efforts can scarcely hope to excite ; but at a period when our maritime supremacy is idly questioned, and the slumbering glory of our Navy almost forgotten, any attempt to call the attention of the Public to an important addition to the efficiency of our shipping cannot be unacceptable :—I allude to the combination of steam-power with the present resources of sailing vessels ; and propose the application of it, on a limited scale, as an *auxiliary aid* to shipping during calms and light airs.

The experience of every nautical man will afford abundant evidence, that during most voyages to distant parts of the globe, contrary winds are less a source of detention than vexatious calms ; the monotony of which may now be overcome, and the state of helplessness that ships are in when becalmed, obviated.

My professional readers will at once perceive in what numberless instances, this auxiliary aid may be used to advantage. Ships will now be enabled, in the absence of wind, to take up a favourable position in action, bring either broadside to bear, or move when requisite beyond the range of any destructive battery opposed to

them; and the calm which frequently succeeds a heavy cannonading, will neither prevent future fleets from manœuvring, nor suspend the result of a long chase.\*

Every frigate we have, could at a small expence be fitted with the additional assistance alluded to. The men-of-war on the African station, engaged in vain endeavours to suppress the slave-trade—an occupation fatal to many of our gallant fellows on that pestilential coast—would, with steam-power applied as proposed, be able to check more effectually that brutal traffic. At present the calms

\* MR. COOPER in his recent work, "*History of the American Navy*," has the following observations on the probable employment of steam-vessels in future wars:—

"That the use of steam will materially modify naval warfare, is probably true; but it cannot change its general character. No vessel can be built of sufficient force and size to transport a sufficiency of fuel, provisions, munitions of war, and guns, to contend with even a heavy frigate, allowing the last to bring her broadside to bear. It may be questioned if the heaviest steam-vessel of war that exists could engage a modern two-decked ship even in a calm, since the latter, in addition to possessing much greater powers of endurance, could probably bring the most guns to bear in all possible positions. Shot-proof batteries might indeed be built, that, propelled by steam, would be exceedingly formidable for harbour defence; but it is illusory to suppose that vessels of that description can ever be made to cruise. Even in estimating the power of steam-vessels in calms, as opposed to single ships of no great force, there is much exaggeration, as historical facts will amply prove. The wars of this country afford several instances of frigates carrying eighteen pounders lying exposed to the cannonade of fifteen or twenty gun-boats for two or three hours, and yet in no instance has any such vessel been either captured or destroyed. It is a heavy sea-steamer that can bring six guns to bear at a time, and yet frigates have resisted twenty guns, advantageously placed, for hours. It may be said that steamers would dare to approach nearer than gun-boats, and that, by obtaining more favourable positions, they will be so much the more formidable. There is but one position in which a ship can be assailed without the means of resistance, and that is directly ahead, and from a situation near-by. Large ships can hardly be said to be defenceless even under these circumstances; as the slightest variation in their position would always admit of their bringing three or four heavy guns to bear. The expedients of seamen offer a variety of means of changing the direction of a ship's head in calms, even did not the sea itself perform that office for them. Nothing, for instance, would be easier than to rig, temporarily, wheels, to be propelled by hand out of the stern or bow ports, or even on the quarter, that would bring a large ship's forward or after guns to bear, in a way to beat off or destroy a steamer.

"There are certain great principles that are unchangeable, and which must prevail under all circumstances. Of this class is the well-established fact, that a ship which possesses the efficiency which is contained in the double power to annoy and to endure, must, in all ordinary circumstances, prevail over a ship that possesses but one of these advantages, and that too in a smaller degree. Steam may be, and most probably will be, made a powerful auxiliary of the present

which are favourable to slavers using their sweeps, and escaping with their cargoes of suffering beings, prevent the vessels of our squadron from approaching them, except with the ships' boats. The exposure of British seamen in such a climate, is notwithstanding the object, a fact that suggests the necessity of adopting every means that will render this arduous service less harassing, or the resources of our ships on that sickly station more complete. The slightest examination will shew how vastly preferable MR. MELVILLE's invention for propelling ships is, to the various methods hitherto suggested. Perhaps a difficulty of compelling the manual labour requisite for the ingenious contrivances of

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mode of naval warfare, but is by no means likely to supplant it. Fleets may be accompanied by steamers; but their warfare will be conducted by the present classes of heavy ships, since it is not possible to give sufficient powers of annoyance or endurance to vessels propelled by steam, to enable them to lie under the batteries of the latter. Even as active cruisers, the efficiency of steam-vessels is probably overrated, on account of the consumption of fuel; though it remains to be proved by experience whether their employment may not induce a change in the armaments of light vessels of war. The history of the war of 1812 shews that ships have often cruised months without having fallen in with convoys; and it is certain that no steamer, in the present state of science, can remain at sea thirty days, with efficiency as a steamer."

It is evident from the foregoing, that MR. COOPER has not contemplated any other application of steam-power than the usual one prevalent, *viz.* the paddle-wheel, which can only be properly applied to *vessels built expressly for it*; and the probability of machinery being invented by which steam-power could be applied to the propelling of ships of the usual construction, when there is not a sufficiency of wind to enable them to move with sails, never struck his mind. Now MR. MELVILLE's invention affords the means of doing this; and as the machinery can be fitted to all *existing* vessels, occupies but little space, and does not encumber them in any degree, besides having other advantages which render it practicable to use steam-power when wind fails, or its employment becomes desirable or necessary, MR. COOPER's remarks that "no vessel can be built of sufficient force or size to transport a sufficiency of fuel, provisions, munitions of war, and guns, to contend with a heavy frigate," will no longer hold good, as the "heavy frigate," or even the largest first-rate, may now be moved by the occasional application of steam-power: we shall still therefore possess the qualities which he deems essential in a ship of war, "the double power to annoy and to endure," and also have the power of movement independent of wind. MR. MELVILLE has arranged a plan by which the principal portion of his machinery for propelling can be placed entirely under the water-line, and beyond reach of accident from shot, leaving nothing exposed but the connecting rods to move the driving shafts, and even these admit of being easily protected. His propellers will not occasion the removal of a single gun on either deck.



Captain Savery\* and others, caused the rejection of their plans. The appearance of an enemy's ship becalmed a few miles distant, would, no doubt, elicit cheerful compliance; but, wanting that stimulus, I question if the order "*to man the propellers,*" would be very promptly attended to.

To vessels employed on voyages of discovery, and frequenting high latitudes, steam-power, as suggested, would be of great consequence—a ship becalmed in the vicinity of an iceberg, or any other object of danger, might be saved by the application of it.

Ships conveying troops will find the occasional aid of steam-power very important. The overland dispatches from Bombay, dated 1st of November last, referring to the preparations making at

\* Harris, in his Universal Dictionary, or Lexicon Technicum, published in 1704, states—"And here I think it requisite to give the reader a description of a very useful engine, the invention of one of our own nation, Captain Thomas Savery, a gentleman very skilful in things of this sort: it is a plan to row ships or boats at sea or in a river, when there is a stark calm, or very little wind.

"A description of this the inventor published in the year 1698, with his answers to the objections raised by Mr. Dummer and others; and the thought is so natural, and the manner of its working so plain and easy, that 'tis an amazing thing to one, that there is no more use made of it.

"He fits a wheel to the drumhead of the capstan, whose teeth turn a trundle-head, through which is run an iron bar that reaches clear across, and goes through the sides of the ship, and on its ends without-board at a convenient distance from the ship's sides are fastened two drumheads like that on the capstan, in which are fitted, to take out at pleasure, six or eight paddles; and at the outer end of the paddles is fastened an iron pin with a head to it, by which means, and by the help of a cord taking a half turn round about all these pins, both the paddles may be swifted or strained, and strengthened together, so that they shall all work proportionably; and also the paddles may, with a luff tackle, be the more handily and easily lifted in and out, in order to be fitted into or taken out of the drumheads of the bar.

"Now here, *if the men will but work!*—if there be enough of them, and the paddles be made proportionably large, according to the number of the men that can be brought to work at the capstan, I cannot see but that the engine will give the vessel fresher way than any oars can do worked by the same, or a far greater number of hands, as the experiments that have been tried do abundantly shew, according to the best information I can get of the matter."

that Presidency in the military department of the Government, state, "the *Coote* (a sloop of war in the service of the Honourable East India Company), carrying the expedition against Aden, had been spoken at sea by the *Berenice Steamer*, and supplied with provisions:—she had made only *ten miles* in the previous *twenty-four hours*, and was then two hundred miles from Aden; so that it was feared the troops would arrive much out of condition."

The *Coote* is a fast ship; but like all others, without a breeze, helpless. Perhaps I could hardly select a more prominent fact to shew the absolute necessity of combining steam-power with the present resources of our shipping, than the situation of this vessel:—full of troops (destined to uphold or tarnish our country's honour), short of provisions, and *two hundred miles* from the scene of action, which, at the rate of her last day's progress, it would occupy nearly *three weeks* to reach—a distance that with the auxiliary aid alluded to, could easily be accomplished in *forty-eight hours*. More recent accounts inform us that these brave men have stormed and captured Aden: we must not however forget, that had their privations on board the *Coote*, been of much longer continuance, the operations against Aden might have terminated differently.

I have not quoted a tithe of the advantages to be derived from such an additional resource to shipping during war. In ordinary times what vast benefits this auxiliary aid will confer upon our mercantile marine! The recent loss of the ship *Protector*, at the mouth of the River Hooghly, after performing the voyage from England in safety, when one hundred and seventy persons perished, affords melancholy proof, that if any thing can be done to avert or lessen the frequency of such disasters, it is the duty of all to consider the means. I can very easily imagine, and so will my nautical readers, how this ill-fated vessel was lost. Arriving on the coast during thick blowing weather, she anchors, probably near the eastern or western sea-reefs, parts her cables, and is driven upon one of the many sand-banks in that locality (from which ships seldom or ever get off); a heavy sea running, soon completes her destruction. I remember in 1818, the Honour-

able Company's Ships *Castle Huntly* and *Dunira*, arrived off the Sand Heads, Bengal; for several days we had strong breezes, thick weather, severe squalls, and a constant deluge of rain; each ship cruising under snug canvas during the day in search of a pilot; at night firing guns every half-hour, burning blue lights, and using all possible means to procure one without success. The *Dunira* lost one or two anchors, and was riding near the reefs, when the pilot-vessel, on the weather clearing up, hove in sight:—both ships then proceeded up the River Hooghly. They had altogether nearly one thousand souls on board, and their situation, had their hemp-cables (then in use) all parted, would have been most critical.—The late hurricane that occasioned such deplorable loss of life and property on our own coast, is another stimulant to the question, “Can ships in future be in any way assisted to contend against similar difficulties?” The Commanders and Officers of our merchant ships, comprise amongst them, some of the best and bravest of Great Britain's sons: their crews are the sinews of the empire, and have every title to our best consideration. I do not pretend to assert, that in such a gale as occasioned the wreck of those fine ships, *Pennsylvania*, *Lockwoods*, *Crusader*, and others near Liverpool, steam-power, on the scale I am advocating, would have saved them; but every seaman will allow, that had ships when at anchor near a lee-shore, more effectual means than at present, for lessening during a heavy gale, the strain on the riding cable, these melancholy results would occur less frequently: under such circumstances, the proposed auxiliary aid would be most valuable. The ease and safety with which steam-vessels, by such application of their engines, ride out heavy gales in critical situations, prove what I advance; and experience will point out many other useful adaptations of a power we have only begun to use.

During the memorable hurricane in Bombay Harbour, on the 15th of June, 1837, a remarkable instance of the successful application of steam-power occurred. The ships *Edinburgh*, *Adelaide*, *John Stamp*, *Aurora*, *Ranger*, *Great Harwood*, *Hind*, *Mary Dugdale*, *Richard Walker*, *Rapid*, *Northumberland*, *Hastings*, and *Briton*, were all driven on shore—some were totally wrecked, and others

more or less damaged; but the *Berenice* steam-vessel, after being run foul of by the *Hugh Lindsay* (both ships having parted their moorings), got the steam up, and proceeded to Mazagon, where she rode in safety.

The application of steam-power in the manner I propose, to shorten the duration of distant voyages, is another important result apparent to all who will take the trouble to investigate this subject thoroughly. It is evident that the actual daily progress effected by it during a calm will be very considerable; whereas at present, without such occasional aid, a ship is often, and for a length of time, almost stationary:—for instance, near the Equator, and between the limits of the N. E. and S. E. Trade-winds, a space of a few hundred miles only, ships are frequently detained periods varying from six to twenty days. The power to pass through this interval of calm with certainty in a short time, and to again enter within the influence of the Trade-winds, can only be properly estimated by those conversant with ships' accounts:—the saving in wages, provisions, wear and tear, interest, insurance, &c., consequent upon the use of such an auxiliary aid, they will doubtless appreciate.

Every seaman knows how very partial the winds are in many situations; and how often he has seen from the mast-head, a ship with all her sails full, whilst his own remained becalmed and motionless: in these instances such an additional resource even for a few miles, would be highly important.

The experience of many Commanders will remind them, how frequently they have made a fine passage to some particular limit in their route out or home, and there, got so delayed by a calm, as to be obliged to class what they imagined would prove an extraordinarily quick voyage, amongst those far otherwise, or such as have been very often performed by others.

Calms in peculiar localities are frequently the cause of greater delay than their actual duration: for example—After making a splendid run from Bombay, Bengal, or Java Head, a homeward-

bound ship gets becalmed a few leagues to the eastward of Cape L'Agulhas for twenty-four hours ; after which, the wind freshens up from the N. W. ; bad weather comes on and continues ; the vessel that with steam-power, applied for a few hours as an auxiliary aid, would have been propelled during the calm, round the Cape, and enabled to steer away for St. Helena, is two or three weeks detained to the eastward of L'Agulhas ; her sails, rigging, and hull injured ; crew knocked up ; and the fine passage home, which all hands expected to make, lost.

The same results often occur in the northern part of the China seas. A ship, late in the season, or near the Equinox, leaves Singapore for China ; she gets in sight of the land, and is there becalmed. Auxiliary aid from steam-power would in a few hours propel her into one of the many safe harbours on that coast. A gale, perhaps a Tyfoon, commences from the northward ; and after being driven to leeward, sometimes to the southward of the Paracel Shoals, or amongst them, the same vessel makes the coast again, strained, shattered, and liable as ever, to a repetition of similar disasters.

For an illustration nearer home, of the great utility such occasional assistance would be, let us consider a ship after a tedious passage from India, full of passengers, troops, &c., short of water and provisions, having been delayed by a series of easterly winds, at length reaching the mouth of the British Channel, a calm ensues, and the hopes of all are sanguine for a change. With the auxiliary aid of steam-power, the vessel could be propelled into a western port, and supplies readily obtained : wanting such assistance, the returning breeze brings no comfort ; the wind freshens up again steady from the eastward, and another week or fortnight's privation is the consequence : my own experience, and that of my professional readers, will confirm the probability of such contingencies happening.

Tedious passages through Straits similar to Malacca, Singapore, Gaspar, Banca, Sunda, &c., may now be avoided : ships in the vicinity of shoals, or drifting near the land with light winds

and deep water, rendering the anchorage impossible, or unsafe, could with the assistance alluded to, steer clear of danger.

Vessels lightly manned, having a difficulty to purchase their anchor, would be greatly assisted by using such auxiliary aid :—indeed, by a very simple adaptation of the machinery fitted to MELVILLE'S PROPELLERS, the whole heavy work of the ship—weighing anchor, pumping, &c., might be accomplished independent of manual labour, should sickness, or any other casualty, render a resort to such means necessary.

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SUGGESTIONS FOR IMPROVING THE COMMUNICATION WITH INDIA,  
VIÂ THE CAPE OF GOOD HOPE.

A careful inspection of the annexed Tables will I trust shew, that a real necessity for the application of steam-power, as an occasional and auxiliary aid to shipping, exists: I therefore submit, and with great deference, my suggestions for improving thereby our communication with India, *viâ* the Cape of Good Hope. I anticipate but little opposition from practical men, in asserting, *that* route must continue to be Great Britain's high road for the conveyance of troops and merchandise; the one through Egypt being far too precarious (not to mention the enormous expence and inconvenience attending repeated transshipments and land journies). With our important Indian possessions, we must always have, particularly in these critical times, regular and speedy communication, independent, if possible, of political changes, or the caprice of Egyptian rulers. The welfare of British India is identified with improved means of intercourse; and on the ocean, where no power can interrupt us, every exertion must be used to secure this desirable object.

*The Analysis of One Hundred Voyages to and from India, China, &c.*, constructed for the purpose of shewing what very considerable delay ships have experienced from calms and light airs, points out with accuracy the locality of the principal detention, and the *extent* of it. To ascertain correctly these important facts, I preferred

consulting the Journals of so important a Public Service as that of the Honourable East India Company, to the Log Books of private Merchant ships:—the former afford official and satisfactory data, accessible to all who may require confirmation of my statements; the latter, although they contain details better adapted to shew the great advantages to be derived from the occasional use of steam-power as an auxiliary aid, and exhibit frequent instances of delay far more extensive than the Indiamen experienced, are less conveniently referred to, and might not be considered so satisfactory as the documents which the Honourable Court of Directors have permitted me to inspect—records of a Service now abolished, but one that Great Britain must ever hold in proud remembrance.

The principle upon which I have constructed the analysis of each voyage, is as follows: the log-books of the several ships have been carefully examined; and the varieties of weather during every twenty-four hours, divided into four classes, *viz.*—

*Dead Calm.* Ship not having steerage-way.

*Light Airs.* Ship going from half-a-mile to three miles per hour.

*Fair Winds.* Ship going free.

*Foul Winds.* Ship close-hauled.

The weekly total of these divisions in hours, is stated within their respective columns; and the general total, exhibits correctly what proportion of the above vicissitudes, each ship experienced.

In estimating the actual delay sustained, I have simply added together the hours of calm and light airs, discarding entirely those of fair and foul winds; avoiding in the several Tables any assumed calculations of what might have been done, or how frequent were the opportunities of applying steam-power, during light fair winds, or the *lee*-propeller only, when light foul winds prevailed:—these are advantages apparent to all, and their supposed general effect upon future voyages, to India, I have noticed in separate Tables.



The very large proportion of fair winds during East India voyages, as exhibited in the Tables, must convince those conversant with this subject, that the true method of applying steam-power with success to vessels engaged in that important branch of our commerce, is the adoption of it on a limited scale, and as an occasional or auxiliary aid, to be used during calms and light airs, which it is evident are the principal causes of delay:—the constant application of it is proved by the analysis of one hundred voyages to be unnecessary. My nautical readers are well aware, that during fair winds, a fast ship under canvas, will compete in speed with most steam-vessels; whilst the latter derive little or no benefit from their sails, which are seldom full, in consequence of the rate acquired by the vessel from the engines, being greater (unless blowing hard) than that at which the wind moves. Foul winds, it is shewn by the Tables annexed, prevail during so short a period of the voyage to or from India, as to cause a delay insufficient to justify the necessity of applying steam-power on a large scale to contend against them. I feel confident a minute examination of this interesting subject, will prove, that what has hitherto been considered the grand obstacle to the successful application of steam-power on distant voyages, *viz.* “the enormous consumption of fuel,” may, with the exercise of sound judgment, be avoided.

In considering the adaptation of this auxiliary aid to vessels in the India trade, I solicit the indulgence of all who are interested in this important question, whilst I endeavour to shew, that much may be done by the judicious use of steam-power, towards shortening the duration of East India voyages, and lessening the interval that at present exists (owing to the great and praiseworthy exertions of MR. WAGHORN in forwarding the overland letters) between the arrival of Bills, and the cargoes against which many of them are drawn—a result that must be considered very desirable.

The class of vessels at present employed in the Trade between Great Britain and India, are ships averaging from 400 to 500 tons register: of course in this estimate I do not include the line of splendid frigate-built passenger-ships, constructed by, and belonging

to an eminent London Firm: should the spirited owners of this magnificent fleet, apply steam-power as an auxiliary aid to their vessels, the communication between England and India, *viâ* the Cape of Good Hope, will be at once perfect, and this grand object effected by private enterprise and capital: it is scarcely possible to mention a more striking illustration of the vast and expansive resources of this great nation, than the fact of a single mercantile house, building, owning, and employing, a fleet of ships superior to the whole Navy of more than one foreign Power.

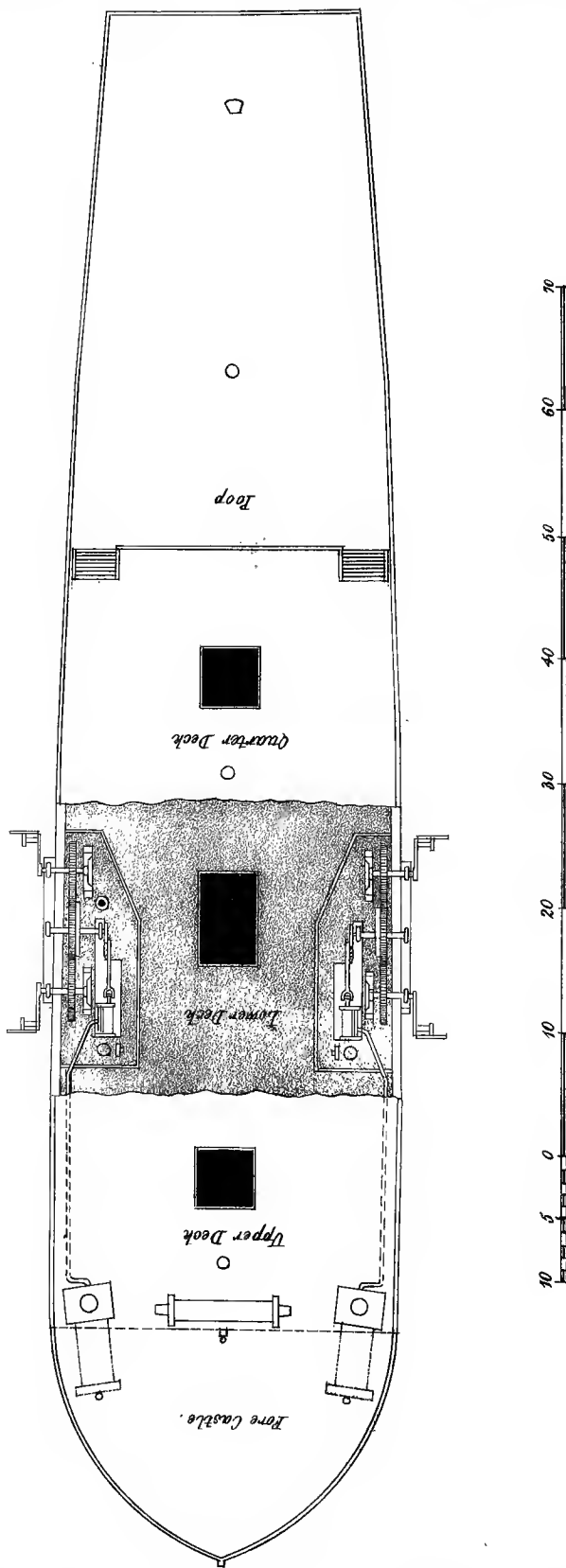
Assuming however, that the bulk of the commerce between this country and India, will continue to be carried on by fast-sailing handy ships of about 400 or 500 tons register, it is to this class of vessels I would suggest the application of the occasional assistance proposed, to be used during calms and light airs. My not very short experience at sea (seventeen years) enables me to value the importance of possessing all available means to meet the emergencies of varying weather and other circumstances when afloat; and I have a firm conviction that the time is not far distant, when it will be as rare for ships to go on remote voyages without this, or a similar invention, for getting through the disheartening periods of calms, sometimes of long duration, as without spare sails or the other equipments necessary to contend against ordinary casualties.

The *Maria*, of 460 tons register, Captain BLACK, (Messrs. GARDNER, URQUHART, & Co., Owners) bound to Bombay with a general cargo, and drawing when loaded, 16 feet 6 inches water, was the first sailing vessel fitted with steam-power as an auxiliary aid. To this ship MR. MELVILLE'S Patent Propellers, with two engines of ten-horse power each, were applied.\*

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\* From an accident to one of the engines at an early period of the voyage, the *Maria* was very considerably delayed on her passage out. But for this misfortune, I feel confident, from what I witnessed of the effective action of the Propellers during the ship's progress from the Docks to the Downs, that her voyage to Bombay, notwithstanding the unfavourable season of her departure (December), would have been very materially shortened.





Interior View of the Ship "MARIA", 460 Tons, Capt. James Black, now on a Voyage to BOMBAY (January 1839) showing the actual space occupied between decks,  
by the Engines and Machinery fitted to Melville's Patent Propellers.

The machinery alluded to, which is more particularly described in the APPENDIX, propelled the ship *Maria* in a dead calm, about three miles per hour: more power would of course effect a greater propelling rate, and larger ships would require it—these are questions of proportion only. The great simplicity of the machinery is evident to all who are conversant with such matters; and although in the *Maria*, engines and boilers on the locomotive principle were preferred, condensing engines are equally easy of application.

The room occupied by the machinery on board the *Maria*, is accurately defined in the engraved Plan; but the bulkhead enclosing it, does not actually extend quite so far out from the engine as represented: the whole space is about equal to what was formerly reserved for the stowage of hemp-cables when in use; and considering that a ship fitted with steam-power, as proposed, requires less stowage for water and provisions, the engines, coals, &c., will not cause so great a sacrifice of freight, as some may suppose.

The consumption of coals on board the *Maria* was about two hundred weight per hour, which quantity supplied both engines; and from the smallness of the boilers, the steam was got up in less than an hour. In a treatise of this kind it can hardly be expected I should furnish financial particulars: as estimates of the expence, and probable pecuniary results, depend so entirely on the class of ship to be fitted, contemplated voyage, &c., the introduction here of such details would occasion very prolix statements, in order to embrace the several topics connected with this branch of the subject: all these are matters of detail better adapted to personal discussion.

Supposing a merchant-ship of the tonnage quoted, to be fitted with propellers and engines of the power alluded to, our next consideration is the opportunities for applying this auxiliary aid to advantage. None of these must be lost; I would therefore suggest, that on all occasions when from calms or light airs, a ship should go less than three knots an hour through the water, the

steam should be immediately got up, and the propellers ready for use: there must be no waiting to see if it is going to be calm; should the breeze freshen, the fires are easily put out—and if it decline, so much time is gained.

A ship bound to India, after quitting the British Channel, and getting a good offing, may possibly not require the aid of steam-power very frequently, until near the southern limit of the N. E. Trade. This is one of the principal situations for the adoption of the proposed auxiliary aid: the calms, light airs, and smooth water here prevalent, all favour its successful application. By crossing the Equator well to windward—say in  $10^{\circ}$  or  $12^{\circ}$  West—and steering from thence a southerly course, until the S. E. Trade is entered, a ship would be enabled to make a rapid passage through it, avoiding the detour to the westward, and effecting, in that part of the outward voyage, a very considerable saving of time.

From the southern limit of the S. E. Trade, until within the influence of the westerly winds, much delay often occurs from calms and light airs, which can now be conquered. After running the easting down, ships bound to Bombay frequently experience great detention between Cape Ambre and that Port, particularly in the early part of the season; here again the occasional aid of steam-power will be most important, and also throughout the Indian Archipelago. Indeed I shall only weary my readers, and am afraid of having already done so, by illustrating further the advantages of this auxiliary aid to shipping. The judicious management of it will of course be an addition to the duty and cares of the several Commanders, which must be cheerfully met by a corresponding increase of zeal and exertion. Plain instructions (*Vide Appendix*) can easily be furnished for the guidance of the Captains and Officers of each ship fitted with steam-power.

In conclusion, I have to observe what many of my nautical readers will admit, that the facts stated in the *Analysis of One Hundred Voyages*, performed by the finest merchant-ships in the universe, amply justify the adaptation of steam-power as an

auxiliary aid to vessels employed in the Trade to the eastward; and I confidently expect the application of it will materially improve our communication with India, *viâ* the Cape of Good Hope: this is an object well worthy our best exertions, and the employment of those great resources which the British Nation, by the blessing of Divine Providence, enjoys.





ANALYSIS  
OF  
ONE HUNDRED VOYAGES  
TO AND FROM  
INDIA, CHINA, &c.



## H. C. SHIP TAUNTON CASTLE, 1198 Tons, Captain JAMES URMSTON, from ENGLAND towards BOMBAY and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1791.										
Jan. 26	26, Left Dunnose.	—	50 37 N.	1 12 W.	—	—	—	—	—	Left Dunnose for Bombay and China.
30	5, Island of Palma.	4	45 36	10 58	—	—	48	—	313	Passed the Island of Palma, bearing S. E. by E.
Feb. 6	6, Ferro Island.	7	25 38	19 6	—	—	168	—	1304	Saw the Island of Ferro, bearing S. by W. 7 leagues.
13		7	8 21	24 51	—	—	—	—	1199	Entered the N. E. Trade, in lat. 25° 16' N., & long. 19° 6' W.
20		7	2 0	20 16	29	63	50	10	586	Lost the N. E. Trade, in lat. 3° 27' N., & long. 22° 15' W.
27	22, Equator.	7	6 53 S.	23 14	—	48	82	38	701	Entered the S. E. Trade, in lat. 1° 10' N., & long. 22° 40' W.
March 6	6, Martin Vas, and Trinidad.	7	21 38	29 15	—	37	100	31	835	Crossed the Equator, in long. 22° 54' W.
13		7	26 4	27 48	22	107	—	39	435	Saw Martin Vas Rocks, and the Island of Trinidad.
20		7	34 46	25 23	16	65	80	7	646	Lost the S. E. Trade, in lat. 23° 20' S., & long. 28° 17' W.
27		7	38 16	8 45	1	38	112	17	874	Grounded on a bank off Coffin Island: at noon floated again, and proceeded through the Mozambique Channel.
April 3	18, Coffin Island.	7	39 3	19 14 E.	2	19	146	—	1218	Light variable airs, which caused Mohilla, Johanna, and Comoro Islands to be in sight 5 days.
10	23, Mohilla, Johanna,	7	34 0	38 19	3	46	119	—	900	Crossed the Equator for India, in long. 52° 30' E.
17	25, } and Comoro	7	18 11	41 40	—	37	131	—	942	Entered the S. W. Monsoon, in lat. 3° 13' N., & long. 54° 26' E.
24	26, } in sight.	7	12 53	44 56	60	67	—	41	422	Anchored in Bombay Harbour.
May 1	6, Equator.	7	6 5	45 37	53	78	—	37	482	Left Bombay for the Straits and China.
8		7	1 51 N.	53 6	—	91	32	45	613	Entered the Malabar Coast from N. E. to East.
15		7	13 30	65 15	—	15	130	23	974	Extremes of Ceylon from N. W. to N. N. E., about 8 leagues.
20	20, Bombay Harbour.	5	18 56	72 54	—	41	32	47	480	At noon Pulo W. S. E. & E., & Pulo Nancy S. S. E.
Total days 114	2736 hours.				186	752	1369	409	12924	NOTE. The Taunton Castle was 21 Sea Logs running through Malacca and Singapore Straits (having light airs and calms for many days successively), which, by steam- assistance, at 4 knots an hour, might be performed in 4 days.
					752					Passed Pulo Aor, bearing N. W. & W.
					938*					Saw Pulo Sapata, bearing N. W. by N., 2 leagues.
										NOTE. From a long succession of light airs and calms, Capt. Urmston was 23 days between Pedro Branca and Macao Roads, which distance at this season is generally per- formed in 6 days.
										Anchored in Macao Roads, and received a Pilot on board.

\* Total period of detention from calms and light airs, 938 hours = 39d. 2h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WINCHELSEA, 1200 Tons, Captain WILLIAM MOFFATT, from ENGLAND towards BOMBAY and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Caln.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1808.										
Feb. 11	11, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	10 Feb. Left Start Point for Bombay and China.
14		4	44 43	11 58	—	39	30	27	387	11 " Saw Lizard Point, bearing N. E. by E., distant 4 leagues.
21		7	33 25	16 14	6	57	105	—	689	25 " Passed the Island of Madeira, bearing S. E. by S., dist. 8 lea.
28	25, Madeira.	7	27 39	19 10	35	63	39	18	470	27 " Saw the Island of Palma S. E., and Ferro E. by S. $\frac{1}{2}$ S.
March 6	27, Palma.	7	17 29	22 42	20	99	27	22	561	1 " Entered the N. E. Trade, in lat. $24^{\circ} 16' N.$ , & long. $20^{\circ} 14' W.$
13	8, St. Mayo.	7	3 26	23 00	16	45	107	—	794	8 " Off St. Mayo, bearing S. W. by W., distant 10 miles.
20	17, Equator.	7	4 15 S.	26 6	42	98	28	—	426	12 " Lost the N. E. Trade, in lat. $5^{\circ} 6' N.$ , & long. $23^{\circ} 11' W.$
27		7	18 25	33 00	12	17	139	—	331	19 " Crossed the Equator, in long. $23^{\circ} 40' W.$
April 3		7	27 30	27 27	8	80	—	80	604	28 " Lost the S. E. Trade, in lat. $20^{\circ} 4' S.$ , & long. $30^{\circ} 4' E.$
10		7	35 57	7 52	—	8	160	—	999	21 April. Crossed the meridian of the Cape of Good Hope, in lat. $36^{\circ} 10' S.$
17	21, Cape Good Hope.	7	34 45	11 53 E.	—	29	139	—	986	10 May. Entered the S. E. Trade, in lat. $20^{\circ} 47' S.$ , & long. $51^{\circ} 44' E.$
24		7	36 4	21 10	—	26	142	—	808	Saw Cape East, N. W. by W., distant 6 leagues.
May 1		7	37 40	36 6	11	50	114	—	324	Saw Cape Amber, bearing South, distant 5 leagues.
8		7	37 00	50 27	2	24	142	—	1059	17 " Lost the S. E. Trade, in lat. $1^{\circ} 7' S.$ , & long. $52^{\circ} 30' E.$
10	12, Cape East.	7	5 13	50 8	—	3	165	—	1340	18 " Crossed the Equator for India, in long. $54^{\circ} 32' E.$
22	14, Cape Amber.	7	8 18 N.	61 12	—	20	148	—	1050	27 " Arrived at Bombay Harbour.
27	18, Equator.	6	18 56	72 54	2	2	128	—	972	26 July. Left Bombay Harbour for the Straits and China.
	27, Bombay Harbour.									5 Aug. Saw Point De Galle Flagstaff, bearing East, 6 miles.
										12 " Passed Pulo Rondo, Pulo Way, and Pulo Brasse.
Total days 108 = 2592 hours.										NOTE. From the prevalence of frequent calms, accompanied with very light airs and smooth water, Capt. Moffatt was 21 Sea Logs in clearing the Straits.—See "STRAITS."
										6 Sept. Passed the North Anambas, bearing S. E. by S.
										NOTE. The Winchelsea was delayed in her progress up the China Sea by a continuance of calms and light variable airs, being no less than 20 days from the Anambas to Macao, which is usually performed in 6 days at this season.
										26 " Arrived at Macao, and received a Pilot on board.

\* Total period of detention from calms and light airs, 824 hours = 34d. 8h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP JAMES SIBBALD, 647 Tons, Captain JOHN BLANSHARD, from ENGLAND towards BOMBAY.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1813.										
June 3	3, Portland.	—	50 31 N.	2 27 W.	—	—	—	—	—	3 June. Left Portland for Madeira and Bombay direct.
6		4	49 46	5 7	16	73	—	7	208.	Entered the N. E. Trade, in lat. 39° 12' N., & long. 13° 29' W.
13		7	46 47	8 32	7	150	—	11	412	" Anchored in Funchal Roads; (Madeira) Town N. W. $\frac{1}{2}$ mile.
21	21, Madeira.	7	32 33	16 56	—	50	118	—	974	3 July. Left Madeira with a fresh N. E. Trade.
4	5, Island of Palma.	2	29 22	18 18	—	3	—	28	222	" Saw the Island of Palma, bearing E. S. E. 10 leagues.
11		7	14 53	26 1	—	6	—	—	986	" Lost the N. E. Trade, in lat. 11° 12' N., & long. 24° 30' W.
18		7	7 55	20 26	—	105	63	—	545	" Entered the S. E. Trade, in lat. 3° 34' N., & long. 15° 4' W.
25		7	5 6	15 26	—	159	—	9	449	
August 1	1, Equator.	7	1 18 S.	19 32	—	90	78	—	623	NOTE. In consequence of frequent calms, with a long con-
8		7	13 29	22 18	3	34	131	—	876	tinuance of light variable airs, the Sibbald was 16 days
15		7	22 59	25 28	—	89	79	—	656	between the N. E. and S. E. Trades; had steam-ma-
22		7	31 26	18 42	1	32	135	—	823	chinery been in use, the run might have been accomplished
29		7	35 5	1 26	6	41	121	—	912	in 3 days, as the water was remarkably smooth.
Sept. 5	7, Cape Good Hope.	7	37 47	12 20 E.	2	59	108	—	709	
12		7	35 54	35 12	2	21	145	—	1069	
19		7	32 0	58 24	6	1	161	—	1148	
26		7	18 2	62 7	—	—	168	—	957	Crossed the Equator, in long. 19° 39' W.
October 3	6, Equator.	7	14 14	64 47	3	22	124	19	841	Lost the S. E. Trade, in lat. 22° 59' S., & long. 26° 28' W.
10		7	7 57 N.	67 3	—	56	112	—	757	Crossed the meridian of the Cape of Good Hope, in lat. 37° 24' S.
17		7	17 2	72 6	—	20	140	8	771	Entered the S. E. Trade, in lat. 29° 36' S., & long. 59° E.
21	21, Bombay Harbour.	4	18 56	72 54	2	76	—	18	258.	Lost the S. E. Trade, in lat. 2° 30' S., & long. 64° 50' E.
										Crossed the Equator for India, in long. 64° 57' E.
										Sounded ground, 30 fms., in lat. 17° 2' N., & long. 71° 50' E.
										Anchored in Bombay Harbour.
										NOTE. From the Equator to Bombay the water was remark-
										ably smooth nearly the whole distance; and during the last
										5 days, calms, with very light airs, were experienced,
										which generally prevail at this season (October).
Total days 129 = 3096 hours.										
					54	1087	1845	110	14196	
					1087	Calms and light airs... 1141* hours.				

\* Total period of detention from calms and light airs, 1141 hours = 47d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP DUNIRA, 1325 Tons, Captain MONTGOMERIE HAMILTON, from ENGLAND towards BOMBAY and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1822.										
January 8	8, Start Point.	—	50 13 N.	3 38 W.	—	—	—	—	—	8 Jan. Left Start Point for Bombay and China.
13	14, Madeira.	5	34 16	16 44	—	—	120	—	949	14 " Passed the Island of Madeira and Desertas.
20	16, Island of Palma.	7	18 15	19 16	2	29	137	—	955	16 " Saw the Island of Palma from the deck, S. E., 30 miles.
27	2, Equator.	7	4 26	19 24	4	45	100	19	866	19 " Entered the N. E. Trade, in lat. 20° 28' N., & long. 19° 20' W.
Feb. 3		7	1 4 S.	23 10	12	100	21	35	442	27 " Lost the N. E. Trade, in lat. 4° 26' N., & long. 19° 24' W.
10		7	14 56	30 17	1	9	158	—	961	2 Feb. Crossed the Equator, in long. 22° 58' W.
17		7	29 47	28 12	—	40	128	—	821	4 " Entered the S. E. Trade, in lat. 2° 1' S., & long. 25° 12' W.
24	25, Tristan da Cunha.	7	35 51	14 52	4	38	122	8	1021	NOTE. The <i>Dunira</i> was 8 days between the Trades, with light airs and very smooth water.
March 3		7	36 27	7 39 E.	40	41	77	10	598	16 " Lost the S. E. Trade, in lat. 23° 33' S., & long. 28° 13' W.
10	10, Cape Good Hope.	7	39 20	17 49	—	25	143	—	1107	25 " Passed Tristan da Cunha, seen from the deck, S. W. ½ W. 12 leagues.
17		7	39 48	42 47	—	18	124	26	1052	10 March. Crossed the meridian of the Cape of Good Hope, in lat. 39° 30' S.
24		7	35 44	60 5	—	—	168	—	1123	31 " Passed the Island of Rodriguez, E. ½ N., dist. 15 or 16 miles.
31	31, Rodrigue Island.	7	18 59	63 20	—	—	124	42	892	13 April Crossed the Equator for India, in long. 57° 2' E.
April 7		7	7 18	59 6	11	62	54	41	726	12 May Anchored in Bombay Harbour.
14	13, Equator.	7	0 54 N.	56 43	18	60	71	19	637	8 July. Left Bombay for the Straits and China.
21		7	7 56	55 48	21	70	27	50	435	NOTE. Captain H. had an excellent run down the Malabar Coast, being only 12 days from Bombay to Pulo Rondo; but, in passing through the Straits of Malacca and Sincapore, was 22 Sea Logs getting from Pulo Rondo to the China Sea, which, by steam, at 4 knots an hour, could be performed in 4 days. A statement will be shewn in a Table under "STRAITS." He was 15 days more (from light airs and calms) in running to China, which is generally performed in 6 days at this season of the year.
28		7	14 49	58 14	18	74	42	34	493	
May 5		7	16 35	62 28	27	90	—	51	311	
12	12, Bombay Harbour.	7	18 56	72 54	11	40	62	55	656	
Total days 124 = 2976 hours.					169	741	1674	392	14045	
					741					
					Calms and light airs... 910* hours.					

\* Total period of detention from calms and light airs, 910 hours = 37d. 22h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, 910 hours = 37d. 22h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP CASTLE HUNTLY, 1200 Tons, Captain HENRY DRUMMOND, from ENGLAND towards BOMBAY.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1824.										
Feb. 15	15, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	15 Feb. Left the Lizard for Bombay and China.
22		8	44 43	11 24	9	5	38	140	706	4 March. Passed the Island of Madeira, bearing E. S. E., dist. 12 leag.
29		7	36 45	16 14	11	24	47	86	591	9 " Entered the N. E. Trade, in lat. 22° 20' N., & long. 22° 48' W.
March 7	4, Madeira.	7	26 20	20 45	18	57	69	24	613	14 " Lost the N. E. Trade, in lat. 7° 36' N., & long. 23° 10' W.
14		7	7 36	23 10	—	—	168	—	1139	23 " Crossed the Equator, in long. 22° 5' W.
21	23, Equator.	7	1 30	20 12	19	125	24	—	288	24 " Entered the S. E. Trade, in lat. 0° 18' S., & long. 22° 17' W.
28		7	8 25 S.	26 10	—	72	—	96	644	NOTE. From a long succession of calms and light variable airs (having very smooth water), the Huntly was 10 days between the N. E. and S. E. Trades; which, by steam-assistance, at only 4 knots an hour, might have been accomplished in 4 days.
April 4	3, Trinidad & Martin Vas.	7	22 12	28 53	—	24	—	144	873	
11		7	30 16	23 27	40	33	55	40	622	
18		7	36 52	0 8 E.	—	—	120	48	1255	
25	23, Cape Good Hope	7	36 56	27 3	—	7	161	—	1188	
May 2		7	32 5	38 22	5	50	48	65	751	
9		7	18 53	39 30	10	68	22	68	710	2 April. Lost the S. E. Trade, in lat. 22° 12' S., & long. 28° 53' W.
16	12, Mohilla & Comoro	7	7 39	45 42	6	60	63	39	758	" " Passed the Island of Trinidad, bearing S. W. by W. ¼ W.; and Martin Vas Rocks at the same time bore S. by W.
23	21, Equator.	7	2 27 N.	54 46	—	24	34	110	794	23 " Crossed the meridian of the Cape of Good Hope, in lat. 38° 30' S.
30		7	9 28	61 2	—	81	37	50	564	12 May. Saw Johanna, S. 20° E.; Mohilla, S. 45° W.; and Comoro, S. 56° W.
June 6		7	16 33	70 10	—	57	111	—	673	21 " Crossed the Equator, in long. 52° 15' E.
8	3, Bombay Harbour.	2	18 56	72 54	—	8	40	—	208	8 June. Anchored in Bombay Harbour.
Total days 115 = 2760 hours.					118 695	695	1037	910	12392	
					Calms and light airs... 813* hours.					

NOTE. Captain Drummond had considerable delay in Malacca and Singapore Straits, being employed 17 Sea Logs; for particulars of which, see the Table under the head of "STRAITS."

\* Total period of detention from calms and light airs, 813 hours = 33d. 21h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

**H. C. SHIP BUCKINGHAMSHIRE, 1269 Tons, Captain RICHARD GLASSPOOLE, from ENGLAND towards BOMBAY.**

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1829.										
Jan. 12	12, Lizard Point.	—	0 50 N.	5 11 W.	—	—	—	—	—	Left the Lizard for Bombay and China.
18	18, Madeira.	7	31 42	14 10	—	20	148	—	1147	Saw the Island of Madeira bearing S. S. W., 13 or 14 leagues.
25	22, Island of Palma.	7	20 3	19 50	4	52	94	18	848	Passed the Island of Palma, and saw the Peak of Teneriffe.
Feb. 1		7	4 54	19 59	—	66	80	22	802	Entered the N.E. Trade, in lat. 23° 47' N., & long. 19° 47' W.
8		7	1 35	20 5	21	130	—	17	330	Lost the N. E. Trade, in lat. 4° 54' N., & long. 20° 10' W.
15	11, Equator.	7	13 43 S.	26 34	3	21	116	28	868	Crossed the Equator, in long. 22° 36' W.
22		7	23 13	25 25	—	52	98	18	802	Entered the S. E. Trade, in lat. 3° 47' S., & long. 23° 54' W.
March 1		7	29 53	20 32	2	44	100	22	832	Lost the S. E. Trade, in lat. 20° 33' S., & long. 28° 17' W.
8		7	33 19	8 30	4	57	58	49	772	Crossed the meridian of the Cape of Good Hope, in lat. 39° 49' S.
15	17, Cape Good Hope.	7	39 41	9 48 E.	6	56	106	—	863	Saw high land on Madagascar Island, just in sight from the poop, bearing N. E. by N.
22		7	35 50	32 12	—	22	146	—	1184	Passed Cape Amber, steering the course N. $\frac{1}{2}$ E.
29		6	34 46	49 39	14	50	80	40	640	
April 5	11, Madagascar.	7	27 54	55 11	8	50	70	—	747	
12	12, Cape Amber.	7	10 10	49 58	2	25	141	—	1068	NOTE. It is deserving of notice, that Captain Glasspoole experienced a long succession of light airs, with frequent calms of many hours' continuance, between Cape Amber and Bombay, which distance is generally run in 16 or 18 days; but in this instance (the water remarkably smooth the whole way), it was not performed in less than 37 days.
19	19, Equator.	7	0 21 N.	52 9	14	99	21	34	551	
26		7	5 41	58 25	12	116	—	40	480	
May 3		7	7 45	60 40	27	125	—	16	300	
10		7	11 10	64 36	19	68	54	27	544	
17		7	16 32	69 51	19	92	29	28	493	
19	19, Bombay Harbour.	2	18 56	72 54	1	10	37	—	208	Crossed the Equator for India, in long. 52° 4' E.
Total days 127	3048 hours.				156	1155	1378	359	13479	Arrived and anchored in Bombay Harbour.
					1155					
					1311*	hours.				

\* Total period of detention from calms and light airs, 1311 hours = 54d. 15h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NOTE. The Buckinghamshire experienced much delay from having many days' calm, with very light variable airs, during her passage through the Straits of Malacca and Singapore; a statement of which will be shewn in a separate Table, under the head of "STRAITS."

## H. C. SHIP DUCHESS OF ATHOL, 1300 Tons, Captain EDWARD DANIELL, from ENGLAND towards BOMBAY and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1832.										
Jan. 28	26, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	28 Jan. Left the Lizard for Bombay and China.
Feb. 5		9	35 12	17 3	12	35	149	20	1312	7 Feb. Saw the Island of Madeira from the mast-head, bearing S. S. W.
12	7, Madeira.	7	17 29	19 31	7	25	136	—	1018	
19		7	2 9	21 2	—	43	74	51	712	9 " Entered the N. E. Trade, in lat. 27° 24' N., & long. 17° 15' W.
26	22, Equator.	7	8 0 S.	25 25	5	53	68	42	706	18 " Lost the N. E. Trade, in lat. 2° 40' N., & long. 20° 33' W.
March 4	2, Trinidad.	7	26 35	29 52	—	—	168	—	1196	22 " Crossed the Equator, in long. 22° 10' W.
11		7	32 16	19 57	18	74	47	29	664	23 " Entered the S. E. Trade, in lat. 1° 6' S., & long. 21° 50' W.
18		7	36 3	6 43	10	30	128	—	1427	2 March. At 8h. P. M. saw Trinidad from the poop, bearing S. S. E.
25	21, Cape Good Hope	7	37 20	26 54 E.	—	—	168	—	1112	4 " Lost the S. E. Trade, in lat. 26° 35' S., & long. 29° 52' W.
April 1		7	38 42	49 21	2	19	128	19	1024	21 " Crossed the meridian of the Cape of Good Hope, in lat. 38° 15' S.
8	11, Island Bourbon.	7	27 48	57 2	8	18	142	—	1065	11 April. Saw the Island of Bourbon, bearing N. W.
15	15, Agalega Island.	7	9 43	56 38	—	13	155	—	1148	15 " Passed the Agalega Islands, bearing, from the poop, E. by S.
22	21, Equator.	7	1 13 N.	62 0	14	38	100	26	923	21 " Crossed the Equator for India, in long. 60° 39' E.
29		7	10 41	60 12	—	60	85	23	736	11 May. Anchored in Bombay Harbour.
May 6		7	13 30	61 56	44	105	—	19	386	11 July. Left Bombay Harbour for the Straits and China.
11	11, Bombay Harbour.	5	18 56	72 54	—	9	111	—	710	21 " Passed Pulo Way, and entered Malacca Straits.
Total days 105 = 2520 hours.					120	522	1659	229	14139	
					522	hours.				
					642*	Calms and light airs...				

\* Total period of detention from calms and light airs, 642 hours = 26d. 18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NORE. In running through the Straits of Malacca and Singapore, Captain Daniell encountered many light airs and calms, and was 15 days in proceeding from Pulo Way to Pedro Branco.

16 Aug. Anchored in Macao Roads, and received a Pilot on board.

## H. C. SHIP ORWELL, 1335 Tons, Captain JAMES DALRYMPLE, from ENGLAND towards BOMBAY and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1832.										
Jan. 30	30, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	30 Jan. Left the Lizard for Bombay and China.
Feb. 5	8, Madeira.	7	36 57	16 26	6	13	149	—	1043	8 Feb. Passed the Island of Madeira, bearing S. S. E.
12		7	21 20	24 34	1	19	148	—	1043	9 " Entered the N. E. Trade, in lat. 29° 17' N., & long. 19° 42' W.
19		7	3 42	21 34	—	20	148	—	1088	19 " Lost the N. E. Trade, in lat. 3° 42' N., & long. 21° 34' W.
26	22, Equator.	7	6 44 S.	24 52	4	62	50	52	692	22 " Crossed the Equator, in long. 20° 25' W.
March 4	3, Trinidad.	7	24 35	29 22	1	16	151	—	1067	25 " Entered the S. E. Trade, in lat. 4° 47' S., & long. 24° 0' W.
11		7	33 9	20 55	10	67	50	41	719	3 March. Saw the Island of Trinidad, bearing due South.
18		7	38 10	7 6 E.	—	7	161	—	1347	6 " Lost the S. E. Trade, in lat. 26° 54' S., & long. 27° 10' W.
25	22, Cape Good Hope.	7	41 1	27 4	3	19	146	—	1129	22 " Crossed the meridian of the Cape of Good Hope, in lat. 39° 44' S.
April 1		7	40 33	52 21	—	26	142	—	1032	12 April. Entered the S. E. Trade, in lat. 21° 9' S., & long. 58° 24' E.
8		7	30 35	64 52	—	33	135	—	1045	18 " Lost the S. E. Trade, in lat. 8° 4' S., & long. 65° 54' E.
15		7	12 39	65 4	2	14	121	31	1117	28 " Crossed the Equator for India, in long. 68° 21' E.
22	28, Equator.	7	6 31	66 8	38	91	—	39	447	8 May. A distant view of the Malabar Coast from the poop.
29		7	1 19 N.	68 26	40	105	—	13	572	13 " Arrived in Bombay Harbour.
May 6	8, Malabar Coast.	7	12 24	72 5	—	28	118	22	850	
13	13, Bombay Harbour	7	18 56	72 54	2	39	100	27	826	
Total days 105 = 2520 hours.					107	559	1619	225	14017	
					559					
					666*					
					Calms and light airs... hours.					
NOTE. In running through the Straits of Malacca and Singapore outward, 17 Sea Logs were employed by the <i>Orwell</i> in clearing them (which might be done with steam-assistance in 4 days easily) ; she was 7 more in proceeding up the China Sea.										
21 Aug.					Anchored in Macao Roads, and received a Pilot on board.					

