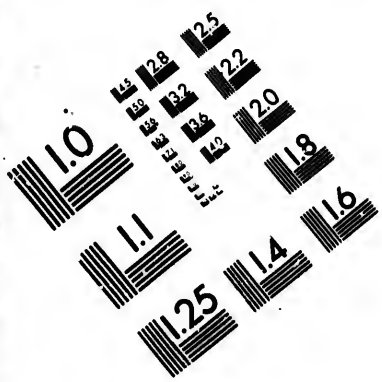

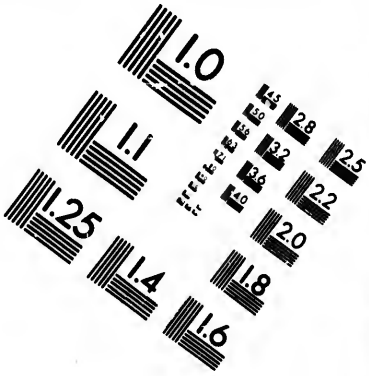

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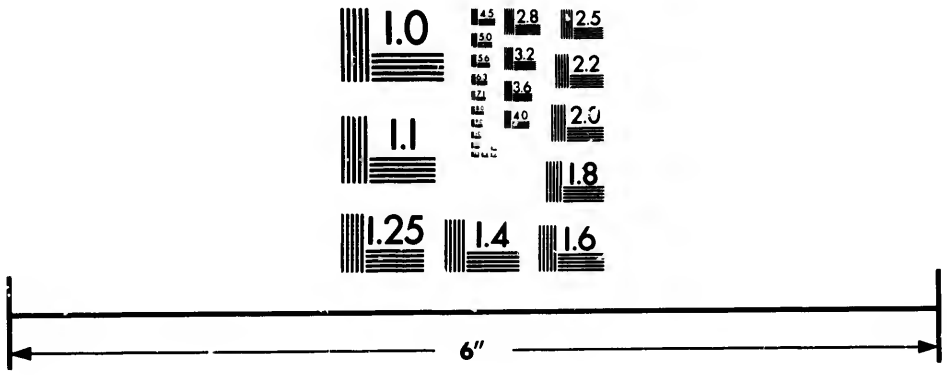

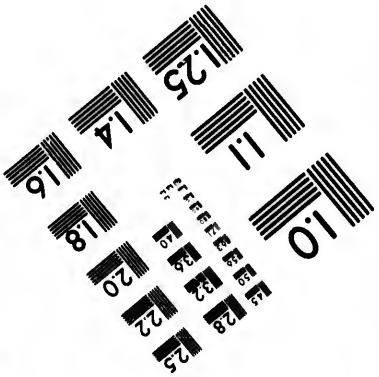

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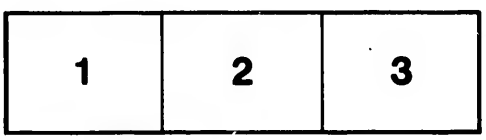

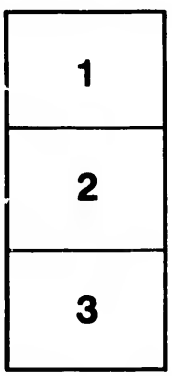

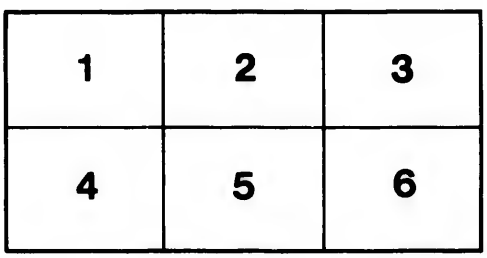

THE

LOGS OF THE FIRST VOYAGE,

MADE WITH THE

UNCEASING AID OF STEAM,

BETWEEN

ENGLAND AND AMERICA,

BY THE

GREAT WESTERN,

OF BRISTOL,

LIEUT. JAMES HOSKEN, R.N., COMMANDER;

ALSO AN

APPENDIX AND REMARKS,

BY

CHRISTOPHER CLAXTON.

BRISTOL:

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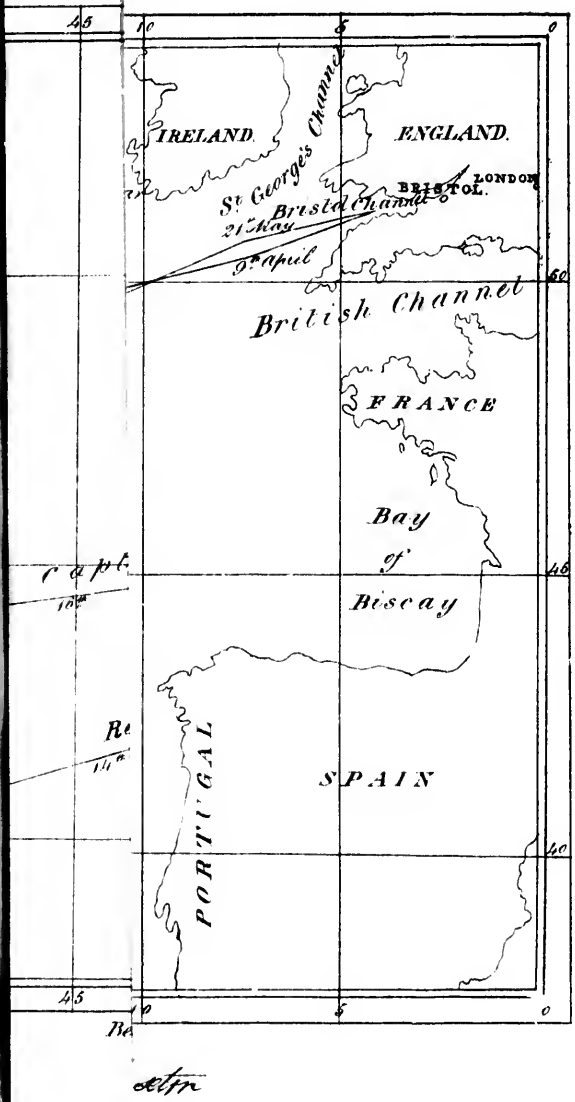
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St George's Channel
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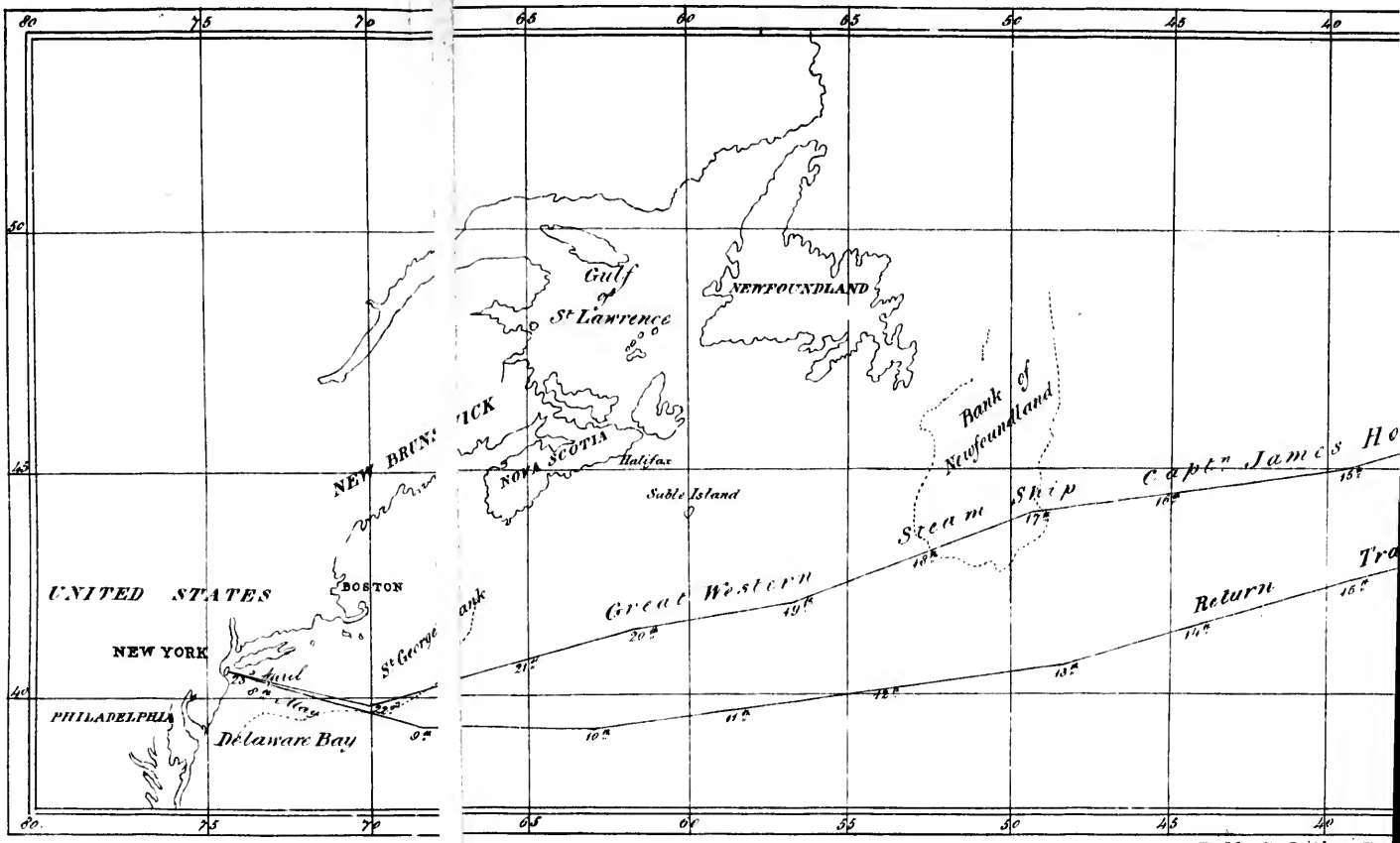
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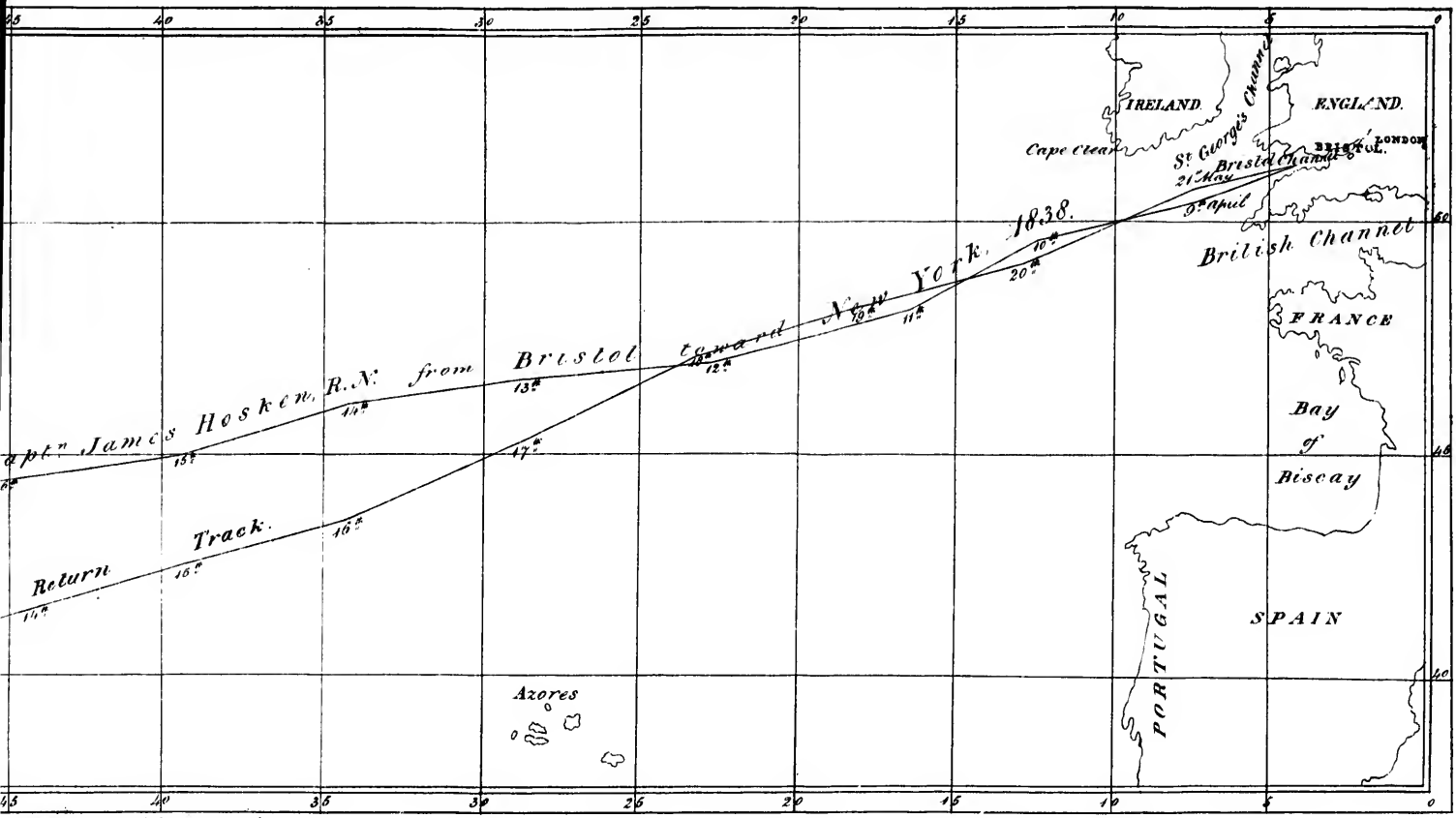