\* Total period of detention from calms and light airs, 666 hours = 27d.18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, 666 hours = 27d. 18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

# H. C. SHIP MARQUIS OF HUNTLY, 1348 Tons, Captain JOHN HINE, from ENGLAND towards BOMBAY and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
Jan. 18	18, Spithead.	—	50° 46' N.	1° 19' W.	—	—	—	—	—	Left Spithead for Bombay and China.
20		3	47° 7'	11° 43'	2	2	51	17	422	Passed the Island of Madeira, bearing S. W. by S.
27	28, Madeira.	7	36° 13'	17° 3'	3	63	73	29	768	Entered the N. E. Trade, in lat. 30° 15' N., & long. 17° 46' W.
Feb. 3	31, Ferro Island.	7	17° 31'	19° 21'	5	50	113	—	947	Saw the Island of Fervo and the Peak of Teneriffe.
10		7	4° 33'	18° 22'	—	60	68	40	740	Lost the N. E. Trade, in lat. 7° 11' N., & long. 18° 52' W.
17	14, Equator.	7	6° 55' S.	24° 33'	—	30	138	—	962	Crossed the Equator, in long. 20° 44' W.
24		7	19° 48'	30° 49'	7	31	110	20	878	" " Entered the S. E. Trade, in lat. 0° 17' S., & long. 18° 35' W.
March 3	9, Tristan da Cunha.	7	32° 54'	23° 29'	7	62	81	18	818	Lost the S. E. Trade, in lat. 20° 33' S., & long. 30° 50' W.
10		7	37° 15'	8° 25'	3	34	131	—	1043	Saw the Island of T-ristan da Cunha, bearing S. ½ W.
17		7	37° 35'	4° 47' E.	14	57	78	19	722	" " Crossed the meridian of the Cape of Good Hope, in lat.
24	21, Cape Good Hope.	7	38° 49'	32° 3'	—	10	158	—	1212	39° 13' S.; bearing of the Cape being N. 7° 30' W.,
31		7	34° 52'	46° 37'	14	52	66	36	643	distant 291 miles.
April 7		7	17° 45'	54° 48'	2	14	152	—	1126	Extremes of the Mahee Islands, from S. S. W. to W. S. W.
14	12, Mahee Islands.	7	3° 20'	56° 53'	—	60	108	—	851	Crossed the Equator for India, in long. 56° 32' E.
21	19, Equator.	7	3° 7' N.	56° 25'	18	123	—	27	457	Arrived in Bombay Harbour.
28		7	8° 38'	61° 58'	24	83	19	42	393	Left Bombay Harbour with a steady S. W. Monsoon.
May 5		7	11° 51'	64° 15'	30	96	20	22	416	" " Anchored at Penang.
12		7	14° 50'	70° 6'	7	86	50	25	563	
15	15, Bombay Harbour	3	18° 56'	72° 54'	—	19	39	14	383	
Total days 118 = 3632 hours.					136	832	1455	309	13344	
					932	hours.				
					1068*	Calms and light airs...				

\* Total period of detention from calms and light airs, 1068 hours = 44d. 12h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NOTE. After quitting Penang (from a long succession of light airs and calms), the Marquis of Huntly was 17 Sea Logs in running through Malacca and Singapore Straits, which by steam-assistance might be performed in 4 days: consequently there would have been a saving of no less than 13 days between Penang and Pedro Branco.

31 " Passed Pedro Branco, steering for China.  
10 Aug. Arrived in Macao Roads, and received a Pilot on board.

## H. C. SHIP HEREFORDSHIRE, 1854 Tons, Captain EDWARD FOORD, from ENGLAND towards BOMBAY.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1853.										
Feb. 24	24, Lizard Point.	—	49° 58' N.	5° 11' W.	—	—	—	—	—	24 Feb. Left the Lizard for Bombay.
March 3		8	46° 26'	9° 52'	54	102	—	36	473	11 March. Passed the Island of Palma, bearing E. by N.
10	11, Island of Palma.	7	30° 44'	18° 10'	2	33	109	24	1018	12 " Saw Ferro Island, bearing S. E. $\frac{1}{2}$ E., distant 4 leagues.
17	12, Ferro Island.	7	15° 38'	19° 6'	8	22	138	—	886	14 " Entered the N. E. Trade, in lat. 23° 7' N., & long. 19° 24' W.
24		7	3° 38'	18° 2'	9	69	67	23	712	21 " Lost the N. E. Trade, in lat. 5° 47' N., & long. 18° 58' W.
31	29, Equator.	7	0° 45'	21° 54'	32	99	—	37	410	29 " Crossed the Equator, in long. 20° 14' W.
April 7		7	12° 53' S.	30° 13'	9	22	128	9	1008	2 April. Entered the S. E. Trade, in lat. 1° 22' S., & long. 22° 30' W.
14		7	22° 57'	30° 57'	30	35	103	—	719	
21		7	34° 5'	11° 0'	—	15	153	—	1237	
28		7	31° 59'	0° 23' E.	23	62	39	44	636	
May 5	8, Cape Good Hope.	7	34° 54'	9° 59'	19	59	52	38	733	
12		7	33° 56'	35° 6'	—	1	167	—	1324	
19		7	19° 46'	40° 22'	1	30	137	—	922	
26	22, Mohilla.	7	4° 10'	48° 23'	—	7	161	—	1044	
June 2	29, Equator.	7	7° 29' N.	59° 45'	—	9	159	—	1005	
9		7	14° 42'	69° 46'	7	57	80	24	753	
11	11, Bombay Harbour.	2	18° 56'	72° 54'	—	12	36	—	263	
Total Days 108 = 2592 hours.					194	634	1529	235	13153	
					634	hours.				
					828*	Calms and light airs...				

\* Total period of detention from calms and light airs, 828 hours = 34d. 12h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NOTE. The Herefordshire (in consequence of having a long continuance of light airs and calms) was 12 days between the N. E. and S. E. Trades, a space which might have been accomplished in 3 days, had steam-power, as an auxiliary aid, been in use at that time.

10 " Lost the S. E. Trade, in lat. 20° 7' S., & long. 39° 32' W.  
 8 May Crossed the meridian of the Cape of Good Hope, in lat. 37° 34' S.  
 22 " Saw Mohilla from the mast-head, bearing N. N. E.  
 23 " Passed Mohilla, Johanna, and Comoro Islands.  
 28 " Entered the S. W. Monsoon, in lat. 0° 38' S., & long. 52° 19' E.  
 29 " Crossed the Equator for India, in long. 53° 52' E.  
 7 June. Lost the S. W. Monsoon, in lat. 13° 31' N., & long. 66° 57' E.  
 11 " Anchored in Bombay Harbour.

NOTE. Captain Foord had a very tedious passage through Malacca and Singapore Straits.—Vide " STRAITS."

## H. C. SHIP FARQUHARSON, 1406 Tons, Captain JOHN CRUICKSHANK, from ENGLAND towards BOMBAY.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
March 7	7, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	7 March. Left the Lizard for Bombay.
10	13, Madeira.	4	42 6	13 17	—	20	32	44	703	13 " Passed the Island of Madeira, seen from the poop, S. W.
17		7	22 58	22 54	—	16	152	—	1291	14 " Entered the N. E. Trade, in lat. 30° 11' N., & long. 18° 57' W.
24	20, St. Antonio.	7	4 52	20 12	—	21	147	—	1184	20 " Saw the Island of St. Antonio from the deck, E. by S.
31	2, Equator.	7	1 25	15 58	18	126	—	24	483	25 " Lost the N. E. Trade, in lat. 4° 20' N., & long. 19° 37' W.
April 7	10, Trinidad.	7	13 33 S.	27 20	—	15	153	—	1123	2 April. Crossed the Equator, in long. 20° 20' W.
14		7	23 41	28 8	28	57	40	43	677	3 " Entered the S. E. Trade, in lat. 1° 40' S., & long. 18° 29' W.
21		7	33 16	7 43	—	6	162	—	1226	10 " At noon saw the Island of Trinidad, bearing South.
28		7	34 32	6 24 E.	12	54	68	34	850	11 " Lost the S. E. Trade, in lat. 21° 37' S., & long. 29° 17' W.
May 5		7	37 7	19 50	3	61	59	45	833	5 May. Crossed the meridian of the Cape of Good Hope, in lat. 37° 17' S.
12	18, Bassas de India.	7	36 4	37 35	7	30	131	—	1082	18 " Saw the Bassas de India from the deck, N. E. $\frac{1}{2}$ E.
19	23, Mohilla & Comoro	7	20 20	40 57	—	54	114	—	1011	23 " Passed Mohilla, Johanna, and Comoro Islands.
26	29, Equator.	7	4 35	48 44	—	13	155	—	1155	29 " Crossed the Equator for India, in long. 52° 36' E.
June 2		7	6 35 N.	59 46	—	11	129	28	975	30 " Entered the S. W. Monsoon, in lat. 2° 20' N., & long. 56° 8' E.
9		7	15 40	69 10	—	59	109	—	830	11 June. Anchored in Bombay Harbour.
11	11, Bombay Harbour	2	18 56	72 54	—	13	35	—	273	
Total days 97 = 2328 hours.					68	556	1486	218	13701	
					556	hours.				
					624*	Calms and light airs...				

NOTE. The Farquharson was much delayed in passing through Malacca and Singapore Straits, by a long succession of calms and light airs.—Vide "STRAITS."

\* Total period of detention from calms and light airs, 624 hours = 26 days, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP LADY MELVILLE, 1350 Tons, Captain THOMAS SHEPHERD, from ENGLAND towards BOMBAY.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
March 7	7, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	7 March. Left the Lizard for Bombay.
10		4	43 48	15 12	—	29	60	7	683	16 " Entered the N. E. Trade, in lat. 26° 27', & long. 18° 42' W.
17		7	24 24	18 54	—	31	137	—	1129	24 " Lost the N. E. Trade, in lat. 5° 33' N., & long. 19° 59' W.
24		7	5 33	19 59	—	41	127	—	1081	2 April. Crossed the Equator, in long. 21° 17' W.
31		7	1 18	17 0	29	112	—	27	431	3 " Entered the S. E. Trade, in lat. 4° 16' S., & long. 21° 19' W.
April 7	2, Equator.	7	14 1 S.	27 27	6	27	135	—	1098	
14		7	23 35	29 17	10	70	39	49	699	
21		7	33 47	8 51	—	14	154	—	1269	NOTE. The Melville was 10 days between the N. E. and
28		7	36 12	7 0 E.	5	22	141	—	927	S. E. Trades, from frequent calms with light variable
May 5	2, Cape Good Hope.	7	36 38	26 46	6	48	98	16	968	airs, having very smooth water: under such circumstances,
12		7	29 54	41 39	4	16	148	—	1166	steam-assistance would be highly advantageous.
19		7	16 5	42 30	21	57	61	29	784	11 " Lost the S. E. Trade, in lat. 22° 2' S., & long. 30° 24' W.
26	22, Johanna.	7	2 5	50 9	7	17	144	—	966	2 May. Crossed the meridian of the Cape of Good Hope, in lat. 37° 12' S.
June 2	28, Equator.	7	8 26 N.	61 18	—	11	157	—	877	13 " Hauled up for the Mozambique Channel, steering N.N.E. ½ E.
10	10, Bombay Harbour.	8	18 56	72 54	4	60	128	—	864	22 " Passed Mohilla, Johanna, and Comoro Islands.
Total days 96 = 2304 hours.					92	555	1529	128	12942	27 " Entered the S. W. Monsoon, in lat. 0° 40' S., & long. 51° 37' E.
					555					28 " Crossed the Equator for India, in long. 53° 30' E.
					647*					9 June. Sounded—ground 45 fathoms, mud.
					Calms and light airs... hours.					10 " Arrived in Bombay Harbour.

\* Total period of detention from calms and light airs, 647 hours = 26d. 23h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NOTE. Captain Shepherd experienced a most tedious passage through the Straits, from a long continuance of calms and light airs.—Vide "STRAITS."

NOTE. Captain Shepherd experienced a most tedious passage through the Straits, from a long continuance of calms and light airs.—Vide "STRAITS."

\* Total period of detention from calms and light airs, 647 hours = 26d. 23h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP WILLIAM PITT, 819 Tons, Captain CHARLES GRAHAM, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1817.										
April 16	16, Beachy Head.	—	50 44 N.	0 15 E.	—	—	—	—	—	16 April. Left Beachy Head for Madras direct.
20		5	43 23	11 52 W.	1	24	66	29	676	
26	27, Madeira.	6	32 34	17 10	6	35	68	35	724	27 " Anchored in Funchal Roads, and left the following day.
May 4	1, Island of Palma.	7	25 5	19 50	2	92	57	17	623	
11		7	13 13	25 27	—	45	123	—	806	1 May. Passed the Island of Palma, bearing E. S. E.
18	20, Equator.	7	1 40	25 4	—	37	81	50	774	5 " Entered the N. E. Trade, in lat. 23° 59' N., & long. 20° 32' W.
25	30, Island of Trinidad	7	8 56 S.	31 8	—	87	39	42	656	15 " Lost the N. E. Trade, in lat. 5° 27' N., & long. 22° 33' W.
June 1		7	23 14	30 16	—	49	119	—	879	18 " Entered the S. E. Trade, in lat. 1° 40' N., & long. 25° 4' W.
8		7	32 53	18 40	—	17	151	—	954	
15	18, Cape Good Hope.	7	36 49	8 21 E.	—	2	166	—	1356	20 " Crossed the Equator, in long. 26° 12' W.
22		7	35 53	31 29	4	24	140	—	1067	
29		7	32 59	50 33	3	47	72	46	962	30 " Lost the S. E. Trade, in lat. 20° 41' S., and long. 30° 38' W.
July 6		7	27 36	59 17	13	66	89	—	644	" " Saw the Island of Trinidad from the deck, E by N, 15 leagues.
13		7	10 12	67 38	2	3	163	—	1225	18 June. Crossed the meridian of the Cape of Good Hope, in lat. 37° 30' S.
20	21, Equator.	7	0 39	74 34	—	50	118	—	789	7 July. Entered the S. E. Trade, in lat. 25° 42' S., and long. 60° 46' E.
27	1, Friar's Hood.	7	1 12 N.	76 3	40	128	—	—	259	14 " Lost the S. E. Trade, in lat. 9° 9' S., and long. 68° 12' E.
August 3	3, Madras Roads.	7	13 4	80 21	—	20	148	—	939	21 " Crossed the Equator for India, in long. 75° 15' E.
Total days	109 = 2616 hours.				71	726	1600	219	13333	1 August. Saw Friar's Hood on Ceylon, bearing W. $\frac{1}{2}$ N.
					726					3 " Anchored in Madras Roads.
					797*					

Calms and light airs... hours.

\* Total period of detention from calms and light airs, 797 hours = 33d. 5h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WINDSOR, 1332 Tons, Captain JOHN FRANKLIN, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1819. March 2	2, Spithead.	—	50° 47' N.	1° 6' W.	—	—	—	—	—	2 March. Left Spithead for Madras.
7	8, Madeira.	5	33° 41'	17° 23'	1	—	113	—	1250	8 " Passed Madeira, bearing E. S. E., distant 13 or 14 leagues.
14	10, Island of Palma.	7	23° 58'	22° 32'	22	64	72	10	720	10 " The Island of Palma was seen from the poop, bearing S. E. by E.
21		7	10° 35'	24° 4'	15	40	103	10	894	13 " Entered the N. E. Trade, in lat. 20° 32' N., & long. 19° 24' W.
28	29, Equator.	7	0° 42'	19° 33'	1	68	99	—	739	26 " Lost the N. E. Trade, in lat. 2° 20' N., & long. 20° 2' W.
April 4		7	6° 20' S.	18° 51'	29	89	24	26	430	29 " Crossed the Equator, in long. 18° 51' W.
11		7	23° 37'	27° 9'	—	8	126	34	1064	3 April. Entered the S. E. Trade, in lat. 4° 50' S., & long. 18° 26' W.
18		7	29° 12'	21° 42'	2	95	49	22	663	
25		7	36° 5'	5° 8'	—	4	136	28	982	NOTE. The Windser was 8 days between the N. E. and
May 2		7	35° 59'	18° 27' E.	2	34	132	—	1118	S. E. Trades, with calms, light variable airs, and very
9	4, Cape Good Hope.	7	42° 14'	26° 10'	—	68	74	26	762	smooth water.
16		7	38° 19'	51° 27'	—	20	138	10	1197	
23		7	35° 20'	72° 6'	—	53	107	—	1044	12 " Lost the S. E. Trade, in lat. 24° 52' S., & long. 26° 0' W.
30		7	14° 40'	82° 30'	1	6	151	—	1443	4 May. Cape of Good Hope in sight, bearing N. W., 5 or 6 leagues.
June 6	6, Equator.	7	1° 40'	83° 18'	4	79	85	—	852	Entered the S. E. Trade, in lat. 33° 30' S., & long. 74° 52' E.
12	10, Friar's Hood.	7	0° 41' N.	83° 18'	4	47	117	—	1108	24 " Entered the S. E. Trade, in lat. 2° 18' S., and long. 83° 14' E.
	12, Madras Roads.	6	13° 4'	80° 21'	4	—	—	—	—	5 June Lost the S. E. Trade, in lat. 2° 18' S., and long. 83° 14' E.
										6 " Crossed the Equator for India, in long. 63° 18' E.
										10 " Saw Friar's Hood on Ceylon, from the deck, bearing W. by S.
										12 " Anchored in Madras Roads, in 13 fathoms.
Total Days 102 = 2448 hours.					81	675	1526	166	14266	NOTE. Captain Franklin experienced a tedious passage
					675	hours.				through the Straits of Malacca and Singapore.—Vide
					756*	Calms and light airs...				" STRAITS."

\* Total period of detention from calms and light airs, 756 hours = 31 d. 12 h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP MARQUIS OF WELLINGTON, 961 Tons, Captain JOHN BLANSHARD, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1821.										
May 20	20, Portland.	—	50 31 N.	2 27 W.	—	—	—	—	—	20 May. Left Portland Bill for Madras direct.
27	30, Madeira.	8	35 53	17 34	21	15	156	—	1242	30 " Saw the Island of Madeira, bearing E. by S.
June 3	4, Palma Island.	7	30 9	18 36	36	100	—	32	397	
10		7	15 31	25 50	—	17	151	—	1017	
17		7	6 36	22 38	25	71	31	41	598	NOTE. In sight of Madeira and the Desertas 3 days, having very light variable airs, with calms and smooth water, the whole time.
24	26, Equator.	7	1 44	24 51	42	55	47	24	535	
July 1		7	11 11 S.	32 37	26	13	100	29	856	
8		7	23 42	33 17	19	32	102	15	774	2 June. Entered the N. E. Trade, in lat. 31° 16' N., & long. 17° 10' W.
15		7	27 12	18 4	2	33	133	—	1008	4 " Saw the Island of Palma from the main-top, S. E. by E.
22		7	33 58	9 29	19	57	74	18	734	13 " Lost the N. E. Trade, in lat. 9° 35' N., & long. 22° 27' W.
29	30, Cape Good Hope.	7	36 55	12 30 E.	3	26	139	—	1141	22 " Entered the S. E. Trade, in lat. 4° 42' N., & long. 21° 18' W.
August 5		7	35 42	38 59	4	20	144	—	1186	
12		7	35 47	60 32	2	33	133	—	1126	NOTE. Captain Blanchard was 9 days between the N. E. and S. E. Trades, owing to calms and light airs, a space that by the aid of steam-power might have been accom- plished in 3 days
19		7	30 38	73 57	11	56	78	23	836	
26	30, Equator.	7	10 24	79 12	2	4	162	—	1310	
Sept. 2	4, Sadras Hills.	7	8 33 N.	82 42	—	12	156	—	1174	
5	5, Madras Roads.	3	13 4	80 21	14	28	30	—	333	
Total days 109 = 2616 hours.					226	572	1636	182	14267	26 " Crossed the Equator, in long. 24° 32' W.
					572	hours.				1 July. Lost the S. E. Trade, in lat. 20° 50' S., & long. 32° 59' W.
					Calms and light airs... 798*				30 " Crossed the meridian of the Cape of Good Hope, in lat. 36° 32' S.	
									30 Aug. Crossed the Equator for India, in long. 80° 38' E.	
									4 Sept. Saw Sadras Hills from the poop, bearing N. W. by N.	
									5 " Anchored in Madras Roads.	

\* Total period of detention from calms and light airs, 798 hours = 33d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, 798 hours = 33d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NOTE. In sight of Madeira and the Desertas 3 days, having very light variable airs, with calms and smooth water, the whole time.

NOTE. Captain Blanshard was 9 days between the N. E. and S. E. Trades, owing to calms and light airs, a space that by the aid of steam-power might have been accomplished in 3 days

## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1822.										
March 30	30, Dungeness.	—	50 55 N.	0 58 W.	—	—	—	—	—	30 March. Left Dungeness for Madras direct.
April 7	8, Madeira.	8	36 30	17 46	5	21	148	18	1202	8 April. The Island of Madeira just in sight from the poop, E. S. E.
14	12, Isle of Palma.	7	29 29	19 22	3	73	58	44	652	12 " Passed the Island of Palma, S. E. by S., 20 miles.
21	23, St. Antonio.	7	20 33	22 23	20	56	58	34	625	19 " Entered the N. E. Trade, in lat. 22° 24' N., & long. 19° 47' W.
28		7	6 8	19 55	—	15	153	—	1101	23 " Passed the Island of St. Antonio, bearing E. by N.
May 5	7, Equator.	7	1 4	20 44	49	102	—	17	306	28 " Lost the N. E. Trade, in lat. 5° 18' N., & long. 10° 8' W.
12		7	13 26 S.	26 27	15	15	138	—	956	7 May. Crossed the Equator, in long. 22° 36' W.
19		7	22 3	31 39	14	26	49	79	607	8 " Entered the S. E. Trade, in lat. 0° 21' S., & long. 20° 3' W.
26		7	31 27	19 30	14	32	96	26	895	
June 2		7	33 14	4 1	7	31	74	56	768	NOTE. The Asia was 11 days between the N. E. and S. E.
9	9, Cape Good Hope.	7	35 54	19 10 E.	—	2	166	—	1141	Trades, with calms, light variable airs, and very smooth
16		7	35 39	43 46	3	4	161	—	1219	water; circumstances all favourable to the application of
23		7	35 40	69 10	3	15	150	—	1215	steam-power, which in this instance would have effected
30		7	19 20	82 21	—	—	168	—	1330	a saving of 7 or 8 days.
July 7	8, Equator.	7	0 41 S.	82 37	3	25	118	22	1106	20 " Lost the S. E. Trade, in lat. 24° 35' S., & long. 31° 12' W.
15	14, Sadras Hills.	7	13 4 N.	80 21	5	79	72	36	910	9 June. Crossed the meridian of the Cape of Good Hope, in lat.
	15, Madras Roads.	8								36° 10' S.
Total days 107 = 2568 hours.					141	496	1599	332	14033	29 " Entered the S. E. Trade, in lat. 22° 37' S., & long. 81° 48' E.
					496	hours.				5 July. Lost the S. E. Trade, in lat. 3° 51' S., & long. 82° 16' E.
					637*					8 " Crossed the Equator for India, in long. 81° 37' E.
										14 " Saw Sadras Hills ahead, bearing N. by W. $\frac{1}{2}$ W.
										15 " Anchored in Madras Roads.

\* Total period of detention from calms and light airs, 637 hours = 26d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1824.										
May 26	26, Spithead.	—	50° 37' N.	1° 12' W.	—	—	—	—	—	26 May. Left Spithead for Madras direct.
30		5	48° 16'	9° 42'	11	78	—	31	365	8 June. Passed the Island of Madeira, bearing N. W. by W.
June 6	8, Madeira.	7	34° 4'	15° 36'	1	46	78	43	914	9 " Entered the N. E. Trade, in lat. 39° 36' N., & long. 16° 41' W.
13	10, Palma Island.	7	21° 56'	21° 45'	—	42	126	—	875	10 " Saw the Island of Palma from the deck, W. S. W.
20	16, St. Antonio.	7	9° 58'	22° 4'	7	28	133	—	872	16 " Passed the Island of St. Antonio (or St. Anthony), bearing E.
27	2, Equator.	7	6° 17'	17° 32'	15	87	—	66	519	19 " Lost the N. E. Trade, in lat. 10° 48' N., & long. 22° 46' W.
July 4		7	6° 58' S.	25° 58'	—	11	125	32	894	1 July. Entered the S. E. Trade, in lat. 0° 50' N., & long. 23° 30' W.
11		7	17° 17'	27° 28'	5	67	66	30	701	
18		7	31° 21'	20° 3'	3	26	139	—	1112	NOTE. The Asia was 12 days between the N. E. and S. E.
25	31, Cape Good Hope.	7	31° 5'	0° 38' E.	—	29	139	—	1031	Trades, with calms, light variable airs, and very smooth
Aug. 1		7	36° 15'	23° 1'	—	16	152	—	1137	water. With steam-power as an auxiliary aid, Captain
8		7	36° 37'	49° 19'	—	6	162	—	1216	Balderston's voyage would have been one of the shortest
15		7	33° 5'	72° 12'	1	5	162	—	1222	on record.
22	Equator.	7	12° 46'	81° 32'	—	—	168	—	1357	
29	1, Sadras Hills.	7	5° 28' N.	82° 50'	—	23	145	—	1123	2 " Crossed the Equator, in long. 21° 47' W.
Sept. 2	2, Madras Roads.	4	13° 4'	80° 21'	—	51	—	41	476	10 " Lost the S. E. Trade, in lat. 16° 50' S., & long. 28° 19' W.
Total days 100 = 2400 hours.					47	415	1595	243	13813	31 " Crossed the meridian of the Cape of Good Hope, in lat. 36° 40' S.
					415	hours.				17 Aug. Entered the S. E. Trade, in lat. 28° 50' S., & long. 79° 30' E.
					462*					25 " Lost the S. E. Trade, in lat. 4° 40' S., & long. 82° 10' E.
										27 " Crossed the Equator for India, in long. 82° 43' E.
										1 Sept. Saw Sadras Hills from the deck, bearing N. N. W.
										2 " Anchored in Madras Roads.

\* Total period of detention from calms and light airs, 462 hours = 19d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ROSE, 955 Tons, Captain THOMAS MARQUIS, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1824.										
May 30	30, Spithead.	—	50 10 N.	1 16 W.	—	—	—	—	—	30 May. Left Spithead for Madras direct.
June 6		8	38 44	14 30	33	51	108	—	979	12 June. Off Madeira, bearing S. E. distant 5 leagues.
13	12, Madeira.	7	27 19	20 24	9	30	129	—	834	13 " Entered the N. E. Trade, in lat. 30° 10' N., & long. 18° 50' W.
20		7	11 45	24 8	10	—	158	—	968	25 " Lost the N. E. Trade, in lat. 7° 43' N., & long. 20° 30' W.
27	3, Equator.	7	6 6	13 54	34	66	24	44	482	3 July. Crossed the Equator, in long. 21° 10' W.
July 4		7	2 28 S.	21 53	27	2	139	—	830	12 " Entered the S. E. Trade, in lat. 13° 25' S., & long. 36° 0' W.
11		7	12 22	25 47	—	58	91	19	646	
18		7	26 21	23 3	—	34	100	34	850	
25		7	32 37	11 4	11	53	104	—	859	
Aug. 1	2, Cape Good Hope.	7	36 00	12 52 E.	—	23	145	—	1194	NORR. The Rose was engaged 17 days between the N. E.
8		7	36 1	31 4	1	2	165	—	1144	and S. E. Trades, owing to a long succession of calms
15		7	36 1	62 22	3	27	138	—	1075	and light variable airs, the water remarkably smooth the
22		7	29 22	79 38	22	25	100	21	922	whole time : favourable circumstances for application of
29	4, Equator.	7	19 3	82 4	14	24	130	—	1232	steam-power.
Sept. 5	11, Sadras Hills.	7	0 9 N.	82 7	21	82	—	65	398	17 " Lost the S. E. Trade, in lat. 24° 48' S., & long. 25° 36' W.
12	12, Madras Roads.	7	13 4	80 21	11	33	84	40	881	2 Aug. Crossed the meridian of the Cape of Good Hope, in lat. 38° 8' S., the land bearing N. by W. $\frac{1}{2}$ W., and distant 187 miles.
Total days 106 = 2544 hours.										24 " Entered the S. E. Trade, in lat. 26° 20' S., & long. 80° 33' E.
										3 Sept. Lost the S. E. Trade, in lat. 0° 27' S., & long. 82° 15' E.
										4 " Crossed the Equator for India, in long 82° 6' E.
										12 " Saw Sadras Hills ahead, bearing N. N. W.
										13 " Arrived at Madras Roads, St. Thomas's Mount S. W.
					216	510	1595	223	12294	
					Calms and light airs... hours.					
					726*					

\* Total period of detention from calms and light airs, 726 hours = 30d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

**H. C. SHIP CASTLE HUNTLY, 1311 Tons, Captain HENRY DRUMMOND, from ENGLAND towards MADRAS.**

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1830.										
March 28	28, Dungeness	—	50 55 N.	0 58 W.	—	—	—	—	—	28 March. Left Dungeness for Madras.
April 4		8	44 57	11 48	25	83	32	42	569	12 April. Passed the Island of Madeira, bearing S. W. 8 leagues.
11		7	34 3	16 58	21	86	54	17	721	13 " Entered the N. E. Trade, in lat. 30° 14' N., & long. 19° 4' W.
18	12, Off Madeira.	7	18 31	25 3	—	7	161	—	1010	25 " Lost the N. E. Trade, in lat. 4° 30' N., & long. 22° 43' W.
25		7	4 30	22 43	—	38	130	—	862	8 May. Crossed the Equator, in long. 24° 27' W.
May 2		7	1 51	22 9	37	113	—	18	295	9 " Entered the S. E. Trade, in lat. 1° 29' S., & long. 27° 17' W.
9	8, Equator.	7	1 29 S.	27 17	21	88	—	59	486	
16		7	17 58	34 46	—	7	161	—	1090	
23		7	31 7	33 44	—	29	139	—	942	
30		7	34 14	11 59	4	19	145	—	1106	
June 6	7, Cape Good Hope.	7	36 5	16 15 E.	—	1	167	—	1372	
13		7	29 17	39 27	—	15	153	—	1345	
20		7	25 6	41 25	19	109	—	40	473	
27	21, Bassas de India.	7	10 47	45 47	12	56	88	12	982	
July 4	25, Saw Johanna.	7	4 17 N.	60 33	—	1	167	—	1342	
11	1, Equator.	7	6 9	76 32	—	4	164	—	1025	
17	17, Madras Roads.	6	13 4	80 21	15	24	75	30	815	
Total days 112 = 2638 hours.					154	680	1636	218	14435	
					680	hours.				
					834*	Calms and light airs...				

\* Total period of detention from calms and light airs, 834 hours = 34d. 18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NOTE. *The Caslie Huntly was no less than 15 days between the N. E. and S. E. Trades, with a long succession of calms, light airs, and very smooth water the whole time. The time saved by application of steam-power would in this instance have been very considerable.*

17 " Lost the S. E. Trade, in lat. 19° 24' S., & long. 33° 41' W.  
 7 June. Crossed the meridian of the Cape of Good Hope, in lat. 36° 30' S.  
 21 " Saw Europa Island, or Bassas de India, by Horsburgh.  
 25 " Saw Johanna, Mayotta, and Comoro Islands.  
 1 July. Crossed the Equator, in long. 54° 24' E.  
 2 " Entered the S. W. Monsoon, in lat. 1° 45' N., & long. 54° E.  
 17 " Anchored in Madras Roads, the Flagstaff S. W.  $\frac{1}{2}$  S.

NOTE. *Captain Drummond had an unusually long passage through Malacca and Singapore Straits, owing to a succession of light airs and calms.—Vide "STRAITS."*

## H. C. SHIP BUCKINGHAMSHIRE, 1369 Tons, Captain CHARLES SHEA, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
Feb. 22	22, Spithead.	—	50 46 N.	1 16 W.	—	—	—	—	—	22 Feb. Left Spithead for Madras.
25		3	47 45	9 6	11	21	—	40	378	14 March. Entered the N. E. Trade, in lat. 15° 2' N., & long. 21° 3' W.
March 3		7	43 20	12 24	—	97	48	23	662	20 " Lost the N. E. Trade, in lat. 2° 50' N., & long. 20° 35' W.
10		7	23 29	21 7	—	11	157	—	1285	29 " Crossed the Equator, in long. 22° 34' W.
17		7	6 34	20 40	13	19	136	—	981	30 " Entered the S. E. Trade, in lat. 0° 49' S., & long. 23° 19' W.
24		7	2 9	19 13	52	83	—	33	366	
31	29, Equator.	7	1 47 S.	24 18	36	69	41	22	564	NOTE. The Buckinghamshire was 10 days between the
April 7		7	18 44	30 36	—	14	154	—	1087	N. E. & S. E. Trades, with calms, light variable airs, and
14		7	24 36	30 18	21	117	—	30	402	very smooth water: all favourable circumstances to the
21		7	34 6	11 24	2	20	146	—	1163	efficient application of steam-power.
28		7	31 56	0 5	13	60	95	—	851	Lost the S. E. Trade, in lat. 18° 44' S., & long. 30° 36' W.
May 5		7	34 9	13 11 E.	12	45	90	21	819	8 May. Crossed the meridian of the Cape of Good Hope, in lat. 38° 15' S.
12	8, Cape Good Hope	7	38 42	37 24	—	12	156	—	1289	Entered the S. E. Trade, in lat. 28° 54' S., & long. 65° 16' E.
19		7	32 27	64 46	1	6	161	—	1450	20 " Entered the S. E. Trade, in lat. 6° 45' S., & long. 64° 47' E.
26	31, Equator.	7	9 24	64 58	—	11	157	—	1352	31 " Crossed the Equator for India, in long. 66° 18' E.
June 2	8, Adam's Peak.	7	2 37 N.	67 53	15	68	36	49	703	2 June. Entered the S.W. Monsoon, in lat. 2° 27' N., & long. 67° 53' E.
9	11, Sadras Hills and	7	8 4	83 33	—	3	165	—	1153	8 " Saw Adam's Peak on the Island of Ceylon, bearing N.N.W.,
11	Madras Roads.	2	13 4	80 21	2	1	45	—	324	being the first land seen since quitting the English
Total days 110 = 2640 hours.					178	657	1587	218	13849	Channel.
					657	hours.				
					835*	Calms and light airs...				

NOTE. Captain Shea experienced a bad passage through the Straits of Malacca and Singapore, in consequence of a long succession of calms and light airs.—Vide "STRAITS."

\* Total period of detention from calms and light airs, 835 hours = 34d. 19h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP WARREN HASTINGS, 1068 Tons, Captain THOMAS SANDYS, from ENGLAND towards MADRAS.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
Feb. 22	22, Portland Bill.	—	50° 31' N.	2° 27' W.	—	—	—	—	—	22 Feb. Left Portland Bill, and sailed for Madras.
March 3		9	43° 4'	12° 41'	—	74	142	—	1238	7 March. Saw the Island of Madeira from the main-top, W. N. W.
10	7, Madeira.	7	23° 41'	19° 22'	13	14	130	11	1129	8 " Entered the N. E. Trade, in lat. 30° 11' N., & long. 18° 34' W.
17		7	6° 53'	19° 24'	—	48	76	44	902	21 " Lost the N. E. Trade, in lat. 3° 30' N., & long. 19° 27' W.
24		7	2° 52'	18° 43'	20	99	12	37	452	27 " Crossed the Equator, in long. 18° 30' W.
31	27, Equator.	7	0° 13' S.	18° 27'	48	118	—	—	325	1 April. Entered the S. E. Trade, in lat. 0° 29' S., & long. 20° 18' W.
April 7		7	13° 4'	26° 17'	14	14	100	40	901	NOTE. The Warren Hastings was 12 days between the N. E. and S. E. Trades, owing to calms and light airs; the occasional aid of steam-power would have been of very great utility.
14		7	23° 43'	27° 38'	34	61	28	45	626	
21		7	33° 50'	9° 54'	—	8	160	—	1155	
28		7	34° 54'	4° 53' E.	20	50	80	18	880	
May 5	4, Cape Good Hope.	7	36° 31'	22° 28'	12	39	86	31	927	
12		7	38° 4'	43° 3'	11	16	141	—	1181	11 " Lost the S. E. Trade, in lat. 21° 19' S., & long. 28° 18' W.
19		7	33° 24'	70° 0'	—	5	163	—	1309	4 May. Crossed the meridian of the Cape of Good Hope, in lat. 38° 17' S.
26		7	18° 46'	77° 24'	—	7	161	—	1047	21 " Entered the S. E. Trade, in lat. 30° 35' S., & long. 74° 24' E.
June 2	2, Equator.	7	1° 30' N.	80° 55'	—	—	168	—	1223	2 June. Crossed the Equator for India, in long. 80° 18' E.
7	4, Friar's Hood. 7, Madras Roads.	5	13° 4'	80° 21'	—	33	69	18	876	4 " Passed Friar's Hood, bearing W. N. W.
Total days 105 = 2520 hours.					174	586	1516	244	14171	6 " Saw Sadras Hills, bearing N. W. by N.
					586					7 " Anchored in Madras Roads, St. Thomas's Mount S.W.

Calms and light airs... 760\* hours.

NOTE. Captain Sandys had a passage of 24 Sea Logs through the Straits of Malacca and Singapore, owing to a long continuance of calms and light airs.—Vide "STRAITS."

\* Total period of detention from calms and light airs, 760 hours = 31d. 16h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP CASTLE HUNTLY, 1400 Tons, Captain HENRY DRUMMOND, from ENGLAND towards BENGAL and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1818.										
March 28	26, Portland Bill.	—	50 31 N.	2 27 W.	—	78	—	—	—	28 March. Left the Bill of Portland for Bengal and China.
April 5	11, Madeira.	9	37 58 N.	14 35	13	—	125	—	1164	11 April. Saw the Island of Madeira bearing E. S. E., 10 leagues.
12	17, St. Antonio.	7	29 22 N.	19 54	—	60	44	64	786	Entered the N. E. Trade, in lat. 27° 38' N., & long. 21° 10' W.
19		7	13 28 N.	25 42	—	—	168	—	1099	Passed the Island of St. Antonio, E. by N., 13 leagues.
26		7	4 11 N.	19 16	5	84	52	27	689	Lost the N. E. Trade, in lat. 7° 48' N., & long. 22° 20' W.
May 3	1, Equator.	7	3 22 S.	22 25	16	80	—	72	553	22 " Lost the N. E. Trade, in lat. 7° 48' N., & long. 22° 20' W.
10		7	19 19 N.	29 49	3	15	150	—	1054	1 " Crossed the Equator, in long. 22° 46' W.
17		7	29 24 N.	16 13	—	66	45	57	750	Entered the S. E. Trade, in lat. 1° 34' S., & long. 21° 30' W.
24		7	36 10 N.	2 14	—	11	157	—	1391	NOTE. The Huntly was detained 10 days between the Trades, with calms, light baffling airs, and smooth water.
31	20, Cape Good Hope.	7	37 36 N.	21 17 E.	—	11	157	—	1172	Lost the S. E. Trade, in lat. 17° 46' S., & long. 29° 59' W.
June 7		7	37 10 N.	44 18	—	12	146	10	1159	Passed the Isl. of Trinidad, bearing S. 55° E., dist. 10 miles.
14		7	33 55 N.	72 30	—	7	161	—	1400	Crossed the meridian of the Cape of Good Hope, in lat. 37° 50' S.
21	23, Equator.	7	16 39 N.	81 29	—	9	159	—	1277	Entered the S. W. Monsoon, in lat. 0° 11' S., & long. 81° 48' E.
28	4, Ganjam.	7	1 53 N.	81 56	3	11	154	—	1178	Crossed the Equator for India, in long. 81° 28' E.
July 5	5, Sand Heads.	7	20 58 N.	88 19	—	10	158	—	1292	Saw the Island of Ceylon from the mast-head, bearing N. by E.
Total days	100 = 2400 hours.				40	454	1676	230	14914	Passed the high land of Ganjam, bearing N. 50° W.
					454					Arrived at the Sand Heads, and received a Pilot on board.
					494*					Left the Sand Heads for the Straits and China.
						hours.				12 " Passed the Island of Preparis, bearing E. N. E.
October 5	5, Sand Heads.	—	20 58 N.	88 19 E.	—	83	—	—	—	Saw Aladin Island just discernible from the poop.
11	12, Preparis.	7	16 49 N.	91 54	74	83	—	11	263	Passed Junkceylon, bearing E. S. E., & Pulo Rajah, E. by S.
18	25, Aladin Island.	7	13 12 N.	95 25	60	74	10	24	339	Arrived in Penang Harbour, & anchored off Fort Cornwallis.
25	23, Junkceylon.	7	9 13 N.	97 17	61	97	—	10	257	NOTE. In consequence of the very tedious passage to Penang,
31	31, Pulo Penang.	5	5 25 N.	100 21	20	79	10	11	336	and the N. E. Monsoon having set in, Captain Drummond,
Total days	26 = 624 hours.				215	333	20	56	1215	on quitting Malacca and Singapore Straits, was obliged
					333					to proceed through the Eastern Passages for China.
					548*	hours.				Arrived at Lintin, and received a Pilot on board.
										NOTE. This is a striking proof of the great detention from
										calms and light airs in the Straits. It is deserving of
										notice that during the short trip from the Sand Heads to
										Penang, a run of only 1215 miles, the ship experienced
										greater delay than in running 14914 miles, the whole
										distance from England to Bengal.

\* Total period of detention from calms and light airs, 1042 hours = 43d. 10h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP DUNIRA, 1325 Tons, Captain MONTGOMERIE HAMILTON, from ENGLAND towards BENGAL and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1818.										
March 28	28, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	28 March. Left the Lizard for Bengal and China.
April 5		9	35 40	18 6	12	45	137	22	1184	10 April. Passed the Island of Madeira, just in sight, bearing E. by N.
12	10, Madeira.	7	27 21	19 28	16	38	100	14	771	11 " Entered the N. E. Trade, in lat. 30° 16' N., & long. 18° 10' W.
19	16, St. Antonio.	7	10 26	23 25	—	—	168	—	1193	16 " Saw the Island of St. Antonio from the poop, bearing E. by S.
26		7	2 25	20 26	13	90	37	28	524	21 " Lost the N. E. Trade, in lat. 6° 3' N., & long. 21° 28' W.
May 3	30, Equator.	7	7 16 S.	25 14	16	67	75	10	639	30 " Crossed the Equator, in long. 22° 18' W.
10		7	22 28	26 18	—	18	150	—	1011	2 May. Entered the S. E. Trade, in lat. 4° 13' S., & long. 24° 15' W.
17		7	29 20	24 23	3	44	100	21	750	
24		7	34 19	0 40	—	5	163	—	1351	NOTE. The Dunira experienced the delay of 11 days between the N. E. and S. E. Trades; having light baffling airs, with frequent calms, and very smooth water the whole time.
31	31, Cape Good Hope.	7	37 58	19 39 E.	—	25	143	—	989	
June 7		7	36 47	44 10	—	10	158	—	1203	
14		7	34 18	73 44	—	—	168	—	1478	8 " Lost the S. E. Trade, in lat. 18° 42' S., & long. 28° 18' W.
21	27, Equator.	7	16 14	80 51	—	—	168	—	1235	31 " Crossed the meridian of the Cape of Good Hope, in lat. 37° 58' S.
28	30, Friar's Hood.	7	3 20 N.	81 39	1	21	130	16	1166	17 June. Entered the S. E. Trade, in lat. 26° 43' S., & long. 80° 38' E.
July 5	4, Point Palmiras.	7	20 53	88 19	—	16	152	—	1134	26 " Lost the S. E. Trade, in lat. 1° 21' S., & long. 81° 27' E.
	5, Sand Heads.	7								27 " Crossed the Equator for India, in long. 81° 45' E.
										30 " Passed Westminster Abbey and Friar's Hood in Ceylon.
										4 July. Passed False Point and Point Palmiras.
										5 " Arrived off the Light Vessel, and received a Pilot on board.
										NOTE. Captain Hamilton remained at the new anchorage till the 15th of November, on which day he made sail towards China for Malacca and Singapore Straits, proceeding through the Eastern Passages, on account of the lateness of the season.
										1819.
										26 Jan. Arrived off Lintin, and received a Pilot on board.
Total Days 100 = 2400 hours.					61	379	1849	111	14628	
					379	hours.				
					440*	Calms and light airs...				

\* Total period of detention from calms and light airs, 440 hours = 18d. 8h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from ENGLAND towards BENGAL.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1818.										
May 29	29, Dungeness.	—	50 55 N.	0 58 E.	—	—	—	—	—	Left the Downs for Bengal direct.
31		3	48 37	7 16 W.	24	9	—	39	346	Entered the N. E. Trade, in lat. 39° 36' N., & long. 15° W.
June 7		7	41 5	14 19	31	86	11	40	497	Passed the Island of Palma, bearing E. by N., 6 leagues.
14	14, Island of Palma.	7	28 9	18 31	—	45	123	—	853	Saw the Island of St. Antonio, from S. S. E. to S. W. by S.
21	19, St. Antonio.	7	12 13	25 54	—	8	160	—	1068	Lost the N. E. Trade, in lat. 10° 49' N., & long. 24° W.
28		7	6 8	18 13	20	100	24	24	475	Entered the S. E. Trade, in lat. 3° 18' N., & long. 20° 30' W.
July 5		7	1 38	22 45	27	37	50	54	665	
12	7, Equator.	7	11 27 S.	30 39	10	30	90	38	794	
19	16, Island of Trinidad	7	25 35	26 43	12	46	88	22	856	
26		7	34 17	10 46	—	8	160	—	1067	NOTE. From the prevalence of frequent calms, a continuance of very light airs, and smooth water, Captain Balderston was detained 12 days between the N. E. & S. E. Trades.
August 2		7	35 46	8 2 E.	7	23	120	18	901	Here again was an excellent opportunity to test the advantages of steam-power, as an auxiliary aid.
9	5, Cape Good Hope.	7	36 9	35 5	—	1	167	—	1297	
16		7	35 54	60 13	—	20	148	—	1092	
23		7	25 37	79 53	1	2	165	—	1331	Crossed the Equator, in long. 20° 45' W.
30		7	4 32	82 22	—	27	141	—	1266	Lost the S. E. Trade, in lat. 19° 44' S., & long. 29° 32' W.
Sept. 6	3, Equator.	7	10 16 N.	85 44	2	30	100	36	959	Saw the Island of Trinidad from the poop, E. by N.
12	10, Black Pagoda.	6	20 58	88 19	19	38	53	34	723	Crossed the meridian of the Cape of Good Hope, in lat. 39° 10' S.
	12, Sand Heads.									Entered the S. E. Trade, in lat. 22° 7' S., & long. 80° 44' E.
										Lost the S. E. Trade, in lat. 1° 46' S., & long. 82° 14' E.
										Crossed the Equator for India, in long. 83° 30' E.
										Passed Black and Juggernaut Pagodas.
										Arrived at the Sand Heads, and received a Pilot on board.
Total days 107 = 2568 hours.					153	510	1600	305	14190	
					510	hours.				
					663*	Calms and light airs...				

\* Total period of detention from calms and light airs, 663 hours = 27d. 15h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from ENGLAND towards BENGAL.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1820.										
Feb. 3	3, Needles Light.	—	50 40 N.	0 1 34 W.	—	—	—	—	—	3 Feb. Left the Isle of Wight for Bengal direct.
6		4	48 32	7 26	4	57	—	35	340	21 " Passed the Island of Madeira, E. by N., dist. 3 or 4 leagues.
13		7	43 51	12 30	8	61	39	60	665	25 " Entered the N. E. Trade, in lat. 27° 10' N., & long. 20° 47' W.
20	21, Madeira.	7	35 36	15 45	5	53	110	—	806	1 March. Saw the Island of St. Antonio, E. by N. $\frac{1}{2}$ N.
27	1, St. Antonio.	7	23 8	22 54	—	45	123	—	893	4 " Lost the N. E. Trade, in lat. 6° 55' N., & long. 20° 56' W.
March 5		7	5 21	19 47	—	6	162	—	1183	12 " Crossed the Equator, in long. 19° 16' W.
12	12, Equator.	7	0 14	18 20	6	150	—	12	343	17 " Entered the S. E. Trade, in lat. 4° 10' S., & long. 19° 17' W.
19		7	8 6 S.	21 35	8	84	—	76	579	NOR'E. Captain Balderston was detained between the Trades 13 days by a succession of light baffling airs and frequent calms, and very smooth water : in this instance the use of steam-power would have been very beneficial.
26		7	21 32	24 9	—	48	100	20	811	
April 2		7	31 4	23 36	—	45	82	42	766	
9		7	35 28	13 19	14	81	48	25	651	
16	21, Cape Good Hope.	7	37 17	5 14 E.	—	26	142	—	1053	
23		7	40 39	22 31	—	28	140	—	968	Lost the S. E. Trade, in lat. 29° 22' S., & long. 25° 58' W. Crossed the meridian of the Cape of Good Hope, in lat. 37° 50' S. Entered the S. E. Trade, in lat. 25° 50' S., & long. 80° 28' E. Lost the S. E. Trade, in lat. 7° 41' S., & long. 79° 12' E. Crossed the Equator for India, in long. 80° 44' E. Entered the S. W. Monsoon, in lat. 10° 36' N. & long. 83° 10' E. A noon, Jageraut and Black Pagodas, distant 10 or 11 miles. Arrived at the Sand Heads, and received a Pilot on board.
30		7	39 5	53 10	2	10	155	—	1205	
May 7		7	32 24	75 28	2	27	139	—	1146	
14		7	17 31	80 10	—	39	129	—	946	
21		7	1 28	81 44	6	24	138	—	982	
28	22, Equator.	7	13 20 N.	84 5	—	50	89	29	887	Total days 120 = 2880 hours.
June 1	30, Black Pagoda. 1, Sauger Roads.	4	22 35	88 28	4	39	27	26	526	
					59	873	1623	325	14750	
					873					
					932*					
					Calms and light airs... hours.					

\* Total period of detention from calms and light airs, 932 hours = 36d. 20h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP THAMES, 1425 Tons, Captain JAMES K. FORBES, from ENGLAND towards BENGAL and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1831.										
Jan. 27	27, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	Left the Lizard Point for Bengal and China.
30		4	40 57	12 14	—	4	38	54	654	Passed Porto Santo, the Peak W. by S. $\frac{1}{2}$ S., dist. 12 miles.
Feb. 6	7, Porto Santo.	7	33 35	15 51	—	53	81	34	771	At noon, Madeira N.W. by W.; Porto Santo N. $\frac{1}{2}$ E.; and Desertas, W. by N.
13	8, Madeira.	7	20 27	19 33	3	27	113	25	928	Entered the N. E. Trade, in lat. 27° 50' N., & long. 19° 37' W.
20		7	4 26	18 51	—	39	129	—	945	Lost the N. E. Trade, in lat. 6° 50' N., & long. 19° 18' W.
27	24, Equator.	7	8 40 S.	26 40	7	51	78	32	872	Crossed the Equator in long. 22° 24' W.
March 6		7	21 23	24 49	24	17	72	55	790	Entered the S. E. Trade, in lat. 5° 20' S., & long. 25° 14' W.
13		7	26 46	15 32	12	50	43	63	665	<i>NOTE. The Thames was 8 days between the N. E. and S. E. Trades, having faint airs and occasional calms.</i>
20		7	36 55	9 15	2	37	100	29	718	Lost the S. E. Trade, in lat. 16° 10' S., & long. 29° 16' W.
27	29, Cape Good Hope.	7	37 13	17 18 E.	—	14	154	—	1281	<i>NOTE. It was a dead calm the whole of this day, with sultry weather; on the 9th and two following days, many hours' calm were also experienced, the water very smooth the whole time. The application of steam-power in this case would have been very important.</i>
10		7	36 16	56 12	13	16	129	10	1116	Crossed the meridian of the Cape of Good Hope, in lat. 37° 40' S.
17		7	37 51	72 10	6	58	87	17	844	Entered the S. E. Trade, in lat. 16° 17' S., & long. 81° 42' E.
24		7	27 57	84 14	—	64	71	33	799	Crossed the Equator for India, in long. 80° 22' E.
May 1	6, Equator.	7	6 43	80 40	3	6	159	—	1206	Saw Friar's Hood on Ceylon, W. by S., distant 6 or 7 leagues.
8	9, Friar's Hood.	7	4 19 N.	81 55	—	58	100	10	720	Arrived in Madras Roads : St. Thomas's Mount, S.W. $\frac{1}{2}$ W.
11	11, Madras Roads.	3	13 4	80 21	3	5	58	6	489	Left Madras Roads with a steady S. W. Monsoon.
20	15, Left Madras.	3	22 35	88 28	2	1	93	—	676	Passed False Point and Point Palmiras.
20	20, Sauger Roads.	4			2					Arrived at the Sand Heads, and obtained a Pilot.
Total days 109 = 2616 hours.					90	541	1605	380	14327	Left the Sand Heads for the Straits and China.
					541					At noon, Laddia Islands E. N. E., and Pulo Penang S. E. $\frac{1}{2}$ E.
					631*					Anchored in Penang Harbour, Fort Cornwallis N. W.
										Left Penang Harbour, and passed Saddle Island.
										<i>NOTE. Captain Forbes was 12 days in getting through the Straits of Malacca &amp; Singapore, owing to light airs &amp; calms.</i>
										Passed Pedro Branco; at noon, Barbucet Hill S. W. $\frac{1}{2}$ W.
										Saw Pulo Aor S. W. $\frac{1}{2}$ W., and Pulo Tingy W. by N.
										Anchored in Macao Roads, and obtained a Pilot.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, 631 hours = 26d. 7h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP REPULSE, 1334 Tons, Captain HENRY GRIBBLE, from ENGLAND towards BENGAL and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1831.										
Feb. 23	23, Start Point.	—	50 13 N.	3 38 W.	—	—	—	—	—	23 Feb. Left the Start Point for Bengal and China.
27	3, Madeira.	5	39 57	13 29	1	5	34	34	749	3 March. Saw the Island of Madeira, S. E. by E., distant 10 leagues.
March 6		7	25 27	19 59	9	33	100	26	871	5 " Entered the N. E. Trade, in lat. 28° 41' N., & long. 19° 58' W.
13		7	7 16	20 37	—	34	134	—	1048	13 " Lost the N. E. Trade, in lat. 7° 6' N., & long. 20° 37' W.
20	19, Equator.	7	1 15 S.	18 36	9	101	—	58	514	19 " Crossed the Equator, in long. 19° 23' W.
27		7	13 31	22 10	22	55	70	21	894	24 " Entered the S. E. Trade, in lat. 4° 37' S., & long. 16° 38' W.
April 3		7	26 46	19 19	12	38	118	—	917	
10		7	34 34	0 16 E.	—	33	135	—	1194	NOTE. The Repulse was detained 11 days between the N. E. and S. E. Trades by light airs and calms (smooth water all the time.)
17	18, Cape Good Hope.	7	36 38	18 22	7	34	111	16	1016	30 " Lost the S. E. Trade, in lat. 22° 43' S., & long. 23° 31' W.
24		7	37 38	43 32	8	14	146	—	1230	18 April. Crossed the meridian of the Cape of Good Hope, in lat. 37° 50' S.
May 1		7	36 12	69 12	—	12	156	—	1237	7 May. Entered the S. E. Trade, in lat. 28° 25' S., & long. 84° 16' E.
8		7	26 0	84 32	4	21	143	—	1122	15 " Lost the S. E. Trade, in lat. 4° 53' S., & long. 81° 54' E.
15	20, Equator.	7	4 53	81 54	2	25	141	—	1255	20 " Crossed the Equator for India, in long. 82° 23' E.
22	22, Friar's Hood.	7	7 55 N.	82 23	2	77	40	44	765	22 " Saw Westminster Abbey, S. 42° W. Friar's Hood, S. 62° W. distant 15 miles.
24	24, Madras Roads.	2	13 4	80 21	—	7	—	41	310	24 " Anchored in Madras Roads, St. Thomas's Mount S.W. 1/3 W.
June 4	4, Sauger Roads.	5	22 35	88 28	6	6	83	25	692	31 " Left Madras Roads for the Sand Heads.
Total days 96 = 2304 hours.					87	495	1457	265	13814	4 June. Saw the Gaspar Sand Light Vessel, and obtained a Pilot.
					495					8 Aug. Left the Sand Heads for the Straits and China.
					582*					12 " Saw the Cocos Islands, E. N. E., distant 4 or 5 leagues.
										15 " At noon Pulo Penang, N. E.; the Laddas, East; and Pulo Bouton, N. E.

Calms and light airs... hours.

NOTE. Capt. Gribble was engaged 13 Sea Logs in running through Malacca and Singapore Straits, with the usual calms and light airs prevalent in them; and 12 days more in running up the China Sea.

\* Total period of detention from calms and light airs, 582 hours = 24d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

12 Sept. Arrived in Macao Roads, and received a Pilot on board.

## H. C. SHIP WILLIAM FAIRLIE, 1318 Tons, Captain THOMAS BRAIR, from ENGLAND towards BENGAL and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1892.										
Feb. 17	17, Start Point.	—	50 13 N.	3 38 W.	—	—	—	—	—	17 Feb. Left Start Point for Bengal and China.
19		3	47 13	8 25	—	32	17	23	289	27 " Passed the Island of Madeira, seen from the deck, S.W. by S.
26		7	36 23	15 56	—	89	51	28	814	29 " Saw the Island of Palma, E. by S, distant 12 leagues.
March 4	27, Madeira.	7	15 19	19 28	—	20	146	2	1235	2 March. Entered the N. E. Trade, in lat. 21° 50' N., & long. 19° 30' W.
11	29, Palma Island.	7	2 3	20 37	8	50	90	20	834	8 " Lost the N. E. Trade, in lat. 4° 30' N., & long. 20° 20' W.
18	13, Equator.	7	17 28 S.	32 52	—	2	160	6	1182	13 " Crossed the Equator, in long. 23° 46' W.
25		7	28 58	23 12	—	5	163	—	1098	14 " Entered the S. E. Trade, in lat. 3° 40' S., & long. 26° 20' W.
April 1	3, Tristan da Cunha.	7	34 52	16 40	21	72	37	38	576	NOTE. <i>The Fairlie had not the great delay generally experienced between the Trades, being only 6 days from one to the other.</i>
8	10, Cape Good Hope.	7	37 18	14 26 E.	—	6	162	—	1446	23 " Lost the S. E. Trade, in lat. 24° 34' S., and long. 31° 20' W.
15		7	36 32	30 55	14	49	81	24	868	3 April. Saw Tristan da Cunha from the poop, West.
22		7	19 52	39 30	—	10	158	—	1230	10 " Crossed the meridian of the Cape of Good Hope, in lat. 36° 43' S.
29	1, Mohilla & Comoro	7	12 29	42 56	24	68	31	45	506	18 " Entered the S. E. Trade, in lat. 31° 40' S., and long. 35° 27' E.
May 6	11, Equator.	7	3 22	49 15	16	34	90	28	787	24 " Lost the S. E. Trade, in lat. 16° 15' S., & long. 42° 18' E.
13		7	2 19 N.	55 34	36	81	—	51	447	30 " Off Mohilla, Johanna, and Comoro Islands.
20	27, Off the Maldives.	7	5 24	66 58	4	67	53	44	725	1 May. Crossed the Equator for India, in long. 52° 56' E.
27	31, Friar's Hood.	7	7 12	73 30	14	86	21	47	533	11 " Saw the Northern Atol of the Maldives just discernible from the mast-head, S. W. by S., distant 6 leagues.
3	6, Madras Roads.	7	13 4	80 21	—	7	127	34	743	27 " Saw Westminster Abbey N. 59° W., & Friar's Hood, N. 48° W.
10	10, Sauger Roads.	5	22 35	88 28	4	11	79	26	744	3 June. Anchored in Madras Roads; St. Thomas's Mount S. W.
Total days 113 = 2712 hours.					141	689	1466	416	14147	6 " Left Madras for the Sand Heads.
					689					10 " Arrived off the Gaspar Light Vessel, and obtained a Pilot.
					830*					26 Aug. Left the Sand Heads for the Straits and China.
										29 " Passed the Island of Narcondam, W. by N.
										1 Sept. Pilot Bouton in sight N. E., and Ladda Island Peak, East.
										NOTE. <i>Captain Blair was engaged 17 Sea Logs in clearing Malacca and Singapore Straits, and was much delayed by the prevalence of calms and light airs; after which, 22 days more were employed (having no S. W. Monsoon) in running up the China Sea. What an excellent opportunity for the application of steam-power!</i>
										Arrived in Macao Roads, and received a Pilot on board.

\* Total period of detention from calms and light airs, 830 hours = 34d. 14h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP RELIANCE, 1416 Tons, Captain CHARLES TIMINS, from ENGLAND towards BENGAL and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1852.										
March 24	24, Start Point.	—	50 13 N.	3 38 W.	—	—	—	—	—	24 March. Left Start Point for Bengal and China.
April 1		9	33 52	17 42	19	45	117	35	1238	5 April. Entered the N. E. Trade, in lat. 27° 45' N., & long. 20° 31' W.
8	9, St. Antonio.	7	19 9	24 33	—	37	131	—	948	9 " At noon saw St. Antonio, N. E. by E., dist. 10 or 11 leagues.
15	10, Brava Island.	7	3 28	20 19	—	13	151	4	982	10 " Passed the Island of Brava, seen from the poop, E. N. E.
22	19, Equator.	7	7 19	24 7	26	62	39	41	705	11 " Lost the N. E. Trade, in lat. 12° 53' N., & long. 24° 53' W.
29		7	24 44 S.	24 11	—	28	100	40	978	19 " Crossed the Equator, in long. 20° 52' W.
May 6	12, Cape Good Hope.	7	35 57	1 36	—	7	161	—	1347	21 " Entered the S. E. Trade, in lat. 3° 52' S., & long. 23° 13' W.
13		7	37 35	24 45 E.	—	24	144	—	1295	NOTE. The Reliance was delayed 10 days between the Trades by a continued succession of light airs and calms (very smooth water the whole time.)
20		7	36 59	36 40	21	59	46	42	748	29 " Lost the S. E. Trade, in lat. 24° 44' S., & long. 24° 11' W.
27		7	33 44	46 39	23	65	41	39	671	12 May. Crossed the meridian of the Cape of Good Hope, in lat. 36° 58' S.
June 3		7	33 17	73 41	—	—	168	—	1368	7 June. Entered the S. E. Trade, in lat. 29° 44' S., & long. 78° 19' E.
10	18, Equator.	7	20 18	80 23	13	40	115	—	993	17 " Lost the S. E. Trade, in lat. 0° 43' S., & long. 82° 15' E.
17	20, Adam's Peak.	7	0 43 N.	82 3	13	12	143	—	1187	18 " Crossed the Equator for India, in long. 81° 57' E.
22	22, Madras Roads.	5	13 4	80 21	35	61	24	35	849	20 " Saw Adam's Peak W. S. W., & Westminster-Abbey W. by S.
29	27, Ganjam.	6	22 35	88 28	—	43	46	31	657	21 " Saw Friar's Hood S. W. & W., & Kettle Bottle, S. W. by S.
	29, Sauger Roads.				24	43	46	31		22 " Anchored in Madras Roads, and left the following day for Bengal.
Total days 97 = 2328 hours.					139	470	1463	256	13986	27 " Passed the high land of Ganjam, W. by N.
					470					29 " Arrived off the Sand Heads, and obtained a Pilot.
					609*					12 Sept. Left the Sand Heads for the Straits and China.
Calms and light airs... hours.										

NOTE. By a long succession of calms and light airs, Captain Timins was delayed 30 days between the Sand Heads and Pulo Bouton. Had steam-power, as an auxiliary aid, been used in this instance, what a saving of time would have been effected! The detention in getting through the Straits of Malacca and Singapore obliged Captain Timins to proceed through the Eastern Passage to China.

\* Total period of detention from calms and light airs, 609 hours = 25d. 9h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

5 Dec. Anchored in Macao Roads, and received a Pilot on board.

## H. C. SHIP SIR DAVID SCOTT, 1342 Tons, Captain DAVID WARD, from ENGLAND towards BENGAL and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1832.										
March 25	25, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	25 March. Left Lizard Point for Bengal and China.
April 1	10, St. Antonio.	8	34 37	16 52	10	47	100	35	1076	5 April. Entered the N. E. Trade, in lat. 31° 11' N., & long. 29° 11' W.
8	12, Brava Island.	7	23 23	24 23	—	37	57	74	660	10 " Passed the Island of St. Antonio, just discernible S. by W.
15	21, Equator.	7	7 16	22 18	—	15	153	—	1045	12 " Saw the Island of Brava, E. by N., distant 12 leagues.
22	26, Trinidad.	7	2 52 S.	24 10	24	76	28	40	635	17 " Lost the N. E. Trade, in lat. 3° 16' N., & long. 21° 34' W.
29	28, Martin Vas	7	22 23	28 34	—	3	165	—	1207	21 " Crossed the Equator, in long. 29° 55' W.
May 6		7	31 45	22 19	19	53	96	—	930	25 " Entered the S. E. Trade, in lat. 2° 52' S., & long. 24° 16' W.
13		7	35 16	11 43 E.	—	21	147	—	1174	NOTE. The Sir David Scott was 8 days between the Trades, owing to calms and light airs, (smooth water all the time.)
20		7	37 28	15 44	1	25	142	—	1020	28 " The Island of Trinidad just visible from the deck, S. S. W.
27	24, Cape Good Hope.	7	38 48	24 20	8	64	74	22	739	29 " The Martin Vas Rocks just seen from the poop, N. E. by E.
3		7	37 46	34 34	4	90	49	25	774	30 " Lost the S. E. Trade, in lat. 23° 10' S., & long. 27° 50' W.
10		7	35 2	50 49	1	25	142	—	1029	24 May. Crossed the meridian of the Cape of Good Hope, in lat. 40° 10' S.
17		7	33 26	63 50	—	6	162	—	1067	21 June. Entered the S. E. Trade, in lat. 28° 51' S., & long. 73° 52' E.
24		7	21 45	78 25	1	15	152	—	940	30 " Lost the S. E. Trade, in lat. 5° 15' S., & long. 81° 50' E.
July 1	4, Equator.	7	4 18	82 12	1	20	147	—	1238	4 July. Crossed the Equator for India, in long. 62° 30' E.
8	9, Friar's Hood.	7	6 51 N.	82 59	20	60	64	24	727	Saw Westminster Abbey S. W. by S., and Friar's Hood S. W. by W.
15	11, Madras Roads.	5	15 31	85 34	16	19	41	44	687	11 " Anchored in Madras Roads, St. Thomas's Mount S. W. ¼ W.
18	14, Left Madras.	3	22 35	88 28	11	1	34	26	397	14 " Left Madras Roads for the Sand Heads.
Total days 114 = 2736 hours.					116	577	1753	290	15345	18 " Arrived off Point Palmiras, and received a Pilot on board.
					577					1 Oct. Left the Sand Heads for the Straits and China.
										16 " Passed Narcondam Island S. S. W., distant 7 or 8 leagues.
										29 " At noon, saw Pulo Penang, from East to N. E. by E.
										NOTE. Captain Ward was 12 Sea Logs in getting clear of the Straits. This detention, and the lateness of the season, compelled Captain Ward to proceed by the Eastern Passage for China.
										10 Jan. 1833. Anchored in Lintin Roads, and received a Pilot on board.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, 693 hours = 28d. 21h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP VANSITTART, 1211 Tons, Captain ROBERT SCOTT, from ENGLAND towards BENGAL, and CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Alrs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
March 7	7, Start Point.	—	50 13 N.	3 38 W.	—	—	—	—	—	7 March. Left Start Point for Bengal and China.
10		4	43 13	11 10	8	39	31	18	762	15 " Saw Ferro Island, S. E. by S., and Island of Palma, East.
17	15, Ferro Island.	7	24 25	19 5	1	14	153	—	1155	16 " Entered the N. E. Trade, in lat. 21° 25' N., & long. 18° 52' W.
24		7	6 2	19 26	—	34	134	—	1064	25 " Lost the N. E. Trade, in lat. 4° 53' N., & long. 19° 13' W.
31	1, Equator.	7	1 3	18 7	26	131	—	11	339	April. Crossed the Equator, in long. 19° 55' W.
April 7		7	13 15 S.	28 2	8	14	146	—	1024	3 " Entered the S. E. Trade, in lat. 4° 14' S., & long. 22° 17' W.
14		7	23 12	28 55	11	73	22	62	627	NOTE. The Vansittart was 9 days between the Trades, owing to calms and light variable airs (smooth water the whole time.)
21		7	33 28	9 35	—	4	164	—	1188	11 " Lost the S. E. Trade, in lat. 21° 23' S., & long. 29° 13' W.
28		7	33 5	9 32 E.	1	44	123	—	1065	7 May. Crossed the meridian of the Cape of Good Hope, in lat. 39° 23' S.
5	7, Cape Good Hope.	7	35 13	17 53	8	65	58	37	689	24 " Entered the S. E. Trade, in lat. 16° 44' S., & long. 70° 14' E.
12		7	37 54	40 34	—	2	166	—	1351	29 " Saw the land from N. N. E. to N. N. W. soundd, ground 45 fms.
19		7	31 57	65 47	—	15	153	—	1276	30 " Passed Peros Banhos Islands, seen from the mast-head S. E.
26	30, Peros Banhos.	7	11 19	70 13	—	—	168	—	1164	1 June. Crossed the Equator for India, in long. 77° 58' E.
June 2	1, Equator.	7	1 31 N.	77 59	3	15	131	19	844	3 " Lost the S. E. Trade, in lat. 3° 34' N., & long. 80° 23' E.
7	7, Madras Roads.	5	13 4	80 21	—	20	80	20	780	13 " Anchored in Madras Roads, St. Thomas's Mount S. W. ½ W.
16	16, Sauger Roads.	4	22 35	88 28	2	7	71	16	620	15 " Left Madras Roads for the Sand Heads.
Total days 97 = 2328 hours.					68	477	1600	183	13948	19 Aug. Arrived off the Gaspar Sand Light Vessel, and received a Pilot.
					477					23 " Left the Sand Heads for the Straits and China.
										27 " Passed Narcondam Island, seen from the deck W. by N.
										30 " At noon, Pulo Bouton N. E. by N., and Pulo Pera S. by W.
										Anchored in Penang Harbour, and left the following day.
										NOTE. Captain Scott was detained 17 Sea Logs in Malacca and Singapore Straits by a series of light airs and calms, with contrary currents: in this instance the application of steam-power would have been of great advantage.
					545*					22 Sept. Passed Pedro Branco and Point Romania for China.
										2 Oct. At 2h. 30m. P.M. saw Scarborough Shoal from S. E. to E. N. E. distant 6 or 7 miles.
										8 " Arrived in Macao Roads, and received a Pilot on board.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, 545 hours = 22d. 17h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WINCHELSEA, 1200 Tons, Captain W. Moffatt, through MALACCA and SINGAPORE STRAITS towards CHINA.

## REMARKS, BEARINGS, &amp;c.

Date.	Lat. by Obs.	Long. by Chr.	Remarks, Bearings, &c.
1808.			
July 26	18 43 N.	72 36 E.	Left Bombay Harbour with a fresh S. W. Monsoon, for Malacca and Singapore Straits and China.
August 2	76 25	76 25	Saw the land about Cape Comorin in sight from the quarter-deck, East, about 14 leagues.
5	77 41	77 41	At daylight saw the Island of Ceylon from North to N. E. At 10h. A. M. Point de Galle Flagstaff North, 6 miles.
11	79 9	79 9	At noon saw high land from the poop, N. E. by E. to E. S. E., and extremes of the land from S. W. to S. E. by S.
12	80 21	80 21	Passed Pulo Rondo, Pulo Way, and Pulo Brasse : at noon the extremes of distant land from S. W. to S. E. by S.
16	83 27	83 27	Light airs, with occasional squalls. At noon, the Ladda Islands E. by N. to N. E. Pulo Penang S. E. by E. 8 leagues.
17	86 0	86 0	Light v'ble airs, with squalls & rain. " The high land of Queda E. by N. to N. E. Pulo Penang S. E. by S. 5 leagues.
18	88 0	88 0	Faint airs and calms throughout. " Anchored abreast Pulo Teecoo's ; Penang Flagstaff S. by E. Queda Hill N. E.
19	90 6	90 6	Very light airs with calms at intervals. " Left Penang Harbour. At sunset Penang Flagstaff S. E. by S. 5 miles.
20	92 13	92 13	Light airs and calms, sultry weather. " Pulo Penang from S. 3/4 W. to E. by S. High land of Queda N. E. by E.
21	94 35	94 35	Very faint airs, and calms throughout. " Pulo Penang from East to N. E. by N. 4 leagues. Queda Hill N. E. by N.
22	95 58	95 58	Light variable breezes throughout. " Pulo Dinding E. by S. Pulo Jara S. by W. Malay Coast N. N. E. to E. by N.
23	97 32	97 32	Faint airs, with occasional squalls. " Pulo Dinding East. Pulo Jara S. by W. Malay Coast N. E. by N. to E. by N.
24	98 18	98 18	Throughout variable airs, and squally. " Pulo Jarra N. W. by N. The Samblangs N. E. 3/4 N. to N. by E. 3/4 E.
25	99 44	99 44	Light v'ble breezes, sultry weather. " Saw the Long and Round Arroas from the mast-head, S. E. by S.
26	99 22	99 22	Ditto. " The Long Arroa S. 33° W., and the Round Arroa S. 16° W.
27	100 8	100 8	Very faint airs, with heavy showers. " The Round Arroa S. 80° W., and Parcelar Hill N. 87° E.
28			Light variable airs and squalls. " The Round Arroa just in sight from the main-top, & Parcelar Hill E. by N. 1/4 N.
29			V'ble airs throughout, and squally. " Parcelar Hill N. W. by W. and Cape Rachardo N. by W. 4 W. dist. 4 or 5 miles.
30	No Obs.	No Obs.	Very light variable airs and calms. " Cape Rachardo N. W. by W. 3/4 W., and Malacca Church S. E. by E. 6 miles.
31	100 12	100 12	Light airs throughout, very sultry. " Anchored in Malacca Roads; the Flagstaff N. E. by N., & Fisher's Island, N. W.
3 Sept.	100 12	100 12	Thro'out very sultry, with light airs. Left Malacca Roads. At noon, Mount Formosa N. by E. 3/4 E. Pulo Pisang E. S. E. 7 m.
4	100 14	100 14	Pleasant breezes, with sultry weather. At noon, Barn Island W. S. St. John's N. N. E., Barbuet Hill dist. from St. John's 4 m.
5	100 23	100 23	Variable breezes, squally and rain. " Pedro Branco E. by N. 1/4 N. Buntang Hill S. E., and Point Romania N. W. by W.
6	100 29	100 29	Light variable breezes, fair weather. Passed Pedro Branco & Point Romania. At noon, Pulo Ar W. S. W. Pulo Domar N. E.
7	100 41	100 41	Light breezes, with squalls and rain. At noon, the extremes of the Anambas from S. by E. to S. E. 3/4 E., dist. 8 or 9 leagues.

NOTE. It is a very unusual circumstance at this season of the year not to have the S. W. Monsoon. In this instance the winds were light and variable, with frequent calms of many hours' duration, between the Anambas and Macao, causing the Winchelsea to be 20 days from Point Romania to the anchorage off Macao Town, a distance frequently run in 7 or 8 days.

25 " Anchored in Macao Roads, and received a Pilot on board. Macao Town W. S. W., and Lintin Peak N. by E.

NOTE. Captain Moffatt was considerably delayed during his passage through the Straits, being no less than 20 Sea Logs to Pedro Branco, a distance of only 372 miles. The advantages of steam-power, as an auxiliary aid, have in no part of the Globe a more ample field for successful application than in the various Straits of the Eastern Archipelago.

No Obs.  
104 58

1 40 N.

No Obs.

2 33

Septem.

## H. C. SHIP DUNIRA, 1325 Tons, Captain MONTGOMERIE HAMILTON, through MALACCA and SINGAPORE STRAITS towards CHINA.

Date.	Lat. by Obs.		Long. by Chr.		REMARKS, BEARINGS, &c.
	° ' "	° ' "	° ' "	° ' "	
1822.					
July	8	18 56 N.	72 54 E.		Left Bombay Harbour, with a steady S. W. Monsoon, for Malacca Straits and China.
9	No Obs.	No Obs.	No Obs.		At noon, Pulo Rondo S. 64° E.; Pulo Way S. 57° E., and Pulo Brasse S. 30° E.
10	13 28	74 00			Passed the Islands off Acheen Head: at noon saw Table Mount South.
11	12 13	74 30			At noon, Pulo Pera S. 83° W.; the Laddia Islands N. 49° E., and Landcava N. N. E. 4 E.
12	9 29	75 49			Light breezes and very fair weather. Anchored off Penang Town: Fort Cornwallis Flagstaff N. W. 1 mile.
13	6 14	77 45			Light variable airs & calms thro' out. Left Pulo Penang. At noon, the Boonting Islands E. by S. to N. E. by E.
14	5 10	80 46			Very faint airs throughout, and fine. Passed Saddle Island. At noon, Pulo Dinding S. E. by E.
15	5 38	83 33			Variable breezes, squally, and rain. At noon, Little Dinding S. 68° E. North Sambillang S. 45° E. Pulo Jarra S. by W.
16	5 38	87 37			Light variable airs, and fine weather. Passed Pulo Dinding and the Sambillangs. At noon, Pulo Jarra W. by N. 1 N.
17	5 50	91 18			Moderate breeze thro' out from S. E. At daylight, Pulo Jarra N. W. by W. Extremes of the land from N. E. to E. by S.
18					{ Variable easterly winds, very hazy. { At 10h. A. M. the Long Arroa in sight from the mizen-rigging, South.
19					
20					{ S. Easterly winds, and fine weather. { At noon, the Round Arroa S. W. by W., and Parcelar Hill S. 81° E.
21					
22					{ Light airs and calms, with squalls. { Cleared the 2½ fathoms bank. At noon, Cape Rachado in sight S. E.
23					
24					{ Squally, with light airs and calms. { At noon, Mount Formosa East, and the Outer Water Island N. N. W. 1 W.
25					
26					{ Light and variable airs, with calms. { Mount Formosa N. 80° E. Mount Mora N. 20° E., off shore 6 leagues.
27					
28					{ Calms, with very faint easterly airs. { Mount Formosa N. 4° W. Pulo Pisang S. 67° E. Little Carimon S. 41° E.
29					
30					{ Very light breezes, calms at times. { Barn Island E. by S. Pulo Pisang N. W. Great Carimon S. W. by W.
31					
August	1				{ Calms, with very light airs, and fine. { Barn Island E. 1 S. The Great and Little Carimons in one S. W.
2					
3					{ Light airs, hard squally weather. { Passed Barn Island and St. John's, and anchored off Singapore Town.
4					
5					{ At anchor off Singapore Town. { The Flagstaff N. W. by W. Government House N. W. 1 N., off shore 2 miles.
6					
7					{ Light S. E. breezes and very cloudy. { At noon, Left Singapore Roads for China.
8					
9					{ Increasing S. E. wind, and squally. { Barbuet Hill N. by E. Johore Hill N. by W. Biantang Hill S. E.
10					
11					{ Passed Point Romania and Pedro Branco. At noon, the Anambas seen.
12					
13					{ NOTE. Capt. Hamilton, it appears, was 21 Sea Logs from Pulo Pera to Pedro Branco, the whole distance being only 372 miles.
14					
15					{ Anchored in Macao Roads, and received a Pilot on board; after which proceeded to Lintin.
16					
17					{ NOTE. The Dunira, while proceeding up the China Sea, experienced a series of baffling winds from each quarter of the compass, instead of having a steady S. W. Monsoon, which is usually the case at this season: her passage from Pedro Branco to Macao occupied 15 Sea Logs.
18					

## H. C. SHIP CASTLE HUNTLY, 1400 Tons, Captain HENRY DRUMMOND, through MALACCA and SINGAPORE STRAITS towards CHINA.

## REMARKS, BEARINGS, &amp;c.

Date.	Lat. by Obs.	Long. by Chr.	
1824.	° ' "	° ' "	
July			
26	18 56 N.	72 54 E.	Left Bombay Harbour, with a steady S. W. Monsoon, for Malacca Straits and China.
27	16 29	73 11	At daylight, Pulo Rondo, E. by E.; Pulo Way S. E. by E.; Pulo Brasse S. S. E., and Golden Mountain, S. E. ½ E.
28	13 50	73 21	Moderate breezes & fine throughout. At 8h. A. M., extremes of the land, from S. W. ½ S. to S. by E.
29	11 8	74 55	Light and variable airs with calms. At 8h. A. M., extremes of the land, from South to S. W. by W.
30	10 3	75 28	Paint airs, with many light squalls. At daylight, Pulo Bouton in sight from the deck, E. N. E.
31	8 35	76 9	Light airs and calms, fine weather. At noon, Pulo Bouton E. by N.; too hazy to see the low land.
August			
1	6 41	77 11	" the Peak of Pulo Bouton seen N. 40° E.
2	5 39	78 40	" the extremes of Pulo Penang from E. N. E. to S. E. by E.
3	5 29	81 28	" Pulo Penang North, and Saddle Island N. by W. ½ W.
4	6 2	85 19	" Pulo Penang North, and Pulo Dinding S. E. ½ E.
5	6 21	89 12	At 8h. A. M. Pulo Jarra S. W. ½ W.; False Dinding E. ½ S., and Little Dinding S. E. by S.
6	6 11	92 35	Pulo Jarra S. W.; Little Dinding S. E., and Outer Sambalang S. by E. ½ E.
7	6 19	95 22	Outer Sambalang E. by N. Pulo Jarra W. ½ N.; distance from Sambilangs 5 miles.
8	6 5	97 15	At 8h. A. M., the Long Arroa just in sight, S. by E.
9	No Obs.	No Obs.	" the Round Arroa S. W. by W., and Parcelar Hill E. ½ S.
10	6 22	98 28	At anchor for most part of this log: at noon, Parcelar Hill N. N. E.
11	6 25	98 30	At noon, Mount Formosa E. ½ S., and Outer Water Island N. W. ½ W.
12	6 9	99 0	Passed Tree Island; also the Rabbit and Coney: anchored off Singapore.
13	5 28	100 6	Left Singapore with light airs under all sail.
14	5 2	100 14	At 6 P. M. Bintang Hill S. by W.; Pedro Branco S. W. by W. Saw Pulo Aor.
15	4 42	100 16	Entered the S. W. Monsoon, in lat. 3° 36' N., and long. 106° 24' E.
16	4 27	100 30	
17	3 49	100 44	
18	3 37	100 31	
19	3 5	100 42	
20	2 46	100 55	
21	2 43	101 21	
22	1 51	102 36	
23	1 12	No Obs.	
27	2 50	105 10	
26 July.			Light variable airs, with frequent squalls and rain.
7 August.			Southerly airs, with light squalls.
8 "			V'ble from S. E., with hazy weather.
9 "			Light v'ble airs, calms occasionally.
10 "			Very faint airs, with calms and rain.
11 "			Ditto, fair.
12 "			Light airs, with calms and squalls.
13 "			Ditto, with very fine weather.
14 "			Light variable airs and calms, fine.
15 "			Very moderate breezes throughout.
16 "			Light variable airs, fine throughout.
17 "			Steady breezes, with hazy weather.
18 "			Fresh breeze, with clear weather.
19 "			
20 "			
21 "			
22 "			
23 "			
26 "			
27 "			
28 "			
NOTE.			Captain Drummond was no less than 20 Sea Logs in proceeding through Malacca and Singapore Straits, the whole distance being only 372 miles.
31 "			Steady S. W. Monsoon and hazy. Passed Pulo Sapata N. W. by N., distant 6 leagues.
7 Sept.			Arrived and anchored in Lintin Roads in 11 fathoms, and obtained a Pilot.
NOTE.			The Castle Huntly was 11 Sea Logs between Pedro Branco and Lintin Roads, having a pleasant S. W. Monsoon, with smooth water the whole way.

Date.	Lat. by Obs.	Long. by Chr.	REMARKS, BEARINGS, &c.
1829.			
July 3	18 56 N.	72 54 E.	Left Bombay Harbour with fresh S. W. Monsoon for Malacca Straits and China.
16	6 10	93 7	At 5h. 15m. P. M. saw the Island of Ceylon from the deck, N. W. to N. E. by E.
17	6 4	96 7	Light v'ble airs and squally weather. The entrance of Malacca Straits just discernible from E. N. E. to East.
18	5 55	97 5	First light airs, latterly fresh breeze. At noon, Pulo Rondo East, Pulo Way S. E. $\frac{3}{4}$ E., and Pulo Brasse S. $\frac{3}{4}$ E.
19	5 41	98 14	Pleasant weather and moderate wind. Passed King's Point S. 30° W., and Golden Mountain S. 5° E.
20	5 21	98 3	Light breezes, v'ble with heavy rain. At 6h. P. M. saw Elephant Hill S. by W., and high land near Diamond Point S. E.
21	No Obs.	No Obs.	Light and variable airs with calms. At noon, no land in sight, on account of the weather being thick and squally.
22	No Obs.	No Obs.	Moderate breeze and squally weather. " Pulo Varella just discernible from the poop, S. W. by S.
23	2 52		Mod. breezes N. E., latter light airs. Passed Pulo Jarra and Pulo Varella; noon, Long Arroa S. 70° W., Round Arroa S. 38° W.
24	2 46		} Nearly dead calm the whole of these { While at anchor, the Round Arroa S. 60° W.; Parcelor Hill S. 87° E.
25			two days.
26			Mostly calm, latterly light breeze, S. W. At noon, Parcelor Hill N. 33° E., Pulo Callum N. 10° E., and Pulo Loomat N. 33° W.
27			First & middle calm, latter light breeze. Parcelor Hill N. 35° W., Cape Rachado S. 66° E., and Tanjong Clin E. by S.
28			Westerly breezes, with fine weather. Anchored in Malacca Roads; the Flagstaff N. E. by E.
29			Mod. breezes with frequent squalls. Left Malacca for China; Malacca Church E. N. E.
30			Ditto from S. E., with fine weather. At noon, the Outer Water Island N. $\frac{3}{4}$ E., and Malacca Church East.
31			Light and variable airs, with calms. " Mount Formosa N. 32° E., and Mount Moar N. 24° W.
1 August			Mod. breezes S. E., with fine weather. " Mount Formosa N. 32° E., Mount Moar N. 10° W., and Pulo Pisang N. 70° E.
2			Ditto, which latterly shifted to S. W. " Rounded the Rabbit and Coney.
3			Variable breezes, with fine weather. Passed Pedro Branco, bearing South.
4	104 24		Pleasant breezes with clear weather. Saw Pulo Aor from the deck W. by S., and Pulo Domar N. E.
5	105 42		Moderate Monsoon and fine weather. Entered the S. W. Monsoon, in lat. 5° 17' N., and long. 105° 42' E.
8	No Obs.	No Obs.	Variable airs, with heavy showers. Lost the S. W. Monsoon, in lat. 16° 12' N., and long. 113° 15' E.
NOTE. Captain Glasspoole did not succeed in clearing the Straits of Malacca and Singapore in less than 18 Sea Logs, the whole distance being only 372 miles.			
11			Anchored in Macao Roads, and obtained a Pilot. Macao Town N. 65° W., distant 3 or 4 miles.
NOTE. The Buckinghamshire was only 9 Sea Logs between Pedro Branco and Macao Roads, having a moderate S. W. Monsoon nearly the whole distance.			

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Anchored in Macao Roads, and obtained a Pilot. Macao Town N. 65° W., distant 3 or 4 miles.

NOTE. The Buckinghamshire was only 9 Sea Logs between Pedro Branco and Macao Roads, having a moderate S. W. Monsoon nearly the whole distance.

## H. C. SHIP CASTLE HUNTLY. 1400 Tons, Captain HENRY DRUMMOND, through MALACCA and SINGAPORE STRAITS towards CHINA.

Date.		Lat. by Obs.	Long. by Chr.	REMARKS, BEARINGS, &c.	
1830.					
August 15		° ' 12 56 N.	° ' 81 5 E.	15 August. Left Madras Roads for Malacca and Singapore Straits and China.	
16		11 30	84 0	At 4h. P. M. the Body of Terraça N. E. $\frac{1}{2}$ N., and Kathall Island E. by N. $\frac{1}{2}$ N.	
17		10 25	86 35	Passed Pulo Bonton N. E. by E., and anchored in Penang Harbour off Fort Cornwallis, the Flagstaff N. W. by W. $\frac{3}{4}$ mile.	
18		9 23	89 24	Very light airs, with frequent calms. Left Penang Harbour for Malacca and Singapore.	
19		8 17	92 18	Light variable airs throughout, fine. At noon, Pulo Penang N. E. by E., Saddle Island E. by N., and Elephant Hill N. E.	
20		7 18	95 35	" Ditto. Pulo Penang N. 15° W., and Pulo Dinding S. 52° E.	
21		6 21	98 35	" " Pulo Jarra W. by S. $\frac{1}{2}$ S., White Rock E. by S., & South Sambalang E. S. E.	
22		No Obs.	No Obs.	Passed Pulo Jarra W. by N., and Great Sambalang N. E.	
23				At noon, Round Arroa S. W. $\frac{1}{2}$ W., Long Arroa W. by S., and Parcelar Hill E. by S.	
24				" Parcelar Hill N. W. $\frac{1}{2}$ N., and Cape Rachado S. 85° E.	
25				" Cape Rachado N. 49° W., Fisher's Island S. 86° E., & Water Islands S. 64° E.	
26				Anchored in Malacca Roads, Church N. E., and Red Island E. $\frac{1}{2}$ N.	
27				At noon, Little Carimon Peak S. 17° E., Pulo Cocob N. 74° E., & Pulo Pisang N. 33° W.	
28				" Little Carimon Peak W., Red Island S. E., and Tree Island S. by E.	
29				Anchored off Singapore Town, the Flagstaff N. W. by W.	
30				Left Singapore Roads for China.	
31				{ At noon, Red Cliffs N. $\frac{1}{2}$ E., Johore Hill N. E., and Battam Point S. E.	
32				" Point Romania North, and Barbuett Hill N. 21° W.	
33				" Bintang Hill S. 28° E., Pedro Branco N. 18° E., and Battam Point S. 70° W.	
34				Steady breeze from S. W., fine weather. Passed Pulo Aor and Pulo Timooan; Great Anambas S. E.	
35				Entered the S. W. Monsoon, in lat. 5° 2' N., and long. 106° 9' E.	
36				NOTE. Captain Drummond, in proceeding through Malacca and Singapore Straits, was considerably detained in his passage by calms and light airs, being 18 days performing the trifling distance of 372 miles.	
37				4 October. Anchored in Macao Roads, and received a Pilot on board; after which weighed, and proceeded to Lintin Roads.	
38				NOTE. The Castle Huntly was 12 Sea Logs between Point Romania and the Coast of China, with baffling winds for several days, after which the S. W. Monsoon set in, and continued steady.	



## H. C. SHIP FARQUHARSON, 1406 Tons, Captain JOHN CRUICKSHANK, through MALACCA and SINGAPORE STRAITS towards CHINA.

Date.		Lat. by Obs.	Long. by Chr.	REMARKS, BEARINGS, &c.
1883.				
July	31	° 18	' 56 N.	Left Bombay Harbour, with fresh S. W. Monsoon, for Malacca Straits and China.
August	11	} No Obs.	° 72	V'ble breezes and unsettled weather. Saw Pulo Rondo S. W. by W., Pulo Way S. W. by S., and Golden Mountain S. by E.
	12		' 54 E.	Passed the Islands off Acheen Head; Golden Mountain S. by W., and Pulo Valetta S. W.
	13	} No Obs.	No Obs.	Passed Pulo Varella; at noon, Pulo Pera S. 24° E., and Pulo Bouton N. E.
	14			At noon, Pulo Pera N. 87° W., Pulo Penang S. 76° E., and Pulo Bouton N. E.
	15	° 6	' 2 N.	Faint airs, with frequent squalls and rain.
	16	° 5	' 39	At noon, Pulo Pera; at noon, Pulo Penang S. 86° E., and Pulo Bouton N. 40° E.
	17	° 5	' 32	Pulo Penang N. 29° E., Pulo Dinding S. 72° E., and False Dinding E. 19° N.
	18	} No Obs.	No Obs.	At noon, Pulo Jarra N. 56° W. Rocks off the Nine Islands, N. 32° E.
	19			" No land in sight, on account of the weather being thick and hazy.
	20	° 3	' 34	" The Round Arroa S. by W. ½ W., and Parcelar Hill S. E. by E. ½ E.
	21	° 3	' 28	" The Round Arroa just in sight S. 38° W., and Long Arroa S. 65° W.
	22	° 2	' 58	" Parcelar Hill N. 62° E., Parcelar Point N. 13° E., & Pulo Callum just seen.
	23			" Cape Rachado N. 17° W.; the same bearing has continued since 7h. P. M.
	24			" Mount Formosa N. 82° E., Mount Moar, N. 6° E., and low land E. S. E.
	25			" Mount Formosa N. 52° E., Mount Moar N. 26° W., and low land E. by S.
	26			" Pulo Pisang S. 82° E., Great Carimon S. 31° E., and Little Carimon S. 60° E.
	27			" Pulo Pisang N. 38° E., Great Carimon S. 50° E., and Brothers S. E. by S.
	28			" Pulo Pisang N. 33° W., Little Carimon N. 7° E., and Barn Island East.
	29			" Tree Island S. 16° E., Rabbit and Coney S. 78° E., and Barn Island S. 81° E.
	30			" Anchored in Singapore Roads, the Flagstaff N. E. by E.
	31			" Left Singapore, with light winds from the Southward.
1 Sept.				Pedro Branco, S. 64° E., Bintaung Hill S. 11° W., and Barbuett Hill S. 62° W.
Septem.	1	° 38	' 105	Passed Pulo Aor, just seen from the deck N. W. by W.
	2	° 57	' 34	Southerly winds with squally weather.
	3	° 5	' 36	NOTE. Captain Cruickshank, it appears, in consequence of a continued succession of calms and light airs, was no less than
	4	° 7	' 16	19 Sea Logs in Malacca and Singapore Straits, a distance of only 372 miles.
	5	° 8	' 16	Passed Pulo Sapata, seen from the mizen-rigging N. W. ½ W.
	6	° 4	' 8	Saw the Peak of Lintin N. 27° W., the Asses' Ears, N. 32° W., and the Grand Lemma N. 17° W.
	7	° 8	' 49	Arrived in Macao Roads. On receiving a Pilot, proceeded to Lintin Roads.
	8	° 10	' 20	NOTE. The Farquharson was 22 Sea Logs between Pedro Branco and the Coast of China, with calms of many hours' duration between light variable breezes.

## H. C. SHIP LADY MELVILLE, 1350 Tons, Captain THOMAS SHEPHERD, through MALACCA and SINGAPORE STRAITS towards CHINA.

Date.		Lat. by Obs.		Long. by Chr.		REMARKS, BEARINGS, &c.
	1853.	°	'	°	'	
July	31	18	56 N.	72	54 E.	31 July. Left Bombay Harbour, with a fresh S. W. Monsoon, for Malacca Straits and China.
August	1	No Obs.		No Obs.		11 August. Pleasant breeze, with squalls & rain. Passed Pulo Rondo S. W. by S., Pulo Way S. $\frac{1}{2}$ W., and Golden Mountain S. S. E.
	2	12	55	74	39	12 " Middle variable airs, with heavy rain. At sunset, Golden Mountain was seen S. S. W.
	3	10	16	75	37	13 " Light and latter, light airs and calms. Passed Pulo Bouton N. E. $\frac{1}{2}$ N. At noon, Pulo Pera S. S. E. $\frac{1}{2}$ E.
	4	8	42	76	17	14 " Light variable airs and very squally. At 6h. A. M. Pulo Pera W. $\frac{1}{2}$ N., Ladda Islands N. by E. $\frac{1}{2}$ E., & Pulo Penang E. $\frac{1}{2}$ S.
	5	6	39	78	6	15 " Ditto. At daylight, Pulo Penang from the deck, E. by N. $\frac{1}{2}$ N.
	6	5	20	80	33	16 " Ditto. At noon, Pulo Penang N. by E.
	7	5	19	83	23	17 " Light breezes, with occasional calms. At 6h. 30m. A. M. Pulo Jarra N. W., and the Great Sambilang N. by E.
	8	5	35	87	9	18 " Light v'ble airs thro' out—squalls & rain. At noon, the Round Arroa just in sight from the mast-head S. W. by S.
	9	5	57	90	33	19 " Faint airs thro' out—contrary currents. " the Round Arroa S. W. $\frac{1}{2}$ W., and Parcelar Hill E. $\frac{1}{2}$ S.
	10	6	3	93	38	20 " Very light airs, with occasional calms. " Parcelar Hill E. N. E., and Pulo Callum N. by E. $\frac{1}{2}$ E.
	11	6	23	96	0	21 " Ditto. " Cape Rachado E. by S., and extremes of the low land N. W. by W.
	12	6	12	97	22	22 " Light v'ble breezes & frequent calms. " Mount Moar E. $\frac{1}{2}$ N., and Mount Formosa E. by S. $\frac{1}{2}$ S.
	13	5	55			23 " Ditto, with much heavy rain at times. " Little Carimon S. E., Great Carimon S. E. by E., & Pulo Pisang N. E. by E.
	14	5	24			24 " Variable winds, with squalls & rain. Passed Pulo Pisang and the Carimons. At noon, the Coney E. N. E., 1 $\frac{1}{2}$ mile.
	15	6	16			25 " Light S. W. winds, unsettled weather. Lighted off Singapore Town; the Flagstaff N. W. by W., & St. John's S. by W. $\frac{1}{2}$ W.
	16	4	40			26 " } Light variable airs, frequent calms. At anchor in Singapore Roads.
	17	3	31			27 " Faint airs and calms, fine weather. At noon, St. John's Island W. by S., Johore Hill N. E.
	18	3	11			28 " Mostly light v'ble breezes, latter fresh. Passed Johore Hill. At 6h. P. M. Pedro Branco E. N. E., Harbucet Hill N. W.
	19	2	56			29 " Fresh southerly breeze—constant rain. Passed Pulo Aor just discernible from the poop E. by N.
						30 " }
						NOTE. Captain Shepherd, it appears, was 19 Sea Logs in proceeding through the Straits of Malacca and Singapore, a distance of only 372 miles.
						23 Sept. Arrived off Macao, and obtained a Pilot; after which proceeded to Lintin Roads, and anchored.
						NOTE. The Lady Melville experienced a most tedious passage from Point Romania to China, being delayed 25 days by a continued succession of alternate calms and light variable airs (smooth water the whole way.)

## H. C. SHIP HEREFORDSHIRE, 1354 Tons, Captain EDWARD FOORD, through MALACCA and SINGAPORE STRAITS towards CHINA.

Date.		Lat. by Obs.		Long. by Chr.		REMARKS, BEARINGS, &c.
		°	'	°	'	
1853.						
July	31	18	56 N.	72	54 E.	Left Bombay Harbour, with S. W. Monsoon, for Malacca and Singapore Straits and China.
August	11	6	17	96	15	Moderate breezes, with squally weather. Saw Pulo Way from the deck S. W., and Golden Mountain S. by E.
	12	6	9	97	30	Variable airs, with occasional calms. Passed Pulo Rondo, Pulo Way, and Pulo Brasse.
	13	6	2	99	5	First part fresh breeze, latter light airs. Pulo Pera S. E. $\frac{1}{2}$ E., and Pulo Bouton N. E. by E.
	14	5	37	99	38	Light variable airs and very squally. Pulo Pera N. 81° W., and Pulo Penang S. 82° E.
	15	5	23	99	48	Ditto, with frequent calms and rain. Pulo Penang E. by N., ground 40 fms., green sand and black specks.
	16	4	35	100	10	Light breezes, with occasional squalls. Pulo Penang N. 5° E., Pulo Dinding S. 56° E., False Dinding S. 72° E.
	17	3	30	100	39	V'ble breezes, with heavy rain at times. Passed Pulo Penang. Pulo Jarra from the mizen-rigging N. W.
	18	3	17			Very light and v'ble airs throughout. At Th. A. M. The Arroas from the mast-head, S. by W. $\frac{1}{2}$ W.
	19	3	3			V'ble breezes, and squally at intervals. At noon, The Round Arroa S. 30° W., and Parcelar Hill E. S. E.
	20					Light airs thro'out, with sultry weather. " The Round Arroa W. by S. $\frac{1}{2}$ S. and Parcelar Hill E. $\frac{1}{2}$ S.
	21					Light airs and calms, with hot weather. " Parcelar Hill N. 14° E., and Pulo Callum N. 18° W.
	22	} No Obs.				Ditto ditto, heavy rain. " Cape Rachado N. 28° E., with nearly the same bearing for 18 hours.
	23					Ditto ditto, with heavy rain. " Mount Formosa N. 84° E., and Mount Moar N. 8° E.
	24	2	19			Light variable airs, with fine weather. " Mount Formosa N. 50° E., and Mount Moar N. 28° W.
	25					Light airs, with occasional calm and rain. " Pulo Pisang E. by N. $\frac{1}{2}$ N., and Great Carlmon S. E. by S.
	26					V'ble breezes, with very sultry weather. " Pulo Pisang North, the North Brother S. 46° E., Point Cocob N. 85° E.
	27					Light and v'ble, with heavy rain at times. " Little Carlmon S. 54° E., Point Cocob N. $\frac{1}{2}$ W., and Barn Island S. 83° E.
	28					First part faint airs, latter pleasant breeze. " The Rabbit and Coney S. 81° E., and Tree Island S. 8° W.
	29					Light airs, with calms occasionally. " Anchored off Singapore Town; Flagstaff N. 52° E.
	30					Variable airs, latter part a dead calm. " Left Singapore for China, with light southerly wind.
	31					First part calm, latter pleasant breeze. " Point Romania N. 21° E., Johore Hill N. 75° W., Pedro Branco N. 74° E.
1	Sept.					Steady breeze first part, latter squally. At 6h. P. M. Pulo Aor was seen from the poop N. W. by N.
	13					Light variable airs, with sultry weather. At noon crossed Maclesfield Bank in 17 fathoms, the Rocks clearly seen.
						NOTE. Captain Foord, from the continued delay caused by light airs and calms, was 21 Sea Logs between Pulo Pera and Pedro Branco, a distance of only 372 miles.
Septem.	1	3	58	105	30	Arrived in Macao Roads, and obtained a Pilot; after which, proceeded to Lintin Roads, and anchored.

NOTE. The Herefordshire had no S. W. Monsoon during her passage up the China Sea; on which account she was much delayed between Pedro Branco and the Grand Ladrone, being 24 Sea Logs on her passage from the Straits to China, with smooth water the whole way.