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Christ.r Chesterton

TO THE

RIGHT HONOURABLE THE EARL OF MINTO, G.C.B.,

FIRST LORD OF THE ADMIRALTY.

Great Western Steam Ship Office,
Bristol, July 4th, 1838.

My Lord,

The Directors of the Great Western Steam Ship Company are indebted to the Board of Admiralty for the kindest assistance.

The only return which would be adequate they have made, in an anxious, and, they trust, not unsuccessful endeavour, so to conduct their undertaking that it might be useful to the two greatest maritime Nations of the World, beneficial to science, and honourable to their country.

To your Lordship this first record of their enterprise is duly and most respectfully dedicated, by

Your Lordship's obedient

Humble Servant,

CHRISTOPHER CLAXTON.

THE GREAT WESTERN.

Preparatory to an examination of the Logs of the first Steam Ship which has ever traversed and returned across the Atlantic, between England and the United States, by the powers of machinery, exercised unceasingly throughout the whole distance, a few words may be devoted to the efforts and projects previously directed to a purpose which has now been so gloriously accomplished. The first attempt to render the force of steam auxiliary to Transatlantic Navigation was by a ship from the United States in 1819, but as her engines were of small power, and were used merely as auxiliaries when her sails were inoperative, her voyage, highly honourable as it was to American enterprise, can scarcely be classed with the efforts of the present day.

In furtherance of a project for establishing steam communication with the United States, an Act of Parliament was applied for and obtained some years since, for the formation of a Company (the Valentia), which proposed to furnish a number of Steam Vessels of 600 tons each, for the purpose of plying regularly between Valentia, on the West Coast of Ireland, and New York, but the terms of the Act not having been complied with, it became a dead letter. Proposing, however, to avail themselves of some of its favouring clauses, another Company (the Dublin), endeavoured, in 1836, to renew the project, but also without success. They went so far as to advertise for four pairs of the largest engines, and to lay down a keel two years ago at Liverpool. In the same year, Government thought fit to set an inquiry on foot, through a Commission, touching a similar project to the Valentia, as a seaborne continuation of a proposed Railway from Dublin to the West Coast.*

Toward the latter end of 1835, a Company was formed in London, called the British and American, which proposed to lay down several Steamers of large dimensions, to run alternately between London and Liverpool and New York. Previously, however, to this, and while the Great Western Railway subscription efforts were on foot in Bristol, the grand object of making it an outport to the Metropolis for vessels of all descriptions trading on or through the Atlantic, was never lost sight of. The appearance of the Prospectus of the British and American Company brought matters to a point, and in November, 1835, a party of gentlemen connected with the Railway (among whom were their celebrated engineer Mr. BRUNEL, and Mr. GUPPY), after a good deal of discussion on the feasibility of such an experiment, put down their names as ready to take shares in the event of due encouragement being given in Bristol. It was some time in October, 1835, that Mr. GUPPY and Mr. BRUNEL consulted, and fairly enlisted the writer in the cause as a practical nautical man, acquainted in his particular line with the full advantages of Bristol's position. Having satisfied ourselves that the leading gentlemen connected with the Railway and some of the most influential merchants and monied men in the city were ready to come forward if a fair case were made out, a journey was undertaken through all

* Bristol, as a Steam Port, with the Great Western Railway at her back, would have nothing to fear even if this object were accomplished.

the great Steam Ports of the Empire, Mr. PATTERSON, a ship-builder, in whose abilities in his line the utmost confidence could be placed, who was known as a man open to conviction and not prejudiced in favour of either quaint or old-fashioned notions in ship-building, being one of the party. The Report, Appendix No. 1, is the result of that excursion and inquiry, and upon its publication our Company sprang into life, and with great rapidity into action also.

The stern-post of its steam ship, the Great Western, was raised on the 28th July, 1836, and she was launched on the 19th July, 1837, proceeded on her way to London on the 18th August, and arrived in the river on the 22nd of the same month, after a remarkable passage under canvass four-fifths of the distance, having left the steamer, a fast one, which was to have attended her, behind. Her first trial down the river was made on the 24th March, her second on the 28th March, in both of which she beat two of the fastest Gravesend boats. She eventually sailed on the 31st March, and arrived in King-Road on the 2nd April, whence she started on her first voyage to New York on the 8th of the same month.

The Journals on either side of the Atlantic having kept the reading public informed on general matters connected with the progress of the Great Western, and the local press having recorded the proceedings of the Company, whose formation has been thus cursorily glanced at, all that is anticipated for the following observations is their being looked upon as explanatory, and in some degree necessary, previous to either a critical or scientific examination of the Logs and Tables.

The reader in search of descriptions of either the Ship or her Engines, is referred to the Appendices, where, with Reports, they are registered as matters of reference for the Proprietors of the Company; while the reader in search of amusement may find it in the Journal of the Voyage to and a description of the departure from New York, by two well-informed American Gentlemen, which touching as they do upon the vast importance of the project in a national view, and as most gratifying expressions of the feeling called forth on the other side of the Atlantic, are worthy of more than mere preservation.

The boilers of the Great Western are peculiarly constructed, having in height or depth that capacity for generating steam which has been hitherto obtained in lateral space. Originally it was settled that there should be two sets of boilers and two chimnies, one set before and one abaft the machinery, but it was thought that the after boilers took off too much space from the saloon, and moreover would be likely to increase the temperature of the accommodations more than would be desirable in warm weather. It was, consequently, arranged that they should all be placed forward, or before the machinery. The depth of the Great Western's hold is 23 feet. The boilers and steam chests occupy the whole space from the platform to the deck, they are four in number, in two compartments, each boiler having a clear passage all round it. There is fitted to each a change water-pump, through which at every stroke of the engine a portion of water is drawn out from the bottom, in quantity about one-half that evaporated in the production of steam, the whole of which is, of course, supplied with new sea water, but instead of reaching the boilers in a cold state, it acquires an additional temperature of about 70 degrees, by passing through a system of tubes, around which the hot water flows in its passage to the change pump; the water from the boiler is thus cooled down in the same degree, previous to its being discharged overboard. The merit of this invention is Mr. FIELD'S, and it

would appear to be second to nothing in its effects on marine steaming. The boilers are each furnished with the common blow-off cocks, which may be used in case of need, but with the changing pumps the operation of blowing off is not resorted to, consequently the steam and the state of the fires are much more uniform. The voyage of the Great Western out and home has not in the slightest degree injured the boilers, nor has it been necessary to renew a single fire-bar.

In the table detailing the expenditure of fuel, it will be seen that at times there is a vast disproportion in the consumption, on some days 39 tons, and on others even as little as 21 are in the return. The Log gives fair reasons for the difference on most occasions, but not on all, as much of the larger expenditure may be attributed to the fact, that the first lot of coal, which was the middle quality used, had greatly deteriorated in quality. It went from Bristol to London in August, 1837, was landed and housed in September, and reshipped in March, 1838. The coals laid in, in the river, and added to the foregoing (which were Lydney*), were HENDERSON's Walls' End, CARR's Hartley, WEST Hartley, and a small quantity of Merthyr. The quantities the ship had on board on the first trial were—

(Old) Lydney from 80 to	100	Tons
HENDERSON's Walls' End	49	,,
Merthyr - - - - - - -	21	,,
West Hartley - - - - -	42	,,

With which and her stores the ship drew 12 feet. The next quantity put on board was CARR's Hartley, 364 tons, with a portion of which we made a second trial, at 13½ dft. of water on an even keel. On the ship's arrival in Bristol she received of Lydney in lumps 195 tons, making a total of 771 tons, of which quantity not less than 600 tons were on board when she started for New York, the rest having been consumed in moving the engines when moored at Blackwall, in the trials, and on the passage round. If the Lydney sort be excepted, the rest of the coal came in as it arrived in the Colliers, and no doubt a great deal of trash (steamingly speaking) was occasionally brought to the fires.

Some very interesting experiments were made by Mr. BRUNEL, and Messrs. MAUDSLAYS and FIELD, in the river, and by the two latter on the passage round to Bristol, with an indicator, and Mr. PEARNE repeated the experiments on the outward passage. The card which the indicator marked made it apparent, that by means of the expansion valve, a great saving of fuel may be effected, with little loss of speed—that with half the steam, two-thirds of the power may be obtained at all times.

The Great Western is now on her second voyage, and there is every reason to hope that on her return, much which is now incomplete in these details will be rendered perfect, and a more scientific and elaborate statement of many important particulars will be placed within the reach of the Directors. It may safely be asserted that the past performance of this splendid Steamer has surpassed the most sanguine anticipations of the most zealous friends of our Company.

In a small book, containing calculations, made by Mr. PEARNE, (the Head Engineer, who unfortunately died at New York,) and memoranda of what the engines required to have done to them on arrival, I find written in pencil a copy of a letter, intended either for Messrs. MAUDSLAYS and FIELD, or the Directors, which, although much rubbed, I have contrived to decypher, I think correctly. The blanks left would have been filled in

* Low Delf, from Mr. PROTHEROE's Colliery, of which nearly 600 tons were shipped on the second voyage.

and the letter finished perhaps the same evening on which it pleased the Almighty Disposer of Events by an awful visitation to will it otherwise. There are no data by which to form an opinion of the exact time when the copy was scrawled, but it is not improbable that the last desponding words were pencilled a very few minutes before the accident, which was the immediate cause of terminating the existence of a man, of whose value these pages bear ample testimony. His health was delicate, and it is probable the anxiety of mind he was about to describe, combined with the zealous prosecution of his duties in an enervating and heated atmosphere for fifteen days in succession, tended not a little to prevent his rallying and recovering from the effects of the scalding. In him the Company has lost a valuable servant, and science, in regard to the engineering department, an able chronicler of one of the most interesting experiments of modern times. The respect in which he was held by the assistant Engineers is a proof of their estimation of his talents, and the affectionate manner in which his name is mentioned by the officers of the ship and the young gentlemen (the cadets), his messmates, to whom it was designed he should endeavour to impart some portion of his practical acquirements, is the best proof that can be advanced of the kindliness of his nature, and of his possessing, in addition to judgment, energy, and zeal, other qualities admirably fitting him for the important trust confided to him.

The following is the copy of the letter alluded to :—

"Gentlemen,

"I beg to announce to you by first ship leaving after our arrival here that we reached this port in no worse condition than when we left Bristol, excepting all hands very much fatigued. We were fortunate after the first two days were over in getting a slant of wind favourable, then light breezes ahead and fine weather, with which we ran near to the great bank; after which we had some gales ahead with very heavy seas, in which the ship behaved admirably, although rolling and pitching considerably, as may be imagined, her movements, however, were uncommonly easy, and she shipped no water to speak of; our consumption of coal has been greater than calculated upon. We were said to have better than 600 tons on leaving Bristol, and have now about having expended in days during several of which, I had expansion valves on various grades and days only the two boilers at work, with a view to save expenditure. I had only to stop twice, once to tighten connecting rod brass, the 3rd day, and on the 7th day to over-haul and tighten up bolts in wheels. On the 17th, at 6, P.M., stopped and got sounding on the Bank of Newfoundland. The engines, *I am proud to say*, have performed even beyond my expectation, which was at all times sanguine. Some of the little usual difficulties of hot bearings, occasional loss of vacuum, loose joints, &c., were met, and enabled the engines to work as intended. The changing water apparatus has acted to perfection in the two after boilers; in the starboard fore one some confounded piece of saturated wood (I suppose) got into the aperture of the plug in the cock and stopped the draw off. Some lesser obstruction occurred in larboard fore cock; however, I regulated the gravity of the water by blowing off occasionally as required. The paper relating to saltness of water is indicated by hydrometer left with me, which was incorrect, and rather alarmed me at first. Luckily I sent on shore at Bristol for a second hydrometer, and I believe arrived at a definite scale to prove the water. After I got the pumps &c., in proper work, I never much exceeded two saltnesses of salt water !! in the after boilers, viz., if common salt water weighed 11 degrees, I have not exceeded 25 degrees. In summing up, the engines are a piece of magnificent perfection.

"I believe, Gentlemen, you are aware of the mental depression I experience from anxiety to have the engines and all"—Here the copy abruptly ends.

It is much to be regretted that Mr. PEARNE did not fill up each hiatus with the numbers he evidently intended should appear, but which as evidently required the voyage to be concluded, and some time to be expended on the survey and estimate of the remnants in the different parts of the ship. Circumstances unfortunately have prevented our knowing with precision the quantity which had been expended in the trials of the engines, and on the passage to Bristol, so as to be enabled to fix the exact quantity with which the Great Western took her departure from Kingroad. The result of the experiments made on the passage from London, and of the careful measurement of the room for coal stowage is, however, that she had at least 600 tons on board.

The following Logs shew the total number of revolutions of the wheels, indicated by the counter on the ship's arrival at Bristol, to have been 557,454, of which number 287,354 were the revolutions on the passage to New York, and the remainder, 270,100, on the passage home. The diameter of the wheel is 28 feet 9 inches; the diameter, therefore, of the centre of action of the boards may be assumed to be 26 feet. On the outward passage, the wheels traversed 3670 nautical miles, and on the homeward 3450. Assuming the distance at 3000 nautical miles, the wheels lost 670 miles on the former, and 450 on the latter passage. The difference is to be accounted for by contrary strong winds, and by the current, which impeded her progress, going to the Westward in the same ratio as the latter assisted it on her passage home. After a little more experience, it is not too much to assume that the counter will turn out a tolerably correct indicator of the ship's daily runs, and the rate of the current which it is well known sets with more or less strength from the Westward in the latitudes the Great Western has to traverse.

With respect to speed, the American River Steam Boats are said to be the fastest vessels afloat, but probably they are not faster than the best Margate, Herne Bay, or Gravesend vessels. The best authorities do not lay claim to speed in America beyond fourteen English statute miles per hour, or with an admitted four miles per hour tide up the Hudson (on which river their fastest boats ply), of eighteen miles an hour. The measured distance between Blackwall and Gravesend is more than twenty-two miles. The Great Western accomplished this distance, with the tide, in one hour and fourteen minutes, or at the rate of eighteen miles per hour. The tide (it not happening to be the springs) was not strong; the pilot called it a three miles tide. If we allow it to have helped the ship four and a half miles for the hour and a quarter, we shall have eighteen miles and a half as the ship's performance in an hour and a quarter, or fourteen miles per hour. The Log (common) gave twelve and a half *knots*, and even better, frequently. The wheels' revolutions per minute agree fairly with the distance.* The Comet, a few days previously, was, by the admission of her Captain, beaten considerably by the Great Western, and the Pearl, when alongside her, and affected by the same strength of tide (then against all) was well dropped twice. By the reports of trials between either the aforesaid vessels or some others of their class, and a new Iron Boat, it appears the distance above-named was, on another occasion, accomplished

* Under favourable circumstances, such as a fair wind and perfectly smooth water, the wheels and the ship's distance run would approximate. In this case sixteen revolutions exceeded the run by more than two miles an hour.

in an hour and twelve minutes. Hence the conclusion, that twelve *knots* and a half is about the maximum speed attainable under the most favourable circumstances, and that we on this side the Atlantic are upon an equal footing, in that respect, with our friends on the other.*

The instructions issued to the Captain of the Great Western were, that he should endeavour to accomplish his voyage more with an eye to a discreet use of fuel, than to the constant attainment of maximum of speed, through extreme consumption. It is in the correct or judicious exercise of this principle, that the practical working of our undertaking is comprised, the grand object of its promoters not having been so much the mere accomplishment of the voyage, as to bring its time within definable computation, and to fix that time as less than a sailing packet would require under almost any circumstances. This object is now attained.

The manner in which the Engineer's Log on the homeward voyage has been kept renders it quite unnecessary to make excuses for only extracting the columns noticing the state of the Vacuum Gauges and Expansion Valves, the number of Boilers in work, and the table of Stores' Consumption, and combining them with the Captain's Log. There is only one notice of experiments on fuel, and that does not give either the time, quantities, qualities, or results, further than "opened the after tank, and consumed in twenty-four hours twenty-two tons of coal." The Engineers appear to have been a good deal troubled by the heating of the repaired connecting brass most of the passage, otherwise this negligence in such a voyage would have been unpardonable. The calculations of coal consumption on this passage are again not precise, the quantity taken on board at New York having been unfortunately laid in by measure, and the weights of different qualities vary so much, as to set minute calculations at defiance. The sort was Newcastle, from Messrs. BRANDLING's Colliery.

No. 1, of the Appendices, is the Report which immediately preceded the formation of the Great Western Steam Ship Company.

No. 2—The Dimensions of the Ship and of her Engines.

No. 3—The First Report of the Directors.

No. 4—A Journal of the Outward Voyage, by W. A. FOSTER, Esq., of Philadelphia, passenger.

No. 5—Her Departure from New York, by Col. WEBB, passenger.

No. 6—Resolutions of the public meeting held in Bristol, to express the sentiments of its inhabitants upon the reception given to the Great Western by those of New York.

I am quite aware of the incompleteness of the materials thus laid before the public. Circumstances have precluded their being more perfect, but it is hoped that, even in their present state, they may not be unproductive of benefit to the science of steam navigation.

C. C.

* The speed of men-of-war may have increased in these *piping times*; but, in the war, thirteen knots, under rare circumstances, as to wind, water, and sail, were considered the utmost our crack frigates could accomplish by the rule of thumb (common Log Reel) shewing. It is probable that MASSEY's Log has never registered more than, or that the actual distance run has never exceeded, twelve knots for many successive hours, even in the fastest *sailing* vessel that ever floated.

The assumed quantity of coals at starting was, in the Engineer's Log, 660 tons. I gave Mr. Pearne a statement that went to say, "better than 600 tons was supposed to be on board." This is explained in the Preface. Under the circumstances, I have felt myself justified in correcting the error, and substituting 600 tons. *The daily statements are not affected*, but the remainder is brought as near as I can now find out,—[Mr. Pearne being the only person having the calculations of coal spaces beyond the Bunkers at either end of the ship],—to an approximation of what was left in the different parts of the ship, which has been stated at from four to five days' consumption. It is perfectly clear that the quantity set down as left was not the result of examination and estimate, but merely the remainder of the supposed quantity put on board, less the *supposed* daily consumption. C. C.

in an hour and twelve minutes. Hence the conclusion, that twelve *knots* and a half is about the maximum speed attainable under the most favourable circumstances, and that we on this side the Atlantic are upon an equal footing, in that respect, with our friends on the other.*

The instructions issued to the Captain of the Great Western were, that he should endeavour to accomplish his voyage more with an eye to a discreet use of fuel, than to the constant attainment of maximum of speed, through extreme consumption. It is in the correct or judicious exercise of this principle, that the practical working of our undertaking is comprised,

* The speed of men-of-war may have increased in these *piping times*; but, in the war, thirteen knots, under rare circumstances, as to wind, water, and sail, were considered the utmost our crack frigates could accomplish by the rule of thumb (common Log Reel) shewing. It is probable that MASSEY'S Log has never registered more than, or that the actual distance run has never exceeded, twelve knots for many successive hours, even in the fastest *sailing* vessel that ever floated.

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CAPTAIN'S AND ENGINEER'S

LOGS

OF THE

GREAT WESTERN.

GREAT WESTERN STEAM SHIP.

ENGINEER's LOG,

Kept by G. PEARNE, Superintendent of that Department.

Wednesday, 28th March.

8½h., A.M., lighted fires; got steam up, and started at noon down the river; got aground opposite Trinity Wharf, and lay near half an hour; started again, went down to Sea Reach; engines, 16½. 3h. 25m., P.M., turned round to go up the river. 6h., P.M., arrived at moorings and blowed out boilers, as much as steam would admit.

Thursday and Friday, 29th and 30th March.

All hands fully employed, preparing for sea, on engines, &c.

Saturday, 31st March.

3¾h., A.M., lighted fires. 6h. 10m., A.M., started; calm and inclined to be feggy. 7½h., A.M., stopped to put out some persons at Gravesend; all going on well. 8½h., A.M., a fire broke out in the region of the chimney, from the oil in the felt on the steam chests having ignited, which threatened destruction to the ship; the fore stoke-hole and engine-room soon became enveloped in dense smoke, and the upper part in flame. Thinking it possible the ship might be saved, and that it was important to save the boilers, I crawled down, after a strong inhalation of fresh air, and succeeded in putting on a feed plunger and opening all the boiler feed cocks, suffering the engines to work to pump them up, as the steam was generating fast from the flames round the upper part of boilers. A small fire-engine was got to work on deck; C. Claxton, Esq., and the Chief Officer, descending with the hose, at great risk. We shortly after got the engines and hand pumps to work, and all hands baling, pumping, &c., succeeded in extinguishing the fire. The most melancholy part of the catastrophe was, that J. K. Brunel, Esq., in attempting to go down the fore stoke-hole ladder, stepped on a burnt rung,

several of which, in this state, giving way, precipitated him down to the bottom, about 20 feet, falling on Mr. Claxton. He was taken up apparently seriously injured, and ultimately sent on shore. The vessel was run aground, in soft mud, not far from the Chapman Beacon. During the confusion, three or four stokers got over the side, into a boat, and left the ship. After a few hours, no very material damage having been done, got steam up, and started down the river. During the night, connecting rod brasses worked hot. The nine remaining stokers, for the most part, not understanding the management of fires, could not keep steam; worked expansion gear 4th grade; occasionally blowed off boilers.