## H. C. SHIP WARREN HASTINGS, 1068 Tons, Captain THOMAS SANDYS, through MALACCA and SINGAPORE STRAITS towards CHINA.

## REMARKS, BEARINGS, &amp;c.

Date.	Lat. by Obs.	Long. by Chr.	
1833.	° ' "	° ' "	
August 14	20 33 N.	89 4 E.	Left the Sand Heads, with a steady S. W. Monsoon, for Malacca Straits and China.
15	19 19	91 18	The extremes of the Island of Preparis from W. $\frac{1}{2}$ N. to W. S. W. The Cow and Calf, W. by N. $\frac{1}{2}$ N.
16	18 9	91 25	At daylight, passed the Island of Narcondam W. by N., distant 5 or 6 leagues.
17	16 13	92 57	At daylight, saw the Island of Pulo Pera N. W. $\frac{1}{2}$ W. At daylight, saw Pulo Penang E. N. E., distant 8 leagues.
18	14 38	94 15	Light variable airs with frequent calms. At daylight, Pulo Dinding E. by N. $\frac{1}{2}$ N.
19	13 50	94 56	Ditto " with squalls and rain. At noon, Pulo Jarra S. W. by S., Pulo Dinding E. by S., and Great Sambalang S. E.
20	12 4	95 43	Fresh breezes, S. E'y, with fine weather. " Pulo Jarra N. W. by W. $\frac{1}{2}$ W., and Great Sambalang W. by N.
21	10 32	96 7	Ditto first part—latter part light airs. Passed Pulo Jarra and the Great Sambalang W. by N.
22	8 55	96 40	Variable airs, slight contrary current. At 9 A. M. anchored, Round Arroa S. W. $\frac{1}{2}$ S., Long Arroa W. S. W., East Rock S. W.
23	6 51	97 20	Light breeze & squally, with heavy rain. While at anchor, Parcelar Hill N. $\frac{1}{2}$ N.; too hazy to see the Round Arroa.
24	5 54	98 9	Ditto " with occasional hard squalls. At noon, anchored, Parcelar Hill N. $\frac{1}{2}$ W., the low land E. by N. to S. E.
25	5 41	98 59	Light S. E'y winds, with heavy rain. Cape Rachado N. E. by N., and Tanjong Clin E. by N. $\frac{1}{2}$ N.
26	4 56	99 32	Faint breezes from S. E., fine weather. " Passed Malacca, Water Island E. by S., and Fisher's Island N. by W.
27	4 26	100 26	Variable breezes S. E'y, clear weather. " Mount Formosa N. N. W. $\frac{1}{2}$ W., and Mount Moar N. by W. $\frac{1}{2}$ W.
28	4 18	100 29	Very faint airs, with frequent calms. " Pulo Pisang N. E. by E. $\frac{1}{2}$ E., and the Great Carimon S. E.
29	3 47	100 25	Moderate breezes S. E., fine weather. " Pulo Pisang N. by W., and the Little Carimon S. E.
30	3 12	100 42	Light variable airs, and fine weather. " Pulo Pisang N. N. W., Little Carimon S. by E., and Tanjong Bohus E. $\frac{1}{2}$ S.
31	3 00	100 42	Very light airs thro' out, fine weather. " Tree Island South, and the Coney E. by N.
Septem. 1	2 49		Light variable airs, ditto. " St. John's Island N. E., and Middle Island West, in 30 fathoms.
2			Very faint airs, calms, and hot weather. Anchored off Singapore, the Flagstaff N. W. by N., and St. John's Island S. S. W.
3			Light airs & calms, with squalls & rain. At anchor off Singapore Town.
4			Variable E'y breezes, squally weather. Left Singapore Roads, Barbuet Hill N. E. $\frac{1}{2}$ E., and Red Cliffs N. by W.
5			Light variable breezes, with heavy rain. Pedro Branco S. S. E. $\frac{1}{2}$ E., Barbuet Hill W. $\frac{1}{2}$ N., and Bintang Hill S. by E.
6			Light variable breezes, with heavy rain. At noon, was seen from the deck Pulo Aur N. W. $\frac{1}{2}$ W.
7			Light variable breezes, with heavy rain. At daylight, the Middle Anambas East.

NOTE. Captain Sandys was no less than 22 Sea Logs in his passage through the Straits of Malacca and Singapore, a distance of only 372 miles.

7 October. Passed the Asses' Ears and Grand Lemna. Anchored in Macao Roads, and obtained a Pilot.

NOTE. The Warren Hastings was 20 Sea Logs between Point Romania and making the Coast of China.

# H. C. SHIP BUCKINGHAMSHIRE, 1369 Tons, Captain CHARLES SHEA, through MALACCA and SINGAPORE STRAITS towards CHINA.

Date.		Lat by Obs.		Long by Chr.		REMARKS, BEARINGS, &c.
		°	'	°	'	
1833.						
Septem.	4	20	58 N.	88	19 E.	Left the Sand Heads for China, through Malacca and Singapore Straits.
	14	13	57	93	33	Passed the Cocos S. S. E. and Table Island S. E. by E., distant about 6 leagues.
	15	11	29	94	55	At 4h. P. M. the Island of Narcondam due East, distant 8 leagues.
	16	9	4	96	33	At noon, the high land of Queda N. E. $\frac{1}{2}$ E., and Pulo Bouton N. N. W. $\frac{1}{2}$ W.
	17	7	6	97	32	Pulo Penang S. E. $\frac{1}{2}$ S., Mount Elephant E. by S., and the Ladda Island N. W. by N.
	18	6	17	98	7	" Anchored in Pulo Penang Harbour, the Flagstaff at Fort Cornwallis N. W. $\frac{1}{2}$ W., distant $\frac{3}{4}$ mile.
	19	5	53	99	32	} Left Pulo Penang Harbour, and proceeded with very light airs. Frequent calms of many hours' duration, with faint variable airs and slight contrary currents, occasioned Pulo Penang and Saddle Island to be in sight during the whole of these four days, with very little deviation in their respective bearings.
	20	5	44	99	51	
	21	5	24	100	21	
	25	No Obs.		No Obs.		A light steady breeze for several hours. Passed Pulo Penang. At noon, Pulo Jarra just in sight S. E.
	26	5	28	100	7	Calms with light v'ble air throughout. At noon, Pulo Jarra S. 40° W., and Outer Sambalang S. 53° E.
	27	4	53	99	54	Ditto ditto. " Pulo Jarra N. N. W. 10 miles, Outer Sambalang N. E. by E.
	28	4	18	99	58	" Pulo Jarra N. W. $\frac{1}{2}$ W. 20 miles, Sambalang just in sight.
	29	4	12	100	16	" The Arroas from the fore-yard in sight, S. S. W.
	30	3	51	100	14	" Parcelar Hill N. N. E., and Parcelar Point E. $\frac{1}{4}$ N.
October	1	3	22	100	32	Passed Cape Rachado; at noon, the Cape N. 58° W., and Malacca Church E. $\frac{1}{2}$ N.
	2	3	7	100	45	At noon, Pulo Pisang N. $\frac{1}{2}$ W., and the Peak of Great Carimon S. E.
	3	2	42	101	21	" Pulo Pisang N. by W. $\frac{1}{2}$ W., Great and Little Carimon in one S. E. by S.
	4	2	13	102	8	" The Coney E. by N., Barn Island N. E., and Tree Island W. $\frac{1}{2}$ N.
	5	1	19	103	17	In sight of Singapore Town, Flagstaff W. S. W.
	6	1	14	103	28	Left Singapore for China.
	7	1	7	103	44	Nearly calm throughout this Log, with very smooth water. Left Singapore for China.
	8	1	14	103	52	Light and variable air throughout. Pedro Branco in one with Saddle Hill, and Barbuett Hill W. by N.
	11	1	13	103	53	Ditto and calm; latterly a light breeze. At noon, Pulo Ar N. W. by W., distant 5 leagues.
	12	1	20	104	24	} No R. The small Island of Pulo Jarra was in sight four days. In consequence of the long continuance of light airs and calms during the Buckinghamshire's passage through the Straits, Captain Shea was too late to proceed direct up the China Sea, on account of the advanced period of the season: he therefore went the Palawan passage, and was not less than 45 days from Pedro Branco to China; the direct distance is easily accomplished in 8 or 10 days. Detention from calms in the Straits frequently obliges Commanders of Ships late in the season to reach China by the Eastern or Palawan Passage, as in this instance. These circuitous routes occupy periods varying from 30 to 60 days.
	13	2	19	104	46	
						26 Novem. Arrived in Macao Roads, and received a Pilot on board; after which, weighed, and proceeded to Lintin.

H. C. SHIP DUNIRA, 1325 Tons, Captain MONTGOMERIE HAMILTON, through GASPAR and SUNDA STRAITS towards ENGLAND.

Date.	Lat. by Obs.	Long. by Chr.	REMARKS, BEARINGS, &c.
1819.			Left Macao Roads for Gaspar Straits.
1 April.	° /	° /	Light variable airs, and fine weather.
9 "	19 48 N.	114 10 E.	At noon, Grand Natuna E.S.E., Saddle Island N.E. $\frac{1}{2}$ N., 3 Rocks off Mount Head S. by W. $\frac{1}{2}$ W.
10 "	17 51	114 48	" Low Island from the deck S. E. by E. $\frac{1}{2}$ E., & Haycock Island E. by N. $\frac{1}{2}$ N. 10 m.
10 "	15 21	113 42	At 4h. P. M., Haycock Island from the mast-head N. E. by E., & Low Island E. by S.
11 "	13 22	112 30	At daylight, Camel's Hump S. by E., Victory & Barren Islands from mast-head W. by N.
12 "	11 15	111 15	At noon, Camel's Hump N. E. by E., St. Julian E. $\frac{1}{2}$ N., & St. Barbe S. E. $\frac{3}{4}$ E. 8 m.
13 "	10 56	110 7	At noon, Camel's Hump N. E. by E., St. Julian E. $\frac{1}{2}$ N., & St. Barbe S. E. $\frac{3}{4}$ E. 8 m.
14 "	8 37	109 24	At 6h. P. M. St. Julian N.N.E., St. Esprit E. by N., & at noon St. Barbe just seen N.E. by E. $\frac{1}{2}$ E.
15 "	7 9	108 22	At 5h. P. M. St. Barbe just discernible from the mast-head N.E. by N., at noon no land seen.
16 "	5 28	107 28	At noon, Gaspar's. W. by S. $\frac{3}{4}$ S., high land of Billiton S.E. $\frac{1}{2}$ E., & Pulo Leat just seen S.S.W.
17 "	4 20	107 22	" Gaspar Isl. N. by W. $\frac{1}{2}$ W., Tanjong Brekat N.W. $\frac{1}{2}$ W., N. Point Pulo Leat W. by S.
18 "	3 10	106 58	At 10h. 30m. A. M. Saddle Isl. S. W. by W., Baran Isl. W. by N., North Isl. N.N.E., South Isl. E. $\frac{1}{2}$ N.
19 "	2 14	106 52	The whole of these two days was employed beating to windward between Saddle Island and the entrance of Sunda Strait.
20 "	1 34	106 40	At noon, the high land on the Sumatra Coast just discernible W. by S.
21 "	0 56	106 40	" the Brothers just seen S. W. $\frac{1}{2}$ W., & the N. Watcher E. S. E. $\frac{1}{2}$ E., 16 or 17 m.
22 "	15 7 S.	107 20	" the N. Watcher S. E. by E., N. Brother W. by S. $\frac{1}{2}$ S., & S. Brother W. S. W.
23 "	1 15	107 9	At 10h. A. M. the North Watcher S. E., distant 10 miles.
24 "	2 13	107 9	At noon, the Brothers S. S. E. $\frac{1}{2}$ E., & the extremes of Sumatra S. W. $\frac{1}{2}$ S. to N. W.
25 "	2 46	107 8	" St. Nicholas Point S. S. E. $\frac{3}{4}$ E., North Island S. by W., Rajah Bassa S. W.
26 "	3 41	107 16	" St. Nicholas Point S. E. $\frac{1}{2}$ S., North Island S. by E., Rajah Bassa S. by W.
27 "	4 43	107 0	" Thwart the Way Island W.S.W., the Cap N.N.E. $\frac{1}{2}$ E., & the Button N.E. $\frac{1}{2}$ E.
28 "	4 35	106 23	" Thwart the Way Island W.S.W., the Cap N. by E., & Button N. $\frac{1}{2}$ E.
29 "	5 0	106 18	At 4h. P. M., anchored in Anjer Roads; the Cap N. by E., and Button N. $\frac{1}{2}$ E.
30 "	5 7		At anchor in Anjer Roads, having contrary winds and slight adverse currents.
1 May.	5 6		Left Anjer Roads. At noon, the Cap N. N. E., and the Button N. by W.
2 "	5 4		At noon, the bearing of the Cap and Button the same as yesterday.
3 "			" Crokatoo Peak W. by S. $\frac{1}{2}$ S., Rajah Bassa N. $\frac{3}{4}$ E., Princes Island S. W. by S.
4 "			" Crokatoo Peak N. E. by E., and Princes Island S. by E. distant 10 m.
5 "			Left the Straits for St. Helena and England, under all sail.
6 "			

NOTE. Captain Hamilton, in consequence of so long a continuance of faint airs, calms, and slight contrary currents, was 28 days on his passage from the South Anambas to Princes Island, the distance being only 578 miles.

## H. C. SHIP WILLIAM PITT, 819 Tons, Captain CHARLES GRAHAM, through GASPAR and SUNDA STRAITS towards ENGLAND.

Date.	Lat.	by Obs.	Long.	by Chr.	REMARKS, BEARINGS, &c.
	°	'	°	'	
1820.					
March	28	21	48 N.	113	33 E.
	29	18	56	113	54
	30	18	12	114	6
	31	18	3	114	5
April	1	17	56	114	1
	2	16	36	114	34
	3	14	36	113	5
	4	12	44	111	10
	5	10	41	109	42
	6	9	6	108	48
	7	7	34	109	5
	8	6	28	109	56
	9	5	29	110	36
	10	5	10	110	54
	11	5	30	110	32
	12	5	20	110	26
	13	5	25	110	16
	14	5	31	110	7
	15	5	27	109	49
	16	4	52	109	13
	17	4	3	108	43
	18	3	37	108	31
	19	3	5	108	34
	20	3	20	108	28
	21	3	9	108	21
	22	2	21	107	39
	23	1	55	107	14
	24	1	25	107	0
	25	0	32	107	3
	26	0	30 S.	106	56
	27	1	24	107	24
	28	2	18	107	25
	29	2	33	107	17
	30	2	37		
	1	2	53		
May	1	No Obs.			
	2	3	9	107	16

NOTE. Captain Graham it appears was 6 days in sight of the Grand Natunas, and 7 days in sight of Gaspar Island—delays that at once point out the immense advantages to be derived by the occasional application of steam-power as an auxiliary aid. Had the Pitt not experienced such detention in the Straits, Captain Graham would have been off the Cape of Good Hope before the Winter season commenced, and thereby have avoided the severe weather usually encountered by ships rounding it so late as he did.

## H. C. SHIP CERES, 1400 Tons, Captain WILLIAM DUNSFORD, from ENGLAND towards RIO JANEIRO.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1804.										
June 10	10, Spithead.	—	50 37 N.	1 34 W.	—	—	—	—	—	Left Spithead, St. Catherine's Point N. N. E. $\frac{1}{2}$ E.
17	14, Land's End.	8	47 28	9 2	24	106	—	62	460	At noon, Berry Head N. 32° E., & Start Point N. 55° W.
24		7	43 22	12 56	18	108	—	42	458	Land's End in sight N. by E., distant 8 leagues.
July 1	5, Madeira.	7	37 32	11 4	4	128	36	—	466	Entered the N. E. Trade, in lat. 35° 17' N., & long. 12° 30' W.
8	7, Island of Palma.	7	24 13	21 19	8	22	138	—	973	Saw the Island of Madeira S. W., distant 7 leagues.
15	11, Off St. Antonio.	7	11 5	25 35	6	56	106	—	814	Saw the Island of Palma; extremes S. 45° W. to S. 16° E.
22		7	6 27	18 20	7	134	10	17	441	Off the Island St. Antonio S. $\frac{1}{2}$ E., distant 10 miles.
29	30, Equator.	7	1 18	26 47	—	47	92	29	691	Lost the N. E. Trade, in lat. 11° 5' N., & long. 25° 17' W.
Aug. 5	14, Land in sight.	7	10 54 S.	33 32	6	33	129	—	731	Entered the S. E. Trade, in lat. 2° 33' N., & long. 25° 8' W.
12	16, Cape Frio.	7	22 34	37 51	4	54	87	23	662	NOTE. The Ceres was 13 days between the Trades, having calms, light variable airs, and smooth water the whole time.
17	17, Rio Janeiro.	5	22 53	43 12	27	41	34	18	275	Crossed the Equator, in long. 28° 16' W.
T total days 69 = 1656 hours.					104	729	632	191	5971	Lost the S. E. Trade, in lat. 19° 28' S., & long. 38° 55' W.
					729					Saw land from the mast-head, bearing N. 40° W. to S. 50° W.
					833*					At noon, Cape Frio N. 60° E., Round Island N. 69° W., and Sugar Loaf Peak N. 70° W.
										Arrived at Rio Janeiro: Santa Cruz Fort N. 22° W., 5 miles.
										Weighed and ran further in; when at anchor, the Sugar Loaf Peak S. 7° E., Santa Cruz Fort S. 32° E., and the Monastery S. 54° W., $1\frac{1}{2}$ mile off shore.
										NOTE. It is deserving of notice, that the H. C. Ship Ceres quitted the English Channel in the middle of the Summer season, and consequently had to contend against light airs and calms so universally prevalent at this period of the year. The same delay would most likely be experienced by ships returning home from Rio Janeiro, and other Ports along that coast. What an immense saving of time may therefore be fairly calculated upon by using steam-power during calms on future voyages!

\* Total period of detention from calms and light airs, 833 hours = 34d. 17h. between England and Rio, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP BATAVIA, 660 Tons, Captain JOHN MAYNE, from ENGLAND towards CEYLON.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1810.										
June 10	10, Portsmouth.	—	50 47 N.	1 6 W.	—	—	—	—	—	10 June. Left Portsmouth Harbour for Ceylon.
19		8	44 19	11 44	13	99	80	—	750	26 " Anchored in Funchal Roads; Loo Castle N. N. W.
24		7	35 21	15 23	16	89	—	63	602	10 July. Left Madeira, with light baffling winds and very smooth water.
July 26	26, Madeira.	2	32 48	15 40	13	3	—	32	211	
15	12, Palma Island.	6	23 29	21 36	9	24	69	42	616	
22	18, St. Antonio.	7	11 47	25 13	—	40	128	—	808	12 " Saw the Island of Palma E. S. E., distant 8 leagues.
29	5, Equator.	7	5 54	19 42	8	115	—	45	489	18 " Passed St. Antonio, E. N. E., distant 6 or 7 leagues.
Aug. 5		7	0 28	27 56	—	63	105	—	636	19 " Entered the N. E. Trade, in lat. 18° 52' N., & long. 26° 33' W.
12		7	6 56 S.	33 37	—	40	128	—	690	25 " Lost the N. E. Trade in lat. 8° 10' N., & long. 23° 25' W.
19		7	14 20	35 8	4	27	137	—	764	30 " Entered the S. E. Trade, in lat. 5° 12' N., & long. 20° 27' W.
26		7	23 25	28 17	—	35	54	79	747	
Sept. 2		7	26 34	21 18	—	71	27	70	654	
9		7	32 14	13 15	3	64	101	—	723	
16		7	36 51	1 16	10	77	—	81	758	
23		7	37 13	8 33 E.	8	108	—	52	559	
30	27, Cape Good Hope.	7	37 35	26 32	5	15	148	—	964	
Oct. 7		7	39 52	40 4	14	48	80	26	727	
14		7	39 12	60 23	1	34	133	—	956	
21		7	36 0	76 9	7	22	139	—	891	5 Aug. Crossed the Equator, in long. 27° 56' W.
28		7	29 10	84 30	11	78	—	79	715	13 " Lost the S. E. Trade, in lat. 6° 30' S., & long. 33° 6' W.
Nov. 4		7	12 43	80 15	—	5	163	—	1116	27 Sept. Crossed the meridian of the Cape of Good Hope, in lat. 38° 10' S.
11	13, Equator.	7	2 58	79 28	48	41	32	47	618	30 Oct. Entered the S. E. Trade, in lat. 25° 30' S., & long. 43° 58' E.
18	18, Point de Galle.	7	5 23 N.	79 47	11	47	48	62	623	9 Nov. Lost the S. E. Trade, in lat. 4° 35' S., & long. 78° 50' E.
21	21, Colombo Roads.	3	6 3	81 28	13	52	—	7	150	13 " Crossed the Equator for India, in long. 82° 24' E.
Total days 152 = 3648 hours.					194	1297	1472	685	15767	18 " Saw Point de Galle N. by E. ½ E., distant 4 leagues.
					1297					21 " Anchored in Colombo Roads, Mount Lavinia S. S. E.; the Flagstaff N. by W. off shore about 2 miles.

\* Total period of detention from calms and light airs, 1491 hours = 62d. 3h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

Calms and light airs... 1491\* hours.

NOTE. *The Batavia it appears had not the delay usually experienced between the Trades, having been only 5 days from leaving the N. E. to entering the S. E. Trade.*

## H. C. SHIP WILLIAM PITT, 819 Tons, Captain CHARLES GRAHAM, from ENGLAND towards ST. HELENA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1819.										
Jan. 30	30, Spithead.	—	50 40 N.	1 34 W.	—	—	—	—	—	30 Jan. Left Spithead for St. Helena.
Feb. 7		9	45 29	9 35	17	92	82	25	817	21 Feb. Passed the Island of Madeira W. $\frac{1}{2}$ N., and Porto Santo N. W.
14		7	41 28	15 35	19	90	21	38	335	22 " Entered the N. E. Trade, in lat. 28° 24' N., & long. 19° 19' W.
21	21, Madeira.	7	31 4	17 27	—	46	94	28	793	4 March. Lost the N. E. Trade, in lat. 5° 24' N., & long. 18° 29' W.
28		7	12 24	23 47	—	2	166	—	1247	16 " Crossed the Equator, in long. 14° 37' W.
March 7		7	2 46	17 7	2	82	70	14	733	26 " Entered the S. E. Trade, in lat. 4° 51' S., & long. 20° 2' W.
14	16, Equator.	7	0 33	14 2	41	127	—	—	257	NOTE. From the prevalence of frequent calms, accompanied by very light variable airs and smooth water, the William Pitt was detained between the N. E. and S. E. Trades as many as 23 days; a delay which must astonish all, except those whose experience reminds them how very precarious this part of the voyage is.
21		7	2 30 S.	18 5	15	144	—	9	361	
28		7	6 53	21 9	25	131	—	12	377	
April 4		7	21 3	25 37	—	18	150	—	909	
11		7	28 24	23 43	5	62	88	13	617	
18		7	27 13	14 53	6	121	—	41	574	
25		7	30 30	9 47	1	58	90	19	712	
May 2	5, St. Helena seen.	7	21 30	5 1	4	37	127	—	753	
6	6, St. Helena Roads.	4	15 55	5 43	6	36	54	—	348	
Total days 97 = 2328 hours.					141	1046	942	199	8833	
										NOTE. Captain Graham it appears was exceedingly delayed on his passage to Saint Helena, owing to a long and

\* Total period of detention from calms and light airs, 1187 hours = 49d. 11h. between England and St. Helena, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

H. C. SHIP WILLIAM PITT, 819 Tons, Captain CHARLES GRAHAM, from BENCŒOLEN towards PENANG, and then to CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1819.										
Sept. 9	9, Bencoolen.	—	3 48 S.	102 28 E.	—	—	—	—	—	9 Sept. Left Bencoolen for Pulo Penang.
12	10, Poggy Island.	4	3 30	98 58	4	75	—	17	198	10 " At noon, extremes of Poggy Island from N. by E. $\frac{1}{2}$ E. to E.N.E.
19	20, Equator.	7	0 15	95 13	37	94	29	8	362	20 " Crossed the Equator, in long. 94° 48' E.
26	30, Pulo Rondo.	7	3 33 N.	92 45	48	119	—	1	285	30 " Passed Pulo Rondo, Pulo Brasse, and Pulo Nancy.
Oct. 5	5, Penang Harbour.	9	5 25	100 22	39	116	45	16	667	4 Oct. Passed Pulo Bouton and the Ladda Islands.
Total days 27 = 648 hours.					128	404	74	42	1512	5 " Saw the high land of Queta, & anchored in Penang Harbour.
					404	hours.				
					532*	Calms and light airs...				
* Total period of detention from calms and light airs, 532 hrs. = 22d. 4h. between Bencoolen and Penang, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										
Novem. 11	11, Pulo Penang.	—	5 25 N.	100 22 E.	—	—	—	—	—	11 Nov. Left Pulo Penang for Malacca Straits and China.
15	12, Pulo Dinding.	6	2 12	102 15	27	74	21	22	324	12 " Passed Saddle Island, Pulo Dinding, and the Samblangs.
19	20, Equator.	8	5 32 S.	112 24	18	96	52	26	636	14 " Passed the Great Samblangs and Pulo Jarra.
Decem. 12		7	5 24	116 10	75	93	—	—	234	15 " Crossed the North Sand, passed Parcel Hill, and Cape
19		7	6 2	116 32	62	106	—	—	174	Rachado, and anchored in Malacca Roads.
26		7	5 40	122 16	25	127	16	—	382	19 " Passed the Little Carimons and Tanjong Bolus.
1820.										20 " Anchored off Singapore Town; the Flagstaff N. W. $\frac{1}{2}$ W.
Jan. 2		7	3 44	124 14	31	135	—	2	293	21 NOTE. From this date to the 1st of December, the William Pitt
9	9, Equator.	7	1 52	129 36	39	115	—	14	331	was engaged in clearing the Straits, owing to frequent calms of
16		7	1 49 N.	135 36	20	109	39	—	414	long duration and very light airs, seldom making more (when
23		7	8 32	135 59	12	112	32	12	455	under sail) than 10, 15, or 20 miles a day. Similar calm wea-
30	2, Pedro Branco.	7	21 2	124 11	—	8	160	—	1069	ther attended Captain Graham throughout the Eastern Straits
Feb. 3	3, Lintin.	4	22 6	114 4	—	20	58	18	559	till January 12, the ship rarely going 2 knots an hour, and never
Total days 75 = 1800 hours.					315	1005	378	102	4974	1820, exceeding 40 miles a day during the whole time.
					1005	hours.				
					1320*	Calms and light airs...				
* Total period of detention from calms and light airs, 1320 hrs. = 55 days, between Penang and China, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										

## H. C. SHIP LORD THURLOW, 900 Tons, Captain WILLIAM THOMSON, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1793.										
May 23	23, Portland Bill.	—	50 31 N.	2 27 W.	—	—	—	—	—	23 May. Left Portland for China direct.
26		4	48 19	7 10	15	32	20	29	229	8 June. Passed the Island of Madeira, E. by N. 15 miles.
June 2		7	40 40	12 18	10	71	20	67	564	11 " Entered the N. E. Trade, in lat. 29° 8' N., & long. 20° W.
9	8, Madeira.	7	32 3	19 1	24	77	31	36	605	17 " Saw the Island of St. Antonio S. E., 12 leagues.
16		7	18 49	25 5	3	35	130	—	796	23 " Lost the N. E. Trade, in lat. 8° 22' N., & long. 22° 4' W.
23	17, St. Antonio.	7	8 22	21 38	14	64	90	—	630	6 July. Crossed the Equator, in long. 17° 10' W.
30		7	5 54	16 18	20	77	71	—	419	7 " Entered the S. E. Trade, in lat. 1° 54' S., & long. 17° 28' W.
July 7	6, Equator.	7	1 49 S.	17 28	—	41	127	—	748	NOTE. The Lord Thurlow was 14 days between the Trades, with light baffling airs, calms, and smooth water the whole time.
14		7	16 28	22 57	1	5	162	—	1084	
21		7	29 30	20 43	3	14	119	32	935	19 " Lost the S. E. Trade, in lat. 26° 35' S., & long. 24° 44' W.
28		7	35 0	9 37	—	19	149	—	969	6 Aug. Crossed the meridian of the Cape of Good Hope, in lat. 37° 42' S.
August 4		7	37 5	10 21 E.	2	32	134	—	1051	26 " Entered the S. E. Trade, in lat. 30° 18' S., & long. 90° 17' E.
11	6, Cape Good Hope.	7	36 13	31 48	8	17	143	—	1082	5 Sept. Lost the S. E. Trade, in lat. 8° 20' S., & long. 99° 16' E.
18		7	37 34	60 17	—	8	160	—	1368	6 " Passed Christmas Island E. N. E., 4 leagues.
25		7	34 30	87 25	—	1	167	—	1396	7 " Saw the land about Java Head N. E. by E. $\frac{1}{2}$ E.
Sept. 1	6, Christmas Island.	7	24 53	96 34	1	12	134	21	983	8 " Passed Java Head E. by S. 3 leagues.
7	7, Java Head.	6	6 48	105 11	4	3	111	26	1131	NOTE. Captain Thomson was 14 Sea Logs from Anjer Roads to the Anambas, having a long succession of light variable airs and calms. In consequence of the light baffling winds continuing while in the China Sea, and the N. E. Monsoon having set in, Captain T. was obliged to proceed to the Eastward, which delayed the voyage so much as to compel his putting into Manilla for supplies, where he arrived on the 9th of November. Had steam-assistance been in use, much valuable time would have been saved, as well as every expence incurred by the delay, solely arising from the long series of light airs and calms in the first instance.
Total days	108 = 2592 hours.				105	508	1768	211	13950	17 Dec. Arrived in Macao Roads, and received a Pilot on board.
					508					

\* Total period of detention from calms and light airs, 613 hours = 25d. 13h. between England and Java Head, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WINDSOR, 1400 Tons, Captain THOMAS HAVISIDE, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1821.										
April 27	27, Dungeness.	—	50 55 N.	0 58 E.	—	—	—	—	—	Left Dungeness for China direct.
29	29, Caskets.	3	49 1	5 14 W.	—	33	9	30	330	Saw the Lights on the Caskets, South, distant 5 leagues.
May 6	5, Porto Santo.	7	31 24	16 40	—	4	164	—	1229	Entered the N. E. Trade, in lat. 33° 30' N., & long. 16° 44' W.
13	7, Teneriffe.	7	13 25	21 52	3	4	161	—	1241	At noon, Porto Santo due South, 7 or 8 leagues.
20		7	3 53	19 55	6	67	95	—	706	Saw the Island of Teneriffe S. E. by S., distant 25 miles.
27	24, Equator.	7	6 24 S.	26 17	—	68	100	—	760	Lost the N. E. Trade, in lat. 3° 30' N., & long. 20° 12' W.
June 3		7	18 30	29 51	—	49	119	—	856	Crossed the Equator, in long. 21° 30' W.
10		7	28 7	31 32	15	48	50	55	696	Entered the S. E. Trade, in lat. 2° 10' S., & long. 23° 30' W.
17		7	32 3	13 37	2	30	136	—	1013	NOTE. The Windsor was seven days between the Trades, having calms, light variable airs, and smooth water, accompanied with heavy rain at intervals.
24	28, Cape Good Hope.	7	34 50	4 51 E.	2	41	72	53	983	Lost the S. E. Trade, in lat. 25° 10' S., & long. 30° 57' W.
July 1	29, Table Mountain.	7	35 52	29 25	6	13	149	—	1263	Saw the Cape of Good Hope N. E., 15 leagues.
8		7	34 34	51 47	4	35	129	—	1131	Saw Table Mountain N. N. E., and Cape Point E. N. E., 5 leag.
15		7	35 50	73 5	—	33	95	40	967	Entered the S. E. Trade, in lat. 31° 4' S., & long. 90° 42' E.
22		7	35 50	73 5	—	33	95	40	967	Rounded Java Head, and entered the Straits of Sunda, by running through Princes Channel for Anjer Roads.
29		7	29 51	91 42	—	24	138	—	1045	Anchored in Anjer Roads; the Cap N. by E., Crookatoa Island N. W. by N., and Anjer Peak S. E. by S.
Aug. 4	4, Java Head.	6	15 45	101 48	—	18	150	—	1113	
			6 48	105 11	—	28	58	58	830	
Total days 100 = 2400 hours.					38	495	1631	136	14161	NOTE. Captain Haviside was employed 11 Sea Logs in his passage from Anjer Roads to the China Sea through Gaspar Straits, attended, as usual in this part of the voyage, with light variable airs, occasional calms, and smooth water.
					495	533*	hours.			
Calms and light airs...										
* Total period of detention from calms and light airs, between England and Java Head, 533 hours = 22d. 5h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										
31										Crossed over part of Pratas Bank; soundings from 30 to 35 fms.
2 Sept.										Saw St. John's Island N. by W., distant 3 or 4 leagues.
3										Anchored in Macao Roads, and obtained a Pilot. When at anchor, Lantao Peak E. by N., Peak of Lintin N. by E. & E., and Macao Flagstaff W. by S., off shore about 4 miles.



**H. C. SHIP CHARLES GRANT, 1246 Tons, Captain WILLIAM HAY, from ENGLAND towards CHINA.**

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1823.										
March 28	26, Dunnoose.	—	50° 37' N.	1° 12' W.	—	—	—	—	—	28 March. Left Dunnoose for China direct.
30		3	49° 22'	6° 42'	7	29	12	24	263	8 April. At daylight, Porto Santo N. W. by W., Madeira W. by N., Desertas S. W. by W.
April 6	8, Madeira.	7	37° 29'	13° 8'	1	46	80	41	797	10 " Saw the Island of Teneriffe from the deck S. 10° E.
13	10, Teneriffe.	7	19° 49'	20° 35'	1	18	149	—	1086	11 " Passed the Island of Palma N. 4° E., & Gonera S. E. E.
20	11, Palma Island.	7	3° 30'	19° 35'	5	36	100	27	936	" Entered the N. E. Trade, in lat. 26° 24' N., & long. 19° 23' W.
27	25, Equator.	7	4° 43' S.	22° 13'	33	77	17	41	487	18 " Lost the N. E. Trade, in lat. 5° 56' N., & long. 20° 43' W.
May 4		7	23° 23'	26° 34'	—	—	168	—	1094	25 " Crossed the Equator, in long. 19° 41' W.
11		7	35° 42'	9° 4'	—	6	162	—	1193	26 " Entered the S. E. Trade, in lat. 2° 31' S., & long. 20° 29' W.
18		7	36° 55'	9° 5' E.	—	28	140	—	1045	NOTE. The Charles Grant was 8 days between the Trades, having frequent calms, light variable airs, and very smooth water:—occasional steam-assistance in this case would have been very advantageous.
25	19, Cape Good Hope.	7	35° 38'	39° 41'	—	2	166	—	1234	
June 1		7	30° 56'	46° 23'	1	95	45	27	557	4 May. Lost the S. E. Trade, in lat. 23° 23' S., & long. 26° 34' W.
8		7	39° 17'	53° 52'	—	43	100	25	861	19 " Crossed the meridian of the Cape of Good Hope, in lat. 37° 10' S.
12	12, Mauritius.	4	20° 10'	57° 29'	4	1	71	20	561	12 June. Anchored at Port Louis (Mauritius); Flagstaff S. 38° E., Church S. 10° E.
29		9	4° 22'	71° 53'	—	15	183	18	1242	20 " Left the Mauritius: at noon, Ronde Isle S. 50° E., Gunner's Quoin S. 7° W.
July 6	5, Equator.	7	1° 8' N.	78° 43'	17	110	—	41	451	21 " Entered the S. E. Trade, in lat. 19° 17' S., and long. 59° 16' E.
13		7	6° 12'	96° 57'	—	9	168	—	1123	5 July. Crossed the Equator in long. 77° 44' E.
15	15, Penang Harbour.	2	5° 25'	100° 22'	10	—	29	—	195	" " Lost the S. E. Trade, in lat. 0° 2' N., & long. 77° 50' E.
										" " Entered the S. W. Monsoon, in lat. 1° 8' N., & long. 78° 43' E.
										15 " Anchored in Penang Harbour; Fort Cornwallis W. N. W.
										27 " Left Penang for Malacca: at noon, Erskine Hill S. 36° E.
										NOTE. Captain Hay was 14 Sea Legs between <i>Pulo Penang</i> and <i>Pedro Branco</i> , with calms, light airs, and smooth water; and 10 more from <i>Point Romania</i> to <i>China</i> .
										19 Aug. Passed the Asses' Ears and Grand Ladrone. At noon, anchored in Macao Roads, obtained a Pilot, and proceeded to Lintin Roads.
Total days 102 = 2448 hours.					79	515	1590	264	13125	
					515	hours.				
					Calms and light airs... 594*					

\* Total period of detention from calms and light airs, between England and Penang Harbour, 594 hours = 24d. 18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP DUKE OF YORK, 1327 Tons, Captain ROBERT LOCKE, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1831.										
April 23	23, Portland Bill.	—	50 31 N.	2 27 W.	—	—	—	—	—	Left Portland Bill for China direct.
May 1		9	41 37	12 12	—	43	122	51	1184	Entered the N. E. Trade, in lat. 33° 53' N., & long. 15° 55' W.
8	6, Madeira.	7	26 15	20 18	—	—	168	—	1173	Passed the Island of Madeira S. 50° W., distant 8 leagues.
15		7	5 13	22 9	—	—	168	—	1204	Lost the N. E. Trade, in lat. 5° 13' N., & long. 22° 19' W.
22	24, Equator.	7	1 12	23 55	38	83	—	47	416	Crossed the Equator, in long. 23° 36' W.
29		7	12 56 S.	33 11	3	37	86	42	979	Entered the S. E. Trade, in lat. 2° 29' S., & long. 26° 15' W.
June 5		7	27 19	27 35	—	16	152	—	1095	NOTE. The Duke of York was delayed 10 days between the N. E. and S. E. Trades, with frequent calms, and light baffling airs, smooth water the whole time:—here likewise would occasional steam-assistance have been applied with great advantage.
12		7	33 32	9 14	14	26	128	—	998	
19	23, Cape Good Hope.	7	35 47	6 14 E.	15	28	100	25	958	
26		7	35 1	24 57	4	27	128	9	1093	
July 3		7	39 42	53 34	—	—	168	—	1363	Lost the S. E. Trade, in lat. 22° 16' S., & long. 32° 40' W.
10	9, St. Paul's Island.	7	37 6	83 31	—	—	168	—	1312	Crossed the meridian of the Cape of Good Hope, in lat. 37° 10' S.
17		7	21 19	101 50	—	6	162	—	1324	Passed the Island of St. Paul's, just in sight from the noon.
23	20, Christmas Island.	7	6 35	105 15	4	42	98	24	1121	Entered the S. E. Trade, in lat. 27° 42' S., & long. 98° 32' E.
	22, Java Head.									Saw Christmas Island from the deck, N. 78° E. to S. 45° E.
	23, Princes Island.									Lost the S. E. Trade, in lat. 6° 51' S., & long. 105° 11' E.
										Passed Java Head, and entered Princes Strait.
										At noon, Princes Island S. 30° E. to S. 15° W., Crookatoa Peak N. 72° E.
					78	308	1648	198	14220	At noon, Anjer Roads; Flagstaff S. S. E., Cap N. N. E.
					308					Anchored in Anjer Roads; at noon, the Brothers in one, S. by W.
					386*					Left Anjer Roads: at noon, the Brothers in one, S. by W.
										At noon, Entrance Point, North, & the Body of Pulau Bear NNE.
										" St. Barbe in sight from the mast-head, N. by E. & E.
										At 10h. A.M., Gap Rock N. W., high land of Trumbelan S. W.
										At noon, extremes of Grand Natuna N. 19° W. to N. 72° W.
										" Grand Natuna Peak seen from the poop, S. W. by S.
										Passed the Asses' Ears and Grand Ladronne: at noon, Potoe
										N. 38° E., Samcock N. 37° E., and Macao N. 8° W.
										At 3 P.M. anchored in Macao Roads, and obtained a Pilot.
Total days 93 = 2232 hours.										
Calms and light airs... hours.										

\* Total period of detention from calms and light airs, between England and Princes Island, 386 hours = 16d. 2h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP SCALEBY CASTLE, 1242 Tons, Captain JOHN HILLMAN, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Alrs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1831.										
May 7	7, Lizard Point.	—	49 58 N.	5 11 W.	—	—	—	—	—	7 May. Left the Lizard for China direct.
15	16, Madeira.	9	32 36	18 6	6	26	184	—	1298	16 " Saw the Island of Madeira N. E. $\frac{1}{2}$ E., the N. extreme N. 46° E.
22	18, Palma Island.	7	18 28	24 14	8	5	160	—	1054	18 " At noon, saw the I. of Palma from the deck S. E. by E. $\frac{1}{2}$ E.
29	3, Equator.	7	5 16	21 42	24	8	57	37	837	19 " Entered the N. E. Trade, in lat. 26° 19' N., & long. 19° 26' W.
June 5		7	1 29 S.	27 53	17	71	36	44	661	26 " Lost the N. E. Trade, in lat. 8° 33' N., & long. 22° 24' W.
12		7	6 26	30 10	13	16	100	39	838	2 June. Entered the S. E. Trade, in lat. 1° 9' N., & long. 24° 15' W.
19		7	22 28	33 40	—	22	146	—	1098	NOTE. The <i>Scaleby Castle</i> was 7 days between the Trades, with the usual calms and light variable airs, having very smooth water the whole time, all of which circumstances were highly favourable for occasional steam-assistance.
26		7	32 55	20 41	—	24	144	—	1080	3 " Crossed the Equator, in long. 25° 44' W.
July 3	8, Cape Good Hope.	7	34 59	3 23 E.	12	14	142	—	1114	18 " Lost the S. E. Trade, in lat. 19° 48' S., & long. 34° 59' W.
10		7	37 14	25 20	—	33	108	27	1064	8 July. Crossed the meridian of the Cape of Good Hope, in lat. 37° 27' S.
17		7	39 33	46 43	12	30	88	38	875	25 " Passed the Island of Amsterdam E. by N., dist. 40 miles.
24	25, Amsterdam.	7	38 7	77 25	4	10	154	—	1374	2 Aug. Entered the S. E. Trade, in lat. 23° 10' S., & long. 92° 32' E.
31		7	27 18	92 15	12	36	120	—	1100	12 " Lost the S. E. Trade, in lat. 6° 11' S., & long. 104° 16' E.
Aug. 7	13, Keyser's Island.	7	18 28	100 40	—	16	152	—	1085	13 " At sunset, the extremes of the Sumatra Coast from N. E. to E. by S. At noon, Keyser's Peak N. E., and Fortuna Island S. E. $\frac{1}{2}$ S.
14	14, Anjer Roads.	7	6 3	105 55	24	37	62	45	805	14 " Anchored in Anjer Roads; the Flagstaff S. 79° E., the Cap N. 21° E., the Button N. 7° E., and the high Peak of Crooktoea N. 77° W.
Total days 100 = 2400 hours.										17 " Left Anjer Roads; at noon, Thwart the Way N. 13° W., the Cap N. 81° E., and the Button N. 30° E.
										NOTE. Captain Hillman was engaged 9 Sea Logs between Anjer and clearing the Natunas, having calms and faint airs, with slight contrary currents; smooth water all the time.
										26 " Entered the N. E. Monsoon in lat. 6° 17' N., & long. 109° 22' E., which was very light and unsettled the whole way to China.
										7 Sept. At 1h. 30m. P. M. saw the Coast of China N. N. W. $\frac{1}{2}$ W., the Asses' Ears W. N. W., and Grand Lemna N. W. by N.
										8 " Received a Pilot on board, and proceeded to Lintin; at 6h. 30m. P. M. anchored, the Peak of Lintin N. E. $\frac{1}{2}$ N.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, between England and Anjer Roads, 517 hours = 21d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. Ship EARL OF BALCARRAS, 1417 Tons, Captain BRYAN BROUGHTON, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance run by the Log.	REMARKS DURING THE VOYAGE OUTWARD.
1832.										
May 30	30, Lizard Point.	—	49° 58' N.	5° 11' W.	—	—	—	—	—	30 May. Left the Lizard for China direct.
June 3	9, Teneriffe.	5	38° 46'	12° 1'	—	13	87	20	737	9 June. Saw the Peak of Teneriffe, S. 59° W., 45 miles.
10	10, Great Canary.	7	28° 14'	16° 5'	10	80	—	78	656	10 , Saw the Great Canary, S. 32° E., and the Peak of Teneriffe, N. 82° W.
17		7	14° 55'	19° 9'	9	37	122	—	841	
24	30, Equator.	7	6° 42'	20° 46'	2	32	92	42	798	NOTE. In consequence of having a succession of light airs and calms, the Peak of Teneriffe was in sight four days.
July 1		7	1° 44' S.	20° 50'	—	6	162	—	918	Entered the N. E. Trade, in lat. 23° 4' N., & long. 18° 54' W.
8		7	21° 57'	25° 55'	—	2	166	—	1216	NOTE. This was a very light variable Trade, and continued only three days, having lost it in lat. 14° 55' N., and long. 19° 10' W.
15		7	31° 2'	15° 43'	10	77	54	27	799	25 , Entered the S. E. Trade, in lat. 5° 13' N., & long. 21° 38' W.
22	26, Cape Good Hope.	7	35° 51'	2° 0' E.	2	21	145	—	1087	NOTE. The Balaarras was 11 days between the N. E. & S. E. Trades, with calms, light baffling airs, and very smooth water.
29		7	38° 14'	32° 18'	1	10	157	—	1341	
August 5		7	38° 12'	64° 38'	—	25	143	—	1436	
12		7	36° 0'	88° 12'	—	7	161	—	1167	
19	22, Christmas Island.	7	19° 53'	104° 24'	—	3	28	61	742	30 " Crossed the Equator, in long. 20° 30' W.
23	23, Java Head.	4	6° 48' S.	105° 11'	4	3	—	—	—	7 July. Lost the S. E. Trade, in lat. 20° 5' S., and long. 21° 12' W.
Total Days	86 = 2064 hours.				38	313	1495	228	12785	26 , Crossed the meridian of the Cape of Good Hope, in lat. 38° 48' S.
					313					22 Aug. Christmas Island seen from the poop, N. E.
					351*					23 , Saw Clap's Island E. N. E., and at noon passed Java Head.
										NOTE. Captain B. had an excellent passage through the Straits of Sunda and Gaspar, being only 7 Sea Logs from one extreme to the other; after which, he was 12 days reaching Macao.
										12 Sept. Anchored in Macao Roads, and received a Pilot on board.

\* Total period of detention from calms and light airs, between England and Java Head, 351 hours = 14d. 15h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP PRINCE REGENT, 992 Tons, Captain RICHARD APLIN, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
April 18	18, Start Point.	—	50 13 N.	3 38 W.	—	—	—	—	—	Left Start Point for China direct.
21		4	47 50	9 23	—	47	18	31	390	Entered the N. E. Trade, in lat. 36° 11' N., & long. 16° 24' W.
28		7	27 17	21 8	2	8	158	—	1306	Saw the Island of St. Antonio from the deck, W. by S.
May 5	2, St. Antonio.	7	7 26	21 4	—	10	158	—	1234	Lost the N. E. Trade, in lat. 6° 31' N., & long. 19° 54' W.
12		7	1 32	22 39	17	99	20	32	458	Crossed the Equator, in long. 20° 10' W.
19	14, Equator.	7	11 8 S.	22 58	—	40	100	28	914	Entered the S. E. Trade, in lat. 1° 26' S., & long. 23° 30' W.
26		7	20 23	27 16	—	27	98	43	853	NOTE. The Prince Regent was 9 days between the Trades, with a succession of light airs and calms, having very smooth water.
June 2		7	30 54	26 10	—	45	101	22	954	
9		7	31 54	12 56	4	39	118	7	952	
16		7	33 55	7 40 E.	4	44	120	—	1135	Lost the S. E. Trade, in lat. 17° 23' S., & long. 29° 5' W.
23	21, Cape Good Hope.	7	36 23	26 47	3	58	107	—	977	Crossed the meridian of the Cape of Good Hope, in lat. 36° 24' S.
30		7	33 37	50 25	—	22	146	—	1140	Crossed the Equator, in long. 92° 24' E.
7		7	36 11	71 55	—	4	164	—	1248	Passed Pulo Rondo, Pulo Way, and Pulo Brasse.
14		7	25 46	90 18	2	11	155	—	1166	Saw Pulo Pera, and passed the Ladda Islands for Penang.
21		7	8 37	91 12	4	40	124	—	1003	Saw the high land of Queda, and Pulo Boonting.
28	25, Equator.	7	5 59 N.	98 34	—	—	154	14	1153	Arrived at Pulo Penang Harbour—Flagstaff W. N. W.
31	29, Ladda Islands.	7	5 25	100 22	9	37	—	26	199	NOTE. Captain Aplin was 20 days getting through the Straits of Malacca and Singapore, owing to a continued succession of light airs and calms, with slight contrary currents, and not sufficient wind to stem them. This is another instance of the necessity of occasional steam-assistance to all China ships. The usual run from the Straits to China at this season is 6 or 7 days; but
Total days 105 = 2520 hours.					45	531	1741	203	15064	Captain A. (from the circumstance of having nothing but light airs and calms) was no less than 24 days in proceeding direct up the China Sea for the Grand Ladrone, having very smooth water nearly the whole distance from Pedro Branco.
					531	hours.				
					Calms and light airs... 576* hours.					

\* Total period of detention from calms and light airs, between England and Penang Harbour, 576 hours = 24d., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, between England and Penang Harbour, 576 hours = 24d., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ROSE, 1024 Tons, Captain THOMAS MARQUIS, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1833.										
May 8	8, Portland Bill.	—	50° 31' N.	2° 27' W.	—	—	—	—	—	8 May. Left Portland Bill for China direct.
12		4	48° 4'	7° 58'	23	46	—	27	206	25 " Saw the Island of Madeira, which remained in sight nearly four successive days, in consequence of light variable airs and calms.
19	25, Madeira.	7	41° 9'	11° 35'	4	110	22	32	532	29 " Entered the N. E. Trade, in lat. 27° 55' N., & long. 20° 18' W.
26		7	33° 12'	16° 50'	15	77	44	32	576	" Passed the Island of St. Antonio, distant about 30 miles.
June 2	4, St. Antonio.	7	20° 20'	24° 37'	1	19	148	—	913	4 June. Lost the N. E. Trade, in lat. 7° 30' N., & long. 23° 29' W.
9		7	1° 23'	24° 6'	17	27	124	—	881	7 " Entered the S. E. Trade, in lat. 2° 25' N., & long. 20° 40' W.
16	17, Equator.	7	0° 38'	22° 43'	28	66	22	52	560	15 " "
23		7	15° 4' S.	31° 24'	—	5	163	—	1108	NORE. The Rose was eight days between the N. E. and S. E. Trades, with calms, light airs, and very smooth water.
30		7	26° 41'	32° 18'	—	12	87	69	943	" "
July 7		7	33° 14'	6° 12'	1	—	167	—	1341	17 " Crossed the Equator, in long. 24° 00' W.
14	15, Cape Good Hope.	7	35° 44'	16° 48' E.	2	31	135	—	1105	25 " Lost the S. E. Trade, in lat. 18° 42' S., & long. 34° 32' W.
21		7	36° 44'	37° 48'	6	23	139	—	1018	15 July. Crossed the meridian of the Cape of Good Hope, in lat. 36° 37' S.
28		7	39° 2'	59° 13'	15	30	100	23	974	2 Aug. Saw the Island of Amsterdam, distant 15 or 16 miles.
August 4	2, Amsterdam Isl.	7	32° 8'	84° 52'	1	8	159	—	1384	6 " Entered the S. E. Trade, in lat. 27° 46' S., & long. 89° 57' E.
11		7	12° 50'	92° 40'	—	11	157	—	1290	13 " Lost the S. E. Trade, in lat. 7° 23' S., & long. 92° 15' E.
18		7	2° 2'	90° 53'	6	93	26	43	636	21 " Crossed the Equator, in long. 90° 15' E.
25	21, Equator.	7	4° 29' N.	92° 20'	28	123	—	17	367	" Passed Achéen Head and Pulo Rondo, steering for Pulo Penang, to repair the bowsprit; having a succession of light airs and calms, this ship was 8 days from Achéen Head to her intended Port.
27	27, Achéen Head.	2	5° 36'	95° 21'	—	22	—	26	202	" "
Total days 111 = 2664 hours.					147	703	1493	321	14036	NOTE. Captain M. was 14 Sea Logs in running from Penang to Pedro Branco; and 28 days on his passage direct up the China Sea (which, at this season, is usually performed in 7 or 8 days), having light airs and calms, with smooth water nearly the whole distance to Macao:—another instance, among many, shewing the great advantage of steam-assistance.
					703	hours.				
					850*	Calms and light airs...				
* Total period of detention from calms and light airs, between England and Achéen Head, 850h. = 35d. 10h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										
29 Oct. Anchored in Macao Roads, and obtained a Pilot.										