Sunday, 1st April.

8h., A.M., had stokers up before the Captain, and lectured them; put on, for first time, brine pumps of larboard boilers. 9, A.M., also ditto of starboard boilers; stiff steady breeze, N.E., and fine weather; engines average, 14; ship's speed, 12½ knots. 10, A.M., engines 15½, vacuum, larboard 27, starboard 27¼. About noon tried gravity of water ex boilers, as per paper; also tried consumption of coal for four hours—result:

61 barrows, of 190lbs. each	11590lbs.
Per hour	2897
Per horse-power per hour	724

Engines going at full speed, say 15 revolutions; all steam on; continued running down Channel; fine easterly wind, fresh.

Monday, 2nd April.

12½h. A.M., passed the Longships Light; all sail previously taken in; fresh breeze ahead; engines, 13½; vacc. 27¼ and 27.40; during the day, breeze died away to calm; tried gravity of water ex boilers, also indicator; engines, 15½; tried also expansive gear. 4h. 25m. P.M., arrived and came to anchor in Kingroad; blowed out boilers as much as we could; got up ashes, and worst of dirt off engines.

SHIP's LOG.

N.B. The following Scale, for notifying the force of the wind, and simplifying the entries into the Log, was arranged by Captain Beaufort, R.N., Hydrographer to Her Majesty's Navy.

SCALE.

Captain Beaufort's Figures, to denote the Force of the Wind.

0	Calm.	7	Moderate Gale.
1	Light Air.	8	Fresh Gale.
2	Light Breeze.	9	Strong Gale.
3	Gentle Breeze.	10	Whole Gale.
4	Moderate Breeze.	11	Storm.
5	Fresh Breeze.	12	Hurricane.
6	Strong Breeze.		

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Sunday, the Eighth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd,*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	N.W.	No. 10										
2												
3												
4												
5												
6												
7												
8												
9		No. 8										
10												
11												
12												

In Latitude { by Obs. / by D.R. } Longitude { by Chrono. / by Lunar.

P1M	W.N.N.	No. 8	N.W.	9		690				Short and high.		
2				9		630						
3				9								
4				9								
5				9								
6				9		690						
7				9								
8			W. by N. ½ N.	9		705						
9	N.N.W.	5		8								
10				8		660						
11				8								
12		4		8	4	615						

Commencing Number of Counter,

Ending Number,

OCCURRENCES AND REMARKS.

A.M. Commences with strong gales and a short sea up, with heavy squalls. Twelve labourers employed to assist the crew in getting the coals, cargo, and stores off decks, and receive on board sundry stores, &c. At 6 the boat came off as directed, and took the labourers on shore; at 9 commenced heaving in the cable (the steam being up); at 10 weighed and proceeded slowly down channel; at 11h. 30m. got the anchor catted, and proceeded at full speed; struck the three after topmasts and gaffs, and fore-top gallant mast; down top gallant yard. 11½ average revolutions of wheel per minute. At 12h. 25m. passed to the northward of the Flat Holms, about one mile. Got the quarter boats on deck. More moderate and clear, with a high short N.W. swell; ship plunging heavy, and shipping water over top gallant forecastle; got the stream anchor in from the quarter; unbent the larboard bower chain, put it below, and cleared the decks as much as possible. All hands employed until 8, P.M., at which time mustered crew, and chose watches; starboard watch on deck; continued clearing decks. At 10 moderate and fine weather, with a very short sea up. Lundy lights bore N.N.E. 1½ miles. At midnight ditto, wind and weather.

ENGINEER's LOG.

11				8								
12		4		8	4	615						

At midnight ditto, wind and weather.

ENGINEER's LOG.

Hour. A.M.	Steam Guage.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12	3½ Inches	26.5	27	0	11.5 690	70	Four
PM							
2	.....	26.5	27	0	10.5 630	73	Ditto
3							
4	.....	26.5	27	0	10.5 630	76	Ditto
5							
6	.....				11.5 690		Ditto
7							
8	.....				11.75 705		Ditto
9							
10	.....				11 660		Ditto
11							
12	.....	26.5	27	0	10.25 615		Ditto

Meridian.
Commencing Number of Counter, 800. *Ending Number,*

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.	Tow. lbs.
Commenced with	600		2072	70	168
Used					
Remaining	600				

OCCURRENCES AND REMARKS.

7, A.M., fires under way; 9, A.M., steam up, and commenced working to get anchor; 10h. 35m., A.M., started very slowly; 11h. 25m. set on full speed. At meridian attached brine pumps to engines of all four boilers. Water very muddy.

GREAT WESTERN.

First Voyage from BRISTOL to NEW YORK, Monday, the Ninth day of April, 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	N.N.W.	No. 4	W. by N. ½ N.	9		690				Short and high.		
2				9	4							
3				9	4							
4				9	4							
5				10								
6				10		720						
7				10						Long and high.		
8	Variable.	2		10		780						
9				10								
10	S.S.W.	3		10	4		3 trysails and 2 jibs.					
11				10	4							
12				10	4	795						
In Latitude { by Obs. 50. 27. N. / by D.R.				Longitude { by Chrono. 7. 32. / by Lunar.							30 10	55½
P1M	S.S.W.	3	W. by N. ½ N.	11		795						
2				11		816	Added 1 top-sail & foresail.					
3	S.W.	4		11								
4				11		834						
5				11			3 trysails 2 jibs.					
6	W. by S.			11		720						
7	West			10	4		None set.					
8				10	4	714						
9				10								
10				10		720						
11				10								
12				10								

Commencing Number of Counter,

Ending Number, 17,232.

OCCURRENCES AND REMARKS.

Moderate winds and fine weather, with a short high sea up. Ship pitching deep, but very easy. Washed away the head cloths and trident of figure head. Passed several sail on the starboard tack, standing to the westward. Employed clearing the lumber off deck, and washing them. Wind variable. At 10 wind shifted suddenly to the S. S. W.; up gaffs and set three trysails and two jibs. At 11h. 30m. spoke the American ship Neponsit, of Boston, from Liverpool to Charleston, out forty-eight hours; at noon fine pleasant weather. At 1h. 30m. set the topsail and foresail; bent main trysail, it having been unbent to repair. At 4h. 30m. thick fog; wind variable to the westward; in topsail and foresail. At 6h. 30m. in all sail and stowed them; braced the yards up; passed several sail standing to the westward. At midnight moon clear; set the wind sails.

ENGINEER's LOG.

12				10								

ENGINEER's LOG.

Hour. A.M.	Steam Guage.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2	3½ Inches	26.5			10.5 630		All four.
3							
4	.....	26.5			10.5 630	79	Ditto
5							
6	.....	26.5	27	0	12 720	79	Ditto
7							
8	.....	27	27	0	13 780	95	Ditto
9							
10	.. ...	27	27	0	13 780	94	Ditto
11							
12	.....	27	27	0	13.25 795	88	Ditto
PM							
2	.....	27	27	0	13.60 816	83	Ditto
3							
4	.....	27	27	4½, P.M., set on 4th grade	13.90 834	85	Ditto
5							
6	.....	27	27	4th gra e	12.0 720		Ditto
7							
8	.....	27	27	0	11.90 714	92	Ditto
9							
10	.....	27	27	0	12 720	90	Ditto
11							
12	.....	27	27	0	12 720	91	Ditto

Meridian.

Commencing Number of Counter, *Ending Number,* 17,232.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	600		2072	70
Used, up to noon, from 10, A.M., yesterday, 26 hours, at 30 cwt.	39		112	2½
Remaining	571		1960	67½

OCCURRENCES AND REMARKS.

During the last night both connecting rod brasses and starboard inner plummer block brass worked hot. A squeaking noise in larboard slide. Tried consumption of coal from 9, A.M., to 3, P.M., viz., six hours consumed 33 cwt. per hour, say average since leaving roadstead yesterday 30 cwt. per hour. 4, P.M., canvass drawing on ship; set expansive camm to 4th grade. 8, P.M., put roller back to 1st grade of camm. Got wind sails down into engine room, being very hot.

GREAT WESTERN.

First Voyage from BRISTOL to NEW YORK, Tuesday, the Tenth day of April, 1838.

SHIP's LOG.

Hour. A.M.	Wind. Direction.	Force.	Course.	Rate. Knots.	Fms.	Revolutns. per Hour.	Sail.	Immersion. Forwd	Aft.	Wave.	Barom.	Therm
1	W. by N.	4	W. by N. ½ N.	9	4	720	None set.			Long and moderate		
2				9	4							
3				9	4							
4				9	4	735						
5				9	4							
6				9		720						
7				9								
8				9		735						
9				9		690						
10				9								
11				8	4							
12				9		720						
In Latitude { by Obs. 49. 45. / by D.R. 49. 45.				Longitude { by Chrono. 12. 16. 45. W. / by Lunar. 12. 50.							30. 20.	58½
P1M	W.S.W.			9	4	720				Long and moderate		
2				9	4							
3	S.W.			9	4		Inner jib and fore trysail.					
4				10		780						
5	S.S.W.			10			Main and mizen trysails					
6				10								
7				10		810						
8				10		765						
9	Variable.			10								
10				9	4	780						
11	S.W.		W.N.W.	9								
12				9		750						

Commencing Number of Counter, 17,232.
Ending Number, 35,028.

OCCURRENCES AND REMARKS.

A.M. at 3 passed a ship standing to the N.W.; at daylight commenced clearing the decks, and putting the lumber below. Unbent the starboard bower chain, and put it below into the chain locker, and all the ground geer. Washed decks, and put part of the stream chain below into chain locker. Tried the patent logs, and found them give at the rate of nine miles per hour. The distance allowed is per common log. At 11 spoke the American ship South American, under top gallant sail, from Liverpool to New York. Returned cheers with her. She left Liverpool on the 3rd inst. At 2, P.M., the South American hull down on the starboard quarter. At noon *Sun obscure*, hazy weather. At 3h 0m. set the inner jib and fore trysail. At 4h 30m. set main and mizen trysails. Moderate and hazy at intervals. At midnight, ditto weather.

7

ENGINEER's LOG.

Meridian.

12				9	750		

ENGINEER's LOG.

Hour. A.M.	Steam Guage.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2	3½ Inches	27	27	0	12 720	88	All four
3							
4	.....	27	27.5	0	12.25 735	89	Ditto
5							
6	.....	27	27.5	0	12 720	89	Ditto
7							
8	.....	27	27.5	0	12.25 735	86	Ditto
9							
10	.....	27	27.5	0	11.50 690	85	Ditto
11							
12	.....	27	27.5	0	12 720	85	Ditto
P.M.							
2	.....	27	27.5	0	720 12		Ditto
3							
4	.....	27	27.0	0 3	780 13	84	Ditto
5							
6	.....	27	27.5	3	780 13	74	Ditto
7				4	810 13.5		Ditto
8	.....	27	27.5	4	765 12.75	72	Ditto
9							
10	.....	27	27.5	4	780 13	72	Ditto
11							
12	.....	27	27.5	4	750 12.5	72	Ditto

From Yesterday Noon. *Commencing Number of Counter*, 17,232.

Meridian. *Ending Number*, 35,028.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Yesterday noon, commenced with	571		1960	67½
Used	33		112	2½
Remaining	538		1848	65

OCCURRENCES AND REMARKS.

Squeaking in larboard slide continues, which is considered to arise from packing being deranged; in other respects engines performing well. 11½, A.M., and 12, blowed out partially all four boilers. 2, P.M., stopped three minutes to tighten up starboard connecting rod brasses. Meridian, having tried consumption of coal for six hours, viz., from 6, A.M., to noon, there was consumed 18,488 lbs., 3081 lbs. per hour, or 27 cwt. 5 lbs., say consumption for twenty-four hour. 33 tons. 4, P.M., put camm on third grade, fore and aft sails being set and drawing. 7, P.M., canvass assisting ship; put camm on fourth grade. N.B. The draft created by ship's canvass and windsails in engine room tend to keep heavy bearings cool. Engines performing regular and well during the night.

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Wednesday, the Eleventh day of April,* 1838.

SHIP's LOG.

Hour. A.M.	*Wind.* *Direction.*	*Force.*	*Course.*	*Rate.* *Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion.* *Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	S.W.	4	W.N.W.	9		750	3 trysails and inner jib.			Long and high N.W		78
2				9								
3				9								
4	Variable to the Westward.		N.W. by W.	9								
5				9								
6	Ditto to the Northward.			9		720	None set.					80
7				8	4					Ditto.		
8	North.			8	4		3 trysails and inner jib.					75
9	N. by E.		W. by N. ½ N.	9			Outer jib.					
10				10		798						
11				10	4							
12	N.N.E.			10	4	735					E. R.	73
In Latitude { by Obs. 48. 11. N. / by D.R. 49. 4.				Longitude { by Chrono. 17. 10. 0. W. / by D. R. 17. 25.							30 50	61½
P1M	N.N.E.	4	W.N.W	10	4					Ditto.		
2				10	4	735						
3	N.E.			10	4		Fore-top-gallant sail.					
4				10	4	750						71
5				10	4							
6				10	4	720	Mizen gallant-topsail.					74
7				10	4							
8				10	4							
9	East.			10	4							
10				10	4							82
11				10	4	705						
12	E. by S.	7		10	4	780				Ditto.		76

Commencing Number of Counter, 35,028.
Ending Number, 53,700.

OCCURRENCES AND REMARKS.

A.M. moderate winds and hazy at intervals, with a long heavy swell from the N. W. ship plunging heavy; wind variable to the westward. At 6 wind variable to the N. W.; in all sails; braced the yards round. At 8 set three trysails and inner jib. At 8h. 30m. set the foresail and topsail. At 9 set outer jib; exchanged colours with a French ship running to the eastward; up foretop gallant mast and yard; people employed fitting heel ropes for topmasts, and sundry other jobs. Lat. Obs. 48. 11. N. Moderate and cloudy, with light rain at intervals; people variously employed at ship's duty; swayed up main and mizen topmasts; set fore-top gallant sail. At 7h. 30m. set mizen gaff topsails. At 8, ditto weather hauled down gaff topsail, with the yard carried away; wind variable and cloudy; took in and made sail as required. At midnight strong wind and clear, with a heavy N.W. swell up; ship rolling heavy.

ENGINEER's LOG.

9	East.			10	4							
10				10	4							82
11				10	4	705						
12	E. by S.	7		10	4	780				Ditto.		76

ENGINEER's LOG.

Hour. A.M.	*Steam Guage.*	*Vacuum Gauges. Larbd.*	*Starbd.*	*Expan. Valve No.*	*Revolutions per Hour.*	*Therm*	*Boilers In Work.*
1							
2	3½ Inches	27	27.5	4th grade	750 12.5	78	All four
3							
4	.....	27	27.5	4th	750 12.5	78	Ditto
5							
6	.....	27	27.5	0	720 12	80	Ditto
7							
8	.....	27	27.5	4th	720 12	75	Ditto
9				5th			Ditto
9.45	.....			7th	13.3		
10	.....			7th	798 13.3		Ditto
11							
12	.....	27	27.5	7th	735 12.25	73	Ditto
P1M							
2	.....	27	27.5	7th	735		Ditto
3							
4	.....	Choked	27.5	7th	750 12.50	71	Ditto
5							
6	.....		27.5	7th	720 12	74	Ditto
7							
8	.....		27.5	7th	720 12	74	Ditto
9							
10	.....		27.5	7th	720 12	82	Ditto
11	.....			5th	705 11.75		Ditto
12	.....		27.5	5th	780 13	76	Ditto

From Yesterday Noon. Commencing Number of Counter, 35,028.

At Noon. Ending Number, 53,700.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	538	0	1848	65
Used	30	6	80	2½
Remaining	508	14	1768	62½

OCCURRENCES AND REMARKS.

6, A.M., canvass taken off ship; set expansion valve to 0. 8, A.M., wind favoured us; set expansion to 4th grade. 9, A.M., more sail; set expansion 5th grade. 9¾ expansion 7th grade; 10, A.M., having measured coal for five hours, consumed 12,880 lbs., 2576 lbs. per hour, or 23 cwt. per hour. Meridian, fine steady breeze, north easterly; canvass set; engines performing well; expansion 7th grade. 2, P.M., still on 7th grade expansion. 4, P.M., larboard vacuum guage choked; temperature 71. 11, P.M., canvass reduced on ship, and rolling much; set expansion back to 5th grade.

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK****, Thursday, the Twelfth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	E. by S.	4	W.N.W.	10	4	780	3 trysails, foresail, topsail, & top gallant sail and jibs.			Long and high, N.W.		74
2				10	4							
3				10	4							
4				10	4							72
5				10	4							
6				10	4		Foresail, topsail, and top-gallant-sail.					
7				10	4							
8				10	4							80
9				10	4							
10				10	4							84
11		3		10	4							
12				10	4							
In Latitude { by Obs. Indift. 47.17.N. / by D.R. 47.47.				Longitude { by Chrono. 22. 51. 0 / by Lunar. 22.48							30. 80.	63½
P I M	Variable from E.N.E to E.S.E.		W.N.W.	10		780	Topmast studding-sail.			Moderate		
2		2	NW by W	10			Took in and made sail as required.					86
3				10								
4				10		810						82
5				10								
6				10		780						83
7				10								
8				10		840						85
9				10								
10				10		780						76
11				10								
12				10		750						75

Commencing Number of Counter, 53,700.
Ending Number, 72,002.

OCCURRENCES AND REMARKS.

Moderate winds and cloudy weather; all necessary sail set. At 6 in all trysails and jibs. At 8 steady wind and fair weather; all sail set to the best advantage; people employed variously: driving coals, chocking cargo, fitting studding-sail gear, &c. At noon, cloudy. Lat. indifferently observed, 47. 17. N.; set starboard fore-top-mast studding-sail; wind variable; took in and made sail as required; one man trimming coals off the fore coal tanks for the use of the stokers at fore end of boilers; light winds and pleasant weather. At midnight, ditto weather.

ENGINEER's LOG.

11				10		780	Too					76
12				10		750						75

ENGINEER's LOG.

Hour. A.M.	*Steam Guage.*	*Vacuum Gauges. Larbd.*	*Starbd.*	*Expan. Valve No.*	*Revolutions per Hour.*	*Therm*	*Boilers In Work.*
1							
2	3½ Inches	Choked.	27.5	5th grade	780 13	74	All four.
3							
4	.....		27.5	5th	780 13	72	Ditto
5							
6	.....		27.5	5th	780 13		Ditto
7							
8	.....		28	5th	780 13	80	Ditto
9							
10	.....		28	5th	780 13	84	Ditto
11							
12	.....		28	5th	780 13	84	Ditto
P1M							
2	.....		28	5th	780 13	86	Ditto
3							
4	.....		28	5th	810 13.5	82	Ditto
5							
6	.....		28	5th	780 13	83	Ditto
7							
8	.....		28	7th	840 14	85	Ditto
9							
10	.....		28	7th	780 13	76	Ditto
11							
12	.....		28	7th 5th	750 12.5	75	Ditto
12½							

From Yesterday Noon. *Commencing Number of Counter,* 53,700.

At Noon, *Ending Number,* 72,002.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	508	14	1768	62½
Used	28		60	2½
Remaining	480	14	1708	60

OCCURRENCES AND REMARKS.

11 A.M., found it necessary to put stokers and trimmers into two watches, which they objected to; had them up before the Captain, and gave them specific orders to abide by such regulations for their working as should be made.

ORDERED.

Starboard watch to commence at 4, P.M.
Thompson
Hummerston
Wheatly
Merney
Rowland
Tillett
Porter
Smith

Say four on the fires, and four to turn coals.

Larboard watch to commence at noon.
Wachet
Bannon
Scully
Raid
Crooks
Edwards
Grell
A sailor.

Meridian; moderate breeze right aft; engines working smooth and well. 7, P.M., having measured coal consumed for last six hours, with expansion on 5th grade, there has been consumed 16,430lbs. 2740lbs. per hour.

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Friday, the Thirteenth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	*Wind Direction*		*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	Variable from N.E. to E.S.E.	3	N.W. by W.	10		840	All plain, and starboard fore-top studding-sail.			Moderate from N.W.		80
2				10								81
3				10								
4				10								82
5				10								
6				10		870						
7				10								
8				10		840						
9				10								
10				10		870						
11				10								
12				10		840						
In Latitude { by Obs. / by D.R.			46. 56. N. / 46. 56.	Longitude { by Chrono. / by D.R.		28. 27. / 28. 9.					30. 75.	64½
P.M.	Variable from N.E. to E.S.E.	4	N.W. by W. ½ W.	10			Main gaff-top-sail.					82
2				10		840						
3				10								
4				10		858						84
5				10								
6				10								85
7				10								
8				10		840						88
9				10								
10				10								
11				10								
12				10								

Commencing Number of Counter, 72,002.
Ending Number, 92,210.

OCCURRENCES AND REMARKS.

Light variable winds and fine weather; took in and made sail as required; one man trimming coals from the after hold for the after fires. At daylight saw a brig hull down on the larboard beam on the larboard tack; carpenter making gaff-top-sail yard and platform for coal passage in after hold; set main gaff-topsail; wind variable, and fine; took in and set sail as required; people employed turning coals out of after hold, hauling ashes up, fitting square-sail yard for the sail; two men trimming coals off the coal tanks forward, and out of the after hold; moderate winds and fine weather at the end.

8				10		840					88
9				10							
10				10							
11				10							
12				10							

ENGINEER's LOG.

Hour. A.M.	*Steam Gauge.*	*Vacuum Gauges. Larbd.*	*Starbd.*	*Expan. Valve No.*	*Revolutions per Hour.*	*Therm*	*Boilers In Work.*
1							
2	3½ Inches		28	5th grade	840 14	80	All four.
3							
4	.....		28	5th	840 14	81	Ditto
5							
6	.....		28	5th	870 14.5	82	Ditto
7							
8	.....		28	5th	840 14	82	Ditto
9							
10	.....		28		870		Ditto
11				0, 3, 5, 7,	14.5		
12	.....	27.5	28	5th	840	82	Ditto
12½ PM				3rd	14		
2	.....	27	28	3rd	840	82	Ditto
3							
4	.....	27	28	3rd	858 14.3	84	Ditto
5							
6	.....	27.5	28	3rd	858 14.3	85	Ditto
7							
8	.....	27.5	28	3rd	840 14	88	Ditto
9							
10	.....	27.5	28	3rd	840 14.5		Ditto
11				5th			
12	.....	27	28	5th	840 14	88	Ditto

From Yesterday Noon. *Commencing Number of Counter, 72,002.*

At Noon. *Ending Number of Counter, 92,210.*

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow lbs.	Oil. Gals.
Commenced with	480	14	1708	60
Used	29	14	56	2½
Remaining	451	0	1652	57½

OCCURRENCES AND REMARKS.