## H. C. SHIP SCALEBY CASTLE, 1242 Tons, Captain JOHN HILLMAN, from ENGLAND towards CHINA.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE OUTWARD.
1883.										
May 7	7, Lizard.	—	49 58 N.	5 11 W.	—	—	—	—	—	7 May. Left the Lizard for China direct.
12		6	38 3	16 43	7	23	72	42	757	16 " Passed the Island of Madeira with light easterly airs,
19	16, Madeira.	7	29 52	19 38	18	108	—	42	502	and very smooth water.
26	26, St. Antonio.	7	16 44	25 22	7	48	87	26	790	19 " Entered the N.E. Trade, in lat. 29° 52' N., & long. 19° 54' W.
June 2		7	5 40	21 34	14	44	71	39	743	26 " Saw the Island of St. Antonio at noon E. by N.
9	9, Equator.	7	0 54 S.	25 37	—	64	48	56	679	31 " Lost the N.E. Trade, in lat. 5° 50' N., & long. 29° 22' W.
16		7	18 1	30 55	8	—	160	—	1089	6 June. Entered the S.E. Trade, in lat. 2° 38' N., & long. 20° 52' W.
23		7	30 59	31 4	—	27	141	—	901	NOTE. Captain Hillman experienced much delay from calms and light airs between the N. E. & S. E. Trades, a space where the occasional aid of steam-power would be invaluable.
30		7	35 11	6 0 E.	—	—	168	—	1436	
July 7	3, Cape Good Hope.	7	38 17	34 18	—	24	144	—	1247	
14		7	38 29	65 7	—	—	168	—	1349	
21		7	36 13	95 26	—	—	168	—	1414	9 " Crossed the Equator, in long. 25° 12' W.
28		7	16 16	105 1	—	—	168	—	1266	19 " Lost the S. E. Trade, in lat. 25° 12' S., & long. 29° 21' W.
August 1	30, Christmas Island.	4	6 48	105 11	—	9	52	35	650	3 July. Crossed the meridian of the Cape of Good Hope, in lat. 37° 10' S.
	1, Java Head.									25 " Entered the S. E. Trade, in lat. 22° 31' S., & long. 103° 38' E.
										30 " Saw Christmas Island from the deck, N. N. E., dist. 11 lea.
										1 Aug. Rounded Java Head, and entered Princes Channel.
Calms and light airs... hours.										
Total Days 87 = 2088 hours.					54	347	1447	240	12823	
					347					

NOTE. The Scaleby Castle was 10 Sea Logs in the Straits of Sunda and Gaspar; and 18 more from Direction Island to Macao, in consequence of having had occasional calms with many light airs; which distance, at this season (August), is generally performed in seven days.

28 " Arrived in Macao Roads, and obtained a Pilot.

\* Total period of detention from calms and light airs, between England and Java Head, 401 hours = 16d. 17h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

**H. C. SHIP TAUNTON CASTLE, 1200 Tons, Captain JAMES URMSTON, from CHINA towards ENGLAND.**

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1792.										
Feb. 9	9, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	5 Jan. Left Macao Roads for Banca and Sunda Straits.
12		4	9 39	99 19	7	58	—	—	265	Passed Pulo Sapata, seen from the deck, N. by W. dist. 6 leagues.
19		7	17 21	92 42	7	37	100	24	825	Passed Pulo Timooan and Pulo Varella; at noon, Pulo Pisang
26		7	22 41	63 39	—	—	168	—	1479	W.S.W., and Pulo Aor S.S.W., distant 5 or 6 leagues.
March 4		7	26 2	56 10	15	48	105	—	816	NOTE. The Taunton Castle was employed 16 Sea Logs
11		7	32 20	39 54	3	8	137	—	1023	between Pulo Aor and Java Head, with the usual vicissitudes
18		7	35 0	25 26	28	47	48	45	569	of calms, faint variable airs, and slight contrary currents,
25	24, Cape Good Hope.	7	34 37	17 14	31	99	—	38	457	all in favour of steam-assistance being made available.
April 1		7	21 26	0 50	18	2	148	—	1148	At sunset the extremes of Java Head from N. E. $\frac{1}{2}$ N. to
6	6, St. Helena.	5	15 55	5 43 W.	13	22	50	35	499	E. by N., distant 6 or 7 leagues.
May 6	5, Ascension Island.	8	4 42	17 38	3	49	102	38	917	Entered the S. E. Trade, in lat. $10^{\circ} 57'$ S., & long. $103^{\circ}$ E.
13	8, Equator.	7	6 12 N.	22 16	29	49	30	60	673	Lost the S. E. Trade, in lat. $22^{\circ} 3'$ S., & long. $68^{\circ} 40'$ E.
20		7	12 25	30 29	22	44	60	42	657	Sounded; ground 88 fathoms, off third Point of Natal.
27		7	26 19	36 52	—	2	158	8	927	Sounded; ground 70 fathoms, fine sand with black specks.
June 3		7	41 45	30 51	7	55	50	56	706	Rounded the Cape of Good Hope in lat. $35^{\circ} 28'$ S., and long.
10		7	48 47	21 51	17	86	65	—	534	$18^{\circ} 17'$ E.; no land in sight from the mast-head.
17	19, Start Point.	7	50 11	12 14	—	—	70	—	577	Entered the S. E. Trade, in lat. $27^{\circ} 30'$ S., & long. $8^{\circ} 10'$ E.
20	20, Dunnose.	3	50 55	0 58 E.	—	—	—	—	—	Arrived at St. Helena; Sugar Loaf Point S. by E. $\frac{1}{2}$ E.
Total days 111 = 2664 hours.										Left St. Helena for England.
										Passed the Island of Ascension N.E. by N., distant 13 leagues.
										Crossed the Equator, in long. $19^{\circ} 36'$ W.
										Lost the S. E. Trade, in lat. $6^{\circ} 10'$ N., & long. $20^{\circ} 59'$ W.
										NOTE. Captain Urmston was detained a week between the
										Trades by the usual calms in this locality.
										Entered the N.E. Trade, in lat. $12^{\circ} 19'$ N., & long. $29^{\circ} 37'$ W.
										Lost the N. E. Trade, in lat. $33^{\circ} 46'$ N., & long. $37^{\circ} 39'$ W.
										Sounded; ground 65 fathoms, fine sand and broken shells.
										Received a Pilot on board 100 miles from land.
										Bolt Head N.W., Start Point N.N.W., and Berry Head N.E.
										Saw Dunnose N.E. by E. and ran up Channel. Wind aft.

Calms and light airs... hours.

• Total period of detention from calms and light airs, between Java Head and England, 835 hours = 34d. 19h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, between Java Head and England, 1151 hours = 48 days, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP CERES, 1400. Tons, Captain WILLIAM DUNSFORD, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1805. April 6	6, Acheen Head.	—	5 36 N.	95 20 E.	—	—	—	—	—	8 March. Left Macao Roads for Singapore and Malacca Straits : Lintin Peak N. 5° E.; Poteo N. 21° W.; Macao Town N. 76° W., dist. 6 or 7 m.
14		9	3 26	91 40	65	133	—	18	370	Entered the N. E. Monsoon, in lat. 19° 25' N., & long. 113° 27' E.
21		7	0 56	93 36	26	129	—	13	325	Crossed Macassar Bank; sounded—ground 47 fathoms.
26	23, Equator.	7	5 14 S.	89 1	15	117	—	16	340	Crossed Macassar Bank; sounded—ground 47 fathoms.
May 5		7	15 30	73 49	2	5	161	—	1134	Passed Pulo Sapata, seen from the deck W. by N., dist. 4 miles.
12		7	23 23	60 57	4	61	103	—	881	At noon, extremes of Pulo T'moro S. 3° E. to S.W. 3° S., 3 or 4 leagues.
19		7	27 23	48 8	12	50	106	—	784	Passed Pulo Aor, Pulo Pisang, and Pulo Tingy : at noon, Buntang Hill S. by E. 3° E., distant 8 or 9 leagues.
26		7	29 12	35 57	15	45	108	—	675	NOTE. The Ceris was 16 Sea Logs between Pulo Romanda and Pulo Ronda, from having a succession of calms and faint airs, with slight contrary currents, which distance is only 872 miles. Pulo Ronda, with those Islands near Acheen Head, were in sight during six days, from the cause already assigned.
June 2	28, Middle Pt. Natal.	7	36 13	22 38	11	85	72	—	667	6 April. Left Acheen Head for St. Helena and England.
9		7	37 48	21 1	35	123	—	10	351	23 " Crossed the Equator, in long. 93° 25' E.
16	15, Cape Good Hope.	7	32 37	15 0	7	102	30	29	467	24 " Entered the S. E. Trade, in lat. 1° 2' S., & long. 93° 30' E.
23		7	23 16	3 18	4	47	110	17	816	24 " Entered the S. E. Trade, in lat. 1° 2' S., & long. 93° 30' E.
30	30, St. Helena.	3	15 55	5 43 W.	24	51	93	—	640	8 May. Lost the S. E. Trade, in lat. 21° 40' S., & long. 66° 10' E.
July 14		7	12 3	9 36	8	2	24	38	318	28 " Middle Point of Natal in sight, N. 80° W., distant 9 or 10 leagues.
21	17, Ascension Island.	7	2 17	19 40	8	11	149	—	846	29 " Land seen from N. W. by N. to N. E., dist. off shore 6 or 7 leagues.
28	24, Equator.	7	9 56 N.	22 10	1	71	96	—	697	15 June. Table Land (Cape of Good Hope) in sight N. 73° E., 10 leagues.
Aug- 4		7	13 33	26 27	24	124	—	20	315	NOTE. This ship was 19 days endeavouring to round the Cape of Good Hope, in consequence of alternate gales of wind and calms.
11		7	21 27	30 1	16	52	100	—	666	30 " Arrived at St. Helena.
18		7	32 25	38 55	1	47	120	—	714	NOTE. The S. E. Trade generally commences a few days after rounding the Cape of Good Hope; in noon, in this instance, nothing but variable winds and light airs were experienced till within two days arrived at St. Helena.
25		7	38 33	36 28	2	112	—	54	513	12 July. Left St. Helena with 44 ships in company, 40 of which belonged to the H. C. Service.
Sept. 1	8, Start Point.	7	45 29	25 9	19	69	60	20	840	NOTE. This MAGNIFICENT FLEET was delayed 15 days between the Trades!—ONE DAY'S INTEREST ONLY on the value of the cargoes on board the several ships (kept out of port by the cause assigned) would amount to a very considerable sum.
8	9, Bill of Portland.	7	50 7	4 8	—	23	145	—	931	17 " At noon, Island of Ascension S. 7° E. to S. 81° E., dist. 4 or 5 m.
10	10, Downs.	2	50 44	0 15 E.	—	16	—	32	220	23 " Lost the S. E. Trade, in lat. 0° 10' S., & long. 20° 57' W.
Total days 147 = 3528 hours.					299 1475	1475	1487	267	13419	24 " Crossed the Equator, in long. 21° 16' W.
					1774*					17 Aug. Entered the N. E. Trade, in lat. 14° 44' N., & long. 28° 38' W.
										17 " Lost the N. E. Trade, in lat. 31° 0' N., & long. 38° 52' W.
										8 Sept. Start Point N. by E. 3° E., distant 6 or 7 miles.
										9 " Passed Portland Bill N. E. by E.; at noon Beachy Head S. 75° E. 6 m.
										10 " Received a Pilot on board, and anchored in the Downs.

\* Total period of detention from calms and light airs, between Acheen Head and England, 1774 hours = 73d. 22h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP WALMER CASTLE, 1500 Tons, Captain LUKE DODD, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1808. April 6	6, Penang Harbour.	—	5. 25 N.	100 22 E.	—	—	—	—	—	8 March. Left China for Singapore and Malacca Straits.
9		4	5. 37	93 23 E.	—	32	40	24	409	Passed Pulo Timooan; at noon, Pulo Aor North, Pulo Pisang N. N. W. $\frac{1}{2}$ W., and the Peak of Pulo Tingy W. $\frac{1}{4}$ N.
16	17, Equator.	7	1. 30 S.	93 46	13	131	—	24	367	
23		7	2 54 S.	93 51	53	106	—	9	268	
30		7	5 20 S.	94 0	37	118	—	13	283	19 " At noon, Barbuett Hill S. 81° W., Bimbang Hill S. 10° W., and the outer Rock off Point Romania S. 71° W.
May 7		7	13 17	91 41	16	76	42	34	557	NOTE. The Walmer Castle was employed 12 Sea Logs between Pedro Branco and Pulo Penang, with a succession of calms, faint airs, and slight contrary currents.
14		7	18 25	79 57	8	43	80	37	740	
21		7	20 47	63 20	—	27	128	13	957	
28		7	25 22	55 50	5	85	78	—	619	6 April. Left Pulo Penang; Queda Hill E. by S., and Pulo Ladda from N. $\frac{1}{4}$ E. to N. N. W.
4		7	29 12	40 12	3	21	144	—	907	
11		7	31 6	33 25	19	95	54	52	548	17 " Crossed the Equator, in long. 94° 40' E.
18	18, African Coast.	7	34 38	24 23	31	85	—	68	475	Entered the S. E. Trade, in lat. 13° 39' S., & long. 90° 26' E.
25	22, Cape Good Hope.	7	36 2	15 16	20	88	—	—	479	8 May. Entered the S. E. Trade, in lat. 20° 47' S., & long. 63° 20' E.
July 10	10, St. Helena.	7	28 29	9 26	10	105	53	—	501	Lost the S. E. Trade, in lat. 20° 47' S., & long. 63° 20' E.
23	22, Ascension Island.	8	15 55	5 43 W.	3	21	168	—	1062	Saw high land on the African Coast from North to N. W. by W. Sounded; ground 70 fathoms, coarse sand and broken shells.
30	27, Equator.	6	6 26	16 2	1	5	138	—	760	22 " Rounded the Cape of Good Hope, in lat. 35° 41' S., & long. 18° 36' E.
August 6		7	7 5 N.	22 52	3	165	—	—	896	
13		7	11 48	24 31	15	127	26	—	382	3 July. Entered the S. E. Trade, in lat. 35° 50' S., & long. 7° 21' E.
20		7	20 21	33 34	—	44	84	40	708	10 " Anchored off St. James's Town, St. Helena; Flagstaff S. S. W. 1 $\frac{1}{4}$ mile.
27		7	32 44	39 5	—	31	110	27	784	18 " Left St. Helena for England.
Sept. 3	6, Lizard Point.	7	43 2	31 53	—	66	102	—	1000	22 " Off Ascension Island W. by N., distant 12 or 13 miles.
8	8, Downs.	5	48 49	13 3	—	35	132	—	619	27 " Crossed the Equator, in long. 22° 10' W.
			51 22	1 27 E.	—	34	86	—	—	29 " Lost the S. E. Trade, in lat. 5° 15' N., & long. 22° 49' W.
Total days 149	== 3576 hours.				235	1368	1630	341	13115	NOTE. Captain Dodd was 14 days between the Trades, with the usual calms and light airs.
					1368					
					1603*					

Calms and light airs... hours.

\* Total period of detention from calms and light airs, between Pulo Penang and England, 1603 hours == 66d. 19h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WINCHELSEA, 1300 Tons, Captain WILLIAM MOFFATT, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1809. April 6	6, Pulo Penang.	—	6° 37' N.	96° 52' E.	—	—	—	—	—	8 March. Left Macao Roads for Singapore and Malacca Straits: Grand Ladrone N. E. $\frac{1}{2}$ N., distant 5 or 6 leagues.
9		3	5° 53'	94° 29'	2	18	14	33	301	At noon, Pulo Tingo West; Pulo Tinoan and Pulo Pisang in one, N. W. $\frac{1}{2}$ N.; and Pulo Aor North, 8 or 9 miles.
16	17, Equator.	7	1° 19'	94° 48'	13	112	—	43	403	At noon, Mount Barbuat West, & Buntang Hills, by W. $\frac{1}{2}$ W.
23		7	3° 18' S.	93° 53'	56	100	—	2	274	NOTE. <i>Capt. Moffatt was engaged 14 Sea Logs in clearing the Straits between Pedro Branco and Pulo Penang; his passage through being attended with the usual vicissitudes of calms, faint airs, and slight contrary currents occasion- ally: smooth water all the time.</i>
30		7	5° 25'	93° 21'	39	112	—	7	329	
May 7		7	13° 15'	90° 19'	19	69	44	36	544	
14		7	18° 26'	79° 18'	9	66	93	—	743	
21		7	20° 51'	62° 7'	47	121	—	—	986	
28		7	25° 23'	54° 14'	2	83	53	30	611	
June 4		7	29° 12'	38° 27'	1	28	130	—	908	6 April. At daylight Pulo Pera S. by W. $\frac{1}{2}$ W., distant 3 or 4 leagues, and Pulo Bonton N. by E. $\frac{1}{2}$ E. to E. N. E., dist. 6 or 7 leagues.
11	18, African Coast.	7	31° 2'	30° 54'	23	86	32	27	606	Crossed the Equator, in long. 94° 48' E.
18	22, Cape Good Hope.	7	34° 40'	24° 40'	43	72	—	53	510	Entered the S. E. Trade, in lat. 13° 39' S., & long. 90° 19' E.
25		7	36° 0'	15° 57'	36	69	—	63	514	Lost the S. E. Trade, in lat. 20° 47' S., & long. 63° 44' E.
July 2		7	28° 28'	10° 57'	18	97	53	—	566	Sounded; ground 50 fathoms, having fine green sand.
9		7	16° 55'	1° 37' W.	4	20	144	—	1020	Crossed the meridian of the Cape of Good Hope, in lat. 35° 40' S.
10	10, St. Helena.	7	15° 55'	5° 46'	8	1	15	15	81	thick and hazy, no land in sight.
23	23, Island Ascension.	6	6° 26' S.	15° 46'	1	—	131	—	803	Entered the S. E. Trade, in lat. 36° 53' S., & long. 7° 20' E.
30	27, Equator.	7	7° 21' N.	21° 10'	3	—	165	—	942	Arrived at St. Helena; St. James's Church S. by W. $\frac{1}{2}$ W.
Aug. 6		7	11° 53'	24° 8'	19	117	—	32	415	Left St. Helena for England; at noon, James's Town S. E., 7m.
13		7	20° 17'	33° 12'	—	43	125	—	748	At sunset the Island of Ascension from S. E. $\frac{1}{2}$ E. to S. by E.,
20	6, Lizard Point.	7	32° 43'	37° 38'	1	26	141	—	828	Cross Hill S. by E. $\frac{1}{2}$ E., distant about 8 or 9 leagues.
27	7, Portland Bill.	7	43° 9'	31° 54'	1	67	100	—	715	Crossed the Equator, in long. 21° 54' W.
Sept. 8	8, Downs.	12	51° 13'	1° 17' E.	7	64	96	41	1148	Lost the S. E. Trade, in lat. 5° 15' N., & long. 22° 46' W.
Total days 148 = 3552 hours.					317 1397	1397	1451	387	13962	NOTE. <i>The Winchelsea was delayed 14 days between the Trades, with the usual light weather.</i>
Calms and light airs... hours.										
* Total period of detention from calms and light airs, between Pulo Penang and England, 1714 hours = 71d. 10h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										
11 Aug.										Entered the N. E. Trade, in lat. 17° 25' N., & long. 22° 50' W.
21 "										Lost the N. E. Trade, in lat. 34° 48' N., & long. 38° 54' W.
6 Sept.										Saw the Lizard N. N. E., distant 6 leagues.
7 "										At noon, the Bill of Portland N. W. $\frac{1}{2}$ N., off shore about 9 or 10 leagues.
8 "										Anchored in the Downs in 10 fathoms.

## H. C. SHIP BATAVIA, 660 Tons, Captain JOHN MAYNE, from BENGAL towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1812. April 3	3, Sand Heads.	—	22 36 N.	83 26 E.	—	—	—	—	—	3 April Left the Sand Heads for St. Helena and England.
12		10	11 36	87 50	18	182	—	40	639	Crossed the Equator, in long. 89° 22' E.
19		7	5 20	93 40	6	158	—	4	448	Entered the S. E. Trade, in lat. 6° 4' S., & long. 93° 54' E.
26	21, Equator.	7	5 25 S.	92 0	—	90	78	—	639	Lost the S. E. Trade, in lat. 19° 17' S., & long. 65° 56' E.
May 3		7	8 34	73 49	70	68	—	30	286	Saw the Island of Rodriguez S. E., 5 leagues.
10		7	16 19	61 37	—	—	168	—	1155	Anchored at Port Louis, Isle of France.
17	16, Rodrigue Island.	7	20 14	60 10	7	51	110	—	707	Left Mauritius for St. Helena; Town of Port Louis S. E.
19	19, Isle of France.	2	20 10	57 28	15	8	—	25	212	Saw the Isle of Bourbon S. by W. by S. 4 S. dist. 3 leagues.
21	2, Isle of Bourbon.	9	22 50	50 4	22	91	44	59	544	Passed the Island of Bourbon, from S. by E. to S. W.
14	18, Off Natal.	7	29 51	36 49	—	50	118	—	387	Saw the Land of Natal, from N. N. E. to N. W., 10 leagues.
21		7	36 30	22 50	3	83	40	42	606	Land seen from N. E. 4 E. to N. W. by N., dist. 8 or 10 miles.
28		7	34 44	21 10	39	77	19	33	418	Rounded the Cape of Good Hope, in lat. 35° 10' S.
5		7	35 43	23 6	72	91	—	5	212	NORR. Captain Mayne saw Point Natal on the 18th June,
12	10 Cape Good Hope.	7	31 29	11 56	4	67	97	—	815	between which, and the 10th of July (a period of 22 days),
19		7	20 34	2 24	—	43	125	—	351	gales of wind, with occasional light airs and calms, were
24	24, St. Helena.	5	15 55	5 43 W.	6	21	47	46	609	experienced; had steam-assistance been in use during the
6	6, Ascension Island.	6	7 30	14 25	—	8	136	—	806	period of moderate weather and smooth water (which con-
13	10, Equator.	7	3 57 N.	20 50	—	31	137	—	818	tinued for several days), previous to gales returning, his
20		7	11 20	24 55	2	77	20	69	634	ship could have doubled the Cape of Good Hope, and
27		7	20 11	21 45	—	35	100	33	699	thereby have saved much valuable time, as well as expence
4		7	30 18	34 5	5	39	62	—	701	in wear and tear of sails, yards, masts, and rigging, which
11		7	36 32	33 53	8	120	—	40	469	is very considerable during so long a period.
18	23, Portland Bill.	7	45 12	18 20	9	39	120	—	895	Anchored at St. Helena, after a passage of 36 days from
24	24, Isle of Wight.	6	50 49	1 6	—	19	125	—	888	seeing Natal, having experienced nothing but variable
Total days 157 = 3768 hours.					286	1548	1446	483	14988	winds and calms, with unsettled weather the whole time.
					1548					Left St. Helena for England, after remaining there 37 days.
										Passed Ascension Island N. W. by W., distant 3 leagues.
										Crossed the Equator, in long. 19° 40' W.
										Lost the S. E. Trade, in lat. 3° 37' N., & long. 20° 50' W.
										Entered the N. E. Trade, in lat. 10° 27' N., & long. 23° 17' W.
										Lost the N. E. Trade, in lat. 29° 24' N., & long. 35° 34' W.
										At noon, the Bill of Portland N. N. E., distant 3 leagues.
										Arrived off the Isle of Wight, and proceeded up Channel.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, between the Sand Heads and England, 1834 hours = 76d. 10h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP JAMES SUBBALD, 760 Tons, Captain JOHN BLANSHARD, from BOMBAY towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.	
1813. Decem. 24	24, Bombay.	—	18 56N.	72 54 E.	—	—	—	—	—	1813. 24 Dec.	Left Bombay for the Cape, St. Helena, and England. Pigeon Is. N.E. by E., & the low land from E.S.E. to S. by E.
26	26, Pigeon Island.	3	15 34	73 13	1	29	—	42	262	28 "	
1814. Jan. 2	5, Cochin Harbour.	7	11 14	75 15	10	140	—	18	375	3 Jan.	A high Peak seen through the haze, N. E. by E. Off Cochin Harbour, the Flagstaff N. N. E., 3 miles.
9	10, Cape Comorin.	7	8 11	77 9	26	121	21	—	377	5 "	At noon, Cape Comorin seen from the main-top S. 73° E.
12	12, Point de Galle.	3	6 1	80 20	1	28	30	13	226	9 "	Off Cape Comorin, East; and extremes of the land from
16	16, Equator.	4	0 27 S.	81 50	5	25	25	41	418	10 "	N. N. W. to N. N. E., off shore about 4 leagues.
23		7	7 2	85 10	14	106	—	48	456	11 "	At noon, Haycock Hill seen from the deck N. E. by E. ½ E.
30		7	15 14	78 50	—	56	112	—	758	12 "	Arrived and anchored in Point de Galle Roads; a few hours
6		7	24 38	65 20	3	31	134	—	784	16 "	Crossed the Equator, in long. 81° 29' E.
13		7	27 54	48 22	1	9	158	—	1050	25 "	Entered the S. E. Trade, in lat. 9° 7' S., & long. 85° 8' E.
20	24, Point Natal.	7	32 22	32 49	8	31	137	—	873	30 "	Lost the S. E. Trade, in lat. 16° 38' S., & long. 77° 14' E.
27	1, Cape Good Hope.	2	35 9	22 20	7	78	82	33	683	24 Feb.	Saw the land about Point Natal, dist. 15 leagues.
1		2	34 29	18 23	8	43	—	5	775	25 "	High land seen from the deck N. W. by W. to N. by E.
6		2	33 45	16 40	—	31	134	—	740	1 March.	Sounded in 65 fathoms, fine sand and small shells.
13	18, St. Helena.	5	15 55	5 43 W.	1	4	144	—	951	4 "	Left the Cape of Good Hope for St. Helena.
18	1, Ascension Island.	8	5 24	16 49	7	11	150	24	570	10 "	Entered the S. E. Trade, in lat. 28° 12' S., & long. 10° 4' E.
3	7, Equator.	7	2 48 N.	22 42	5	92	41	30	479	18 "	Left St. Helena for England.
10		7	5 30	26 16	2	131	—	35	860	26 "	Passed the Island of Ascension S. S. E., distant 12 miles.
24		7	16 51	35 38	—	7	161	—	704	1 April.	Lost the S. E. Trade, in lat. 1° 20' S., & long. 20° 24' W.
1		7	27 8	42 40	10	23	135	—	726	6 "	NOTE. Captain Blanshard was delayed a week between the Trades by calms and light baffling airs.
8	29, Start Point.	7	34 38	37 16	—	64	104	—	566	7 "	Crossed the Equator, in long. 21° 24' W.
15	30, Isle of Wight.	7	44 29	30 50	4	74	27	63	834	14 "	Entered the N. E. Trade, in lat. 3° 36' N., & long. 23° 17' W.
22	31, Dungeness Point.	7	48 0	12 42	13	30	125	—	679	3 May.	Lost the N. E. Trade, in lat. 28° 50' N., & long. 44° 20' W.
31		9	50 55	0 58 E.	15	132	28	41	679	29 "	At noon, Start Point N. N. E., the low land N. W. to N. by E.
Total days 148	— 3552 hours.				133	1304	1722	393	13476	31 "	Passed the Bill of Portland, and the Isle of Wight. Anchored off Dungeness, the Lighthouse S. W.

\* Total period of detention from calms and light airs, between Bombay and England, 1437 hrs. — 59d. 21h. during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

hours.

\* Total period of detention from calms and light airs, between Bombay and England, 1437 hrs. = 59d. 21h. during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WILLIAM PITT, 819 Tons, Captain CHARLES GRAHAM, from BENGAL towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1817.										1817.
Dec. 9	9, Sand Heads.	—	21° 1' N.	88° 33' E.	—	—	—	—	—	Left the Sand Heads for St. Helena and England.
14		6	9° 40'	87° 50'	—	38	82	24	758	Crossed the Equator, in long. 87° 31' E.
21		7	1° 3'	87° 14'	24	74	27	43	572	
28	24, Equator.	7	6° 33' S.	88° 56'	12	85	29	42	569	
Jan. 4		6	10° 12'	87° 39'	15	108	—	21	358	
1818.										
Jan. 11		7	20° 51'	73° 49'	—	19	149	—	1017	Entered the S. E. Trade, in lat. 8° 52' S., & long. 88° 26' E.
18		7	26° 13'	54° 41'	5	13	150	—	1055	Lost the S. E. Trade, in lat. 24° 54' S., & long. 61° 10' E.
25		7	31° 32'	35° 8'	2	14	152	—	1105	Saw the high land on the African Coast N. E. by E. $\frac{1}{2}$ E.
Feb. 1	1, Cape Lagullas.	7	34° 59'	20° 16'	8	38	100	22	813	Off Cape Lagullas N. W. $\frac{1}{4}$ W., and Sandy Hills N. by E. $\frac{1}{2}$ E.
8	2, Cape Hanglip.	7	22° 51'	2° 44'	—	—	164	—	1126	Saw Cape Hanglip from the poop, N. N. E. $\frac{1}{2}$ E.
12	12, St. Helena.	4	15° 55'	5° 43' W.	11	2	93	—	608	Entered the S. E. Trade, in lat. 24° 32' S., & long. 5° 12' E.
March 1		4	13° 45'	7° 55'	2	82	3	—	178	At noon, off St. Helena; Barn Point N. W. $\frac{3}{4}$ W., and the
8	8, Ascension Island.	7	8° 3'	14° 8'	9	133	—	33	473	extremes of the Island from N. by E. to N. W. by W. $\frac{1}{4}$ W.
15		7	0° 6'	20° 15'	9	82	27	50	346	Anchored at St. Helena; the Church in St. James's Valley
22	16, Equator.	7	4° 21' N.	26° 52'	4	92	44	28	551	S. by W. $\frac{1}{4}$ W.
29		7	11° 36'	35° 41'	6	58	70	34	728	
April 5		7	20° 35'	39° 3'	12	48	82	26	736	Left St. Helena for England with a light S. E. Trade.
12		7	29° 33'	35° 38'	8	89	50	21	638	Off Ascension Isl.; extremes from N. W. by W. to N. by W. $\frac{1}{2}$ W.
19	29, Scilly Islands.	7	42° 20'	28° 34'	2	45	101	20	886	Lost the S. E. Trade, in lat. 1° 14' S., & long. 20° 4' W.
26	30, Bill of Portland.	7	46° 50'	13° 1'	1	65	102	—	812	Crossed the Equator, in long. 20° 15' W.
May 1	1, Dungeness.	5	50° 55'	0° 58' E.	5	18	80	17	687	
Total days 130 = 3120 hours.					127	1107	1505	381	14016	NOTE. The William Pitt was 13 days between the S. E. and N. E. Trades, having the usual calms and light baffling airs so very prevalent in this part of the voyage (smooth water all the time).
					1107	1234*	Calms and light airs... hours.			
* Total period of detention from calms and light airs, between the Sand Heads and England, 1234 hours = 51d. 10h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										

## H. C. SHIP CASTLE HUNTLY, 1400 Tons, Captain HENRY DRUMMOND, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1819.										
March 30	30, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	Left Macao Roads, with a fresh N. E. Monsoon, for Gaspar and Sunda Straits; at sunset, Grand Ladrone N. N. E.
April 4		6	9 36	101 53	36	81	—	27	282	At noon, the body of the Middle Anambas S. W. by W. $\frac{1}{2}$ W.
11		7	17 53	87 43	3	39	—	—	1025	Lost the N. E. Monsoon, in lat. $2^{\circ} 0' N.$ , & long. $107^{\circ} 10' E.$
18		7	24 30	63 16	—	—	168	—	1264	At noon, Camel's Hump S. by E., Saddle Island E. by S.
25		7	25 52	53 8	5	84	32	47	633	At noon, the I. of St. Julian just seen from the poop E. by N. $\frac{1}{2}$ N.
May 2		7	30 20	38 13	16	34	100	18	919	" Wilson's Hummock N. W. $\frac{1}{2}$ W.
9	5, Point Natal.	7	35 12	19 9	3	60	68	37	970	Passed Wilson's Hummock N. W. $\frac{1}{2}$ N., Entrance Point N. $\frac{1}{2}$ W.
16	10, Cape Good Hope.	7	25 56	4 50	5	64	74	25	794	At noon, North Brother S. $82^{\circ} E.$ , Knob Hill W. by S. $\frac{1}{2}$ S.
24	24, St. Helena.	8	15 55	5 43 W.	18	35	98	41	844	Anchored in Anjer Roads; the Flagstaff S. $\frac{1}{2}$ E.
June 6	3, Ascension Island.	7	2 40	19 39	—	—	163	—	1165	At noon, Crockett Peak W. by N. $\frac{1}{2}$ N., Tamarind N. W. by N.
13	8, Equator.	7	5 32 N.	22 32	31	62	37	38	503	Entered the S. E. Trade, in lat. $11^{\circ} 40' S.$ , & long. $101^{\circ} 37' E.$
20		7	13 13	31 28	4	56	108	—	673	Lost the S. E. Trade, in lat. $25^{\circ} 16' S.$ , & long. $60^{\circ} 32' E.$
27		7	27 2	39 26	1	13	154	—	956	Saw distant land about Natal, from N. W. to West.
July 4		7	38 14	37 51	13	35	75	45	693	Sounded; ground 48 fathoms, stones and shells.
11		7	43 0	30 28	23	96	—	49	272	Passed Table Mountain (Cape of Good Hope) N. E. $\frac{1}{2}$ E.
18		7	42 43	21 22	1	93	32	42	538	Entered the S. E. Trade, in lat. $33^{\circ} 17' S.$ , & long. $14^{\circ} 28' E.$
25	27, Lizard Point.	7	50 8	7 23	—	76	92	—	770	Anchored off St. James's Town, St. Helena; the Church S. by W.
30	30, Beachy Head.	5	50 44	0 15 E.	5	81	—	34	381	Left St. Helena for England; at sunset, the Island S. E. 10 lea.
Total days 117 = 2808 hours.										Passed Ascension Island S. E. by S. $15$ or $16$ miles.
										Lost the S. E. Trade, in lat. $1^{\circ} 14' S.$ , & long. $20^{\circ} 55' W.$
										Crossed the Equator, in long. $21^{\circ} 20' W.$
										NOTE. <i>The Castle Huntly was detained seven days between the Trades by calms and light airs.</i>
										Entered the N. E. Trade, in lat. $7^{\circ} 0' N.$ , & long. $24^{\circ} 19' W.$
										Lost the N. E. Trade, in lat. $24^{\circ} 40' N.$ , & long. $39^{\circ} 25' W.$
										Sounded; ground 80 fathoms, fine sand, with small stones.
										Saw the Lizard E. N. E.; at noon, Start Point N. W.
										Arrived off Beachy Head, and received a Pilot on board.

\* Total period of detention from calms and light airs, between Java Head and England, 1073h. = 44d. 17h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP DUNIRA, 1325 Tons, Captain MONTGOMERIE HAMILTON, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chron.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1819.										
May 5	5, Java Head.	—	6 35 S.	105 15 E.	—	—	—	—	—	1 April. Left Macao Roads for Gaspar and Sunda Straits.
9		4½	13 19	91 58	—	—	108	—	920	" " Passed Aponee Point, seen from the deck N. W.
16		7	21 35	69 53	—	—	168	—	1372	" " At noon, Grand Natuna E. S. E., Saddle Island N. E. ½ N.
23		7	25 1	53 31	2	18	122	26	1004	" " Low Isl. S. E. by E. ½ E. & Haycock Isl. E. by N. ½ N.
30		7	30 26	36 34	4	30	110	24	1046	" " 10 miles.
June 6	4, African Coast.	7	32 20	29 54	17	32	55	64	573	NOTE. Captain Hamilton, from a long continuance of faint airs, calms, and slight contrary currents, was 28 Sea Logs on his passage from the South Anambas to Princes Island, the distance being only 578 m.
13	5, Mid. Pt. of Natal.	7	34 56	22 27	7	29	38	94	638	For particulars of this long delay, vide "STRAITS," page 42.
20	20, Cape Good Hope.	7	34 17	18 20	21	26	73	48	555	5 May Entered the S. E. Trade, in lat. 6° 35' S., & long. 105° 15' E.
27		7	23 42	3 55	2	6	160	—	1076	16 " Lost the S. E. Trade, in lat. 21° 36' S., & long. 69° 53' E.
July 3	3, St. Helena.	6	15 55	5 43 W.	—	—	144	—	804	4 June. High land on the African Coast just discernible, N. W. by N.
18	13, Ascension Island.	10	2 3 N.	23 10	—	—	240	—	1476	5 " Land seen about the Middle Point of Natal, N. E. to N. W. by N.
25	17, Equator.	7	10 43	25 31	1	106	27	34	527	8 " Table Mountain (Cape of Good Hope) N. by E. Lion's Rump, with the extremes of the land, were seen, with various bearings, for 3 days successively, owing to adverse winds.
Aug. 1		7	16 32	32 21	1	52	67	48	687	20 " It is very probable that the Dunira would have escaped the delay she experienced between making the African Coast and rounding the Cape (a period of 22 days), had the passage through the Straits been of shorter duration.
8		7	31 44	43 37	—	—	128	40	1046	21 " NOTE.
15		7	36 46	38 50	32	48	60	28	574	24 " Entered the S. E. Trade, in lat. 29° 50' S., and long. 123° 3' E.
22	19, Corvo and Flores.	7	41 43	23 6	15	21	100	32	918	3 July. Arrived at St. Helena, and anchored off St. James's Town.
29		7	47 54	14 20	6	17	125	20	751	9 " Left St. Helena for England, with a fresh S. E. Trade.
Sept. 1	1, Lizard Point.	4	50 4	5 11	—	—	96	—	610	13 " Passed the Island of Ascension, bearing, at noon, S. S. E.
Total days 115½ = 2772 hours.										17 " On the Equator, by observation, in longitude 21° 58' W.
					108	385	1821	458	14577	19 " Lost the S. E. Trade, in lat. 4° 20' N., & long. 23° 22' W.
					385					NOTE. The Dunira was 10 days between the Trades, with calms and light variable winds.
					493*					29 " Entered the N. E. Trade, in lat. 12° 48' N., & long. 27° 06' W.
										8 Aug. Lost the N. E. Trade, in lat. 31° 44' N., & long. 43° 37' W.
										19 " Passed the Islands of Corvo and Flores N. E. ½ E.
										1 Sept. Lizard Lighthouses N. by E., and proceeded up Channel.

\* Total period of detention from calms and light airs, between Java Head and England, 493 hours = 20d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from MADRAS towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1819.										1819.
25 Jan.	25, Madras Roads.	—	13 4 N.	80 21 E.	— 5	— 76	—	—	—	Left Madras Roads for Colombo; St. Thomas's Mount, S. W.
1 Feb.	4, Colombo Roads.	7	6 12	79 30	—	27	62	25	646	Saw Friar's Hood, West, distant 4 leagues.
13	10, Point de Galle.	4	7 8	80 13	—	15	22	47	495	Anchored in Colombo Roads; Flagstaff S. S. E.
14	17, Equator.	1	6 14	86 14	—	56	—	9	37	Left Colombo Roads for Point de Galle.
21		3	6 29	83 6	4	64	12	—	246	
28		7	4 17 S.	84 53	4	83	74	26	739	Anchored in Point de Galle Roads.
7		7	15 19	79 0	4	69	69	12	618	Left Point de Galle for the Cape of Good Hope.
14	20, Highland of Natal	7	24 41	58 46	—	—	168	—	1293	Crossed the Equator, in long. 83° 25' E.
21	29, Cape Good Hope.	7	29 4	40 32	5	18	145	—	1163	Entered the S. E. Trade, in lat. 16° 57' S., & long. 76° 50' E.
29	11, St. Helena.	8	32 30	29 14	19	57	68	24	706	Lost the S. E. Trade, in lat. 28° 16' S., and long. 43° 55' E.
4	30, Equator.	5	34 37	18 39	8	69	81	34	830	Saw the land about Natal, just in sight from the deck.
11		7	26 23	6 46	—	38	82	—	747	Anchored in Table Bay, Cape of Good Hope.
25		10	15 55	5 43 W.	12	46	110	—	956	Left the Cape of Good Hope for St. Helena.
2		7	4 12	14 24	—	42	198	—	1391	Entered the S. E. Trade, in lat. 30° 47' S., & long. 13° 2' E.
9		7	2 50 N.	22 44	48	110	—	10	889	Arrived off St. James's Town, St. Helena; the Church S. S. W.
16		7	13 11	34 19	3	26	139	—	649	Left St. Helena for England.
23		7	22 47	37 6	14	80	23	74	418	Lost the S. E. Trade, in lat. 4° 48' S., & long. 18° 2' W.
30		7	25 57	39 59	49	98	—	21	586	NOTE. The Asia was delayed 11 days between the S. E. and N. E. Trades, with calms and light airs (smooth water all the time). The necessity of auxiliary aid in this locality is very apparent.
6		7	30 20	41 35	15	95	28	30	762	
13		7	35 44	38 56	37	81	—	40	885	
20		7	40 39	34 53	14	80	62	12	1540	Crossed the Equator, in long. 20° 32' W.
26	26, Isle of Wight.	6	47 1	21 42	4	68	96	—	1502	Entered the N. E. Trade, in lat. 3° 20' N., & long. 29° 41' W.
			50 37	1 12	1	29	114	—	1504*	Lost the N. E. Trade, in lat. 20° 17' N., & long. 38° 10' W.
Total Days 142 = 3408 hours.					246	1258	364	15082		Arrived off the Isle of Wight, and proceeded up Channel.
					1258	1504*				
			Calms and light airs... hours.							

\* Total period of detention from calms and light airs, between Madras Roads and England, 1504 hours = 62d. 16h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP WINDSOR, 1400 Tons, Captain JOHN R. FRANKLIN, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1820.										
Feb. 24	24, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	3 Feb. Left Macao Roads for Gaspar and Sunda Straits; at sunset, Macao Town W. N. W., Carabatto Point W. by N., Cowow W. by S., and the Grand Ladrone E. by N.
27		4	10 30	103 3	—	37	19	40	354	5 " Saw the highland of Tsing-lang-so from the deck W. by N. ½ N.
March 5		7	13 6	100 56	22	119	—	27	368	14 " At noon, North Natuna E. ½ S., and Saddle Island S. S. E. ½ E.
12		7	19 15	97 7	—	98	70	—	717	" " the North Anambas seen from the mast-head
19		7	24 37	70 30	—	—	168	—	1529	" S. W. by W., Cocos Island E. N. E., & Haycock Island E. S. E.
26		7	29 13	51 10	—	16	152	—	1091	NOTE. In consequence of a series of alternate light airs and calms, the Windsor was employed 11 Sea Logs between the Anambas and Java Head.
April 2	7, Cape Lagullas.	7	32 15	34 12	2	30	106	30	897	25 " At noon, Keyser's Isl. N. by E., Peak of Crockett N. E. ½ E., Princes Island E. by S., and Java Head S. E. by E.
9	8, Cape Good Hope.	7	32 48	12 57	1	13	154	—	1085	Entered the S. E. Trade, in lat. 17° 12' S., & long. 103° 58' E.
16		7	21 47	0 7 W.	1	26	141	—	957	Lost the S. E. Trade, in lat. 26° 30' S., & long. 53° 44' E.
20	20, St. Helena.	4	15 55	5 44	2	28	10	56	481	7 April. Sounded; ground 87 fathoms, coarse sand and shells: at noon, Cape Lagullas N. W., 32 leagues by calculation.
30	2, Ascension Island.	6	6 17	13 45	—	37	87	20	712	8 " Rounded the Cape of Good Hope, in lat. 35° 10' S., and long. 18° 10' E.
May 7	5, Equator.	7	2 58 N.	22 3	—	52	116	—	790	11 " Entered the S. E. Trade, in lat. 28° 24' S., & long. 7° 36' E.
14		7	10 44	29 31	—	14	130	24	821	20 " Anchored off St. James's Valley, St. Helena; the Church S. by E.
21		7	34 35	40 32	2	19	147	—	1092	25 " Left St. Helena; at sunset, the Island S. S. E. ½ E., 12 lea.
28		7	36 21	42 40	7	42	109	10	765	Saw the Island of Ascension E. by N., distant 3 leagues.
June 4		7	44 39	26 42	—	13	155	—	952	2 May. Lost the S. E. Trade, in lat. 1° 24' S., & long. 19° 33' W.
11	17, Eddystone.	7	45 40	15 52	4	42	104	18	716	NOTE. Captain Franklin experienced 5 days' delay between the Trades, in consequence of prevailing calms and light airs. The extreme smoothness of the water would have been favourable for the application of steam-power.
18	18, Beachy Head.	7	50 44	0 15 E.	—	10	136	22	871	5 " Crossed the Equator, in long. 20° 31' W.
Total days 112 = 2688 hours.										9 " Entered the N. E. Trade, in lat. 5° 18' N., & long. 21° 42' W.
										19 " Lost the N. E. Trade, in lat. 22° 20' N., & long. 38° 32' W.
										17 June. Passed the Eddystone Lighthouse N. by E. ½ E., 6 miles.
										18 " Arrived off Beachy Head E. N. E., 10 or 11 miles.

\* Total period of detention from calms and light airs, between Java Head and England, 637 hours = 26d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, between Java Head and England, 637 hours = 26d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WILLIAM PITT, 819 Tons, Captain CHARLES GRAHAM, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1820.										1820.
March 28	28, Lintin.	—	23° 8' N.	113° 3' E.	—	—	—	—	—	28 March. Left Lintin with a steady N.E. Monsoon for the Straits of Gaspar and Sunda.
April 2	6, Pulo Sapata.	6	21° 24'	114° 34'	34	59	30	21	412	
9	17, Grand Natuna, in sight 6 days.	7	16° 36'	110° 36'	11	63	71	23	794	
16	25, St. Barbe & St. Esprit	7	5° 59'	109° 13'	67	70	—	31	245	
23	28, Equator.	7	4° 52'	107° 14'	23	135	—	10	333	
30	28, Gaspar Island, in sight 7 days.	7	1° 53' S.	107° 25'	36	110	22	10	318	
May 7	1, Brothers.	7	2° 37'	106° 16'	67	91	—	10	249	
14	8, Crocktoea.	7	5° 0'	104° 58'	115	46	—	7	136	
21	17, Java Head.	7	6° 41'	102° 12'	33	67	38	30	323	
28		7	11° 2'	90° 34'	2	20	146	—	840	
June 4		7	17° 21'	71° 43'	2	21	147	—	1000	
11		7	21° 58'	56° 56'	2	33	120	13	856	
18		7	23° 28'	41° 31'	—	44	124	—	938	
25		7	27° 40'	34° 49'	4	123	—	41	333	
July 2	2, African Coast.	7	31° 5'	25° 24'	4	98	50	16	618	
9	7, High land seen.	7	35° 16'	23° 45'	—	154	—	14	409	
16	13, Cape Good Hope.	7	36° 3'	14° 25'	32	31	105	—	692	
26	26, St. Helena.	10	15° 55'	5° 43' W.	—	49	178	13	1336	
August 13	12, Ascension Island.	6	4° 35'	17° 15'	4	10	130	—	1002	
20	15, Equator.	7	9° 20' N.	23° 16'	—	11	157	—	884	
27		7	18° 32'	31° 41'	—	60	72	36	740	
Sept. 3		7	29° 4'	27° 30'	—	48	100	20	755	
10	12, Corvo and Flores.	7	31° 7'	37° 10'	10	36	122	—	824	
17		7	42° 55'	24° 52'	8	73	60	27	688	
26	26, Beachy Head.	9	50° 44'	0° 15' E.	6	16	176	18	1317	
Total days 171 = 4104 hours.					458	1468	1948	330	16062	
					1468					
					Calms and light airs... 1926* hours.					
* Total period of detention from calms and light airs, between Lintin and England, 1926 hours = 80d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										

28 March. Left Lintin with a steady N.E. Monsoon for the Straits of Gaspar and Sunda.

6 April. Saw Pulo Sapata from the poop, S.W. by W., dist. 20 miles.

NOTE. Captain Graham, on his homeward passage through the Straits, was, in consequence of calms, 6 days off Grand Natuna, and, from the same cause, 7 days in sight of Gaspar Island. The serious delay experienced by the William Pitt (30 days), wholly from want of wind, points out the immense advantages that must be derived by the occasional application of steam-power as an auxiliary aid.

—For particulars, vide "STRAITS," page 43.

At noon, the Carpenters W. & S.; Friar's Rock S.W.

15 " " the Peak on Princes Island N. by E.

16 " " Entered the S.E. Trade, in lat. 15° 26' S., & long. 94° 51' E.

17 " " Lost the S.E. Trade, in lat. 23° 50' S., & long. 57° 30' E.

11 June. Saw the high land on the coast of Africa, N. by E. & E.

2 July. Crossed the meridian of the Cape of Good Hope, in lat. 36° 7' S.

13 " " Entered the S.E. Trade, in lat. 28° 27' S., & long. 7° 34' E.

18 " " Arrived at St. Helena, and anchored off St. James's Valley.

26 " " Left St. Helena for England.

7 Aug. Passed the Island of Ascension, extremes from N.E. to N. by E.

12 " " Crossed the Equator, in long. 19° 50' W.

15 " " Lost the S.E. Trade, in lat. 6° 46' N., & long. 21° 49' W.

19 " " NOTE. Captain Graham was detained a week between the Trades by calms and light winds.

26 " " Entered the N.E. Trade, in lat. 13° 44' N., & long. 26° 11' W.

3 Sept. Lost the N.E. Trade, in lat. 29° 6' N., & long. 36° 47' W.

12 " " Passed the Islands Corvo and Flores, N. N.W. 8 leagues.

26 " " Arrived off Beachy Head, and received a Pilot on board.

## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1821.										
March 5	5, Princes Island.	7	6 35 S.	105 12 E.	47	53	—	68	474	Left Macao, with a steady N. E. Monsoon, for Gaspar and Sunda Straits; Potoe Island E. $\frac{1}{2}$ N., 7 or 8 miles.
11		7	14 10	94 33	13	74	62	19	708	At noon, Grand Natuna seen from the poop, S. 75° W.
18		7	18 48	81 10	—	43	100	25	785	Passed Grand Natuna. Lost the N. E. Monsoon, in lat. 2° 5' N., and long. 107° 36' E.
25		7	23 25	60 53	4	21	143	—	1164	At sunrise, the Island of St. Barbe, N. 75° W. dist. 5 leagues.
April 1		7	31 18	37 52	1	22	145	—	1369	At noon, Gaspar Island seen from the deck, S. W. $\frac{1}{2}$ W.
8	9, Cape Good Hope.	7	35 59	19 30	2	48	118	—	877	" West Island N. by E., Pulo Leat N. E., Entrance Point W. by S., & Rocky Point N. W. by W.; offshore 5 m.
15		7	23 30	4 10	1	56	111	—	991	Passed Wilson's Hummock N. W. $\frac{1}{2}$ N. & Banca Is. N. W. by W.
20	20, St. Helena.	5	15 55	5 43 W.	—	17	97	6	770	At noon, the Brothers S. E. by S. $\frac{1}{2}$ mile, and the extremes of the Sumatra Shore from S. W. to W. by N.
29	30, Ascension.	4	8 33	15 8	—	—	96	—	686	" Stroom Rock E. by N., Thwart the Way E. S. E.,
6	3, Equator.	7	4 22 N.	23 15	8	54	92	14	866	Hog Point W. by N., & Peak of Crocktooa W. by S.,
13		7	15 16	35 7	—	21	147	—	995	Crocktooa Island S. E. $\frac{1}{2}$ S., and Rajah Bassa E. N. E.,
20		7	26 56	38 46	18	52	—	98	993	At sunset, Princes Island S. E. by S., & extreme of Sumatra N. W.
27		7	33 15	38 9	34	94	—	40	397	Entered the S. E. Trade, in lat. 9° 25' S., & long. 101° 25' E.
June 3	7, Portland Bill.	7	47 30	17 10	4	—	164	—	1336	Lost the S. E. Trade, in lat. 22° 38' S., & long. 68° 24' E.
8	8, Dungeness.	5	50 55	0 58 E.	—	18	78	24	729	Passed the Cape of Good Hope, just seen from the deck N. E. Entered the S. E. Trade, in lat. 26° 30' S., & long. 6° 0' E.
										Anchored at St. Helena; St. James's Church S. by W.
										Left St. Helena for England.
										Ascension Island just in sight from the deck E. by S. $\frac{1}{2}$ S.
										Crossed the Equator, in long. 21° 48' W.
										Lost the S. E. Trade, in lat. 2° 30' N., & long. 22° 36' W.
										NOTE. Capt. Balderston had less detention between the S. E. & N. E. Trades than is usual; but in other parts of the homeward voyage, leaving Sunda Straits, off the Cape, &c. he experienced frequent delays from calms and light airs.
										6 Entered the N. E. Trade, in lat. 4° 22' N., & long. 23° 10' W.
										18 Lost the N. E. Trade, in lat. 26° 10' N., & long. 39° 4' W.
										Off the Bill of Portland, N. N. E., distant 12 or 13 miles.
										7 June. Arrived off Dungeness Lighthouse, E. by N. $\frac{1}{2}$ N.
						</				

\* Total period of detention from calms and light airs, between Princes Island and England, 705 hours = 29d. 9h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP BOMBAY, 1200 Tons, Captain JOSEPH STAUNTON, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1821.										
Dec. 29	29, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	1821. Left Macao Roads for Banca and Sunda Straits; the Grand Ladrone N. by E., distant about 20 miles.
1822.										
Jan. 6		9	16 56	80 32	12	35	169	—	1475	" Saw Pulo Sapata from the poop, S. 75° W., dist. 12 miles.
13		7	29 39	60 45	—	—	168	—	1215	" Passed Pulo Tinoan, and saw Pulo Aor West.
20		7	28 59	48 59	13	59	30	66	642	
27	2, Cape Lagullas.	7	33 37	31 17	14	16	100	38	1000	NOTE. The Bombay was 14 Sea Logs getting through Banca and Sunda Straits, having very faint airs, with frequent calms and slight contrary currents; which distance might be performed in 3 days with steam-assistance, the run between Frederick Hendrick Rocks and the first Point of Java being, by calculation, only 335 miles.
Feb. 3	3, Cape Good Hope.	7	34 22	18 24	5	76	51	36	745	
17		4	26 16	6 51	—	—	80	16	741	
22	22, St. Helena.	5	15 55	5 43 W.	11	31	78	—	908	29 " Left Java Head for the Cape of Good Hope.
March 3	2, Ascension Island.	6	5 33	17 4	40	40	104	—	946	30 " Entered the S. E. Trade, in lat. 6° 51' S., & long. 103° 10' E.
10	6, Equator.	7	2 44 N.	20 41	36	73	—	59	458	1822.
17		7	6 54	29 27	4	79	32	53	605	14 Jan. Lost the S. E. Trade, in lat. 23° 42' S., & long. 58° 30' E.
24		7	22 18	39 45	—	—	168	—	1158	2 Feb. Saw Cape Lagullas; hauled in for the land.
31	2, Corvo and Flores.	7	37 3	33 20	11	36	90	31	967	3 " Anchored in Table Bay (Cape of Good Hope), 2 miles off shore, in 8 fathoms.
April 7		7	46 22	24 40	11	62	81	14	915	14 " Left the Cape of Good Hope for St. Helena.
14		7	49 39	14 57	10	78	42	38	564	17 " Entered the S. E. Trade, in lat. 26° 16' S., & long. 6° 51' E.
18	18, Lizard Point.	4	49 58	5 11	—	25	47	24	489	22 " Anchored in St. Helena Roads; St. James' Church S. by W. ¼ W.
										26 " Left St. Helena for England.
Total Days	98 = 2352 hours.				127	610	1240	375	12828	2 March. Saw Ascension Island, N. E. by E., about 12 miles.
					610					6 " Crossed the Equator, in long. 18° 56' W.
										7 " Lost the S. E. Trade, in lat. 0° 48' N., & long. 20° 37' W.
										NOTE. Captain Staunton was five days between the Trades; a delay that, compared with other ships, is but trifling.
										12 " Entered the N. E. Trade, in lat. 3° 53' N., & long. 22° 11' W.
										25 " Lost the N. E. Trade, in lat. 24° 42' N., & long. 39° 45' W.
										2 April. Saw the Island of Corvo and Flores, N. W. by W. ¼ W.
										18 " Saw the Lizard Point, and proceeded up Channel.