4, A M., moderate breeze, N.E., and fair weather; engines performing well. 6, A.M., commenced to work coal from after hold by one iron barrow; during the last night, M. J. Scully did not go to work, by reason of a hurt he says he got by a coil of rope falling on him, last evening, in fore stoke-hole. 10, A.M., to 11, A.M., tried indicator, during which time had expanded on 0, 3, 5, and 7 grades; vacc. starboard, 28; in consequence of the vessel deriving assistance from her canvass during trials with indicator, the indications were not so definite as if tried by steam alone. 11½, P.M., heard slight noise in larboard paddle-wheel, which had occurred before, as though a bolt was loose, which soon ceased.

GREAT WESTERN

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Saturday, the Fourteenth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	Wind. Direction.	Force.	Course.	Rate. Knots.	Fms.	Revoluns. per Hour.	Sail.	Immersion. Forwd	Aft.	Wave.	Barom.	Therm.
1	S.W. and Variable.	2	N.W. by W. ½ W.	10	4	840	All plain.			Moderate	E. R.	80
2				10	4							
3				10	4						E. R.	77
4				10	4							
5				10							E. R.	78
6				10								
7				10							E R.	80
8	S.S.W.			10		858						
9				10			Square sail.					
10				10		840						
11				5		Stopped at ½ hour.						
12				2	4							
In Latitude { by Obs. / by D.R.			46. 23. N. / 46. 26.	Longitude { by Chrono. / by D. R.		34. 9. 0. W. / 33. 40.					30. 60.	62
PM	S.S.W.	2	N.W. by W. ½ W.	5	4					Moderate		
2			W.N.W.	10		900						
3				10								
4				10		840					E. R.	76
5		3		10								
6				10								
7				10								
8				10								
9		5		10	4							
10				10	4							
11				10	4							
12				10	4							

Commencing Number of Counter, 92,210.
Ending Number, 111,100.

OCCURRENCES AND REMARKS.

Commences with light, variable winds, and fine weather; stokers complained of the extreme heat of their berths. At 4, ditto wind and weather; carpenter fitting a grating bulk head to starboard side of fore lower deck cabins for the stokers. At 10h. 33m. stopped the engines to examine the paddle wheels, having suspected a portion of them was not correct; found some of the bolts loose; set them up, and put aright the necessary jobs in engines, as per engineer's log. At noon, latitude indifferently observed. At 12h. 20m., P.M., finished the necessaries to the wheels, and set the engines to work again at full speed. At 2 passed a brig, distant about three miles, standing to the westward; light winds and variable, in square sail. At 10 squally, with small rain; at intervals took in the gaff topsails. At midnight, ditto weather.

ENGINEER's LOG.

11				10	4							
12				10	4							

ENGINEER's LOG.

Hour. A.M.	*Steam Gauge.*	*Vacuum Gauges. Larbd.*	*Starbd.*	*Expan. Valve No.*	*Revolutions per Hour.*	*Therm*	*Boilers In Work.*
1							
2	3.5Inches	27	28	5th grade	840 14	80	All four.
3							
4	.....	27	28	5th	840 14	77	Ditto
5							
6	.....	27.5	28	5th	840	78	Ditto
6½	.....			6th	14		
7							
8	.....	Choked.	28	6th	858 14.3	80	Ditto
9							
10	.....	No indication, but satisfied with a good vacuum.	28	6th	840 14		Ditto
11							
12							
P1M							
2	.....		28	6th	900		Ditto
2½	.....			7th	15		
3							
4	.....		28	7th	840 14	76	Ditto
5							
6	.....	27.5	28	7th	870 14.5	84	Ditto
7							
8	.....	27.5	28	7th	840 14	80	Ditto
9							
10	.....	27.5	28	7th	870 14.5	84	Ditto
11							
12	.....	27.5	28	7th	870 14.5	77	Ditto

Yesterday Noon.
Commencing Number of Counter, 92,210.

At 10½, *a.m., Yesterday.*
Ending Number, 111,100.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	451		1652	57½
Used	30		56	2½
Remaining	421		1596	55

OCCURRENCES AND REMARKS.

A.M., stokers much fatigued from want of rest, not being able to sleep in their berths by reason of heat; meridian set on again. 10½, A.M., moderate breezes, southerly, and fine weather; a knocking noise still existing in larboard wheels; deemed it advisable to stop engines and overhaul wheels; in larboard wheel, found one semi outer iron paddle adrift at one, and which would create the noise heard in both wheels; several nuts loose, and two bolts gone; tightened up nuts, put in two bolts, detached loose bent iron paddle; tightened up slide packings, drag links, and such other bearing as required. 12½, P.M., started again; 2½, P.M., all sail set to advantage; engines' revolution 15; put expansion on 7th grade. Some obstruction occurred in brine cock on starboard fore boiler, which not allowing the brine to be drawn off so much as should be, blowed off a portion occasionally.

GREAT WESTERN.

First Voyage from BRISTOL to NEW YORK, Sunday, the Fifteenth day of April, 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	Variable from S.S.W. to S.E.	6	W.N.W.	11			Foresail, fore-topsail, 3 trysails, and inner jib.			Moderate		
2				11								
3				11								
4	South.			11								
5				11								
6	Variable.	7		11								
7				11								
8	S.S.W.			11								
9		4		11								
10				11								
11	South.			11								
12				11								
In Latitude { by Obs. 45. 12. N. / by D.R. 45. 24.				Longitude { by Chrono. 39. 38. 30. W. / by Lunar. 39. 43.							30. 40.	65
P1M	South.	7	N W by W	10	4							
2			N W by W ½ W	10	4							
3	S.S.W.			10	4							
4				10	4							
5	S.W. by S.	7		10	4							
6				10	4							
7	Variable.			10	4							
8				10	4							
9				11								
10				11								
11				11								
12		8		11								

Commencing Number of Counter, 111,100.
Ending Number, 131,183.

OCCURRENCES AND REMARKS.

Commences with strong winds and squally; all sail set to advantage. At 5, got the after gaff up, and set the sail; swayed the topmast up. At 6, passed a French chassmaree, appurently bound to the Banks of Newfoundland to fish. At 7, spoke the brig Henry Brougham, on the starboard tack, bound to London, and requested to be reported: set the squaresail and gaff topsails. At 8h. 40m. squally; carried away fore-topmast, two feet above the cap; the top-gallant-mast and yard and fore cross-trees were carried away by its fall; all hands employed clearing the wreck until 6, P.M.; carpenter getting other spars ready. At 2, P.M., finished the spare top-mast, got it up, and rigged it; exchanged colours with an American ship, standing to eastward. At 4, fidded it, and set up the rigging, and got the topsail yards across. At 7h. 30m., in squaresail and gaff topsails, braced the yards up; watch employed securing the spars, &c., on deck. At mid-night, strong winds and squally; engines performing well,

ENGINEER's LOG.

11				11								
12		8		11								

ENGINEER's LOG.

Hour. A.M.	Steam Guage.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2	3.5Inches	27.5	28	7th grade	870 14.5		All four.
3							
4	.....	27.5	28	7	870 14.5	80	Ditto
5							
6	.....	27.5	28	7	870	78	Ditto
6½				9	14.5		
7							
8	.....		28	9	810 13.5	75	Ditto
9							
10	.....		28	9	780 13	75	Ditto
11							
12	.....		28	9	780	75	Ditto
				7	13		
P M							
2	.....		28	7	870 14.5	75	Ditto
3							
4	.....		28	7	900 15	75	Ditto
5							
6	.....		28	7	870 14.5	75	Ditto
7							
8	.....		28	7	840 14	78	Ditto
9							
10	.....	27.5	27.5	7	840 14	72	Ditto
11							
12	.....	27.5	27.5	7	840 14		Ditto

Yesterday Noon. *Commencing Number of Counter,* 111,100.

At Noon. *Ending Number,* 131,183.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	421		1596	55
Used	27		56	2½
Remaining	394		1540	52½

OCCURRENCES AND REMARKS.

4, A.M., larboard outer plummer block brasses hot; cooled down with water. 6, A.M., let one fire out in each boiler, viz., worked with eight furnaces; put expansion on 9th grade; average revolution during the time thirteen per minute; sails doing much good; average consumption of coal during the time, say five and a half hours, 19½ cwt. per hour. 11, A.M., joint of water pipe, from waste steam pipe, on after safety valve box, broke at flange; made temporary securement of same. Meridian, put expansion to 7th grade; kindled one more fire, viz., nine at work; occasionally blowed off portion of water from starboard fore boiler; the obstruction in brine cock still existing, supposed to be a piece of saturated wood jammed in aperture of cock plug.* 10, P.M., kindled another fire, ten at work.

* Turned out to be an old pair of canvass trousers, and the larboard one was partially obstructed by shavings; had to be drilled out at New York. All four worked beautifully on the homeward voyage.—C. C.

GREAT WESTERN.

First Voyage from ***BRISTOL to NEW YORK,*** *Monday, the Sixteenth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	*Wind.* *Direction.*	*Force.*	*Course.*	*Rate.* *Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion.* *Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	Variable to the Westward.	4	W.N.W.	10	4		foresail and 3 trysails.			Short and high.		
2				10	4							
3				10	4							
4		5		10	4							
5				10	4							
6		6		10	4							
7				10								
8		7		9								
9				8								
10		8		8								
11				8								
12		5		8	4							
In Latitude { by Obs. 44. 34. N. / by D.R. 44. 36. N.				Longitude { by Chrono. 45. 31. W. / by Lunar. 45. 19.							30 30	52
PM		2		9								
2				9								
3				9								
4		3		9								
5				9								
6				9								
7				9								
8		5		8	4							
9				7	4							
10				7								
11		8		7								
12				7								

Commencing Number of Counter, 131,183.
Ending Number, 151,430.

OCCURRENCES AND REMARKS.

Commences with squally weather. At daylight, increasing winds and squally, with heavy rain, and a heavy swell from the southward; carried away the clue lashing of inner jib; hauled it down, with a small split in the foot. At 6h. 30m., the wind shifted suddenly to the N.W., in a squall of rain; in all sail. At 9h. 30m., reefed and set fore spencer. At 10h. 30m., reefed and set main spencer; Evans and Jack, seamen, sick; set the inner jib; wind more moderate; light wind and cloudy; bent the topsail, and set up outer jib stay; set the sails. At 8, winds increasing, and a windy appearance; in outer jib, foresail and topsail, and mizen spencer. At 10, in all sail except the fore spencer and inner jib; carried away main gaff near the strop of outer block. At 10h. 30m., fresh gales and a heavy sea; vessel pitching and lurching *deep, but very easy.* Midnight, ditto weather.

ENGINEER's LOG.

11		8		7								
12				7								

ENGINEER's LOG.

Hour. A.M.	*Steam Guage.*	*Vacuum Gauges.* *Larbd.*	*Starbd.*	*Expan. Valve No.*	*Revolutions per Hour.*	*Therm*	*Boilers In Work.*
1							
2			28	7	870 14.5	70	All four.
3							
4			28	7	855 14.25	70	Ditto
5							
6			28	7	840 14	70	Ditto
7							
7½				0			
8			28	0	720 12	70	Ditto
9							
10			28	0	738 12.3	70	Ditto
11							
12			28	0	810 13.5	76	Ditto
P M							
2			28	0	840 14	78	Ditto
3							
4			28	0	840	77	Ditto
4¼				3	14		
5¾				5			
6			28		900 15	77	Ditto
7							
8			28	5	870 14.5	72	Ditto
9							
10			27.5	5	840 14	70	Ditto
11							
12				5	900 15	65	Ditto

Yesterday Noon. *Commencing Number of Counter*, 131,183.

At Noon. *Ending Number*, 151,430.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	394		1540	52½
Used	29		56	2½
Remaining	365		1484	50

OCCURRENCES AND REMARKS.