\* Total period of detention from calms and light airs, between Java Head and England, 737 hours = 30d. 17h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP MARQUIS OF WELLINGTON, 961 Tons, Captain JOHN BLANSHARD, from BENGAL towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance run by the Log.	REMARKS DURING THE VOYAGE HOMEWARD.
1822.										1822.
Jan. 25	25, Sand Heads.	—	23 4 N.	88 28 E.	—	—	—	—	—	Left the Sand Heads for St. Helena and England.
Feb. 3	6, Equator.	10	9 51	88 21	24	140	32	44	696	Entered the N.E. Trade, in lat. 17° 0' N., & long. 89° 33' E.
10		7	3 40 S.	87 10	21	57	90	—	839	Crossed the Equator, in long. 88° 10' E.
17		7	14 47	80 12	6	67	73	22	751	Lost the N. E. Trade, in lat. 1° 10' N., & long. 86° 59' E.
24		7	24 16	63 51	—	—	168	—	1044	Entered the S. E. Trade, in lat. 7° 27' S., & long. 86° 0' E.
March 3		7	29 18	44 47	2	5	161	—	1081	Lost the S. E. Trade, in lat. 22° 42' S., & long. 68° 0' E.
10	12, African Coast.	7	34 4	29 3	—	63	81	24	871	Lost the S. E. Trade, in lat. 22° 42' S., & long. 68° 0' E.
17	17, Cape Good Hope.	7	35 15	17 43	6	84	32	46	729	Distant land about Natal, from N. by E. to N. W. by N.
24		7	24 26	4 24	—	28	140	—	911	Table Mountain (Cape of Good Hope) just in sight from the deck, bearing N. E. by E. $\frac{1}{2}$ E.
31	31, St. Helena.	7	15 55	5 43 W.	4	77	87	—	678	Entered the S. E. Trade, in lat. 27° 43' S., & long. 8° 47' E.
April 14	11, Ascension Island.	7	1 56	20 5	2	4	162	—	1061	Arrived at St. Helena; St. James's Church S. by W. $\frac{1}{4}$ W.
21	16, Equator.	7	2 6 N.	22 47	46	108	—	14	315	Left St. Helena for England.
28		7	8 30	29 41	13	51	46	58	654	Passed the Island of Ascension, from W. N. W. to W. S. W.
May 5		7	21 11	37 7	—	5	163	—	904	Lost the S. E. Trade, in lat. 0° 54' S., & long. 20° 40' W.
12		7	32 22	39 41	7	55	80	26	741	
19		7	41 10	31 48	1	79	71	17	632	
26	26, Lizard Point.	7	48 58	5 11	10	19	139	—	1115	
Total Days 115 = 2760 hours.					142	842	1525	251	13022	NOTE. Captain Blanshard was 9 days between the Trades, delayed by the calms and light airs prevalent in that locality.
					842					
					984*					
Calms and light airs... hours.										
* Total period of detention from calms and light airs, between the Sand Heads and England, 984 hours = 41 days, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.										

## H. C. SHIP WINDSOR, 1400 Tons, Captain THOMAS HAVSIDE, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1822.										
Feb. 3	3, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	Left Macao Roads, with a fresh N. E. Monsoon, for Gaspar & Sunda Straits; Macao Town W. by S., & Poote S. by E. $\frac{1}{2}$ E.
10		8	10 13	101 30	35	106	—	51	341	At noon, passed the Great Anambas, N. W. by dist. $\frac{1}{2}$ leag.
17		7	19 28	81 35	1	24	143	—	1437	Passed the Camel's Hump and St. Julian: at noon, Saint Esprit N. E., 6 or 7 leagues.
24		7	23 4	63 44	1	—	167	—	1144	Passed St. Barbe: at noon, Gaspar Island S. W. 14 or 15 miles.
March 3		7	27 40	41 52	—	3	165	—	1281	Passed Entrance Point and Saddle Island: at noon, the Brothers N. N. W.
10	17, Cape Felix.	7	33 56	28 20	11	32	90	35	849	Passed North Island, Nicholas Point, and Thwart the Way
18	18, Cape Good Hope.	8	33 48	18 23	13	92	40	47	761	Island: at noon, Rajah Bassa Peak N. by W.
31		7	22 25	3 17	—	34	134	—	1068	Left Java Head for the Cape of Good Hope.
April 5	5, St. Helena.	5	15 55	5 49 W.	—	15	105	—	684	Entered the S. E. Trade, in lat. $10^{\circ}50'$ S., & long. $101^{\circ}24'$ E.
14		6	4 16	16 11	—	—	144	—	1036	Lost the S. E. Trade, in lat. $25^{\circ}34'$ S., & long. $52^{\circ}0'$ E.
21	17, Equator.	7	2 40 N.	20 30	35	90	—	43	423	Saw Cape Felix from the poop N. N. E., dist. about 30 miles.
28		7	9 0	29 38	1	37	130	—	848	Anchored in Table Bay (Cape of Good Hope), Green Point N. W.; Robbin Island, North, distant off shore 2 miles.
5		7	23 2	40 57	—	—	168	—	1124	Left the Cape of Good Hope for St. Helena.
May 12		7	34 11	38 46	—	37	131	—	897	Entered the S. E. Trade, in lat. $29^{\circ}38'$ S., & long. $12^{\circ}15'$ E.
19	20, Fayal Island.	7	36 52	27 41	10	46	74	38	729	Anchored at St. Helena, Church bearing S. S. E.
26	29, Lizard Point.	7	47 5	12 17	1	35	132	—	1092	Left St. Helena for England; at sunset, the Isl. S. E. by S.
June 1	30, Plymouth.	6	50 37	1 12	27	43	16	58	533	Crossed the Equator, in long. $18^{\circ}47'$ W.
	1, Dunnoose.									Lost the S. E. Trade, in lat. $1^{\circ}20'$ N., and long. $17^{\circ}10'$ W.
										Entered the N. E. Trade, in lat. $5^{\circ}22'$ N., & long. $19^{\circ}50'$ W.
Total days 110 = 2640 hours.										NORE. Captain Havside had but a very trifling detention from calms between the Trades, being only 3 days.
					135	594	1639	272	14247	from calms between the Trades, being only 3 days.
					594					8 May. Lost the N. E. Trade, in lat. $28^{\circ}48'$ N., & long. $43^{\circ}18'$ W.
										20 " Saw Fayal from N. E. by N. to N., dist. about 10 m. This Island was in sight 2 days, having faint airs & smooth water.
										28 " Sounded; ground 75 fathoms, coarse sand and gravel.
										29 " Saw the Lizard Lighthouses N. by E., distant 8 leagues.
										30 " The high land of Plymouth N. E. by E., distant 7 or 8 leag. Arrived off Dunnoose N. W., 4 leagues: received a Pilot.
										1 June.

Calms and light airs... 729\* hours.

\* Total period of detention from calms and light airs, between China and England, 729 hours = 30d. 9h. during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from BENGAL towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.				
1822. Dec. 5	5, Sand Heads.	—	21 1 N.	88 33 E.	—	—	—	—	—	1822.				
8		4	12 15	87 18	—	4	54	38	553	5 Dec. Left the Sand Heads for St. Helena and England.				
15		7	6 38	87 39	23	108	—	37	479	24 " Crossed the Equator, in long. 88° 30' E.				
22		7	0 52	87 33	27	114	—	27	423					
29	24, Equator.	7	5 32 S.	90 42	22	88	58	—	524	1823.				
1823. Jan. 5	2, Cape Good Hope.	7	12 49	81 26	2	80	86	—	644	5 Jan. Entered the S. E. Trade, in lat. 12° 49' S., & long. 81° 26' E.				
12		7	21 56	64 10	—	2	166	—	1170	14 " Lost the S. E. Trade, in lat. 23° 26' S., & long. 60° 14' E.				
19		7	27 28	49 33	6	26	100	36	879	2 Feb. Saw Table Mountain, Cape of Good Hope, N. E. by E.				
26		7	30 45	34 50	—	38	130	—	952	10 " Entered the S. E. Trade, in lat. 23° 30' S., & long. 2° 24' E.				
Feb. 2	15, St. Helena. 26, Ascension Island. 4, Equator.	7	34 33	18 11	—	59	64	45	815	15 " Anchored off James Town, St. Helena; the Church S. by W. $\frac{1}{2}$ W., distant half-a-mile.				
9		7	25 18	4 32	3	33	132	—	908	21 " Left St. Helena for England.				
15		7	15 55	5 43 W.	12	5	127	72	1034	26 " Saw the Island of Ascension N. W., 8 leagues.				
March 2		10	2 14	19 26	—	43	28	32	454	4 March. Crossed the Equator, in long. 20° 28' W.				
9	16, Portland Bill. 17, Downs.	7	4 47 N.	21 42	34	74	138	—	890	5 " Lost the S. E. Trade, in lat. 2° 46' N., & long. 21° 14' W.				
16		7	13 45	33 28	—	30	145	—	1042					
23		7	29 3	36 2	5	18	106	—	806					
30		7	38 36	35 14	3	59	144	—	1135					
April 6	Total days 129 = 3096 hours.	7	42 50	12 30	8	16	45	34	545					
13		7	48 12	8 54	21	68	—	64	456					
17		4	51 13	1 24 E.	4	28	—	—	—					
					170	893	1648	385	14554					
					893	Calms and light airs... 1063* hours.								
					Calms and light airs... 1063* hours.									
										Calms and light airs... 1063* hours.				
* Total period of detention from calms and light airs, between the Sand Heads and England, 1063 hours = 44d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.														

NOTE. Captain Balderston was only 6 days between the Trades, and did not experience the usual detention from calms and light airs.

11 " Entered the N. E. Trade, in lat. 5° 36' N., & long. 23° 56' W.  
 22 " Lost the N. E. Trade, in lat. 26° 5' N., & long. 35° 50' W.  
 16 April. Passed Portland Bill, and received a Pilot on board.  
 17 " Anchored in the Downs, Deal Castle W. N. W., in 8 fms., off shore about 1  $\frac{1}{2}$  mile.

## H. C. SHIP CASTLE HUNTLY, 1400 Tons, Captain HENRY DRUMMOND, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Alrs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.	
1825.										1824.	
Jan. 10	10, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	23 Dec. Left Macao, with a fresh N. E. Monsoon, for Gaspar and Sunda Straits.	
16		7	12 27	100 32	19	108	—	41	471	Passed Pulo Sapata W. by N. $\frac{1}{2}$ N., distant about 4 leagues.	
23		7	20 46	84 25	—	25	143	—	1035	Saw Camel's Hump North; at noon, St. Barbe's Island	
30		7	25 23	65 25	—	—	168	—	1088	E. S. E., and St. Esprit N. E. $\frac{1}{2}$ E.	
Feb. 6		7	29 55	46 13	—	6	162	—	1043	1825.	
13	16, African Coast.	7	34 39	27 48	11	31	100	26	915	At noon, Gaspar Island S. 8° E., and Tanjong Brekat S. 32° W.	
20	20, Cape Lagullas.	7	34 21	17 27	31	82	21	34	521	Passed Gaspar Island; at noon, Pulo Let N. by E., & Rocky Point N. W.	
27		7	21 15	0 22	—	21	147	—	1127	The Brothers N. N. E., Knob Hill W. N. W., and Ejou Peak S. W. by W.	
March 6	2, St. Helena.	5	11 38	10 23 W.	—	2	118	—	705	Hog Point W. $\frac{1}{2}$ N., Stroom Rock E. $\frac{1}{2}$ S., and Crockatoo Peak S. W. by W.	
13	8, Ascension Island.	7	2 27 N.	20 56	—	—	168	—	1019	Cocoa Nut Point S. E. $\frac{1}{2}$ E., Ejou Peak E. N. E., and Peak of Crockatoo S. S. W.	
20	12, Equator.	7	8 22	27 8	16	65	54	33	589	The Brothers E. by S., Saradong W. by S., and Zee Clip Rocks S. by W. $\frac{1}{2}$ W.	
27		7	20 27	35 35	—	21	119	28	909	At noon, Peak of Princes Island East, Java Head S. E. by E.	
April 3		7	29 9	30 22	18	54	64	32	658	Entered the S. E. Trade, in lat. 11° 42' S., & long. 101° 30' E.	
10		7	35 49	28 55	1	113	—	54	570	Lost the S. E. Trade, in lat. 26° 58' S., & long. 50° 48' E.	
17	12, Island of Fayal.	7	45 33	17 34	3	60	71	34	778	Saw high land on the Coast of Africa N. E. by E.	
23	23, Portland Bill	6	50 30	2 27	1	59	49	35	708	Saw the Gunner's Quoin N. 32° W., & Cape Lagullus N. 15° W.	
Total days 102 = 2448 hours.					100	647	1384	317	12136	Entered the S. E. Trade, in lat. 22° 57' S., & long. 2° 29' E.	
					647	hours.					2 Mar. Anchored off St. James's Valley (St. Helena), the Church S. by W. $\frac{1}{2}$ W.
					Calms and light airs...					Left St. Helena for England.	4 "
					747*					Passed Ascension Island, just in sight from the deck N.W. by W.	8 "
										At noon, crossed the Equator, in long. 20° 10' W.	12 "
										Lost the S. E. Trade, in lat. 3° 48' N., & long. 20° 45' W.	14 "
										Entered the N. E. Trade, in lat. 4° 56' N., & long. 21° 45' W.	17 "
										<i>Capt. Drummond was delayed only three days between the Trades.</i>	NOTE.
										Lost the N. E. Trade, in lat. 20° 27' N., & long. 35° 35' W.	27 Mar.
										At noon, the body of Graciosa S. E. $\frac{1}{2}$ E., & Fayal S. S. W. $\frac{1}{2}$ W.	12 April.
										At midnight sounded; ground 54 fathoms, sand and pebbles.	22 "
										At midnight, passed Portland Light N. N. W.	23 "

\* Total period of detention from calms and light airs, between Java Head and England, 747 hours = 31d. 3h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, between Java Head and England, 747 hours = 31d. 3h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP ASIA, 958 Tons, Captain THOMAS BALDERSTON, from MADRAS towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.	
1825.										1825.	
Jan. 31	31, Madras Roads.	—	13 4 N.	80 21 E.	—	—	—	—	—	Left Madras for St. Helena and England.	
Feb. 6		7	0 25	84 24	5	73	90	—	842		
13	8, Equator.	7	5 14 S.	82 26	23	119	—	26	294	Crossed the Equator, in long. 83° 20' E.	
20		7	18 6	74 15	—	48	100	20	915	Entered the S. E. Trade, in lat. 1° 26' S., & long. 84° 15' E.	
27		7	24 29	61 31	—	45	123	—	868	Lost the S. E. Trade, in lat. 19° 10' S., & long. 73° 6' E.	
March 6		7	28 58	43 40	—	20	148	—	1053		
13		7	33 28	29 50	1	31	84	52	877	22 March. At 7h. A. M. Cape of Good Hope bore E. N. E.	
20		7	36 4	21 34	13	97	40	18	538	Entered the S. E. Trade, in lat. 31° 6' S., & long. 12° 50' E.	
27	22, Cape Good Hope.	7	28 14	8 53	—	41	100	27	820	Anchored at St. Helena; St. James's Church S. by W. $\frac{1}{2}$ W.	
April 4	4, St. Helena.	8	15 55	5 43 W.	2	18	148	24	1026	Left St. Helena for England.	
17	12, Ascension Island.	9	1 29 N.	21 37	—	5	163	48	1292		
24	17, Equator.	7	12 28	32 45	3	29	136	—	844		
May 1		7	27 52	33 50	—	30	138	—	895	Passed Ascension Island, seen from the deck W. by N. $\frac{1}{2}$ N.	
8	8, Fayal Island.	7	39 6	21 56	—	50	86	32	891	Lost the S. E. Trade, in lat. 0° 26' S., & long. 20° 49' W.	
15		7	46 43	12 57	—	13	155	—	982	NOTE. Captain Balderston was 9 days between the Trades, and had the usual variable weather.	
22	20, Scilly Islands.	7	49 58	3 12	1	55	78	34	687		
24	24, Beachy Head.	2	50 44	0 15 E.	6	24	—	18	164	Crossed the Equator, in long. 20° 58' W.	
Total days 110 = 2640 hours.					54	698	1589	299	12988	Entered the N. E. Trade, in lat. 13° 57' N., & long. 34° 40' W.	
					698	752*	hours.			Lost the N. E. Trade, in lat. 38° 38' N., & long. 30° 10' W.	
					Calms and light airs....					Passed the Island of Fayal, seen from the poop S. E. by E.	
										Saw Scilly Island and Eddystone Lighthouse.	
										Arrived off Beachy Head, and proceeded up Channel.	

\* Total period of detention from calms and light airs, between Madras and England, 752 hours = 31d. 8h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

\* Total period of detention from calms and light airs, between Madras and England, 752 hours = 31d. 8h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ROSE, 1000 Tons, Captain THOMAS MARQUIS, from MADRAS towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1825.										1825.
13 Feb.	13, Madras Roads.	—	12 34 N.	80 49 E.	—	—	68	—	—	Left Madras Roads for England: St. Thomas's Mount S.W. $\frac{1}{2}$ S.
20 "		8	10 55 "	84 41 "	25	74	—	25	421	Crossed the Equator, in long. $88^{\circ} 52'$ E.
27 "		7	8 37 "	85 28 "	32	135	—	1	229	Entered the S. E. Trade, in lat. $16^{\circ} 8'$ S., & long. $88^{\circ} 36'$ E.
March 6	6, Equator.	7	0 20 S.	88 52 "	6	88	61	13	594	Lost the S. E. Trade, in lat. $29^{\circ} 30'$ S., & long. $44^{\circ} 10'$ E.
13 "		7	8 48 "	91 25 "	4	71	74	19	536	Extremes of distant land from N. N. W. to W. N. W.
20 "		7	16 53 "	85 49 "	—	51	99	18	645	Saw high distant land on the African Coast N. N. E. to N. N. W.
27 "		7	23 46 "	63 5 "	—	5	163	—	1266	
April 3		7	27 10 "	51 4 "	—	41	122	5	969	At noon, high land seen from N. by E. to N. W. by N.
10 "	19, African Coast.	7	30 1 "	30 3 "	1	53	114	—	809	Saw the Gunner's Quoin N. E. by N., 5 or 6 leagues.
17 "	23, Gunner's Quoin.	7	34 59 "	23 2 "	—	90	78	—	640	Anchored in Table Bay, Cape of Good Hope: the Flagstaff on the Lion's Rump W. by S., and Green Point N. W. $\frac{1}{2}$ W., in 6 fathoms water.
23 "	24, Cape Good Hope.	6	34 2 "	23 0 "	—	12	76	56	424	
May 1		3	32 59 "	10 1 "	3	51	—	18	202	
8 "		7	21 51 "	2 7 W.	—	27	141	—	994	Left the Cape of Good Hope for St. Helena.
15 "	16, St. Helena.	7	16 24 "	4 35 "	16	102	30	20	513	Entered the S. E. Trade, in lat. $30^{\circ} 40'$ S., & long. $12^{\circ} 46'$ E.
16 "	27, Ascension Island.	1	15 55 "	5 43 "	4	15	5	—	62	At noon, the Island of St. Helena N. W. by N., distant 11 or 12 leagues.
29 "	31, Equator.	7	3 8 "	18 5 "	—	1	167	—	1102	
June 5		7	6 30 N.	23 58 "	5	82	81	—	617	Anchored off St. James's Town, St. Helena, the Church S. by W.
12 "		7	16 35 "	34 35 "	—	30	138	—	801	Left St. Helena for England.
19 "		7	29 24 "	35 16 "	2	48	87	31	767	Off the Island of Ascension, W. by S., 8 or 9 leagues.
26 "		7	41 52 "	27 7 "	2	24	142	—	1081	Crossed the Equator, in long. $23^{\circ} 38'$ W.
July 3	12, Irish Coast.	7	45 10 "	19 0 "	—	79	61	28	767	Lost the S. E. Trade, in lat. $4^{\circ} 35'$ N., & long. $24^{\circ} 0'$ W.
10 "	13, Start & Portland.	7	49 36 "	8 15 "	—	72	54	42	630	
13 "		3	50 11 "	2 0 "	3	41	—	23	240	
Total days 140 = 3360 hours.					103	1192	1761	304	14309	NOTE. Captain Marquis was frequently delayed between the Trades by light variable airs during his homeward voyage.
					1192	hours.				
					1295*	Calms and light airs....				

\* Total period of detention from calms and light airs, between Madras and England, 1295 hours = 53d. 23h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

Entered the N. E. Trade, in lat.  $7^{\circ} 46'$  N., & long.  $24^{\circ} 54'$  W.  
 Lost the N. E. Trade, in lat.  $25^{\circ} 22'$  N., & long.  $36^{\circ} 28'$  W.  
 The Coast of Ireland N. W. by N. to North: at noon, the Land's End from the mast-head N. E.  
 Passed Lizard Lights North, Eddystone Light N. E. by E.: at noon, between the Start & Portland; received a Pilot.

## H. C. SHIP BUCKINGHAMSHIRE, 1369 Tons, Captain RICHARD GLASSPOOLE, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1830. April 7	7, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	13 March. Left Macao, with a fresh N. E. Monsoon, for Gaspar and Sunda Straits.
11		5	9 52	104 22	18	73	—	29	296	21 " At noon, Saddle Island N. E. $\frac{1}{2}$ N., and Peaked Island just discernible from the poop S. E. by E. $\frac{1}{2}$ E.
18		7	15 20	92 53	6	36	100	26	814	22 " At noon, Peaked Island E. by N. $\frac{1}{2}$ N., Haycock Isl. S. E. $\frac{1}{2}$ S.
25		7	22 12	73 36	—	18	150	—	1169	NOTE. <i>The Buckinghamshire</i> had an excellent run down the China Sea, but experienced a most tedious and vexatious passage between Haycock Isl. and Java Head, employing 17 Sea Logs, owing to alternate calms, faint airs, and slight contrary currents.
May 2		7	25 32	62 17	24	54	62	28	688	6 April. At noon, extremes of Princes Island S. by E. to S. E., and the Peak of Crockett N. 47° E.
9		7	29 5	46 4	—	40	128	—	891	7 " At sunset, Java Head E. by N. $\frac{1}{2}$ N., first Point of Java N. by E. $\frac{1}{2}$ E.
16		7	32 29	31 30	4	61	81	22	815	13 " Entered the S. E. Trade, in lat. 10° 38' S., & long. 104° 26' E.
23		7	34 7	27 36	23	97	—	31	487	25 " Lost the S. E. Trade, in lat. 22° 12' S., & long. 73° 36' E.
30		7	34 47	24 39	18	119	—	—	371	24 May. Saw the highland on the African Coast from N. by E. to N. W. by N.
June 6	24, African Coast. 31, Buffalo Mount.	7	36 32	23 55	34	114	66	—	523	29 " Extremes of distant land just discernible from N. N. W. to N. E.
13	1, Cape Seal.	7	36 11	19 38	3	99	123	—	832	31 " Saw Buffalo Mount, North, and Round Mount N. 15° E.
20	15, Cape of Good Hope	7	26 55	10 17	—	45	141	18	1079	1 June. Saw land about Cape Seal, from N. N. E. to E. by N. $\frac{1}{2}$ N.
26	27, St. Helena.	6	15 55	5 43 W.	2	1	70	18	591	9 " Against Table Mountain N. 38° E., & Cape Good Hope N. 60° E.
July 11	5, Ascension Island.	4	9 36	13 49	—	8	165	26	508	15 " Rounded the Cape Good Hope, in lat. 34° 30' S., & long. 16° 44' E.
18	9, Equator.	7	5 39 N.	21 31	1	2	24	36	817	NOTE. <i>Captain Glasspole</i> experienced a continuous gale of wind during 18 successive days. He had considerable difficulty in rounding the Cape of Good Hope, which may in some degree be attributed to his great detention in the Straits, as shown above.
25		7	12 24	24 44	8	110	24	26	636	20 " Entered the S. E. Trade, in lat. 26° 55' S., & long. 10° 17' E.
Aug. 1		7	21 27	33 54	3	52	87	18	719	27 " Arrived at St. Helena, and anchored off St. James's Town, the Church S. by W. $\frac{1}{2}$ W.
8		7	29 40	37 51	21	68	61	17	1222	1 July. Left St. Helena for England.
15		7	37 51	39 31	21	60	70	17	—	5 " Passed the Island of Ascension, E. by S., distant 5 or 6 miles.
24	24, Portland Bill.	9	50 31	28 22	10	72	86	—	—	13 " Lost the S. E. Trade, in lat. 8° 0' N., & long. 22° 0' W.
Total days 136 = 3264 hours.				2 27	—	18	156	42	14409	NOTE. <i>The Buckinghamshire</i> was delayed eight days between the Trades.
					196	1147	1560	361	14409	21 " Entered the N. E. Trade, in lat. 14° 58' N., & long. 26° 30' W.
					1147	—	—	—	—	29 " Lost the N. E. Trade, in lat. 28° 21' N., & long. 37° 51' W.
					1343*	—	—	—	—	24 Aug. Arrived off Portland Bill, and proceeded up Channel.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, between Java Head and England, 1343 hours = 55d. 23h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

# H. C. SHIP CASTLE HUNTLY, 1400 Tons, Captain HENRY DRUMMOND, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chron.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1831.										1830.
Jan. 18	18, Java Head.	—	6 48 S.	105 11 E.	—	88	—	26	—	Left Macao for the Straits of Gaspar and Sunda.
23		5	10 38	104 31	30	88	—	51	337	
30		7	15 56	102 12	15	6	162	—	568	1831.
Feb. 6		7	21 24	86 3	—	38	130	—	1144	Passed Pulo Sapata North.
13		7	24 39	72 7	—	36	132	—	769	Passed Saddle Island E. N. E.
20		7	28 0	58 23	1	47	100	20	833	Entered Gaspar Strait at 8h. P. M.: anchored, it being too
27	6, Point Natal.	7	30 58	44 13	—	36	132	—	819	hazy to see the land.
March 6	8, Cape Good Hope.	7	33 59	26 48	—	64	34	47	915	
13		7	31 25	13 31	23	63	42	67	768	Saw Gaspar Island S. S. W. $\frac{1}{2}$ W., distant 5 or 6 miles.
20		7	24 33	6 5	1	58	83	—	695	Princes Island S. E. by E., and Peak of Crockatoa E. by N.
27	27, St. Helena.	7	15 55	5 43 W.	3	2	94	—	750	Left Java Head for St. Helena and England.
April 3	4, Ascension Island.	4	10 56	13 20	—	9	159	—	553	
10	10, Equator.	7	0 19 N.	24 33	—	77	—	45	916	Entered the S. E. Trade, in lat. $16^{\circ} 21' S.$ , & long. $100^{\circ} 8' E.$
17		7	5 16	26 41	46	3	19	100	333	Lost the S. E. Trade, in lat. $28^{\circ} 10' S.$ , & long. $58^{\circ} 18' E.$
24		7	16 50	38 0	3	35	115	46	839	Saw the land about Natal from N. N. W. to W. N. W.
May 1		7	30 13	44 25	18	15	163	—	868	Saw the Table Land (Cape of Good Hope) N. by W. $\frac{1}{2}$ W.
8		7	37 59	36 21	1	49	58	13	734	Entered the S. E. Trade, in lat. $16^{\circ} 27' S.$ , & long. $1^{\circ} 17' W.$
15		7	41 47	19 55	—	93	51	56	956	Arrived at St. Helena, having experienced the S. E. Trade
22	26, Lizard Point.	7	49 13	6 34	22	16	—	—	703	only two days previous to anchoring.
31	31, Beachy Head.	9	50 44	0 15 E.	16	882	1673	386	742	4 April. Saw Ascension Island from the deck W. S. W.
Total days	130 = 3120 hours.				179	882			14232	10 " Crossed the Equator, in long. $24^{\circ} 23' W.$
					882					11 " Lost the S. E. Trade, in lat. $1^{\circ} 39' N.$ , & long. $25^{\circ} 29' W.$
					1061*					NOTE. The Castle Huntly was delayed five days between the
										Trades, having calms with heavy rain occasionally.
										16 " Entered the N. E. Trade, in lat. $4^{\circ} 50' N.$ , & long. $26^{\circ} 8' W.$
										1 May. Lost the N. E. Trade, in lat. $30^{\circ} 13' N.$ , & long. $44^{\circ} 25' W.$
										26 " Saw Lizard Lighthouses N. E. $\frac{1}{2}$ E.
										31 " Off Beachy Head, and received a Pilot on board.

\* Total period of detention from calms and light airs, between Java Head and England, 1061 hours = 44d. 5h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP THAMES, 1425 Tons, Captain JAMES K. FORBES, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1831.										
Dec. 5	5, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	Left Macao Roads for Banca and Sunda Straits.
11		7	10 57	99 33	—	112	23	33	526	At noon, the North Anambas just seen from the deck S.W.
18		7	18 54	77 42	—	18	150	—	1312	NOTE. The Thames was detained 13 Sea Logs between the Anambas Islands and Java Head, owing to light airs and frequent calms, attended by occasional squalls, with heavy showers of rain.
25		7	23 39	61 8	—	29	111	28	951	
1832.										
Jan. 1		7	27 39	46 54	—	27	100	41	903	At noon, Princes Isl. E. by N., and Java Head E. by S. $\frac{1}{2}$ S.
8	10, Coast of Africa.	7	32 21	29 32	4	35	104	25	890	Entered the S. E. Trade, in lat. $7^{\circ}38'$ S., & long. $104^{\circ}25'$ E.
15	13, Cape Dalgado.	7	34 46	19 30	4	72	58	34	682	Lost the S. E. Trade, in lat. $22^{\circ}16'$ S., & long. $65^{\circ}36'$ E.
22	14, Cape Lagullas.	7	22 21	1 44	—	15	153	—	1169	Saw the high land on the Coast of Africa, from N. W. to N. E., distant about 16 or 17 leagues.
27	16, Cape Good Hope.	5	15 55	5 43 W.	—	3	117	—	738	Distant land seen from N. E. by E. to N. W.
Feb. 5	27, St. Helena.	7	1 46	20 9	—	—	168	—	1030	Saw Cape Dalgado E. N. E., and high distant land North.
12	2, Ascension Island.	7	6 56 N.	25 35	4	86	50	28	598	At noon, Cape Lagullas seen from the mast-head N.W. by W.
19	8, Equator.	7	25 12	29 47	—	—	168	—	1191	" Point Danger N. by W., and Bluff Hill N. by E. $\frac{1}{2}$ E.
26		7	29 38	29 38	—	63	78	27	719	At 7h. P. M., the Cape of Good Hope bore N. E. $\frac{1}{2}$ E., distant 3 leagues.
March 4		7	42 41	25 48	11	37	120	—	898	Entered the S. E. Trade, in lat. $30^{\circ}19'$ S., & long. $11^{\circ}35'$ E.
11	13, Lizard Lights.	7	48 58	6 44	3	68	82	15	892	Anchored in St. Helena Roads, off St. James's Valley, Church S. $\frac{1}{2}$ W., in 18 fathoms water.
14	14, Beachy Head.	3	50 44	0 15 E.	5	29	30	8	316	Left St. Helena under all sail for England.
Total days 99 = 2376 hours.					31	594	1512	239	12815	Passed Ascension Island S. W. by W. $\frac{1}{2}$ W.
					594					Lost the S. E. Trade, in lat. $1^{\circ}35'$ S., & long. $21^{\circ}45'$ W.
					625*					Crossed the Equator, in long. $29^{\circ}19'$ W.
										NOTE. Captain Forbes was detained five days between the Trades, having experienced a series of light baffling airs, with frequent squalls and heavy rain.
										Entered the N. E. Trade, in lat. $6^{\circ}56'$ N., & long. $25^{\circ}35'$ W.
										Lost the N. E. Trade, in lat. $23^{\circ}25'$ N., & long. $30^{\circ}46'$ W.
										At midnight, the Lizard Lights from the poop N. W. by N.
										Off Beachy Head, and obtained a Pilot.

\* Total period of detention from calms and light airs, between Java Head and England, 625 hours = 26d. 1h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP REPULSE, 1834 Tons, Captain HENRY GRIBBLE, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1831.										
Dec. 6	6, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	1831.
11		6	10 21	97 17	16	41	39	48	601	Left Macao Roads for the Straits of Banca and Sunda.
18		7	20 26	75 46	—	2	166	—	1342	Passed Pulo Domar S. E., Pulo Aor S. W., and Anambas E. by S.
25		7	25 18	59 31	—	43	125	—	939	NOTE. The Repulse was eleven Sea Logs from the Anambas Islands to Java Head, having occasional calms and faint airs, with slight contrary currents (smooth water all the time).
1832.										
Jan. 1		7	29 46	43 47	4	35	100	29	886	Left Sunda Straits for St. Helena and England.
8	13, African Coast.	7	33 54	30 37	17	49	68	34	756	Entered the S. E. Trade, in lat. 7° 39' S., & long. 103° 15' E.
15	17, Cape Good Hope.	7	35 18	19 52	5	74	56	33	714	Lost the S. E. Trade, in lat. 23° 42' S., & long. 63° 42' E.
22	27, St. Helena.	7	24 58	4 23	—	16	152	—	1140	
29	2, Ascension Island.	6	14 30	7 12 W.	4	—	140	—	907	1832.
5	7, Equator.	7	1 40	19 0	—	2	166	—	1026	Saw the high land on the African Coast, bearing N. E.
12		7	7 15 N.	25 22	12	64	70	22	641	Distant land seen from the mast-head, bearing N. E. by E.; altered the course, and rounded the Cape of Good Hope, steering for St. Helena.
19		7	25 21	30 46	—	—	168	—	1228	Entered the S. E. Trade, in lat. 21° 24' S., & long. 0° 15' E.
26		7	30 11	38 50	13	69	52	34	614	Anchored off St. James's Valley (St. Helena); the Church S. by W. ½ W.
March 4	13, Corvo and Flores.	7	33 28	39 48	71	57	—	40	343	Left St. Helena Roads (with steady S. E. Trade) for England.
11	16, Start Point.	7	43 14	23 32	3	27	100	38	934	The Island of Ascension seen from the main-top W. by S.
17	17, Isle of Wight.	6	50 36	1 18	2	10	132	—	1109	Crossed the Equator, in long. 1° 25' W.
Total Days	102 = 2448 hours.				147	489	1534	278	13180	Lost the S. E. Trade, in lat. 3° 30' N., & long. 21° 25' W.
					489	636*				Entered the N. E. Trade, in lat. 3° 45' N., & long. 21° 29' W.
						hours.				NOTE. The Repulse had little or no interval of calm between the Trades, but frequent occasional detention during the homeward passage from tight airs.
										Lost the N. E. Trade, in lat. 20° 14' N., & long. 30° 44' W.
										13 March. The Isl. of Corvo and Flores just discernible from the poop.
										16 " Saw Start Point from the deck N. N. W.
										17 " Arrived off the Isle of Wight, and received a Pilot.

\* Total period of detention from calms and light airs, between Java Head and England, 636 hours = 26d. 12h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP DUKE OF YORK, 1227 Tons, Captain ROBERT LOCKE, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1832.										
Jan. 31	31, Princes Island.	—	6 35 S.	105 15 E.	—	—	—	—	—	Left Macao Roads for Gaspar Strait; Ptoee E. S. E. 6 miles.
Feb. 5		6	13 39	94 36	10	47	37	50	669	Saw Buffalo Island S. 55° W.; Coast of Cochín China West.
12		7	21 49	77 38	5	5	163	—	1242	Saw Grand Natuna from the deck S. W. by W.
19		7	19 58	70 55	13	34	86	35	855	At noon, Direction Isl. S. 50° W., & Tumbelan Peak N. 33° W.
26		7	21 16	59 44	23	34	94	17	829	" Entrance Point S. 45° W., Pulo Leat N. 69° E., and West Island N. 24° E.
March 4		7	30 22	41 37	—	19	149	—	1140	" North Brother N. 15° E., high land of Java South.
11		7	33 27	28 20	1	70	26	71	624	" Princes Island E. by S., Crockett Is. N. E. by E. 4 E.
18	12, African Coast.	7	35 10	20 54	25	65	—	78	599	" Peak on Princes Isl. E. 3 N.; first Point of Java E. by S. 3 S.
25	18, Cape Lagullas.	7	36 2	17 35	2	89	17	60	571	Left the Straits, under all sail, for the Cape of Good Hope.
28		7	34 22	18 24	2	19	20	19	214	Entered the S. E. Trade, in lat. 12° 24' S., & long. 99° 32' E.
April 15	28, Cape Good Hope.	2½	22 32	3 40 W.	3	21	144	—	1013	Lost the S. E. Trade, in lat. 22° 32' S., & long. 64° 14' E.
22		7	22 32	8 49	—	2	142	—	915	Saw distant land on the Coast of Africa N. W. by N.
29	20, St. Helena.	6	13 33	8 49	—	—	168	—	1156	At noon, extremes of the land from the deck N. N. W. to N. E.
May 6	25, Ascension Island.	7	0 10 N.	21 23	—	—	143	—	1021	Distant land in sight from the deck N. by E.
13	29, Equator.	7	11 9	32 33	—	20	148	—	1162	Saw Gunner's Quon N. by W., and Cape Lagullas W. N. W.
20		7	26 7	37 16	—	14	134	20	1317	<i>NOTE.</i> Captain Locke was 17 days from first seeing the African Coast to reaching Table Bay, during which period he encountered alternate gales of wind and calms, with light variable airs occasionally, and did not arrive at the Cape until the 28th of March.
29	29, Lizard Point.	9	43 51	27 18	—	6	162	—	990	9 April. Left the Cape of Good Hope for St. Helena.
			49 58	5 11	23	19	100	74		11 " Entered the S. E. Trade, in lat. 28° 24' S., & long. 10° 25' E.
										20 " Arrived in St. Helena Roads, and left the next day.
										25 " Saw the Island of Ascension from the deck N. W. by W. ½ W.
										29 " Crossed the Equator, in long. 21° 20' W.
										30 " Lost the S. E. Trade, in lat. 1° 27' N., & long. 25° 54' W.
										<i>NOTE.</i> Captain Locke had not the usual delay between the Trades, but very frequently light airs considerably impeded his progress homeward.
										3 May. Entered the N. E. Trade, in lat. 5° 50' N., & long. 26° 7' W.
										12 " Lost the N. E. Trade, in lat. 23° 32' N., & long. 38° 8' W.
										29 " Passed Lizard Point; on arriving off Dartmouth, received a Pilot on board, and proceeded up Channel.
Total days 107½ = 2580 hours.					102	464	1590	424	14317	
					464					
					566* hours.					
					Calms and light airs...					

\* Total period of detention from calms and light airs, between Princes Island and England, 566h. = 23d. 14h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP ORWELL, 1336 Tons, Captain JAMES DALRYMPLE, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1832.										1832.
Dec. 10	10, Princes Island.	—	6 35 S.	105 15 E.	—	—	—	—	—	Left Macao for Banca and Sunda Straits.
16		7	15 51	32 22	—	8	160	—	1223	At noon, Pulo Aor seen from the deck, W. by N. $\frac{1}{2}$ N.
23		7	24 7	64 19	—	2	166	—	1102	Passed Pulo Lingin N. W. $\frac{1}{4}$ W., and Pulo Taya W. by S.:
30		7	29 0	52 32	5	52	46	65	805	at noon, Pulo Taya N. by W. $\frac{1}{4}$ W., and Northern Extreme of Seven Islands E. N. E.
1833.										1 Dec.
6	10, Coast of Africa.	7	32 7	37 21	6	58	56	48	767	At noon, Monopin Hill N. E. $\frac{1}{4}$ E. : Extremes of Mintow N. E. by N. to E. by S.
13	14, Cape Good Hope.	7	35 16	19 54	6	50	94	18	872	NOTE. <i>The Orwell was employed 10 Sea Logs between Mintow and Princes Island, with the usual vicissitudes of calms, faint airs, and slight contrary currents.</i>
20		7	26 27	7 58	13	45	110	—	835	
26	26, St. Helena.	6	15 55	5 43 W.	—	4	140	—	979	Left Princes Island for St. Helena and England.
Feb. 3	4, Ascension Island.	5	8 14	13 2	—	3	63	49	603	Entered the S. E. Trade, in lat. $10^{\circ} 31' S.$ , & long. $94^{\circ} 54' E.$
10	9, Equator.	7	1 41 N.	20 25	—	42	72	54	761	Lost the S. E. Trade, in lat. $26^{\circ} 25' S.$ , & long. $59^{\circ} 34' E.$
17		7	8 41	26 50	3	85	38	42	660	
24		7	24 10	37 50	—	1	167	—	1140	Saw the high land on the African Coast from N. N. W. to W. N. W. Soundings, 63 fathoms, sand and shells.
March 3		7	37 17	31 16	1	26	141	—	964	Distant land seen from the deck, from N. by W. to N. E. by N.
10		7	48 46	15 58	—	31	137	—	1308	Rounded the Cape of Good Hope, steering N. W. by N.
17		7	49 3	7 29	9	98	—	61	545	Entered the S. E. Trade, in lat. $27^{\circ} 36' S.$ , & long. $9^{\circ} 3' E.$
20	20, Lizard Point.	3	49 58	5 11	—	70	—	2	203	Arrived at St. Helena, and anchored off St. James's Town.
										Left St. Helena with a steady S. E. Trade.
										Saw the Island of Ascension from the deck, W. N. W.
										Lost the S. E. Trade, in lat. $0^{\circ} 15' S.$ , & long. $20^{\circ} 26' W.$
										Crossed the Equator, in long. $20^{\circ} 54' W.$
Total days 98 = 2352 hours.										NOTE. <i>Capt. Dalrymple was 6 days between the S. E. and N. E. Trades; although without any calms, he experi- enced considerable delay from light baffling airs (remark- ably smooth water all the time).</i>
					43	575	1395	339	12827	N. E. Trades; in lat. $4^{\circ} 40' N.$ , & long. $22^{\circ} 12' W.$
					575					Entered the N. E. Trade, in lat. $24^{\circ} 10' N.$ , & long. $37^{\circ} 50' W.$
					618*					Lost the N. E. Trade, in lat. $24^{\circ} 10' N.$ , & long. $37^{\circ} 50' W.$
										20 March. Saw the Lizard N. E., and proceeded up Channel.

\* Total period of detention from calms and light airs, between Princes Island and England, 618 hours = 25d. 18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP DUCHESS OF ATHOL, 1300 Tons, Captain EDWARD DANIELL, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1832.										1832.
Dec. 20	20, Princes Island.	—	6 35 S.	105 15 E.	—	—	—	—	—	Left Macao Roads for Gaspar and Sunda Straits, having a steady N. E. Monsoon; Potoe East, distant about 3 miles.
23		4	11 15	97 31	9	34	21	32	443	Lost the N. E. Monsoon, in lat. 16° 40' N., & long. 110° 13' E.
30		7	21 7	70 19	—	—	168	—	1603	At daylight, Saddle Island seen from the deck E. by S. 3 S.
1833.										At sunrise, N. Anambas Peak N. W., Middle Anambas W. by N.
Jan. 6		7	28 28	46 59	—	10	158	—	1345	At noon, Saddle Isl. S. E. by E. and Camel's Hump S. by E. 3 E.
13	16, Cape Hanglip.	7	34 3	28 33	—	19	149	—	1019	Passed Camel's Hump & St. Julian; at 8h. A.M., St. Barbe S. E.
17	17, Cape Good Hope.	4	36 30	18 34	7	28	28	33	481	Passed Gaspar Island, Tanjung Brekat, and Pulo Leat.
27		3	27 45	8 11	—	48	24	—	614	Entrance Point seen N. N. W., and West Island N. by E.
Feb. 3		7	18 4	3 5 W.	—	35	133	—	798	At noon, the Brothers seen from the deck S. by W., about 12m.
5	5, St. Helena.	2	15 55	5 43	—	18	30	—	193	" Zutphen Island S. 11° W., and Thwart the Way Peak S. 3° E.
10	11, Ascension Island.	5	9 5	13 48	—	27	57	36	697	" The Brothers in one N. W., Cocoa Nut Point N. E. by N.
17	16, Equator.	7	5 0 N.	22 8	19	38	90	21	957	" Crockatoa Peak S. 62° E., Pulo Bessy S. 87° E., and Keyser's Island N. 10° W.
24		7	13 35	33 25	19	30	119	—	948	Passed Keyser's Island, Flat Point, and Crockatoa Island.
March 3		7	27 58	40 33	15	34	119	—	1035	Left Princes Island for the Cape of Good Hope.
10		7	41 59	31 22	7	24	108	29	1008	Entered the S. E. Trade, in lat. 11° 15' S., & long. 97° 31' E.
17		7	47 11	17 19	8	15	121	24	975	Lost the S. E. Trade, in lat. 28° 28' S., & long. 47° 10' E.
24	24, Selly Island.	7	49 53	6 37	4	54	83	27	750	Saw Cape Hanglip from the deck N. by E.
27	27, Start Point.	3	50 13	3 38	4	12	29	27	344	Anchored in Table Bay (Cape of Good Hope).
Total days 91 = 2184 hours.										1833.
					92	378	1461	253	13120	4 Jan.
					378	—	—	—	—	16 Jan.
					470*	—	—	—	—	17 Jan.
					—	—	—	—	—	18 Jan.
					—	—	—	—	—	19 Jan.
					—	—	—	—	—	20 Jan.
					—	—	—	—	—	21 Jan.
					—	—	—	—	—	22 Jan.
					—	—	—	—	—	23 Jan.
					—	—	—	—	—	24 Jan.
					—	—	—	—	—	25 Jan.
					—	—	—	—	—	26 Jan.
					—	—	—	—	—	27 Jan.
					—	—	—	—	—	28 Jan.
					—	—	—	—	—	29 Jan.
					—	—	—	—	—	30 Jan.
					—	—	—	—	—	31 Jan.
					—	—	—	—	—	1 Feb.
					—	—	—	—	—	2 Feb.
					—	—	—	—	—	3 Feb.
					—	—	—	—	—	4 Feb.
					—	—	—	—	—	5 Feb.
					—	—	—	—	—	6 Feb.
					—	—	—	—	—	7 Feb.
					—	—	—	—	—	8 Feb.
					—	—	—	—	—	9 Feb.
					—	—	—	—	—	10 Feb.
					—	—	—	—	—	11 Feb.
					—	—	—	—	—	12 Feb.
					—	—	—	—	—	13 Feb.
					—	—	—	—	—	14 Feb.
					—	—	—	—	—	15 Feb.
					—	—	—	—	—	16 Feb.
					—	—	—	—	—	17 Feb.
					—	—	—	—	—	18 Feb.
					—	—	—	—	—	19 Feb.
					—	—	—	—	—	20 Feb.
					—	—	—	—	—	21 Feb.
					—	—	—	—	—	22 Feb.
					—	—	—	—	—	23 Feb.
					—	—	—	—	—	24 Feb.
					—	—	—	—	—	25 Feb.
					—	—	—	—	—	26 Feb.
					—	—	—	—	—	27 Feb.
					—	—	—	—	—	28 Feb.
					—	—	—	—	—	29 Feb.
					—	—	—	—	—	30 Feb.
					—	—	—	—	—	31 Feb.
					—	—	—	—	—	1 Mar.
					—	—	—	—	—	2 Mar.
					—	—	—	—	—	3 Mar.
					—	—	—	—	—	4 Mar.
					—	—	—	—	—	5 Mar.
					—	—	—	—	—	6 Mar.
					—	—	—	—	—	7 Mar.
					—	—	—	—	—	8 Mar.
					—	—	—	—	—	9 Mar.
					—	—	—	—	—	10 Mar.
					—	—	—	—	—	11 Mar.
					—	—	—	—	—	12 Mar.
					—	—	—	—	—	13 Mar.
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					—	—	—	—	—	12 Jun.
					—	—	—	—	—	13 Jun.
					—	—	—	—	—	14 Jun.
					—	—	—	—	—	15 Jun.
					—	—	—	—	—	16 Jun.