4. A.M., kindled another fire, eleven at work; 7½, A.M., a squall of rain, in which the wind chopped round to the Northward and Westward, right ahead; stiff breeze; kindled the other fire, viz., all twelve at work; put expansion from 7th grade to 0, all steam. About once in four hours partially blowing off the two fore boilers. 12½, P.M., having tried consumption of Merthyr coal for three hours, expended 4902 lbs. on two fore boilers—14 cwt. 5 lbs. per hour, which would give 29 cwt. per hour on all four boilers. Steam full on, average number of revolutions per minute 13. N.B. The Merthyr coal not sufficiently easy of combustion to answer our purpose; when tried alone, trouble to keep steam with it. 5¾, P.M., another fore-topmast has been got up, and topsail set; breeze from southward assisting; put expansion on 5th grade. 6, P.M., increasing wind. 8, P.M., blows strong; shortening sail. Midnight, blows hard from S.W.; canvass reduced. Heavy sea.

GREAT WESTERN.

First Voyage from BRISTOL to NEW YORK, Tuesday, the Seventeenth day of April, 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	S.W.	8	W.N.W.	8			None.			Short & heavy.		
2	N.W.			8								
3		8		7	4							
4				7								
5				8	4							
6		7		6								
7				6								
8				6								
9		7		6								
10				6								
11				6								
12		6		6	4							
In Latitude { by Obs. 44. 10. / by D.R. 44. 7.				Longitude { by Chrono. 49. 21. / by Lunar. 49. 46.							30. 30.	42
P.M.	N.W.	6	W. by N.	6	4		None.			Short and heavy.		
2				6	4							
3	W.N. W.			6	4							
4		5		6	4							
5				6	4							
6				6	4					Rising.		
7				4								
8				6	4							
9				7								
10				7								
11		4		7								
12				7								

Commencing Number of Counter, 151,430.
Ending Number, 169,455.

OCCURRENCES AND REMARKS.

Commences with strong gales and a heavy sea; ship lurching and pitching deep, but *very easy*; engines performing their duty *well*. At 5, passed a brig standing to the S.W., under close reefed main top-sail and balance reefed mainsail; shipped a sea into the gig and split her; got her and the jolly boat on deck, *minus* the chock. At 10, exchanged colours with a French brig, standing to the S.W., under close reefed topsail and topmast staysail; more moderate. At 11h. 30m., exchanged colours with an English ship, supposed to be, by signal, the James Grant, under double reefed topsails; watch busily employed securing boats, striking topmasts, hauling up ashes, trimming coals, &c.; Evans and Jack, seamen, a little better; found the inner jib split by the tack lashing breaking; unbent it and main spencer for the carpenter to repair the gaff; measured the deep-sea line. At 6, stopped the engines for twenty minutes to tighten the screws of plomer blocks, and get a cast of the lead; sounded ground 26 fathoms, and proceeded at full speed. At midnight, moderate weather, with continuing swell up.

ENGINEER's LOG.

At Noon.

11		4			7									
12					7									

ENGINEER's LOG.

Hour. A.M.	Steam Guage.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
½				0			
1							
2			28	0	570 9.5	70	All four
3							
4			28	0	660 11	69	Ditto
5							
6			28	0	600 10	69	Ditto
7							
8			28	0	690 11.5	73	Ditto
9							
10			28	0	615 10.25	72	Ditto
11							
12			28	0	720 12	72	Ditto
P1M							
2			28	0	630 10.50	70	Ditto
3							
4			28	0	660 11	73	Ditto
5							
6			28	0	750 12.50	73	Ditto
7							
8			28	0	690 11.50	70	Ditto
9							
10			28	0	750 12.50	70	Ditto
11							
12			28	0	810 13.50	52	Ditto

Yesterday Noon. *Commencing Number of Counter,* 151,430.

At Noon. *Ending Number,* 169,455.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	365		1484	
Used	32		50	
Remaining	333		1434	

OCCURRENCES AND REMARKS.

12½, A.M., a squall of rain; wind flew round to N.W., right ahead; doused canvass; gave engines all steam; ship behaving well, and engines all that can be desired. 6, A.M., sharp frost on deck; heavy sea; 8, A.M., fresh breeze ahead, and strong sea confused; ship easy, under the circumstances very easy. 10, A.M., fall of snow, and cold on deck; stiff breeze ahead, and strong sea. Meridian, rather less wind, but swell continues. 2, P.M., fresh breeze ahead and strong swell; difficulty in maintaining steam, by reason that the coal cannot be got from ends of ship, and brought to furnaces fast enough for consumption; stokers and trimmers becoming languid from continued work; number of men not being adequate to the duty. 6½, P.M., fresh wind ahead, with sea; stopped engines, and got soundings, 25 fathoms on Great Bank, Newfoundland; tightened up plummer block and connecting rod brasses, about quarter of an hour, and set on again. 8, P.M., fresh breeze ahead and sea; fair weather; a leak occurred in midship furnace of larboard fore boilers, supposed to be rivet-head knocked off stoking.

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Wednesday, the Eighteenth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	W.N.W.	5	W. by N.	7	4		None.			Short and high.		
2	N.N.W.			7	4		1 reefed fore spencer.					
3				7	4							
4		4		7	4							
5				7	4							
6				7	4							
7				7	4							
8		4		7	4		Whole fore spencer, and fore staysail, without bonnet.					
9				8								
10	N.W.	3		8	4							
11				8	4							
12	W. by N.	2	Variable.	9			None.			Moderate	30 20	42
In Latitude { by Obs. 42. 58. N. / by D.R. 43. 2.				Longitude { by Chrono. 52. 30. / by D. R. 52 55.								
P1M	W. by N.	2	S.W.	10	4		Fore spencer, and fore staysail.			Moderate		
2		4		11								
3				11								
4		5	S.W.byS.	11								
5				11	4							
6				11	4					Rising.		
7				11	4							
8		7		11	4							
9				10	4							
10				10	4					High.		
11				10	4							
12				10								

Commencing Number of Counter, 169,455.
Ending Number, 187,2[illegible]3.

OCCURRENCES AND REMARKS.

Commences with moderate wind and sharp frosty weather; wind veered to the N.N.W.; set the reefed fore spencer; a heavy head swell; up ship; lurching and pitching deep, but very easy; watch employed trimming coals, hauling up ashes, bending fore staysail, clearing the ropes off the decks, &c. At 8, more moderate; let the reef out of fore spencer; set fore staysail; watch busily employed trimming coals, hauling up ashes, &c.; boatswain repairing inner jib; carpenter scarfing main gaff; joiner fitting hand rails in saloon; four men not able to do duty. At noon, light winds and fine weather; *in all sail.* At 1, wind variable to the southward; set fore spencer and fore staysail; sent down gaff topsails; fitting span for main gaff; hauling up ashes; trimming coals out of fore and aft peak; bent inner jib; the foremast fresh water tanks being consumed, broached a cask of water for the crew. At 6, exchanged colours with an English ship running to the eastward. At 8, strong winds and squally, with rain; watch employed getting up ashes and trimming coals out of the peaks. At midnight, ditto weather; shut off two fires from foremost boilers, being short of coals in fore hold.

ENGINEER's LOG.

10			10	4					High.		
11			10	4							
12			10								

ENGINEER's LOG.

Hour. A.M.	*Steam Gauge.*	*Vacuum Gauges.* *Larbd.*	*Starbd.*	*Expcn. Valve No.*	*Revolutions per Hour.*	*Therm*	*Boilers In Work.*
1							
2			28	0	840 14	62	All four.
3							
4			28	0	840 14	63	Ditto
5							
6		27.5	28	0	810 13.5	65	Ditto
7							
8		27.5	28	0	720 12	70	Ditto
9							
10		27.5	28	0	810 13.5	73	Ditto
11							
12		27.5	28	0	738 12.3	77	Ditto
P1M							
2		27.5	28	0	900 15	78	Ditto
3							
4		27.5	28	0	930 15.5	80	Ditto
5							
6		27.5	28	0	930 15.5	81	Ditto
7							
8		27.5	28	0	960 16	79	Ditto
9							
10		27.5	28	0	840 14	76	Ditto
11							
12		27.5	28	0	840 14	78	Ditto

Yesterday. *Commencing Number of Counter*, 169,455.

At Noon. *Ending Number*, 187,263.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	333		1434	
Used	39		56	
Remaining	294		1378	

OCCURRENCES AND REMARKS.

2, A.M., set fore trysail. 6, A.M., moderate breeze, north westerly, and fair weather, with swell; during last night difficulty in maintaining steam; coal bad, viz., small and of little strength, making much clinker, and but scantily supplied from ends of ship for consumption; ashes accumulating in the way of stoking. Noon, moderate breeze and fine weather; engines doing well. 1½, P.M., wind shifted round to the S.W. 4, P.M., engines performing well; ship making good way; coal from aft obtained with more facility, through scuttle from after cargo room. 8, P.M., strong breeze S.W., and rain; put expansion valve on 5th grade. Midnight, let two fires out, viz., one in each fore boiler.

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Thursday, the Nineteenth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	Wind. Direction.	Force.	Course.	Rate. Knots.	Fms.	Revolutns. per Hour.	Sail.	Immersion. Forwd.	Aft.	Wave.	Barom.	Therm.
1	S.W.	5	W. by N.	10	4		Fore staysail & fore spencer.			Long and high.		
2				10	4							
3		6		10								
4				10								
5				10								
6				9	4							
7				9								
8				9								
9				9	4							
10				9	4							
11				9	4							
12				9	4							
In Latitude { by Obs. 42. 02. N. / by D.R. 42. 8.				Longitude { by Chrono. 56. 49. N. / by Lunar. 56. 59.						30. 10.		63
PM		5		9	4							
2				9								
3				9			Mizen spencer.					
4				9								
5		6		9								
6				8	4							
7				8								
8				8								
9		6		8								
10				8								
11				8								
12				8								

Commencing Number of Counter, 187,263.
Ending Number, 208,060.

OCCURRENCES AND REMARKS.

Strong winds, and a heavy westerly swell up; ship remarkably easy in her pitching and lurching; all hands busily employed trimming coals from the peaks; hauling ashes up; commenced using the coal in fore tanks; watch went below; much murmuring amongst the seamen respecting coal trimming. At 5, ship not laying her course, kept her off one point northerly; all hands employed shifting copper into fore part of cargo space; trimming coals from fore peak, bending main spencer, filling the empty water casks with salt water below, &c. At 3, set mizen spencer, with one reef. At 4h. 30m., spoke the American ship Jefferson, of Baltimore, from London to New York, out 35 days; set main spencer; shook out reef of fore mizen spencer. At 8, carried away mizen spencer gaff, inside the old scarf; took in the sail; fitted the bonnet on the fore staysail. At midnight, strong winds and squally, with light rain, and a heavy sea up.

ENGINEER's LOG.

10				8								
11				8								
12				8								

ENGINEER's LOG.

Hour. A.M.	Steam Gauge.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2		27½	28	5th grade	840 14	82	
3							
4		27½	28	5th	780 13	84	
4½					230		
5							
6		27½	27½	5th	840 14	84	
7							
8				5th	810 13.5	88	
9							
10		27½	28	5th	840 14	91	
11							
12		27½	28	5th	870 14.5	91	
P1M							
2		27½	28	5th	840 14	89	
3							
4		27½	28	5th	900 15	87	
5½				7th			
6		27	28		720 12	89	Two after
7							
8		27	28	7th	750 12.5	82	Ditto
9							
10		27	28	7th	750 12.5	82	Ditto
11							
12		27	28	7th	720 12	82	Ditto

Yesterday. *Commencing Number of Counter*, 187,263. *At Noon.* *Ending Number*, 208,060.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	294		1378	
Used	39		56	
Remaining	255		1322	

OCCURRENCES AND REMARKS.