## H. C. SHIP EDINBURGH, 1335 Tons, Captain DAVID MARSHALL, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foal Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1833.										
Jan. 25	25, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	Left Macao Roads for Gaspar and Sunda Straits.
27		3	9 12	102 24	12	39	—	21	161	At noon, Grand Natuna E. by S. $\frac{1}{2}$ S., and Saddle Isl. S. E. $\frac{1}{2}$ E.
Feb. 3		7	14 28	92 43	5	45	100	18	798	" " one of the Anambas Islands just discernible W. $\frac{1}{2}$ N.
10		7	18 17	82 54	29	66	41	32	562	Passed the Anambas; at noon, St. Julian, from deck, S. by E. $\frac{1}{2}$ E.
17		7	24 8	64 31	—	18	150	—	1099	Passed St. Julian North, and Camel Island N. by E.
24		7	30 4	41 55	5	15	148	—	1190	Passed Gaspar Island W. by N., & West Island N. by W. $\frac{1}{2}$ W.
March 3		7	32 24	33 27	28	69	48	23	694	At noon, the Brothers, seen from the deck, N. E. $\frac{1}{2}$ E.
10	10, Cape Lagullas.	7	34 22	17 30	37	44	39	48	588	" Hog Point E. $\frac{1}{2}$ N.; the Brothers N. by W.
17	11, Cape Good Hope.	7	21 15	0 24 W.	—	24	144	—	1177	Passed Keyser's Island, North: at noon, Java Head E. S. E.
20	20, St. Helena.	3	15 55	5 43	—	—	72	—	444	Entered the S. E. Trade, in lat. $11^{\circ} 46'$ S., & long. $89^{\circ} 8'$ E.
24		3	10 30	11 37	—	4	68	—	465	Lost the S. E. Trade, in lat. $15^{\circ} 41'$ S., & long. $85^{\circ} 16'$ E.
31	26, Ascension Island.	7	0 57	21 0	29	47	59	33	727	5 March. Sounded on Lagullas Bank: ground 75 and 67 fathoms.
April 7	2, Equator.	7	5 23 N.	25 31	20	90	39	19	492	Saw Cape Lagullas from the deck N. W. $\frac{1}{2}$ W.
14		7	19 40	40 14	—	7	161	—	1103	Rounded the Cape of Good Hope, under all sail, for St. Helena.
21		7	30 54	40 45	6	33	100	29	832	Entered the S. E. Trade, in lat. $29^{\circ} 10'$ S., & long. $10^{\circ} 45'$ E.
28		7	46 38	25 4	—	25	143	—	936	Arrived at St. Helena; anchored off the Town; the Church S. $\frac{1}{2}$ W.
May 2	2, Bearhaven Harb.	4	51 30	10 15	2	24	70	—	589	Left St. Helena for England, with a steady S. E. Trade.
13	13, Bill of Portland.	8	50 31	2 27	26	106	20	40	471	At daylight, Ascension Island seen E. by S. $\frac{1}{2}$ S.
Total days 105	2520 hours.				199	656	1402	263	11848	Lost the S. E. Trade, in lat. $1^{\circ} 56'$ S., & long. $20^{\circ} 28'$ W.
					855*					Crossed the Equator, in long. $22^{\circ} 36'$ W.
										<i>Note. Captain Marshall was detained 11 days between the Trades; he experienced considerable calms, with very light baffling airs, having squalls occasionally, during which period the water was remarkably smooth.</i>
										9 " Entered the N. E. Trade, in lat. $7^{\circ} 58'$ N., & long. $30^{\circ}$ W.
										19 " Lost the N. E. Trade, in lat. $28^{\circ} 54'$ N., & long. $45^{\circ}$ W.
										2 May. Rounded the Reef off Roanharick Island, and anchored in Bearhaven Harb. (S.W. Coast of Ireland) in 9 fms.; Town of Castletown N. W. by W.; the N. E. end of Bear Isl. E. S. E., and Roanharick Isl. E. by S. $\frac{1}{2}$ S., H.C.S. Berwickshire in company, At 8 A.M. weighed, and made sail; rounded Roanharick Island, and anchored in Bantry Bay.
										5 " Left Bantry Bay, with light airs, for the English Channel.
										6 " Saw the Lizard Lights N. E. $\frac{1}{2}$ E., distant about 5 leagues.
										11 " The Bill of Portland N. E. by N., and St. Aldan's Head, N. E.
										13 " <i>Note. Hove to in the Downs, where an English and French Squadron lay at anchor.</i>
										15 "

Calms and light airs... hours.

\* Total period of detention from calms and light airs, between Java Head and England, 855 hours = 35d. 15h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WILLIAM FAIRLIE, 1318 Tons, Captain THOMAS BLAIR, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1833.										
Jan. 23	23, Java Head.	—	° 6 48 S.	° 105 11 E.	—	—	—	—	—	7 Jan. Left Macao Roads for Gaspar and Sunda Straits.
27		5	10 18	104 24	4	86	—	30	304	13 " At daylight passed the Great Natuna W. by N.
Feb. 3		7	17 14	92 40	11	26	131	—	940	16 " Saw Pulo Leat E. by N., and proceeded through the Straits of Gaspar and Sunda with the usual routine of calms and light airs; was employed 7 Sea Logs in clearing them.
10		7	20 58	85 44	12	104	20	32	556	
17		7	24 14	66 29	3	17	148	—	1207	23 " Left Java Head for St. Helena and England.
24		7	29 55	45 9	—	22	146	—	1205	29 " Entered the S. E. Trade, in lat. 12° 16' S., & long. 103° 37' E.
March 3	5, African Coast.	7	33 8	31 22	17	66	51	34	747	5 Feb. Lost the S. E. Trade, in lat. 18° 18' S., & long. 90° 32' E.
10	8, Cape Dalgado.	7	34 49	18 56	23	81	39	25	549	5 March. Saw the high land on the African Coast North.
17	10, Cape Lagullas.	7	22 11	2 23	—	18	150	—	1172	6 " Saw land from the mast-head N. W. by W.
21	11, Cape Good Hope.	4	15 55	5 43 W.	—	—	96	—	577	8 " Saw Cape Dalgado from the deck N. N. W.
April 7	21, St. Helena.	5	8 30	13 42	2	21	97	—	702	10 " Passed the Gunner's Quoin N. E. ½ E., & Cape Lagullas E. by S.
14	8, Ascension Island.	7	1 17 N.	23 32	—	53	81	34	827	11 " Passed Cape Hanglip N. E. by E., Cape Point E. by N. ½ N., and the Lighthouse on Green Point E. N. E.
21	13, Equator.	7	8 8	30 3	12	101	33	22	590	14 " Entered the S. E. Trade, in lat. 25° 50' S., & long. 7° 13' E.
28		7	27 17	40 5	—	—	168	—	1376	21 " Anchored off St. James's Valley, in St. Helena Roads.
May 5	5, Corvo and Flores.	7	41 48	28 8	—	27	141	—	1112	3 April. Left the Island of St. Helena for England.
12		7	49 14	5 0	11	27	130	—	1147	8 " Passed Ascension Island, seen from the deck S. W. by W.
14	14, Portland Bill.	2	50 31	2 27	4	10	21	13	205	12 " Lost the S. E. Trade, in lat. 1° 21' S., & long. 22° 50' W.
Total days 100 = 2400 hours.										13 " At noon, on the Equator by observation, in long. 23° 0' W.
										NOTE. Captain Blair experienced a detention of 8 days between the Trades, from the calms and light airs prevailing in that locality: smooth winter the whole time.
										20 " Entered the N. E. Trade, in lat. 5° 56' N., & long. 27° 19' W.
										29 " Lost the N. E. Trade, in lat. 30° 30' N., & long. 38° 14' W.
										5 May. Passed the Island of Flores N. E. by E., and Corvo N. N. E.
										14 " Arrived off Portland Bill, and obtained a Pilot.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, between Java Head and England, 753 hours = 31d. 14h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP EARL OF BALCARRAS, 1417 Tons, Captain BRYAN BROUGHTON, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1833.										1833.
Feb. 10	10, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	Left Lintin with a fresh N. E. Monsoon, Potee East, 3 miles, for Gaspar and Sunda Straits.
17		7	13 43	101 13	16	108	27	41	588	Passed Flat Island E. by N.: at noon, West Island S. E. $\frac{1}{2}$ S.
24		7	21 36	78 54	—	—	168	—	1333	Passed the Tumbelan Islands, seen from West to N. W. by W.:
March 3		7	24 29	67 12	7	67	76	18	687	at noon, St. Barbe just discernible from the deck, S. W. $\frac{1}{2}$ W.
10		7	27 45	52 34	—	30	100	38	790	At noon, Gaspar Island just in sight from the mast-head
17		7	33 25	32 32	3	43	122	—	1015	S. S. W. $\frac{1}{2}$ W.; ground, 17 fathoms, hard sand.
24	24, Cape Hanglip.	7	35 24	19 20	6	82	64	16	687	Passed Gaspar Island, the Peak N. N. E., and Tanjong Brekat
31	26, Cape Good Hope.	7	23 4	3 38	14	28	126	—	1080	W. by S.: at noon, West Island S. 11° E.; Entrance Point
April 4	4, St. Helena.	4	15 55	5 43 W.	—	1	95	—	658	S. 17° W.: at noon, West Island S. 11° E.; Entrance Point
7	11, Ascension Island.	1	14 18	7 10	—	—	24	—	129	and Entrance Point W. N. W.
14	16, Equator.	7	2 14	20 12	—	—	107	1	1007	At noon, the Brothers N. E. by N.; the high land of Bantam.
21		7	2 51 N.	24 23	44	84	—	40	391	At noon, Pulo Bessy N. 85° W., Peak of Crookatoa S. 57° W.,
28		7	14 25	35 20	—	23	145	—	948	Hog Point North, and the outer Zutphen Island N. 39° E.
May 5		7	30 9	39 8	—	7	161	—	982	At noon, Crookatoa Peak S. 70° E., Zee Clip Rock N. 31° E.
12		7	43 48	29 37	—	23	145	—	1014	and the Peak of Princes Island S. 5° W.: no ground 45 fms.
18	18, Off Ireland.	6	51 4	10 14	1	13	82	48	895	At sunset, Princes Island S. 56° E., & Crookatoa Peak N. 53° E.
21	21, Scilly Isles.	3	49 54	6 19	4	6	44	3	275	Entered the S. E. Trade, in lat. 13° 43' S., & long. 101° 13' E.
Total Days 98	2352 hours.				92	509	1546	205	12479	Lost the S. E. Trade, in lat. 22° 23' S., & long. 76° 19' E.
					509					25 March. Saw Cape Hanglip North, & the Gunner's Quoin N. E. by E. $\frac{1}{2}$ E.
					601*					26 " Passed Table Mountain, Cape of Good Hope, N. 73° E.
										29 " Entered the S. E. Trade, in lat. 27° 34' S., & long. 8° 55' E.
										4 April. Arrived at St. Helena, and anchored off St. James's Town.
										7 " Left St. Helena for England, with steady S. E. Trade.
										11 " Passed the Island of Ascension W. N. W., distant 8 miles.
										15 " Lost the S. E. Trade, in lat. 0° 54' S., & long. 21° 15' W.
										16 " Crossed the Equator, in long. 22° 24' W.
<p>Notes. <i>Captain Broughton was 7 days between the Trades, having alternate calms and light airs: very smooth water all the time.</i></p>										22 " Entered the N. E. Trade, in lat. 3° 25' N., & long. 26° 3' W.
<p>* Total period of detention from calms and light airs, between Java Head and England, 601 hours = 25d. 1h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.</p>										3 May. Lost the N. E. Trade, in lat. 26° 40' N., & long. 41° 10' W.
										18 " Saw the Irish Coast from the deck N. W. to N. by E.
										21 " Passed St. Agnes Lighthouse, and proceeded up Channel.

## H. C. SHIP RELIANCE, 1416 Tons, Captain CHARLES TIMINS, from CHINA towards ENGLAND.

Date.		Situation.	Days.	Latitude by Obs.		Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
				° ' "	° ' "							
1833.												
March	4	4, Java Head.	—	6 48 S.	105 11 E.		—	—	—	—	—	1833. Left Macao Roads for the Straits of Gaspar and Sunda.
	10		7	15 26	91 32		—	19	130	19	886	11 Feb. Passed the North Natuna E. by S., distant 7 or 8 miles.
	17		7	25 2	66 46		—	—	168	—	1513	16 " NOTE. <i>The Reliance</i> was 15 days in proceeding through Gaspar and Sunda Straits, from having a long continuance of calms, faint airs, and slight contrary currents.
	24		7	29 10	35 32		2	55	90	21	882	
	31	5, African Coast.	7	35 16	35 49		—	58	110	—	909	4 March. Left Java Head E. by N. for St. Helena.
April	7	7, Cape Lagullas.	7	35 0	19 53		5	54	77	32	795	7 " Entered the S. E. Trade, in lat. 12° 21' S., & long. 98° 27' E.
	14	10, Cape Hanglip.	7	26 14	4 58		7	33	128	—	992	18 " Entered the S. E. Trade, in lat. 26° 14' S., & long. 63° 17' E.
	19	19, St. Helena.	5	15 55	5 43 W.		—	—	120	—	857	5 April. Saw high land on the Coast of Africa from N. N. W. to S. E.
	28	1, Ascension Island.	3	11 53	10 38		5	3	64	—	363	7 " The Gunner's Quoin N. 14° W., & Cape Lagullas N. E. ½ E.; they remained in sight three days, it being nearly calm the whole time.
May	5	5, Equator.	7	1 0 N.	21 50		3	6	130	29	983	10 " Cape Lagullas East, Gunner's Quoin N. E., and Cape Hanglip N. by W.
	12		7	8 2	27 12		12	88	31	37	413	16 " Entered the S. E. Trade, in lat. 21° 52' S., & long. 0° 10' E.
	19		7	21 52	35 54		2	2	150	14	962	19 " Arrived at St. Helena, and anchored off St. James's Town.
	26		7	29 53	37 10		13	47	67	41	688	26 " Left St. Helena for England: at sunset, the Island S. E. ½ E.
June	2		7	39 45	36 35		9	42	100	17	1143	1 May. Passed Ascension Island; Cross Hill bearing S. S. E. ½ E.
	9	11, Scilly Isles.	7	49 10	12 42		1	13	154	—	467	4 " Lost the S. E. Trade, in lat. 1° 10' S., & long. 21° 20' W.
	12	12, Dunnoose.	3	50 37	1 12		—	14	58	—	—	5 " Crossed the Equator, in long. 21° 49' W.
Total days 95 = 2280 hours.							59	434	1577	210	12594	NOTE. <i>Captain Timins</i> was 6 days between the S. E. and N. E. Trades, having, as usual, many calms and light variable airs, with occasional squalls and heavy rain.
							434	hours.				10 " Entered the N. E. Trade, in lat. 6° 0' N., & long. 23° 42' W.
							493*	Calms and light airs...				20 " Lost the N. E. Trade, in lat. 24° 12' N., & long. 36° 26' W.
												11 June. Saw Scilly Islands; St. Agnes Lighthouse N. by E.
												12 " Arrived off Dunnoose E. by N., and Needles Point North.

\* Total period of detention from calms and light airs, between Java Head and England, 493 hours = 20d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP SIR DAVID SCOTT, 1342 Tons, Captain DAVID WARD, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1833.										
March 26	26, Prinoes Island.	—	6 35 S.	105 15 E.	—	—	—	—	—	3 March. Left Macao Roads for the Straits of Gaspar and Sunda.
31		5	16 9	88 48	—	—	120	—	1024	Passed the Natunas, seen from the deck, E. by S. $\frac{1}{2}$ S.
April 7		7	24 14	68 42	4	20	144	—	1262	The Middle Anambas just discernible from the poop West.
14		7	30 38	43 30	—	11	157	—	1424	NOTE. The Sir David Scott was 11 Sea Logs running through the Straits of Gaspar and Sunda, having experienced, as usual, calms, light airs, and contrary currents.
21	24, African Coast.	7	33 26	30 38	8	53	81	26	775	
28	28, Cape Vaches.	7	35 49	22 30	10	57	68	33	699	Left Prinoes Island for St. Helena and England.
May 5	5, Cape Good Hope.	7	34 18	17 10	17	81	29	41	556	Entered the S. E. Trade, in lat. $6^{\circ} 42'$ S., & long. $102^{\circ} 26'$ E.
12		7	23 2	3 4	—	17	151	—	1050	Lost the S. E. Trade, in lat. $24^{\circ} 16'$ S., & long. $70^{\circ} 12'$ E.
18	18, St. Helena.	6	15 55	5 43 W.	1	19	124	—	682	Saw high land on the Coast of Africa; Buffalo Hill North, and High Peak N. E. by E., distant about 4 or 5 leagues.
26	24, Ascension Island.	7	4 38	17 15	1	1	148	18	992	At 2h. P. M., land about Cape Vaches N. N. E. This ship was 11 days off the Cape of Good Hope, with every variety of winds and weather, calms, &c.
June 2		7	5 56 N.	23 53	16	35	97	20	801	At daylight, land in sight E. by S., 17 leagues, in long. $170^{\circ} 10'$ E.
9		7	12 54	33 18	25	40	88	15	704	Entered the S. E. Trade, in lat. $28^{\circ} 19'$ S., & long. $9^{\circ} 58'$ E.
16		7	25 47	40 6	—	50	100	18	864	Arrived at St. Helena, and anchored off St. James's Valley.
23		7	40 16	36 3	—	31	137	—	941	Left St. Helena for England under all sail.
30	4, Corvo and Flores.	7	46 40	21 6	12	45	111	—	883	Passed the Island of Ascension W. by S., distant 13 leagues.
July 9	9, Land's End.	9	50 4	5 42	24	52	100	40	822	Crossed the Equator, in long. $23^{\circ} 17'$ W.
	10, Isle of Wight.									Lost the S. E. Trade, in lat. $1^{\circ} 52'$ N., & long. $23^{\circ} 44'$ W.
Total days 104 = 2496 hours.										NOTE. Captain Ward was delayed six days between the Trades, in consequence of frequent calms and light baffling airs (very smooth water the whole time).
					118	512	1655	211	12479	
					512	hours.				
					630*	Calms and light airs...				
5 June.										Entered the N. E. Trade, in lat. $7^{\circ} 30'$ N., & long. $28^{\circ} 10'$ W.
16 "										Lost the N. E. Trade, in lat. $25^{\circ} 47'$ N., & long. $40^{\circ} 16'$ W.
4 July.										Passed the Islands of Corvo and Flores E. by N., dist. 8 leagues.
9 "										Land's End was seen from the deck N. N. E. $\frac{1}{2}$ E.
10 "										Arrived off Dunnose, obtained a Pilot, and proceeded up Channel.

\* Total period of detention from calms and light airs, between Prinoes Island and England, 630h. =

26d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

**H. C. SHIP SCALEBY CASTLE, 1242 Tons, Captain JOHN HILLMAN, from CHINA towards ENGLAND.**

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles	REMARKS DURING THE VOYAGE HOMEWARD.
1833-34.										1833-34.
Nov. 18	18, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	Left Macao, with a fresh N. E. Monsoon, for Banca and Sunda Straits; at sunset, Poree Island East, 2 miles.
24		7	13 59	83 23	—	—	168	—	1257	Passed Pulo Pisang N. 85° W.; Pulo Aor N. 67° W.; and Pulo Tingy West.
Dec. 1		7	22 35	60 35	—	—	160	—	1330	
8		7	28 5	45 15	10	29	129	—	980	At noon, Pulo Lingin S. 40° W., and Domino Peak N. 82° W.
15		7	32 32	31 21	10	79	42	37	698	The Body of the Seven Islands S. 83° E., & Pulo Taya W. 4 m.
22	19, African Coast.	7	34 56	23 13	28	79	26	35	591	Entered Banca Strait with light easterly airs; Monopin Hill S. 33° E.
29	24, Gunner's Quoin.	7	25 27	4 10	—	18	150	—	1166	
Jan. 4	25, Cape Good Hope.	7	15 55	5 43 W.	—	23	121	—	749	<i>Notes. In consequence of faint airs prevailing, Monopin Hill remained in sight nearly four entire days; after which, alternate light airs and calms, with slight contrary currents, caused the Sledley Castle to be 12 Sea Logs clearing Sunda Strait.</i>
12	4, St. Helena.	6	8 57	12 52	—	14	106	—	554	
19	18, Equator.	5	3 2 N.	21 25	20	25	123	—	848	Left Sunda Strait: at sunset, Princes Island S. by E., and the Peak on Keyser's Island N. W.
26		7	8 20	28 44	—	79	79	10	529	Entered the S. E. Trade, in lat. 6° 31' S., & long. 104° 38' E.
Feb. 2		7	23 37	39 19	24	4	144	—	1149	Lost the S. E. Trade, in lat. 25° 8' S., & long. 54° 34' E.
9		7	35 42	36 40	11	59	48	56	766	Saw high land on the African Coast, from N. E. to N. N. W.
16		7	46 22	23 54	8	38	122	—	828	25 hours of these two days it was dead calm, and during the remainder light airs, the ship not making more than a knot an hour (smooth water all the time).
24	23, Lizard Point.	8	50 36	1 18	21	37	110	24	1043	25 hours of these two days it was dead calm, and during the remainder light airs, the ship not making more than a knot an hour (smooth water all the time).
	24, Isle of Wight.									Saw Cape Lagullas N. 74° E., & the Gunner's Quoin N. 22° E.
Total days 96	2304 hours.				132	484	1536	162	12488	Passed Cape Hanglip N. E., & Table Mountain N. N. W.
					484					Entered the S. E. Trade, in lat. 29° 20' S., & long. 8° 57' E.
										Arrived at St. Helena, and anchored off St. James's Town.
										Left St. Helena for England.
										Lost the S. E. Trade, in lat. 0° 17' S., & long. 20° 18' W.
										Crossed the Equator, in long. 20° 36' W.
										<i>Notes. Captain Hillman was only four days between the Trades; he had baffling winds and squally weather.</i>
										Entered the N. E. Trade, in lat. 3° 59' N., & long. 29° 47' W.
										Lost the N. E. Trade, in lat. 25° 17' N., & long. 40° 45' W.
										Saw Lizard Point N. by W., & proceeded up Channel.
										Arrived off the Isle of Wight, and received a Pilot on board.

\* Total period of detention from calms and light airs, between Java Head and England, 616 hours = 25d. 16h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WATERLOO, 1400 Tons, Captain WILLIAM R. BLAKELY, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1833.										
Dec. 9	9, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	20 Nov. Left Macao Roads for Banca and Sunda Straits, with a steady N.E. Monsoon, the Grand Ladrone N.E. by E. $\frac{1}{2}$ E.
15		7	16 21	83 42	—	1	167	—	1286	22 " Saw the high land of Cochlin from the deck S. W. $\frac{1}{2}$ W.
22		7	21 47	65 4	—	5	163	—	1061	27 " At daylight, Pulo Donar N. by E., & Pulo Aor due West.
29		7	27 50	45 42	4	7	157	—	1066	28 " Passed Pulo Panjang W. by N.; at noon Pulo Lingin S. W. by S.
1834.										29 " Passed Pulo Lingin & Pulo Taya, and entered Banca Strait; Monopin Hills S. W., Banca Isl. from E. N. E. to N. E. $\frac{1}{2}$ N.
Jan. 5	5, African Coast.	7	32 49	29 20	5	35	128	—	991	NOTE. Captain Blakely was 9 Sea Logs between the entrance of Banca Strait and Java Head, heaving, as usual, alternate calms, faint airs, and slight contrary currents (very smooth water the whole time).
12	6, Cape Natal.	7	33 4	19 6	40	45	34	49	582	Left Java Head homeward, with a fresh S. E. Trade.
19	12, Cape Hanglip.	6	25 0	7 31	4	17	99	24	781	Lost the S. E. Trade, in lat. 21° 8' S., & long. 67° 19' E.
25	25, St. Helena.	6	15 55	5 43 W.	—	3	141	—	926	9 Dec. Left Java Head homeward, with a fresh S. E. Trade.
Feb. 2	2, Ascension Island.	6	6 39	14 45	—	8	136	—	769	21 " 1834.
9	9, Equator.	7	0 17 N.	19 31	16	101	20	31	485	Saw distant land on the African Coast from N. N. E. to N. by W.
16		7	5 57	24 51	5	99	17	47	594	Extremes of the land about Cape Natal from N. by E. to N. W.
23		7	21 33	34 26	—	2	166	—	1142	Passed the Gunner's Quoin North, & Cape Hanglip S. 73° E.
March 2		7	33 47	36 10	6	31	82	49	796	Arrived in Table Bay, Cape of Good Hope, the Lighthouse N. W. by W.: anchored in 8 fathoms, 2 miles off shore.
9	5, Corvo and Flores.	7	45 13	17 28	10	35	123	—	1051	Left Cape Good Hope for St. Helena: Table Mountain S. by E.
16	19, Solly Islands.	7	49 25	8 49	4	68	64	32	665	Entered the S. E. Trade, in lat. 25° 0' S., & long. 7° 31' E.
21	21, Lizard Point.	5	49 58	5 11	—	7	80	33	710	Arrived at St. Helena, and anchored off St. James's Valley.
Total days	100 = 2400 hours.				94	464	1577	265	12905	Left St. Helena for England, the Church S. by W. $\frac{1}{2}$ W.
					464					Passed the Island of Ascension W. by N., about 12 miles.
										Lost the S. E. Trade, in lat. 2° 10' S., & long. 18° 55' W.
										Crossed the Equator, in long. 20° 10' W.
										NOTE. The Waterloo was 6 days between the Trades, with the usual vicissitudes of calms and light variable airs.
										Entered the N. E. Trade, in lat. 26° 50' N., & long. 20° 42' W.
										25 " Lost the N. E. Trade, in lat. 26° 3' N., & long. 36° 4' W.
										5 March. Saw the Island of Flores from the mast-head, N. W.
										19 " Saw St. Agnes' Lighthouse N. by E. $\frac{1}{2}$ E., 8 or 9 miles.
										21 " Arrived off the Lizard, the Lighthouses N. by E. $\frac{1}{2}$ E.

\* Total period of detention from calms and light airs, between Java Head and England, 558 hours = 23d. 6h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



## H. C. SHIP FARQUHARSON, 1406 Tons, Captain JOHN CRUICKSHANK, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1833.										1833-34.
Dec. 11	11, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	19 Nov. Left Macao Roads for Banca and Sunda Straits.
15		4	11 10	92 45	—	2	94	—	721	26 " Saw the Anambas E. S. E., and Pulo Donar S. 25° E.
22		7	20 14	74 17	—	—	168	—	1209	27 " Pulo Donar N. 29° E.; Anambas N. 54° E.; and Pulo
29		7	22 57	56 35	—	2	166	—	1008	Aor S. 88° W.
1834.										28 " Extremes of Pulo Lingin from S. 84° W. to N. 56° W.
Jan. 5										Pulo Taya S. 20° W.
12		7	31 30	33 9	—	22	146	—	1292	NOTE. The Farquharson was 15 Sea Logs between Pulo Aor and
19	13, African Coast.	7	34 52	23 42	9	82	21	56	682	Princes Island, with many hours calm, light airs (having very smooth
26	21, Gunner's Quoin.	7	35 46	20 53	10	110	—	48	472	water) and slight contrary currents throughout Banca & Sunda Straits.
31	22, Cape Good Hope.	7	26 16	4 55	3	38	100	27	1030	11 Dec. Passed Zee Clip Rock, Pulo Bessy, and Crookatoa Island:
Feb. 9	31, St. Helena.	5	15 55	5 43 W.	—	9	111	—	879	at 7h. P. M. cleared Princes Island, and at 9 passed Java
16	7, Ascension Island.	7	4 41	16 19	—	32	136	—	835	Head under all sail for St. Helena.
23	12, Equator.	7	4 21 N.	19 23	14	86	21	47	582	Entered the S. E. Trade, in lat. 7° 56' S., & long. 101° 51' E.
March 2		7	14 8	29 45	10	28	130	—	933	Lost the S. E. Trade, in lat. 29° 42' S., & long. 42° 44' E.
9		7	29 49	37 49	1	32	135	—	1022	Saw high land on the African Coast, North.
16		7	41 44	32 39	9	51	89	19	866	Saw distant land, just in sight from the poop, N. by E.
23		7	48 29	20 5	—	63	77	28	818	The Gunner's Quoin seen from the deck N. N. W. 4 W.
24	24, Start Point.	7	49 27	10 25	6	95	31	36	690	Crossed meridian of the Cape of Good Hope, in lat. 34° 10' S.
		1	50 36	1 18	—	—	24	—	433	Entered the S. E. Trade, in lat. 30° 10' S., & long. 13° 14' E.
										Arrived at St. Helena; anchored off St. James's Town.
										Left St. Helena for England.
										Passed Ascension Island, just discernible, S. E. by E. 1 E.
										Lost the S. E. Trade, in lat. 0° 34' S., & long. 19° 2' W.
										Crossed the Equator, in long. 19° 18' W.
Total days 101 = 2424 hours.										NOTE. Captain Cruickshank was delayed 7 days between the S. E. and
										N. E. Trades, with the usual calms and light variable airs prevalent
										in that locality.
										18 " Entered the N. E. Trade, in lat. 5° 10' N., & long. 21° 14' W.
										28 " Lost the N. E. Trade, in lat. 27° N., & long. 36° 13' W.
										24 March. Saw Start Point; at noon, St. Catherine's Point on the
										Isle of Wight N. N. E., and proceeded up Channel.

\* Total period of detention from calms and light airs, between Java Head and England, 714 hours = 29d. 18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP LADY MELVILLE, 1350 Tons, Captain THOMAS SHEPHERD, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log. in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1833.										1833.
Dec. 28	28, Java Head.	—	6 43 S.	105 11 E.	—	—	—	—	—	Left Lintin for Banca and Sunda Straits : at noon, Poloe from the deck S. by W., and Cabaretta Point N. W. by W.
1834.										4 Dec.
Jan. 5		8	16 19	85 0	32	28	100	32	1135	High Mountain on Hainan N. W. by N.
12		7	25 4	66 4	—	2	166	—	1239	Passed Buffalo Island S. W. by S. : at noon, Black Rock W. $\frac{1}{2}$ N.
19		7	30 9	45 23	—	5	163	—	1013	Saw Pulo Aur from the poop W. by N. $\frac{1}{2}$ N.
26	28, African Coast.	7	34 16	27 53	1	41	100	26	933	At noon, East Domino W. $\frac{1}{2}$ N., and Lingim Peak W. S. W.
31, Cape Good Hope.		7	28 41	9 58	1	28	139	—	1126	NOTE. The Lady Melville was 11 Sea Logs between Lingim and Princes Island, with the usual alternations of faint airs, calms, and slight contrary currents : (the water remarkably smooth the whole way).
9		7	17 42	3 23	—	24	120	24	828	At sunset, Princes Island E. by S. $\frac{1}{2}$ S., and Crookatoa Peak E. by N.
11	11, St. Helena.	2	15 55	5 43 W.	3	10	35	—	144	Entered the S. E. Trade, in lat. 8° 18' S., & long. 102° 34' E.
16	16, Ascension Island.	5	7 8	14 53	2	2	98	18	749	1834.
23	22, Equator.	7	1 3 N.	21 52	2	64	71	31	691	Lost the S. E. Trade, in lat. 24° 57' S., & long. 73° 8' E.
March 2		7	9 54	30 13	9	66	80	13	647	Saw the land on the Coast of Africa from N. E. to N. W. by N.
9		7	23 28	41 4	6	16	146	—	930	High land seen from the poop from N. E. by N. to N. $\frac{1}{2}$ E.
16		7	30 8	42 48	9	71	60	28	591	Saw the Cape of Good Hope E. by N. $\frac{1}{2}$ N.
23		7	41 55	35 7	—	54	100	14	832	Entered the S. E. Trade, in lat. 28° 41' S., & long. 9° 58' E.
30		7	48 14	10 0	2	16	150	—	1024	Arrived at St. Helena : anchored off St. James's Town.
April 1	1, Lizard Point.	2	49 53	5 11	—	2	46	—	104	Left St. Helena for England.
Total Days 94 = 2256 hours.					67	429	1574	186	11986	Passed the Island of Ascension, seen from the deck W. by S.
					429					Lost the S. E. Trade, in lat. 1° 59' S., & long. 19° 35' W.
										Crossed the Equator, in long. 21° 10' W.
										NOTE. Captain Shepherd experienced a detention of six days between the S. E. and N. E. Trades, arising from calms and light variable airs (smooth water the whole time).
										Entered the N. E. Trade, in lat. 5° 14' N., & long. 23° 5' W.
										12 March. Lost the N. E. Trade, in lat. 26° 5' N., & long. 45° 37' W.
										1 April. Saw the Lizard, passed Portland Bill, and received a Pilot.

\* Total period of detention from calms and light airs, between Java Head and England, 496 hours = 20d. 16h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

**H. C. SHIP HEREFORDSHIRE, 1354 Tons, Captain ROBERT FOORD, from CHINA towards ENGLAND.**

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1834.										1833.
Jan. 1	1, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	13 Dec. Left Macao Roads for Banca and Sunda Straits.
5		5	14 37	86 35	—	11	60	49	797	14 " Passed the Island of Potoe East, distant 3 miles.
12		7	23 26	64 25	—	—	168	—	1357	17 " Saw Pulo Sapata, just discernible from the deck, W. by N.
19	28, African Coast.	7	29 10	46 7	—	5	163	—	1097	20 " At daylight, Pulo Timooan S. 57° W., and Pulo Aor S. 22° W.
26	29, Cape Lagullas.	7	33 24	29 52	1	51	100	16	853	21 " At sunset, Pulo Aor W. by S. $\frac{1}{2}$ S.
Feb. 2	31, Cape Good Hope.	7	30 36	11 48	6	35	100	27	890	NOTE. The Herefordshire succeeded in reaching Java Head from Pulo Aor in 9 Sea Logs, having occasional calms, with faint airs and slight contrary currents (very smooth water all the time).
9		7	19 16	2 1 W.	—	22	146	—	1001	31 " At 5h. P. M., passed Crockatoa Island, the Peak N. 54° E.
11	12, St. Helena.	2	15 55	5 43	—	7	41	—	288	1834.
16	17, Ascension Island.	4	9 27	12 30	1	4	91	—	560	1 Jan. Passed Princes Island E. N. E., and Java Head N. by E. $\frac{1}{2}$ E.
23	21, Equator.	7	3 3 N.	20 24	33	22	113	—	1042	2 " Entered the S. E. Trade, in lat. 11° 10' S., & long. 96° 48' E.
March 2		7	7 7	25 18	14	93	—	61	506	16 " Lost the S. E. Trade, in lat. 26° 31' S., & long. 53° 16' E.
9		7	19 57	36 37	—	12	156	—	1026	28 " Saw high land on the African Coast N. E., 14 or 15 leagues.
16		7	25 23	43 3	43	77	—	48	450	29 " Saw Cape Lagullas N. N. W. $\frac{1}{2}$ W., distant about 5 leagues.
23		7	38 20	37 19	6	35	102	25	973	31 " Rounded the Cape of Good Hope, in lat. 34° 50' S., and long. 18° 10' E.
30		7	48 48	9 16	3	8	157	—	1202	3 Feb. Entered the S. E. Trade, in lat. 28° 18' S., & long. 9° 14' E.
April 1	1, Isle of Wight.	2	50 36	1 18	—	9	39	—	302	12 " Arrived at St. Helena, and anchored off St. James's Valley.
Total days 90 = 2160 hours.										13 " Left St. Helena for England.
										17 " Saw the Island of Ascension from the deck, W. N. W.
										21 " Crossed the Equator, in long. 19° 28' W.
										23 " Lost the S. E. Trade, in lat. 3° 3' N., & long. 20° 24' W.
										NOTE. Captain Foord was only three days between the S. E. & N. E. Trades, with light airs and smooth water.
										26 " Entered the N. E. Trade, in lat. 5° 11' N., & long. 20° 18' W.
										14 March. Lost the N. E. Trade, in lat. 24° 44' N., & long. 43° 17' W.
										1 April. Saw the Island of Alderney; arrived off the Isle of Wight, and obtained a Pilot.

• Total period of detention from calms and light airs, between Java Head and England, 498 hours = 20d. 18h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

H. C. SHIP MARQUIS HUNTLY, 1348 Tons, Captain JOHN HINE, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1834.										
Jan. 1	1, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	1833.
5		5	16 44	90 13	—	—	100	20	813	Left Macao Roads for Banca and Sunda Straits.
12		7	23 13	68 13	1	2	165	—	1245	Extremes of Pulo Canton from W. by N. to S. by W.
19		7	28 25	50 49	—	17	138	13	945	Saw Pulo Aor from the deck, S. W. by S.
26	29, African Coast.	7	32 0	31 35	—	9	159	—	1036	At noon, Ragged Island W. N. W., Saddle Hill W. by S., and Pulo Panjang N. W.
Feb. 2	30, Cupola Mountain.	7	34 22	18 24	4	35	100	29	735	" Pulo Taya N. $\frac{1}{2}$ W., and the high land of Banca S. by E.
23	2, Cape Good Hope.	9	19 7	1 13	9	37	147	23	1291	At daylight, Monopin Hill seen S. E. E.
26	26, St. Helena.	3	15 55	5 43 W.	—	3	69	—	337	<i>NOTE. The Marquis Huntly was 11 Sea Logs from the Frederick Hendrick Roads to Princes Island, having frequent calms and light airs (smooth water all the time).</i>
March 9	9, Equator.	8	0 50 N.	18 11	—	10	182	—	1026	At sunset, Crookatoa Peak E. by N. $\frac{1}{2}$ N., & Keyser's Island N. N. E. $\frac{1}{2}$ E.
16		7	4 38	21 17	26	102	—	40	377	1834.
23		7	16 54	34 51	—	—	168	—	1146	Entered the S. E. Trade, in lat. 10° 29' S., & long. 100° 39' E.
30		7	30 30	41 24	—	13	155	—	922	Lost the S. E. Trade, in lat. 25° 57' S., & long. 57° 40' E.
April 6	9, Corvo and Flores.	7	36 10	39 44	2	89	30	47	387	Saw the high land on the African Coast N. by E.
13		7	45 52	21 10	—	4	164	—	1184	Saw Table Hills N. N. W., Cupola Mountain N. W., and Cape Vaches N. by W.
20	26, Eddystone.	7	49 49	9 51	7	75	47	39	557	Passed the Sand Hills N. E. of Cape Lagullas.
27	27, Berry Head.	7	50 24	3 28	—	74	70	24	645	Arrived at Table Bay, Cape of Good Hope.
Total days 102 = 2448 hours.										Left the Cape of Good Hope for England.
										Entered the S. E. Trade, in lat. 25° 49' N., & long. 8° 45' E.
										26 Anchored off James Town, St. Helena, the Church S. by W. $\frac{1}{2}$ W.
										9 March. Crossed the Equator, in lat. 18° 11' W.
										10 " Lost the S. E. Trade, in lat. 2° 6' N., & long. 18° 37' W.
										<i>NOTE. Captain Hine experienced five days' delay between the Trades, from frequent calms and light variable airs (very smooth water all the time).</i>
										15 " Entered the N. E. Trade, in lat. 4° 17' N., & long. 10° 43' W.
										29 " Lost the N. E. Trade, in lat. 30° 21' N., & long. 42° 22' W.
										9 April. Saw Corvo and Flores; passed within 2 miles of the latter.
										26 " Passed Eddystone Light E. by S. $\frac{1}{2}$ S.; saw Ramehead N. E. $\frac{1}{2}$ E.
										27 " Arrived off Berry Head, and received a Pilot on board.

\* Total period of detention from calms and light airs, between Java Head and England, 519 hours = 21d. 15h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP WARREN HASTINGS, 1068 Tons, Captain THOMAS SANDYS, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1834.										1833.
Jan. 11	11, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	25 Dec.
19		9	14 13	97 37	6	100	74	36	902	31 "
26		7	21 38	76 46	—	—	168	—	1266	1834.
Feb. 2		7	24 48	59 43	—	34	107	27	947	2 Jan.
9		7	29 58	40 16	2	29	137	—	1090	4 "
16	17, Cape St. Blaize.	7	35 40	22 47	—	50	95	23	897	7 "
23	20, Gunner's Quoin.	7	32 39	14 39	9	56	62	41	683	9 "
March 2	22, Cape Good Hope.	7	21 53	0 34	—	20	148	—	981	"
6	6, St. Helena.	4	15 55	5 43 W.	7	6	83	—	511	"
16	13, Ascension Island.	8	2 9	18 48	—	4	155	33	1097	11 "
23	20, Equator.	7	2 50 N.	24 42	10	127	—	31	541	16 "
30		7	14 34	38 31	2	9	157	—	1074	17 "
April 6		7	28 18	42 0	3	21	131	13	906	19 "
13		7	41 59	29 5	1	15	152	—	1080	20 "
20		7	49 1	12 1	—	25	130	13	905	22 "
27	27, Eddystone.	7	49 51	7 11	2	91	41	34	603	26 "
30	30, Dover Roads.	3	51 8	1 19 E.	3	7	47	15	413	9 "
Total Days 108 = 2592 hours.					45	594	1687	266	13896	13 "
					594					or 11 miles.
					639*					Lost the S. E. Trade, in lat. 0° 47' S., & long. 20° 33' W.
					639*					Crossed the Equator, in lon. 21° 24' W.

Calms and light airs... hours.

\* Total period of detention from calms and light airs, between Java Head and England, 639 hours = 22d. 11h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

NOTE. Captain Sandys was detained five days between the Trades with the usual calms and light baffling airs: (smooth water all the time).

Entered the N. E. Trade, in lat. 9° 20' N., & long. 26° 28' W.  
Lost the N. E. Trade, in lat. 25° 40' N., & long. 41° 39' W.  
Passed St. Mary's (Scilly), and saw the Eddystone N. E.  
Anchored in Dover Roads, and received a Pilot on board.

## H. C. SHIP VANSITTART, 1311 Tons, Captain ROBERT SCOTT, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1834.										1833.
Jan. 11	11, Java Head.	—	6 43 S.	105 11 E.	—	—	—	—	—	Left Macao Roads for Gaspar and Sunda Straits.
19	16, Christmas Island.	9	13 33	96 26	26	99	42	49	750	Passed North Natuna bearing East, & Saddle Island E. by N.
26		7	22 14	75 3	—	—	168	—	1146	<i>Note.</i> The Vansittart was 11 Sea Logs in clearing the Straits from Saddle Island to Java Head, with the usual faint airs, calms, and slight contrary currents, generally experienced at all seasons.
Feb. 2		7	27 53	55 51	—	11	157	—	1080	1834.
9	13, Cape Good Hope.	7	33 46	32 2	—	—	168	—	1213	
16		7	30 45	11 52	4	31	100	34	956	
23		7	20 49	0 16 W.	—	56	112	—	847	11 Jan. At 8h. P.M., Princes Island N. E., and Java Head N. N. E.
March 2	1, St. Helena.	5	12 42	8 54	4	9	107	—	690	Entered the S. E. Trade, in lat. 10° 7' S., & long. 104° 20' E.
9	6, Ascension Island.	7	0 12 N.	29 9	—	—	123	45	978	Saw Christmas Island from the mast-head, South.
16	9, Equator.	7	4 16	24 33	11	118	—	39	448	Lost the S. E. Trade, in lat. 26° 23' S., & long. 61° 45' E.
23		7	19 5	36 10	—	—	168	—	1132	Saw the Cape of Good Hope S. E. by S., and the Lion's Rump N. E. $\frac{1}{2}$ E., distance off shore about 10 or 11 miles.
30		7	32 14	41 4	5	37	100	26	880	At daylight, Table Mountain S. E. $\frac{1}{4}$ E.
6		7	37 28	40 13	1	124	—	43	477	Entered the S. E. Trade, in lat. 26° 28' S., & long. 8° 52' E.
13		7	45 52	20 19	3	20	145	—	1124	Anchored in St. Helena Roads, off St. James's Valley.
20	23, St. Agnes Light.	7	48 52	12 30	—	50	88	30	689	Left St. Helena for England.
29	29, Isle of Wight.	9	50 36	1 18	—	39	158	19	1078	1 March. The Island of Ascension just discernible, E. N. E.
Total days 107 = 2568 hours.										6 " Crossed the Equator, in long. 19° 29' W.
										9 " Lost the S. E. Trade, in lat. 2° 14' N., & long. 21° 6' W.
										11 " <i>Captain Scott was only four days between the Trades.</i>
										<i>Note.</i>
										15 " Entered the N. E. Trade, in lat. 3° 40' N., & long. 22° 52' W.
										26 " Lost the N. E. Trade, in lat. 25° 50' N., & long. 38° 30' W.
										28 April. At midnight, St. Agnes Light seen, N. by E. $\frac{1}{2}$ E. 8 miles.
										29 " Passed Portland Bill N. by E., and St. Catherine's Point N. $\frac{1}{4}$ E.: received a Pilot on board, and proceeded up Channel.

\* Total period of detention from calms and light airs, between Java Head and England, 648 hours = 27 days, during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP PRINCE REGENT, 992 Tons, Captain RICHARD APLIN, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1834.										
Feb. 11	11, Princes Island.	—	6 35 S.	105 15 E.	—	—	—	—	—	Left Macao for the Straits of Gaspar and Sunda.
16		6	13 16	96 32	—	40	86	18	711	Entered the N. E. Monsoon, in lat. 18° 45' N., & long. 111° 14' E.
23		7	20 15	77 14	—	5	163	—	1164	NOTE. The Prince Regent, after running down the China Sea with a favourable Monsoon, entered the Straits of Gaspar on the 2d of February, making Flat Island; from passing which, to clearing Java Head, 10 days were employed.
March 2		7	25 41	58 49	—	29	139	—	1096	
9		7	29 48	41 36	—	36	115	17	952	
16	18, Cape Good Hope.	7	36 2	22 41	—	56	98	14	930	Left Princes Island, the Peak S. W. $\frac{1}{2}$ S., & Crockett N.
23		7	23 54	2 57 W.	—	24	144	—	1271	Entered the S. E. Trade, in lat. 8° 29' S., & long. 102° 32' E.
29	29, St. Helena.	6	15 55	5 43	3	28	113	—	674	Lost the S. E. Trade, in lat. 20° 15' S., & long. 77° 5' E.
April 6	4, Ascension Island.	6	4 9	18 5	—	—	144	—	1144	Saw Table Mountain N. 42° E., & Cape Good Hope N. 60° E.
13	12, Equator.	7	0 15 N.	23 1	18	95	19	36	478	Entered the S. E. Trade, in lat. 27° 46' S., & long. 8° 3' E.
20		7	4 34	28 15	29	65	27	47	564	Arrived at St. Helena, and anchored off St. James's Valley.
27		7	21 33	40 0	—	—	168	—	1157	Left St. Helena for England, having a steady Trade.
May 4		7	34 8	36 43	5	56	90	17	827	Passed the Island of Ascension N. W. by N.
11		7	45 28	20 34	—	23	145	—	1117	Lost the S. E. Trade, in lat. 2° 46' S., & long. 19° 52' W.
16	16, Berry Head.	5	50 24	3 28	—	5	115	—	834	Crossed the Equator, in long. 22° 52' W.
Total days 93 = 2232 hours.					55	462	1566	149	12919	NOTE. Captain Aplin had a series of alternate calms and light variable airs between the Trades, which continued during the period of 11 days, with smooth water the whole time.
Calms and light airs... hours.										
18					462					Entered the N. E. Trade, in lat. 3° 15' N., & long. 25° 12' W.
29					517*					Lost the N. E. Trade, in lat. 25° 4' N., & long. 41° 3' W.
14 May.										Sounded ground, 75 fathoms, brown sand and shells.
16										Saw Berry Head N. by E., Start Point N. W. by N.; at 8 A. M., the Isle of Alderney S. $\frac{1}{2}$ W., and the Casquets S. W. by S., distant 6 or 7 miles.
17										At 10h. A. M. Beachy Head North: received a Pilot on board.

\* Total period of detention from calms and light airs, between Princes Island and England, 517 hours = 21d. 13h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.

## H. C. SHIP BUCKINGHAMSHIRE, 1369 Tons, Captain CHARLES SHEA, from CHINA towards ENGLAND.

Date.	Situation.	Days.	Latitude by Obs.	Longitude by Chro.	Hours dead Calm.	Hours light Airs.	Hours fair Wind.	Hours foul Wind.	Distance per Log in Miles.	REMARKS DURING THE VOYAGE HOMEWARD.
1834.										1834.
Feb. 16	16, Java Head.	—	6 48 S.	105 11 E.	—	—	—	—	—	Left Macao for Gaspar and Sunda Straits, with a steady N. E. Monsoon : at noon, Grand Ladrone E. N. E.
23		8	15 13	93 56	31	69	70	22	858	At 4h. 40m. P. M. passed Pulo Sapata North, dist. 7 or 8 m.
March 2		7	21 43	77 26	1	4	144	19	1058	At noon, Saddle Island S. S. W., & Great Tumbelan S. E. by S.
9		7	25 3	61 29	13	40	100	15	856	At daylight, St. Barbe just seen N. E. by E. $\frac{1}{2}$ E., about 10 leagues.
16	19, African Coast.	7	31 4	39 52	—	12	156	—	1230	At noon, Pulo Leat E. S. E., West Island S. S. E. $\frac{1}{2}$ E., Tanjong
23	22, Cape Buffalo.	7	35 6	24 30	10	49	74	35	811	Brekat N. W. by N.
30		7	28 3	8 55	10	32	126	—	1028	the Brothers, from the deck, S. $\frac{1}{2}$ E., & Knob Hill S. W. $\frac{1}{2}$ S.
April 6	6, St. Helena.	7	15 55	5 43 W.	2	6	160	—	1055	the Burton E. by S. $\frac{1}{2}$ S., Strom Rock S. $\frac{1}{2}$ W., and Zurphen Island S. W.
13	14, Ascension Island.	4	8 46	14 31	—	1	95	—	667	Keyser's Point N. by E., Crookston E. by N. $\frac{1}{2}$ N.
20	19, Equator.	7	1 26 N.	23 0	5	69	80	14	789	At daylight, high land over Java Head, just seen from the
27	27, Cape Good Hope.	7	10 57	37 19	1	9	138	20	1004	poop E. by N. $\frac{1}{2}$ N.
May. 4		7	24 50	41 45	2	36	92	38	898	Entered the S. E. Trade, in lat. 20° 51' S., & long. 80° 13' E.
11		7	36 41	40 52	4	24	121	19	992	Lost the S. E. Trade, in lat. 28° 11' S., & long. 47° 31' E.
18		7	44 40	21 6	—	52	89	27	981	Saw high land on the Coast of Africa, N. by W. to N. W.
25		7	48 36	14 19	—	41	97	30	834	Saw the land about Cape Buffalo from North to N. N. E.
June 1		7	49 29	8 26	1	72	80	15	722	Crossed the meridian of the Cape of Good Hope, in lat. 34° 50' S.
2	2, Lizard Point.	1	49 58	5 11	—	11	13	—	109	Entered the S. E. Trade, in lat. 28° 3' S., & long. 8° 55' E.
										Arrived at St. Helena, and anchored off St. James's Valley.
										Left St. Helena for England.
										At sunset passed the Island of Ascension, E. N. E.
										Lost the S. E. Trade, in lat. 0° 42' S., & long. 21° 18' W.
										Crossed the Equator, in long. 22° 11' W.
										NOTE. Captain Shea was only 3 days between the Trades, having light variable airs and occasional squalls.
										Entered the N. E. Trade, in lat. 2° 17' N., & long. 24° 35' W.
										Lost the N. E. Trade, in lat. 23° 36' N., & long. 41° 58' W.
										Passed Scilly Islands, & saw the Lizard Lighthouses N. E. $\frac{1}{2}$ E.

\* Total period of detention from calms and light airs, between Java Head and England, 608 hours = 25d. 8h., during which, the occasional application of steam-power, as an auxiliary aid, would have been advantageous.



**A TABLE SHEWING THE AVERAGE NUMBER OF DAYS OCCUPIED BY THE HONOURABLE COMPANY'S SHIPS IN PERFORMING PASSAGES TO AND FROM THE PRINCIPAL PORTS IN INDIA, DURING THE DIFFERENT PERIODS OF THE MONSOONS; CONSTRUCTED FROM FIFTY JOURNALS.**

*By James Horsburgh, Esq., F. R. S., Hydrographer to the East India Company.*

**THIS DIVISION OF THE TABLE IS DURING THE S. W. MONSOON.**

FROM THE PORT OF CALCUTTA.	Madras.		Ceylon.		Bombay.		Mauritius.		Cape.		Rangoon.		Penang.		Bencoolen.		Java.		Amboyna.		Manilla.		China.		Return.		P. Jackson.		Return.		Bussorah.		Return.	
	Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.		Return.	
APRIL.....	20	12	30	20	60	30	60	49	70	59	14	10	30	20	40	30	45	35	55	45	70	60	70	66	90	70	90	66	90	70	90	66	90	45
MAY .....	25	9	35	18	65	30	65	35	75	45	15	9	40	16	50	28	55	33	65	43	80	58	86	64	110	66	95	64	110	66	95	64	110	45
JUNE .....	35	8	45	15	70	20	65	30	75	40	18	8	40	18	50	28	55	33	65	43	80	58	86	64	110	66	100	64	110	66	100	64	110	40
JULY .....	35	8	45	15	75	20	70	30	80	40	18	8	40	18	50	28	55	33	65	43	80	58	86	64	110	66	100	64	110	66	100	64	110	40
AUGUST.....	25	10	40	18	75	24	65	33	75	45	16	9	35	20	45	30	50	35	60	45	75	60	81	66	100	70	100	66	100	70	100	66	100	45
SEPTEMBER .....	22	12	30	20	70	30	60	49	70	59	14	10	30	20	40	30	45	35	55	45	70	60	76	66	90	70	95	66	90	70	95	66	90	50

**THIS DIVISION OF THE TABLE IS DURING THE N. E. MONSOON.**

OCTOBER .....	15	20	25	30	50	50	49	55	59	65	12	12	20	25	30	35	35	40	45	50	60	65	66	71	70	80	85	60
NOVEMBER .....	12	25	20	35	40	55	40	60	50	70	10	14	20	30	30	40	35	45	45	55	60	70	66	76	70	90	70	70
DECEMBER .....	8	30	15	48	30	65	30	70	40	80	9	18	18	40	28	50	33	55	43	65	58	80	64	86	66	100	60	90
JANUARY .....	8	35	15	45	25	75	30	70	40	80	8	18	18	45	28	55	33	60	43	70	58	95	64	100	66	120	40	100
FEBRUARY.....	10	30	18	40	30	70	35	65	45	75	10	14	18	40	28	50	33	55	43	65	58	90	64	100	66	120	45	100
MARCH .....	15	20	20	30	30	55	40	60	55	70	12	14	20	30	30	40	35	45	50	55	65	85	70	89	70	95	50	95

## GENERAL ABSTRACT OF VOYAGES OUTWARD.

## FROM ENGLAND TO BOMBAY HARBOUR.

Page.	Year.	SHIPS' NAMES.	Days between the Trades.	Hours calm and light Airs.	Hours fair Wind.	Hours foul Wind.	Total Hours during the Voyage.	Total Dist. per Log in Miles.
1	1791	Taunton Castle .....	6	938	1389	409	2736	12924
2	1808	Winchelsea .....	7	824	1621	147	2592	12820
3	1813	James Sibbald .....	16	1141	1845	110	3096	14146
4	1822	Dunira .....	8	910	1674	392	2976	14045
5	1824	Castle Huntly .....	10	813	1037	910	2760	12382
6	1829	Buckinghamshire .....	10	1311	1378	359	3048	13479
7	1832	Duchess of Athol .....	5	642	1659	229	2520	14139
8	—	Orwell .....	6	666	1619	225	2520	14017
9	1833	Marquis of Huntley .....	7	1068	1455	309	3832	13344
10	—	Herefordshire .....	12	828	1529	235	2592	13153
11	—	Farquharson .....	9	624	1486	218	2328	13701
12	—	Lady Melville .....	10	647	1529	128	2304	12942
12 )			106	10412	18221	3671	33304	161092
Average Hours .....				868	1518	306	2775	13424
" Days and Hours.			d. h. 8 20	d. h. 36 4	d. h. 63 6	d. h. 12 18	d. h. 115 15	

## FROM ENGLAND TO MADRAS ROADS.

Page.	Year.	SHIPS' NAMES.	Days between the Trades.	Hours calm and light Airs.	Hours fair Wind.	Hours foul Wind.	Total Hours during the Voyage.	Total Dist. per Log in Miles.
13	1817	William Pitt .....	3	797	1600	219	2616	13333
14	1819	Windsor .....	8	756	1526	166	2448	14266
15	1821	Marquis of Wellington .....	9	798	1636	182	2616	14267
16	1822	Asia .....	11	637	1599	332	2568	14033
17	1824	Asia .....	12	462	1595	243	2400	13813
18	—	Rose .....	17	726	1595	223	2544	12294
19	1830	Castle Huntly .....	15	834	1636	218	2688	14435
20	1833	Buckinghamshire .....	10	835	1587	218	2640	13849
21	—	Warren Hastings .....	12	760	1516	244	2520	14171
9 )			97	6605	14290	2045	23040	124461
Average Hours .....				734	1588	227	2560	13629
" Days and Hours.			d. h. 10 19	d. h. 30 14	d. h. 66 4	d. h. 9 12	d. h. 106 16	

## GENERAL ABSTRACT OF VOYAGES OUTWARD.

## FROM ENGLAND TO BENGAL.

Page.	Year.	SHIPS' NAMES.	Days between the Trades.	Hours calm and light Airs.	Hours fair Wind.	Hours foul Wind.	Total Hours during the Voyage.	Total Dist. per Log in Miles.
22	1818	Castle Huntly .....	10	494	1676	230	2400	14914
23	—	Dunira .....	11	440	1849	111	2400	14628
24	—	Asia .....	12	663	1600	305	2568	14190
25	1820	Asia .....	13	932	1623	325	2880	14750
26	1831	Thames .....	8	631	1605	380	2616	14327
27	—	Repulse.....	11	582	1457	265	2304	13814
28	1832	William Fairlie .....	6	830	1466	416	2712	14147
29	—	Reliance .....	10	609	1463	256	2328	13986
30	—	Sir David Scott .....	8	693	1753	290	2736	15345
31	1833	Vansittart .....	9	545	1600	183	2328	13948
10) Average Hours .....			98	6419	16092	2761	25272	144049
				642	1609	276	2527	14405
			d. h.	d. h.	d. h.	d. h.	d. h.	
" Days and Hours.			9 19	26 18	67 1	11 12	105 7	

## FROM ENGLAND TO CHINA.\*

Page.	Year.	SHIPS' NAMES.	Days between the Trades.	Hours calm and light Airs.	Hours fair Wind.	Hours foul Wind.	Total Hours during the Voyage.	Total Dist. per Log in Miles.
48	1793	Lord Thurlow.....	14	613	1768	211	2592	13950
49	1821	Windsor .....	7	533	1631	136	2400	14161
50	—	Bombay .....	13	741	1405	230	2376	12933
51	1823	Charles Grant .....	8	594	1590	264	2448	13125
52	1831	Duke of York .....	10	386	1648	198	2232	14220
53	—	Scaleby Castle .....	7	517	1653	230	2400	14283
54	1832	Earl of Balcarras.....	11	351	1495	228	2064	12785
55	1833	Prince Regent.....	9	576	1741	203	2520	15064
56	—	Rose .....	8	850	1493	321	2664	14036
57	—	Scaleby Castle .....	7	401	1447	240	2088	12823
10 ) Average Hours .....			94	5562	15871	2261	23784	137380
				556	1587	226	2378	13738
			d. h.	d. h.	d. h.	d. h.	d. h.	
" Days and Hours .			9 10	23 4	66 3	9 10	99 2	

\* *Id est*, as far as the "STRAITS," outward-bound.

GENERAL ABSTRACT OF VOYAGES THROUGH THE VARIOUS STRAITS  
TO AND FROM CHINA.

VOYAGES OUTWARD.

Page.	Year.	SHIPS' NAMES.	Straits passed through.	Days.
1	1791	Taunton Castle .....	Malacca and Singapore ...	21
7	1832	Duchess of Athol .....	" " ...	15
8	—	Orwell .....	" " ...	17
9	1833	Marquis of Huntly .....	" " ...	17
14	1819	Windsor .....	" " ...	20
22	1818	Castle Huntly .....	" " ...	22
23	—	Dunira .....	" " ...	19
26	1831	Thames .....	" " ...	12
27	—	Repulse .....	" " ...	13
28	1832	William Fairlie .....	" " ...	17
29	—	Reliance .....	" " ...	21
30	—	Sir David Scott .....	" " ...	12
31	1833	Vansittart .....	" " ...	17
32	1808	Winchelsea .....	" " ...	22
33	1822	Dunira .....	" " ...	25
34	1824	Castle Huntly .....	" " ...	20
35	1829	Buckinghamshire .....	" " ...	21
36	1830	Castle Huntly .....	" " ...	18
37	1833	Farquharson .....	" " ...	20
38	—	Lady Melville .....	" " ...	19
39	—	Herefordshire .....	" " ...	21
40	—	Warren Hastings .....	" " ...	22
41	—	Buckinghamshire .....	" " ...	22
42	1819	Dunira .....	Gaspar and Sunda .....	28
43	1820	William Pitt .....	" " ...	30
47	1819	William Pitt .....	Malacca and Singapore ...	22
48	1793	Lord Thurlow .....	Sunda and Banca .....	14
49	1821	Windsor .....	Sunda and Gaspar .....	11
50	—	Bombay .....	" " ...	16
51	1823	Charles Grant .....	Malacca and Singapore ...	14
52	1831	Duke of York .....	Sunda and Gaspar .....	13
53	—	Scaleby Castle .....	" " ...	10
54	1832	Earl of Balcarras .....	" " ...	7
55	1833	Prince Regent .....	Malacca and Singapore ...	20
56	—	Rose .....	" " ...	14
57	—	Scaleby Castle .....	Sunda and Gaspar .....	10

GENERAL ABSTRACT OF VOYAGES THROUGH THE VARIOUS STRAITS  
TO AND FROM CHINA.

VOYAGES HOMEWARD.

Page.	Year.	SHIPS' NAMES.	Straits passed through.	Days.
58	1792	Tannton Castle .....	Banca and Sunda.....	16
59	1794	Lord Thurlow .....	" " ...	19
60	1805	Ceres .....	Malacca and Singapore ...	16
61	1808	Walmer Castle.....	" " ...	12
62	1809	Winchelsea .....	" " ...	14
66	1819	Castle Huntly .....	Gaspar and Sunda .....	12
67	—	Dunira .....	" " ...	28
69	1820	Windsor .....	" " ...	11
70	—	William Pitt .....	" " ...	30
71	1821	Asia .....	" " ...	10
72	—	Bombay.....	Banca and Sunda.....	14
74	1822	Windsor .....	Gaspar and Sunda .....	6
76	1825	Castle Huntly .....	" " ...	11
79	1830	Buckinghamshire.....	" " ...	17
80	1831	Castle Huntly .....	" " ...	10
81	—	Thames.....	Banca and Sunda.....	13
82	—	Repulse.....	" " ...	11
83	1832	Duke of York .....	Gaspar and Sunda .....	7
84	—	Orwell .....	Banca and Sunda.....	13
85	—	Duchess of Athol.....	Gaspar and Sunda .....	13
86	1833	Edinburgh .....	" " ...	9
87	—	William Fairlie .....	" " ...	10
88	—	Earl of Balcarras .....	" " ...	10
89	—	Reliance .....	" " ...	15
90	—	Sir David Scott .....	" " ...	11
91	—	Scaleby Castle .....	Banca and Sunda.....	15
92	1834	Waterloo .....	" " ...	12
93	—	Farquharson.....	" " ...	15
94	—	Lady Melville .....	" " ...	13
95	—	Herefordshire .....	" " ...	10
96	—	Marquis Huntly .....	" " ...	14
97	—	Warren Hastings.....	Gaspar and Sunda .....	5
98	—	Vansittart.....	" " ...	4
99	—	Prince Regent.....	" " ...	11
100	—	Buckinghamshire.....	" " ...	3

GENERAL ABSTRACT OF VOYAGES FROM INDIA AND CHINA  
TOWARDS ENGLAND.

Page.	Year.	SHIPS' NAMES.	Days between the Trades.	Hours calm and light Airs.	Hours fair Wind.	Hours foul Wind.	Total Hours during the Voyage.	Total Dist. per Log in Miles.
58	1792	Taunton Castle .....	7	835	1452	377	2664	13159
59	1794	Lord Thurlow.....	15	1151	1564	357	3072	13327
60	1805	Ceres.....	15	1774	1487	267	3528	13419
61	1808	Walmer Castle .....	14	1603	1630	341	3576	13115
62	1809	Winchelsea .....	14	1714	1451	387	3552	13962
63	1812	Batavia.....	10	1834	1446	488	3768	14988
64	1813	James Sibbald .....	7	1437	1722	393	3552	13476
65	1817	William Pitt .....	13	1234	1505	381	3120	14016
66	1819	Castle Huntly .....	7	1073	1332	403	2808	12682
67	—	Dunira .....	10	493	1821	458	2772	14577
68	—	Asia .....	11	1504	1540	364	3408	15082
69	1820	Windsor .....	5	637	1804	247	2688	14188
70	—	William Pitt .....	7	1926	1948	330	4104	16062
71	1821	Asia .....	2	705	1353	294	2352	12540
72	—	Bombay .....	5	737	1240	375	2352	12328
73	1822	Marquis of Wellington .....	9	984	1522	251	2760	13022
74	—	Windsor .....	3	729	1639	272	2640	14247
75	—	Asia .....	6	1063	1648	385	3096	14554
76	1825	Castle Huntly .....	3	747	1384	317	2448	12136
77	—	Asia .....	9	752	1589	299	2640	12988
78	—	Rose .....	4	1295	1765	304	3360	14309
79	1830	Buckinghamshire .....	8	1343	1560	361	3264	14409
80	1831	Castle Huntly .....	5	1061	1673	386	3120	14232
81	—	Thames .....	5	625	1512	239	2376	12815
82	—	Repulse .....	2	636	1534	278	2448	13180
83	1832	Duke of York .....	4	566	1590	424	2580	14317
84	—	Orwell .....	7	618	1395	339	2352	12827
85	—	Duchess of Athol .....	2	470	1461	253	2184	13120
86	1833	Edinburgh .....	11	855	1402	263	2520	11848
87	—	William Fairlie .....	8	758	1452	190	2400	13216
88	—	Earl of Balcarras .....	7	601	1546	205	2352	12479
89	—	Reliance .....	6	493	1577	210	2280	12594
90	—	Sir David Scott .....	6	630	1655	211	2496	12479
91	—	Scauby Castle .....	4	616	1536	162	2304	12488
92	1834	Waterloo .....	6	558	1577	265	2400	12905
93	—	Farquharson .....	7	714	1449	261	2424	13472
94	—	Lady Melville .....	6	496	1574	186	2256	11986
95	—	Herefordshire .....	3	498	1436	226	2160	12240
96	—	Marquis Huntly .....	5	519	1694	235	2448	12646
97	—	Warren Hastings .....	5	639	1687	266	2592	13896
98	—	Vansittart .....	4	648	1636	285	2568	13488
99	—	Prince Regent.....	11	517	1566	149	2232	12919
100	—	Buckinghamshire .....	3	608	1634	254	2496	13892
43 ) Average Hours and Distance.			301	38696	66988	12938	118412	576125
				900	1558	301	2754	13398
			d.	d. h.	d. h.	d. h.	d. h.	
" Days and Hours ...			7	37 12	64 22	12 13	114 18	

TABLE OF THE SEVERAL COURSES AND DISTANCES QUOTED IN  
THE PRECEDING ANALYSIS.

## MALACCA AND SINGAPORE STRAITS.

Names of Places.	Latitudes.	Longitudes.	Courses.	Distances.
	° ' N.	° ' E.	° ' S.	
Pulo Pera .....	5 42 N.	99 1 E.	} S. 29 38 E.	199.2 miles.
Round Arroa .....	2 49 N.	100 40 E.		
Pedro Branco .....	1 20 N.	104 26 E.	} S. 62 30 E.	173.3 miles.
Whole Distance through Malacca and Singapore Straits .....				372.5 miles.

## SUNDA AND BANCA STRAITS.

	°	'		°	'		°	'				
First Point of Java .....	6	44	S.	105	10	E.	}	N. 48	22	E.	61.0 miles.	
Anjer Town .....	6	4	S.	105	55	E.		}	N. 4	59	E.	171.7 miles.
Lucepara Island .....	3	13	S.	106	10	E.	}		N. 41	2	W.	102.1 miles.
Frederic Hendric Rocks .....	1	56	S.	105	3	E.						
Whole Distance through Sunda and Banca Straits .....											334.8 miles.	

## SUNDA AND GASPAR STRAITS.

	°   '	°   '	°   '	
First Point of Java .....	6 44 S.	105 10 E.	} N. 48 22 E.	61.0 miles.
Anjer Town .....	6 4 S.	105 55 E.		
Pulo Leat .....	2 52 S.	107 3 E.	} N. 19 25 E.	203.6 miles.
Tumbelan Island .....	1 0 N.	107 35 E.		
Whole Distance through Sunda and Gaspar Straits .....				498.6 miles.

## FROM MALACCA AND SINGAPORE STRAITS TO CHINA.

	°	'	°	'	°	'	
Pedro Branco .....	1	20 N.	104	26 E.	} N. 62	10 E.	124 miles.
South Anambas .....	2	18 N.	106	12 E.			
Grand Ladrone .....	21	57 N.	113	44 E.	} N. 20	27 E.	1258 miles.
Whole Distance from Pedro Branco to the Grand Ladrone .....							
							1382 miles.

## FROM SUNDA AND BANCA STRAITS TO CHINA.

Frederic Hendric Rocks .....	°   '   1 56 S.	°   '   105 3 E.	} N. 15 12 E.	263.2 miles.
South Anambas .....	2 18 N.	106 12 E.		
Grand Ladrone .....	21 57 N.	113 44 E.	} N. 20 27 E.	1258.0 miles.
Whole Distance from Frederic Hendric Rocks to the Grand Ladrone ...				
				1521.2 miles.

## FROM SUNDA AND GASPAR STRAITS TO CHINA.

Tumbelan Island .....	°   '   1 00 N.	°   '   107 35 E.	} N. 47   20 W.	114 miles.
South Anambas .....	2 18 N.	106 12 E.		
Grand Ladrone .....	21 57 N.	113 44 E.	} N. 20   27 E.	1258 miles.
Whole Distance from Tumbelan Island to the Grand Ladrone.....				
				1372 miles.

**PROBABLE SAVING OF TIME TO BE EFFECTED DURING FUTURE VOYAGES  
TO INDIA BY THE JUDICIOUS USE OF STEAM-POWER, ON A LIMITED  
SCALE, APPLIED AS AN AUXILIARY AID TO SHIPPING.**

Average of the present Interval.	ENGLAND TO BOMBAY.		Assumed future Interval.
Days.			Days.
36 $\frac{1}{4}$	{ <i>Calms and light Airs</i> , a similar distance performed by occasional application of steam-power in .....		12 $\frac{1}{4}$
63 $\frac{1}{4}$	{ <i>Fair Winds</i> . Steam-power not required; consequently the average period occupied would be the same .....		63 $\frac{1}{4}$
12 $\frac{3}{4}$	{ <i>Foul Winds</i> . By using the Lee Propeller only, during <i>light</i> foul winds, a ship would be kept to windward, and be as far advanced, or in a preferable situation, in .....		9 $\frac{1}{2}$
	<i>Total period</i> , supposing a ship fitted with steam-power, <i>pursuing the present route</i> to Bombay.....		85
	By the <i>occasional aid of steam-power</i> , a ship would be enabled to cross the Equator well to windward (probably in 12° West longitude); thereby make a fair wind of the S. E. Trade; avoid the detour to the westward, which sailing vessels are at present compelled to make; and effect generally a more direct course: advantages, it is presumed, that would shorten the voyage to Bombay, by .....		16
112 $\frac{1}{4}$	{ Present average duration of a voyage from England to Bombay.	{ Future probable average duration of a voyage from England to Bombay.	69
Average of the present Interval.	ENGLAND TO MADRAS.		Assumed future Interval.
Days.			Days.
30 $\frac{1}{2}$	{ <i>Calms and light Airs</i> , a similar distance performed by occasional application of steam-power in .....		10 $\frac{1}{2}$
66 $\frac{1}{4}$	{ <i>Fair Winds</i> . Steam-power not required; consequently the average period occupied would be the same .....		66 $\frac{1}{4}$
9 $\frac{1}{2}$	{ <i>Foul Winds</i> . By using the Lee Propeller only, during <i>light</i> foul winds, a ship would be kept to windward, and be as far advanced, or in a preferable situation, in .....		6 $\frac{3}{4}$
	<i>Total period</i> , supposing a ship fitted with steam-power, <i>pursuing the present route</i> to Madras .....		83 $\frac{1}{2}$
	By the <i>occasional aid of steam-power</i> , a ship would be enabled to cross the Equator well to windward (probably in 12° West longitude); thereby make a fair wind of the S. E. Trade; avoid the detour to the westward, which sailing vessels are at present compelled to make; and effect generally a more direct course: advantages, it is presumed, that would shorten the voyage to Madras, by .....		15 $\frac{1}{2}$
106 $\frac{1}{4}$	{ Present average duration of a voyage from England to Madras.	{ Future probable average duration of a voyage from England to Madras.	68



**PROBABLE SAVING OF TIME TO BE EFFECTED DURING FUTURE VOYAGES  
TO INDIA BY THE JUDICIOUS USE OF STEAM-POWER, ON A LIMITED  
SCALE, APPLIED AS AN AUXILIARY AID TO SHIPPING.**

Average of the present Interval.	ENGLAND TO BENGAL.		Assumed future Interval.
Days. 26 $\frac{3}{4}$	{ <i>Calms and light Airs</i> , a similar distance performed by occasional application of steam-power, in..... }		Days. 8 $\frac{3}{4}$
67	{ <i>Fair Winds</i> . Steam-power not required; consequently the average period occupied would be the same .....		67
11 $\frac{1}{2}$	{ <i>Foul Winds</i> . By using the Lee Propeller only, during <i>light</i> foul winds, a ship would be kept to windward, and be as far advanced, or in a preferable situation, in .....		7 $\frac{3}{4}$
	{ <i>Total period</i> , supposing a ship fitted with steam-power, <i>pursuing</i> <i>the present route</i> to Bengal .....		83 $\frac{1}{2}$
	{ By the <i>occasional aid of steam-power</i> , a ship would be enabled to cross the Equator well to windward (probably in 12° West longitude); thereby make a fair wind of the S. E. Trade; avoid the detour to the westward, which sailing vessels are at present compelled to make; and effect generally a more direct course: advantages, it is presumed, that would shorten the voyage to Bengal, by .....		15 $\frac{1}{2}$
105 $\frac{1}{4}$	{ Present average duration of a voyage from Eng- land to Bengal.	{ Future probable average duration of a voyage from England to Bengal.	68
Average of the present Interval.	ENGLAND TO CHINA.*		Assumed future Interval.
Days. 23 $\frac{1}{4}$	{ <i>Calms and light Airs</i> , a similar distance performed by occasional application of steam-power, in..... }		Days. 7 $\frac{3}{4}$
66	{ <i>Fair Winds</i> . Steam-power not required; consequently the average period occupied would be the same .....		66
9 $\frac{1}{2}$	{ <i>Foul Winds</i> . By using the Lee Propeller only, during <i>light</i> foul winds, a ship would be kept to windward, and be as far advanced, or in a preferable situation, in .....		6 $\frac{1}{4}$
	{ <i>Total period</i> , supposing a ship fitted with steam-power, <i>pursuing</i> <i>the present route</i> to the Straits..... }		80
	{ By the <i>occasional aid of steam-power</i> , a ship would be enabled to cross the Equator well to windward (probably in 12° West longitude); thereby make a fair wind of the S. E. Trade; avoid the detour to the westward, which sailing vessels are at present compelled to make; and effect generally a more direct course: advantages, it is presumed, that would shorten the voyage to the Straits by .....		13
98 $\frac{3}{4}$	{ Present average duration of a voyage from Eng- land to the Straits.	{ Future probable average duration of a voyage from England to the Straits.	67

\* *Id est*, as far as the "STRAITS," outward-bound.

Honourable East India Company's Steam Ship **ATALANTA**, 630 Tons,  
 Captain **JOHN P. CAMPBELL**, from **ENGLAND** towards **BOMBAY**.

*Power of Engines, 210 Horse.—Diameter of Cylinder, 54 Inches.—Length of Stroke, 5 Feet.  
 —Diameter of the Wheels, 20 Feet 6 Inches.*

Date.	Situation.	Tons of Coals expended.	Days in actual Motion.	Days in Port, at Anchor.
1836-7.				
Decem. 29	Left Falmouth.....		d. h.	d. h.
January 6	Anchored at Teneriffe .....	116	8 1	
12	Left Ditto .....			5 23
16	Anchored at Bonavista .....	62	3 23	
22	Left Ditto .....			6 1
February 1	Anchored at Fernando Po .....	152	11 6	
5	Left Ditto .....			4 6
19	Anchored at the Cape of Good Hope .....	210	14 10	
28	Left Ditto .....			9 14
March 17	Anchored at Mauritius .....	217	16 0	
26	Left Ditto .....			8 6
April 7	Anchored at Cochin .....	180	12 6	
10	Left Ditto .....			3 8
14	Arrived at Bombay .....	52	3 16	
Total 107	Coals expended from England } to Bombay.....	989	69 14	37 10
	Days and hours in Port.....		37 10	
	Total days between England and Bombay.....		107 0	

The distance actually traversed by the Log between England and Bombay, 11,806 miles.

Honourable East India Company's Steam Ship **BERENICE**, 680 Tons,  
 Captain **GEORGE GRANT**, from **ENGLAND** towards **BOMBAY**.

*Power of Engines, 230 Horse.—Diameter of Cylinder, 56 Inches.—Length of Stroke, 5 Feet  
 6 Inches.—Diameter of the Wheels, 22½ Feet.*

Date.	Situation.	Tons of Coals expended.	Days in actual Motion.	Days in Port, at Anchor.
1837.				
March 16	Left Falmouth.....		d. h.	d. h.
24	Anchored at Teneriffe .....	127	7 7½	
25	Left Ditto .....			1 16½
30	Anchored at Bonavista .....	84	4 9½	
April 2	Left Ditto .....			2 14½
14	Anchored at Fernando Po .....	155	11 5	
20	Left Ditto .....			6 19
May 4	Anchored at the Cape of Good Hope .....	267	14 5	
11	Left Ditto .....			7 19
24	Anchored at Mauritius .....	246	13 0	
30	Left Ditto .....			6 6
June 13	Arrived at Bombay .....	197	13 18	
Total 89	Coals expended from England } to Bombay.....	1076	63 21	25 3
	Days and hours in Port.....		25 3	
	Total days between England and Bombay.....		89 0	

The distance actually traversed by the Log between England and Bombay, 12,929 miles.

Honourable East India Company's Steam Ship SEMIRAMIS, 733 Tons,  
Captain GEORGE BRUCKS, I. N., from ENGLAND towards BOMBAY.

*Power of Engines, 300 Horse.—Diameter of Cylinder, 63 Inches.—Length of Stroke, 6 Feet.  
Weight on Safety Valve, 3½ lbs.—Diameter of Wheels 23 Feet 4 Inches.—Length of Float,  
8 Feet 2 Inches.—5 Square Boilers in one, containing altogether 75 Tons.*

Date.	Situation.	Tons of Coals received on board.	Days in actual Motion.	Days in Port, at Anchor.
1837-8.				
Decem. 21	Left Falmouth.....	356		
31	Anchored at Teneriffe .....	100	10	
January 3	Left Ditto .....			3
8	Anchored at St. Vincent .....	247	5	
14	Left Ditto .....			6
27	Anchored at St. Helena.....	312	13	
February 3	Left Ditto .....			7
15	Anchored at the Cape of Good Hope .	342	12	
27	Left Ditto .....			12
March 16	Anchored at Mauritius .....	375	17	
24	Left Ditto .....			8
April 6	Anchored at Cochin .....	110	13	
8	Left Cochin Harbour .....			2
12	Arrived at Bombay .....		4	
Total 112	Total Tons of Coals received...	1842	74	38
	Remaining stock on arriving at Bombay...	65	38	
	Tons of Coals, with Time expended .....	1777	112 days.	
The distance actually traversed by the Log between England and Bombay, 15,200 miles.				

Steam Ship ENTERPRISE, Capt. JOHNSON, from ENGLAND towards BENGAL.

Date.	Situation.	Days in actual Motion.	Days in Port, at Anchor.
1825.			
August 16	Left Falmouth .....		
Septem. 18	Anchored at St. Thomas's.....	32	
21	Left Ditto .....		3
October 13	Anchored at the Cape of Good Hope .....	22	
21	Left Ditto .....		8
Decem. 7	Arrived in Bengal .....	47	
Total 112		101	11
	Days in Port.....	11	
	Total Days between England and Bengal...	112	
The distance actually traversed by the Log between England and Bengal, 13,522 miles.			

Ship MARIA, 460 Tons, Captain JAMES BLACK,  
From ENGLAND towards BOMBAY.

*Fitted with Steam-power, for use during Calms and light Airs.—Power of Engines (2),  
10 Horse each.*

*This Ship left the Lizard on the 19th December, 1838. An accident to one of the Engines at an early period of the Voyage prevents any statement, from actual experience, of the time saved by the application of Steam-power, as an auxiliary aid, being furnished at present. Captain Black, in consequence of the misfortune alluded to, did not arrive at Bombay until the 3d of May.*

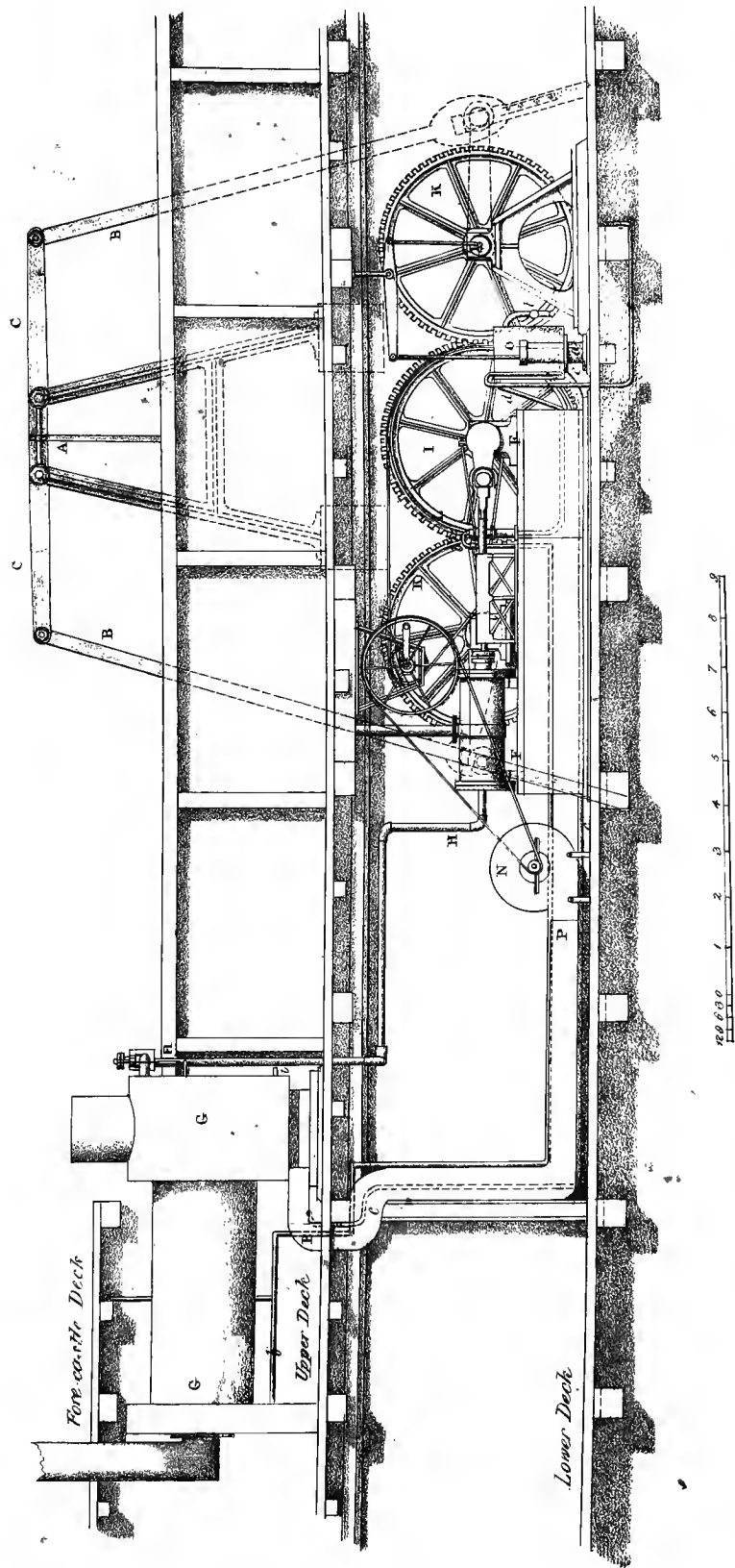
TABLE EXHIBITING THE NUMBER OF DAYS OCCUPIED IN THE TRANSMISSION OF INDIAN LETTERS TO ENGLAND BY THE OVERLAND CONVEYANCE, FROM 27<sup>TH</sup> SEPTEMBER, 1837, TO 5<sup>TH</sup> DECEMBER, 1838.

SENT FROM BOMBAY BY STEAMER.	DATES OF MAILS FROM			SENT FROM ALEXANDRIA		ARRIVED IN LONDON			
	Bombay.	Calcutta.	Madras.	Via Marseilles.	Via Falmouth.	Via Marseilles.	Total Days from Bombay.	Via Falmouth.	Total Days from Bombay.
ATALANTA .....	September 27	September 11	September 15	October... 27	November 7	November 22	56	December 4	68
HUGH LINDSAY .....	October... 26	"	"	November 27	December 5	December 22	57	January... 8	74
BERENICE .....	November 30	"	"	December 27	January... 2	January... 31	62	" ... 31	62
ATALANTA .....	January... 5	December 23	December 23	January... 27	" ... 30	March ... 13	67	March ... 7	61
HUGH LINDSAY .....	" ... 28	January... 14	January... 11	February.. 27	February.. 27	" ... 22	53	" ... 29	60
ATALANTA .....	March..... 1	February.. 17	February.. 18	March..... 27	March ... 28	April ..... 18	48	May ..... 3	63
BERENICE .....	" ... 30	March..... 17	March..... 22	April ..... 27	April ..... 24	May ..... 19	50	" ... 21	52
ATALANTA .....	April ..... 27	April ..... 16	April ..... 17	May ..... 27	May ..... 22	June ..... 19	53	June ..... 18	52
BERENICE .....	May ..... 21	May ..... 9	May ..... 12	June ..... 17	June ..... 17	July ..... 9	49	July ..... 17	57
ATALANTA .....	August ... 1	July ..... 17	July ..... 23	September 27	October... 9	October... 17	77	November 12	103
BERENICE .....	September 13	August ... 30	September 1	October... 7	" ... 9	" ... 29	46	" ... 12	60
ATALANTA .....	October... 6	September 23	"	November 7	November 6	November 28	53	December 5	60
HUGH LINDSAY .....	November 1	October... 20	October... 23	December 7	December 4	December 27	56	January... 7	67
BERENICE .....	December 5	November 23	November 28	December 27	January... 1	January... 21	47	February.. 4	61









View of the Machinery fitted to Mibullio's Patent Propellers on Board the Ship "M.A.R.I." 160 Tons. Capt. James Black, now on a Voyage to BOMBAY (Jan. 1839.)  
 I. T. Beale, Engineer. East Greenwich.



## APPENDIX.

REFERENCES TO VIEWS OF THE MACHINERY FITTED TO  
**Melville's Patent Propellers,**  
 ON BOARD THE SHIP MARIA, OF 460 TONS, CAPTAIN JAMES BLACK,  
*(Messrs. Gardner, Urquhart, & Co., Owners),*  
 J. T. BEALE, ENGINEER, EAST GREENWICH.

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- A. Standard, or frame.
- B. Paddle-bars, at the lower extremity of which the paddles are fixed.
- C. Radius, or guide-rods to paddles.
- D. Paddle-cranks.
- E. Cast-iron girder, fixed on the side of the ship, carrying plumber-blocks to support the outside ends of shafts.
- F. Engines; ten-horse power each.
- G. Boiler.
- H. Steam-pipe, containing two sluice-valves (one near the boiler, and the other near the engine) for regulating the supply of steam to the engine, and a safety-valve.
- I. Mortise-wheel fixed on the engine-shaft, communicating motion to the two wheels K, (fixed on the paddle-shafts), and carrying the drum L.
- K. Toothed-wheels, fixed on the same shafts with the cranks D, to which they communicate motion.
- L. Drum; driving, by means of a strap, the intermediate shaft M, which drives the blowing-machine N, by means of another strap.
- M. Intermediate shaft, with drums receiving motion from the drum L, and communicating it to the blowing-machine N, by means of straps; this shaft has a crank-handle fitted to it, for driving the blowing-machine to get up the steam previous to setting the engine to work, but which can be removed before the engine starts.
- N. Blowing-machine, for getting up and maintaining the steam.
- O. Iron tank, containing a six-inch pump, drawing water from the outside of the vessel, to supply the feed-pumps of the engines.
- P. Air-trunk, conveying air from the blowing-machine to the furnace.
- Q. Hand-pump, fixed and cased in against the fore-part of the windlass-bits, for filling the boilers by hand, when requisite.
- a. Suction-pipe for six-inch pump.
- b. Waste-pipe to cistern O.
- c. Suction-pipe to hand-pump, branching out from the pipe A.
- d. Suction-pipe for the feed-pump of starboard engine.
- e. Suction-pipe for the feed-pump of larboard engine.
- f. Feed-pipe to boiler.
- g. Pipe from hand-pump communicating with the feed-pipe of each boiler
- h. Exit steam-pipe from engine.
- i. Blow-off pipe from boilers.

## DESCRIPTION OF THE ENGINES, &amp;c. FITTED TO

**Melville's Patent Propellers,**ON BOARD THE SHIP *MARIA*, OF 460 TONS, CAPTAIN JAMES BLACK,

(MESSRS. GARDNER, URQUHART, &amp; Co., OWNERS).

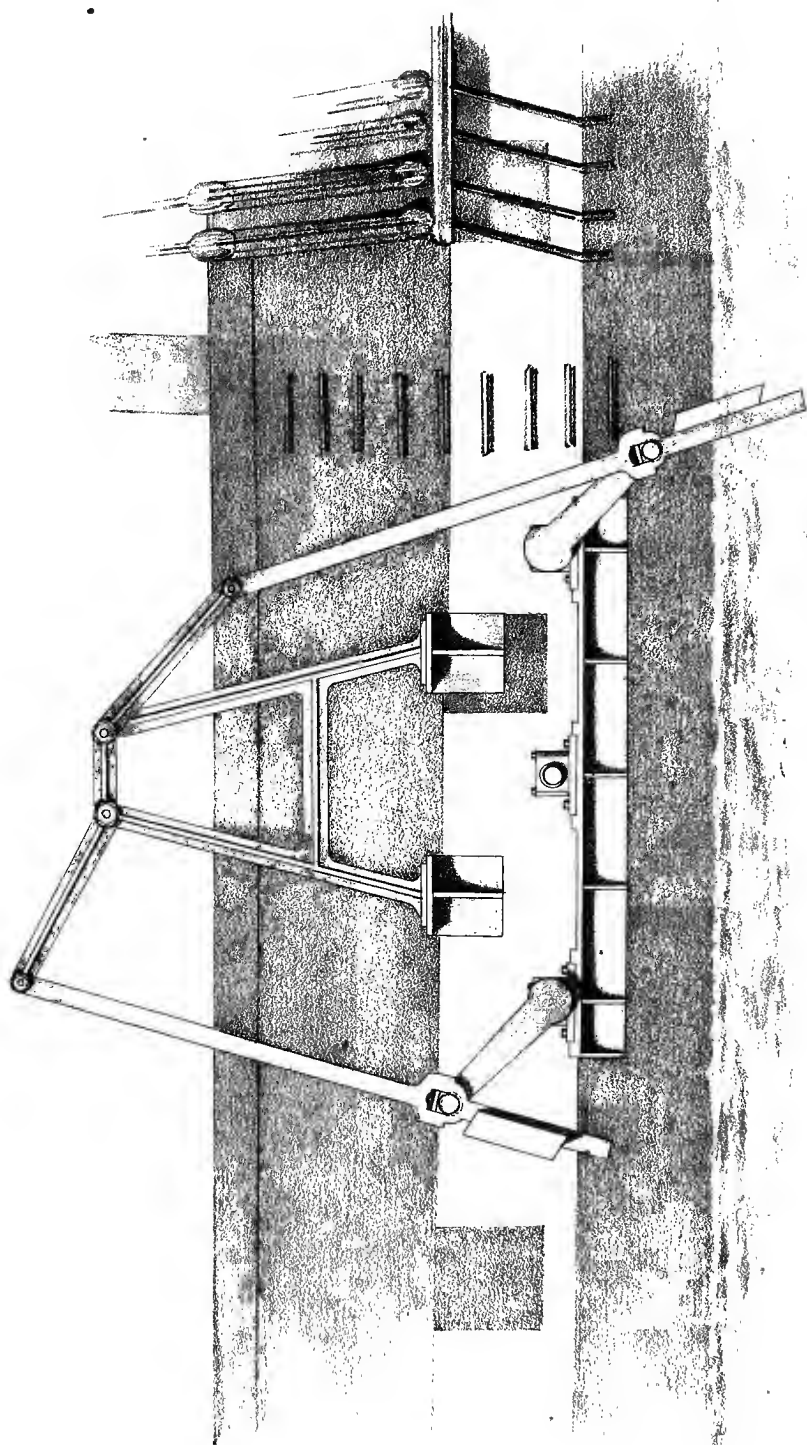
THE engines fitted on board the *Maria* are on the horizontal construction, and of the estimated power of ten horses each. The boilers are made on the principle of locomotive boilers, with the fire entirely surrounded by water. In order to prevent any accident from fire, they are placed upon wrought-iron plates, containing water between them, and have a pipe communicating with the steam-head, to prevent the water being blown out of them, should steam be formed between them; but as the blast used to urge the fire passes over them previous to passing through the bars of the grate, there will always be a greater tendency to condense than to evaporate. An artificial blast is produced by means of a blowing-machine, which keeps up the fire, the chimney being too low to produce a sufficient draught.\* The motion is communicated to the Propellers from the engine by means of three wheels, the middle one being placed on the engine-shaft, in order to obtain a more uniform strain on the various parts of the engine. The water to supply the boilers is brought through the side of the vessel, by means of a pump worked by the starboard engine, into a cistern in which it is immersed, from which the feed-pumps of each engine are supplied. The principal dimensions are as follow:—

	F.	I.
Diameter of cylinder .....	0	10 $\frac{3}{4}$
Length of stroke .....	2	0
Diameter of driving wheel—pitch-line .....	4	10
Length of paddle-cranks.....	3	0
Breadth of paddles .....	2	0
Depth of paddles .....	2	0

The boilers attached to the engines working the Propellers, being placed on the upper deck of vessels using them, all increase of temperature is thereby avoided, which in a tropical climate is very desirable, as the confined space below, usually allotted for the engine-room on board steam-vessels generally, must be detrimental to the engineers, stokers, &c.; should even an accident from fire occur, the consequences would be less serious to a vessel carrying the boilers and furnaces on the upper deck, where all hands could readily use their utmost

\* The suction-pipes of the fans (or blowing-machines) connected with both engines, if led to the lower part of the hold, would cause a thorough ventilation, productive of the greatest advantage to the ship and cargo, preserving both, and contributing materially to the health of the crew.





Scale of 12 feet

exertions, than on board a steam-vessel fitted as at present, with the fires between decks; this arrangement also prevents the possibility of accidents occurring from the ignition of coals, which are too frequently stowed close to the boilers—a contact highly improper.

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#### REMARKS ON THE ACTION OF THE PROPELLERS, &c.

THE superior effect of these Propellers over the wheel, has been established by numerous experiments. The wheel, with its heavy outbearings and paddle-box, which affect injuriously the stability of the vessel, besides being a cumbersome, clumsy, and unsightly appendage, can only be rendered effective as a propeller at the expence of a great waste of power. Much of the effective action of the wheel is oblique, whilst that of these Propellers, from the moment the vessel moves, is direct throughout. When the paddle-board of the wheel first strikes the water, the action is vertical, as well as horizontal, and has a tendency to raise the vessel's head as well as to propel her: this partially oblique action of the wheel occasioning a violent jerk when it first strikes the water, and throwing a great quantity of water upwards when leaving it, produces great commotion and swell; in this manner a very considerable portion of the effective power of the engine is lost. These Propellers, on the contrary, have an action producing a horizontal movement throughout the whole of the stroke. The consequence of this arrangement is, that there is no jerk or vibration, and no backwater; indeed, it is difficult to conceive any mechanical action more smooth and equable. The machinery is so arranged, that twice during the revolution the engine is relieved of all resistance, when the crank is on the centre, or dead-point, over which the momentum, previously acquired, carries it. The Propellers enter the water with an accelerated motion, and do so, slightly inclined from the perpendicular; when they come to the point of their deepest immersion, both the crank of the engine, as well as the Propellers themselves, are in the position of most effective action. The Propellers having passed the point of greatest immersion, they again become accelerated; and so on throughout every revolution. These Propellers act at every stroke on a fulcrum of dense water—that is, on water which has not been previously disturbed, and their directness of action has led to a great diminution in the area of the propelling surface necessary: the ship *Maria*, of 460 Tons, of the usual construction of a trading vessel, and when drawing 16 feet water, is propelled by two surfaces of four square feet, eight square feet only in the aggregate being immersed at one time: the Propellers make thirty-nine revolutions per minute. Their extreme lightness is also a great advantage—they can be worked independently of each other; so that a ship may be rapidly turned by reversing the action on one side; and, in tacking, she may be kept from making lee-way, by working the lee-propellers only.

The vibration caused by these Propellers is scarcely perceptible, whereas that occasioned by the paddle-wheels, is in some steam-vessels excessive, and in

all disagreeable. The Commander of a steam-vessel at present in active service, referring to the effect produced by violent motion upon a chronometer placed in his cabin, states—\* “This cabin being over one of the main beams which suspend the paddle-wheels, is so affected by the concussion caused by the wheels striking the water, that until use had accustomed me to it, I could not suppose it possible any one could live in it: writing there is quite out of the question; and it requires some practice even to be able to read when the vessel is going fast.”

Another important consideration in favour of these Propellers, is the very trifling addition they are to a ship's beam, when compared to the unwieldy paddle-boxes. Should a war render the increase of our naval steam-vessels requisite, new docks must be constructed to admit them; as at present there are few wide enough at the entrance to receive the first class steam-ships, particularly at the outports, where accidents might oblige them occasionally to resort.

For the inland steam-navigation of India, these Propellers are peculiarly applicable; they create no commotion or swell, which on the Ganges, Hooghly, and other crowded rivers, would be a most serious annoyance to the natives, whose fragile boats are ill adapted to encounter the effects produced by steam-vessels as at present fitted:—the casualties on the Thames from this cause, are sufficient to warrant the assertion, that the paddle-wheel in India will be objectionable.

Other advantages are, that the action of these Propellers can be readily adapted to varying draughts of water; they can be applied without difficulty to *all existing vessels*, whatever be their form or construction, neither outward bearings nor paddle-boxes being necessary; and they can also be removed at pleasure, if at any time this should be deemed requisite.

\* See Nautical Magazine for April 1839, page 246.

PRO-FORMÂ INSTRUCTIONS TO THE COMMANDER OF A SHIP FITTED  
(LIKE THE MARIA) WITH STEAM-POWER, AS AN AUXILIARY AID.

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LONDON, — December, 18—.

Captain \_\_\_\_\_

Ship \_\_\_\_\_

SIR,

The \_\_\_\_\_ under your command, bound to Bombay, being ready for sea, we request your attention to our instructions respecting the management of the steam-power (to be used during calms and light airs) with which the vessel is fitted; and need hardly remind you that upon your judgment, zeal, exertion, and prudence, the efficiency of such an auxiliary aid chiefly depends:—assure your officers and men, that without the exercise of these qualities, no favourable results can be expected.

Remember, dispatch is your primary object; let all others be subservient to it. In order to ensure this, resolve never to lose an hour; issue a standing order, that when from light variable winds, the ship goes less than *three knots*, the steam is *to be immediately got up*;—if the breeze *increase*, the fires are easily put out; and should it *decrease*, so much time is gained. *You must not wait to see if it is going to be calm or light weather*; such habitual delay would be injurious. Consider the above as a general rule, and adhere to it:—frequent use of the machinery will improve, rather than injure it. We annex our ideas of your outward track: they are derived from *Horsburgh*, whom you cannot study too often, or observe too rigidly:—unless circumstances require it, any deviation from his instructions, generally proves detrimental.

On quitting the English Channel, shape a westerly course, in order to obtain a good offing, which at this season of the year should be particularly attended to, on account of strong westerly and south-westerly winds prevailing. Do not haul to the southward until well clear of Cape Finisterre, or approach it nearer than 45 or 50 leagues: from thence steer for Madeira, pass to windward of it, and then proceed southerly, as near as wind and circumstances will admit. Endeavour to cross the Equator in 11° or 12° West, thereby avoiding the African coast, and the strong currents near it. At the southern edge of the N. E. Trade, the wind becomes light, and the water smooth: this will be one of the best situations for using the Propellers. Continue from the Equator as near south as you can, until

you enter the S. E. Trade, which in January hangs well to the eastward, with smooth water (also favourable for steaming). Keep the sails clean full, and get out of the Trade as rapidly as possible. On losing it, make all the southing you can until you reach  $38^{\circ}$  or  $39^{\circ}$  S.; in which latitude strong westerly winds prevail. Run down your easting on this parallel, and by so doing avoid the westerly current on the outer edge of L'Agulhas Bank. Arrive at  $52^{\circ}$  or  $53^{\circ}$  East before you haul to the northward. Being too early for the Mozambique Channel, proceed for the middle passage. After passing Cape East, haul in for the land, and sight Cape Ambre; that you may take a fresh departure: then steer North, and N.  $\frac{1}{2}$  E., to avoid the shoals N. E. and N. W. of it; and when well clear of the Mahé Islands, steer direct N. E. for Bombay. From Cape Ambre you will probably have much light weather, during which your steam-power will be of great service.

The preceding is our opinion of your proper route. We have no wish to fetter you with orders on this subject, knowing your earnest desire to make a fine passage: if, therefore, you can adopt a more preferable track, do so. Before concluding this letter, we shall give a few instructions for the engineer:—these you will insist upon being strictly attended to.

Promote and encourage amongst your people a knowledge of the machinery, which is really very simple: this will prevent your being at a loss in case of any casualty occurring to your engineer.

Take great care of the stores on board for the use of the engines: serve them out when required, and note the quantity used in any given time, so as to check any abuse of them; as the exhaustion of your oil, tallow, &c. would be occasioned by profusion. Keep the machinery at all times clean, well-oiled, and ready for use: let the boys assist in this work, and an officer superintend it, who must always be on the alert to prevent mischief, inattention, wilful damage, &c.

In attaching or detaching the paddles (or paddle-arms), observe the greatest care to prevent their loss. Let the man who does this work, always have a person attending with a bucket and lanyard, in which every thing loose may be put out of hand: the man himself should be slung in a bowline-knot, and your quarter-boat ready in case of accidents: the *lee*-paddle will of course invariably claim your attention first. Much time and distance are saved by attention to the chronometers and good steerage:—let the officer of the watch see that the ship is always kept as near her proper course as possible, and carry all the sail you can with prudence.

Your log-book will require more than usual attention (as we hope it may prove of use for future voyages). Insert in *red* ink the hours you use the propelling power: the extent of its utility will then be more easily ascertained. This and your track, you must hold at our disposal for examination on your return. Make careful memoranda of any improvement that may be suggested, in the power,



action, or fixing of the machinery on another occasion : indeed all the information you can possibly collect on this subject, will be interesting.——

**ENGINEER'S INSTRUCTIONS.**—Blow out the boilers occasionally, to get rid of the concentrated salt-water, which would otherwise be highly detrimental to them (indeed the blow-off cock might at all times be kept gently running) : put in some potatoes frequently, to prevent incrustation. Clear the boiler-tubes very often, and keep the boilers clean inside : this is absolutely imperative.

When the boilers and pipes are thoroughly tight, give them several coats of boiled oil and red ochre. On no account allow an accumulation of fire to take place under the bars, as that would materially injure them. When using the engines, always *have a proper supply of water in the boiler*, as more accidents happen from neglecting this, than from any other cause.

Keep the engines, bearings, &c. properly oiled, and at all times ready for use. Use *sperm-oil* for all the cold bearings, and common *fish-oil* for the inside of the engine. If after the engine has been at work a few minutes, water should be seen coming from the steam-pipe, it proves one of two things—there is either a bad fire, or the steam is turned on too flush, which would, if suffered to continue, be most destructive to the boilers and engines. When the engines are out of use, unpack them when hot, and well oil the cylinders inside ; then repack them ready for use : of course, when this is done, the steam must be quite down, or some water might distil into the cylinders, and if allowed to remain there, would injure them. Take care to oil the slides through the oil-feeder often ; break the coals about the size of an egg, and lay them regularly on the fire. In using up the dust, spread it equally when there is a good fire. As soon as the fires are out, and the fireplace sufficiently cold, lay the fresh fuel ready for lighting when wanted. Never start the engine too rashly with the full power of the steam all at once, as by so doing, you would probably blow all the water out of the boiler. Keep sober, and be carefully attentive to your duty.——

Add to the preceding any orders you deem requisite. Let attention to the good care of the machinery, become the men's daily routine of duty, and they will soon be habituated to it. Make your number to any ship passing, and avoid the delay of speaking vessels.

We are not aware of any other important topic to urge upon your attention : your own good sense will supply the omissions in these instructions.

We have now only to remind you, that an officer should always attend when any of the machinery is to be detached, paddles removed, or shipped ; and that by availing yourself of the brass shifting cogs enabling you to get the cranks well up out of the water, you may possibly never require to unship the paddle-arms. Should a heavy sea render that absolutely necessary, let it be done with the utmost caution.

We have confined our remarks in this communication principally to guide you in the judicious use of the steam-power, as an auxiliary aid: your general instructions are contained in a separate letter.

Accept our best wishes for your complete success, and believe us.

Yours faithfully,

\_\_\_\_\_ & Co.

*Owners of Ship* \_\_\_\_\_

F I N I S .