4½, A.M., moderate breeze, S.W.; engines almost stopped for want of coal being brought to furnaces to maintain steam; fore trysail and staysail set. 10, A.M., turned all stokers and trimmers to, to get coal from extreme ends of ship, and promised to give them half a dollar each. Noon, starboard outer plummer block bearing worked hot; cooled with aqua. 5½, P.M., ceased to fire on two fore boilers; put expansion on 7th grade. 6, P.M., the two fore boilers out of work; steam only in two after ones; set the fore boiler watch to get coal from after hold, to supply after boilers. Midnight, still steaming from two after boilers only. During the night, much dissatisfaction prevailing amongst the stokers, declaring themselves all but incapable of work from fatigue; troubled to keep them at work.

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Friday, the Twentieth day of April,* 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	S.W.	6	W. by N.	8	4	750	2 spencers.			Long and heavy.		
2				8	4							
3				8	4	750						
4				8	4							
5				8								
6		6		8								
7				8		660						
8	N.W.	4		8		720				Short & high.		
9				7	4							
10		6		7	4	600						
11				7	4							
12		6		7		600						
In Latitude { by Obs. / by D.R.		No. 41. 37.		Longitude { by Chrono. / by D.R.			60. 54.				30. 0.	55.
P1M	N.W.	6	W. by N.	7						Short & high.		
2				7		660						
3				7								
4				7		780						
5				7								
6		4		7		720						
7				7								
8				7		720						
9				8								
10		2		8		750						
11	N. N. W.			8								
12				8		720				Moderate		

Commencing Number of Counter, 208,060.
Ending Number, 225,480.

OCCURRENCES AND REMARKS.

Strong wind and hazy, with a heavy sea up; ship pitching and lurching deep, but easy; unbent the main spencer for the carpenter to scrape the gaff. At 5h. 30m., reefed and set fore-topsail; hauled down fore-staysail. At noon, high wind and cloudy, sun obscured; a heavy cross sea up; ship lurching deep, but easy; all hands trimming coals from the two extreme ends of the ship. At 10, ditto wind and weather. At midnight, strong wind and cloudy, swell decreasing.

ENGINEER's LOG.

10		2		8		750						
11	N. N. W.			8								
12				8		720				Moderate		

ENGINEER's LOG.

Hour. A.M.	Steam Gauge.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2		27	28	7th grade	750 12.5	83	Two after
3							
4		27	28	7th	750 12.5	79	Ditto
5							
6		27	28	7th	660 11	79	Ditto
7							
8		27	28	7th	720 12	80	Ditto
9							
10				7th	600 10	80	Ditto
11							
12		27	28	7th	600 10	80	Ditto
P M							
2		27	28	7th	660 11	78	Ditto
3							
4		27	28	7th	780 13	79	Ditto
5							
6		27	28	7th	720 12	79	Ditto
7							
8		27	28	7th	720 12	80	Ditto
9							
10		27	28	7th	750 12.5	75	Ditto
11							
12		27	28	7th	720 12	76	Ditto

Yesterday. *Commencing Number of Counter*, 208,060.

At Noon. *Ending Number*, 225,480.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	255		1322	
Used	26		56	
Remaining	229		1266	

OCCURRENCES AND REMARKS.

8, A.M., ship rolling much, but easy. 9, A.M., wind shifted to N.W.; light breeze. 10, A.M., scarcely any steam produced; getting up ashes; ship rolling in heavy sea. Noon, rather better breeze, N.W. 1, P.M., two gangs of sailors down forward and aft, getting coal from extreme ends of ship. 3, P.M., rain; light wind ahead. 4, rain; calm; 8, rain; calm. Midnight, light breeze N.; rain.

GREAT WESTERN.

First Voyage from BRISTOL to NEW YORK, Saturday, the Twenty-first day of April, 1838.

SHIP's LOG.

Hour. A.M.	Wind. Direction.	Force.	Course.	Rate. Knots.	Fms.	Revolutns. per Hour.	Sail.	Immersion. Forwd	Aft.	Wave.	Barom.	Therm.
1	N.N.W.	3	W. ½ N.	8			2 spencers, 1 staysail. and ioner jib.			Moderate		
2				8		720						
3				8								
4				8		720	Fore-topsail					
5				9		780						
6	North.			9								
7				9								
8				9		840						
9		5		9								
10				10		870						
11				10								
12		6		10			Squaresail.					
In Latitude { by Obs. 40. 30. / by D.R. 40. 35.				Longitude { by Chrono. 64. 24. 15. / by Lunar. 65. 5. 0.							30. 30.	42
PM		5	W. by N.	10								
2				10	4	780	Squaresail off.					
3				10	4							
4	N. by W.			10	4	810						
5				10	4		Storm main spencer.					
6				10	4	840						
7				10		810						
8				10								
9		6		9								
10				9		870						
11		7		8								
12				8		810	Foresail and outer jib off.					

Commencing Number of Counter, 225,480.
Ending Number, 243,020.

OCCURRENCES AND REMARKS.

Commenced with light winds and cloudy, with a moderate swell from the S.W.; set outer jib. At 4, wind variable to the northward; set fore topsail and foresail and after spencer; second officer doing his duty. At 7, ship carrying weather helm, shifted the chain over to windward. At 8, Mackallin, seaman, fell from the top of the long boat, head foremost on deck, and injured himself; set the squarerail; strong wind. At noon, fresh wind and cloudy weather; got up a preventive fore topmast backstay; set main spencer; carried away main gaff inside the scarf; hauled it down and unbent it; in squaresail; wind variable and freshening. At 2, came on a heavy snow shower, which lasted until 5h. 30m.; out fires of after boilers, proceeding with fore ones; bent storm main spencer and set it. At 8, strong winds and clear. At midnight, ditto weather; in foresail and outer jib.

ENGINEER's LOG.

10				9		870						
11		7		8								
12				8		810	Foresail and outer jib off.					

ENGINEER's LOG.

Hour. A.M.	Steam Guage.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2		27	27	7th grade	720 12	78	Two after
3							
4		26	27	7th	720 12	72	Ditto
5							
6		26	27	7th	780	75	Ditto
$6\frac{3}{4}$				8th	13		
7							
8		27	27.5	8th	780 13	76	Ditto
9				8th 9th			
10		27	28	9th	840 14	75	Ditto
11							
12		27	28	9th	870 14.5	70	Two fore
P.M.							
2		27	28	9th	780 13	65	Ditto
3							
4		27	28	9th	810 13.5	65	Ditto
5							
6		27	28	9th	840 14	60	Ditto
7							
8		27	28	9th	810 13.5	60	Ditto
9							
10		27	28	9th	810 13.5	63	Ditto
11							
12		27	28	9th	810 13.5	64	Ditto

Yesterday. *Commencing Number of Counter*, 225,480. *At Noon.* *Ending Number*, 243,020.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	229		1266	
Used	$25\frac{1}{2}$		56	
Remaining	$203\frac{1}{2}$		1210	

OCCURRENCES AND REMARKS.

4, A.M., better breeze, N.E.; making sail; sea gone down. 5, A.M., coal running bad, small, and wet; cleaning fires; steam very low at times. 6, A.M., fine breeze N.E.; sail set to advantage; smooth water; engines and ship going well. $6\frac{3}{4}$, A.M., firing hard to keep steam; coal wet and small, clinkering much; put expansion on 8th grade, 9, A.M., put expansion on 9th grade; begun to kindle fires in fore boilers. 11, A.M., steam up in fore boilers; ceased to fire on after boilers. $11\frac{1}{4}$, A.M., shut steam valves of both after boilers; steaming only from two fore ones. Noon, fine steady breeze, North; Engines performing well, and canvass doing much good. 2, P.M., disconnected brine pumps from engines; overhauled valves, and found the cocks of two fore boilers choked; left them disconnected, and resorted to blowing off. Midnight, wind shortening on us.

GREAT WESTERN.

First Voyage from BRISTOL to NEW YORK, Sunday, the Twenty-Second day of April, 1838.

SHIP's LOG.

Hour. A.M.	*Wind. Direction.*	*Force.*	*Course.*	*Rate. Knots.*	*Fms.*	*Revolutns. per Hour.*	*Sail.*	*Immersion. Forwd*	*Aft.*	*Wave.*	*Barom.*	*Therm.*
1	N.N.W.	6	W. by N.	8	4		Fore-topsail, inner jib, fore staysail, fore and mizen spencers, and storm main trysail.			Water smooth, scarcely any motion.		
2				8	4							
3	N.W. by N.		West.	8	4							
4				8	4							
5		7		8	4		Fore topsail off					
6	N.W.	5	W. by S.	8	4							
7				8	4							
8				8	4		None.					
9	W.N.W.		W. by N.	9			All fore and aft sail set.					
10				9								
11		4		10								
12	S.W.			10								
In Latitude { by Obs. 39. 48. by D.R. 39. 41.				Longitude { by Chrono. 69. 3. 30. W. by Lunar. 68. 38							39. 90. 34. 38.	
PM	S.W.	4	N W by W $\frac{3}{4}$ W	10								
2				10								
3				10								
4	Variable.			10								
5				10								
6	W.N.W.			10								
7				10								
8		5		10			None.					
9				9	4							
10				9	4							
11				9	4							
12	N.N.W.			9	4		Inner jib.					

Commencing Number of Counter, 243,020.
Ending Number, 262,600.

OCCURRENCES AND REMARKS.

Commences with strong wind and frosty weather. At 5, increasing winds and variable; in fore-topsail. At 6, moderate and fine; spoke the American ship Westminster, from New York to London, requested to be reported; engines stopped for 5 minutes; commenced firing after boilers; out fore ones; several sail in sight; wind variable to the S.W.; in all sail and set them again; all hands employed the remainder of the day getting the chains on deck, and clearing the decks; using coals from after lower hold; wind variable to the westward. At 8, in all sail. At 9, commenced trimming coals from after cargo space; wind variable to the northward. At midnight, set inner jib.

ENGINEER's LOG.

8		5		10			None.					
9				9	4							
10				9	4							
11				9	4							
12	N.N.W.			9	4		Inner jib.					

ENGINEER's LOG.

Hour. A.M.	Steam Guage.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1							
2		26.5	28	9th grade	810 13.5	66	Two fore
3							
4		26.5	27.5	9tl	780 13	65	Ditto
5							
6		26.5	27.5	9th	780 13	72	Ditto
7							
8				9th	780 13	75	Changing from two fore to two after.
9				8th			
10		26	27.5	7th	840 14	81	Twoafter
11							
12		26	27.5	7th	840 14	75	Ditto
P M							
2		26	27.5	7th	840 14	75	Ditto
3							
4		26	27.5	7th	840 14	75	Ditto
5							
6		26	27	7th	810 13.5	75	Ditto
7							
8		26	27	7th	840 14	80	Ditto
9				8th			
10		26½	27½	8th	750 12.5	87	Ditto
11							
12			27½	8th	810 13.5	81	Ditto

Yesterday. *Commencing Number of Counter,* 243,020. *At Noon,* *Ending Number,* 262,600.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	203¼		1210	
Used	21		56	
Remaining	182½		1154	

OCCURRENCES AND REMARKS.

6½, A.M., stopped two or three minutes, and spoke ship Westminster. 8, A.M., kindled fires in after boilers, by reason that the coal in fore part of ship was becoming low; all canvass taken in, and ship's head brought to wind. 9, A.M., steam up in after boilers; shut steam valves of fore boilers; put expansion on 8th grade. 10, A.M., put expansion on 7th grade; moderate breeze ahead, smooth water, and clear weather. Noon, wind veered S. W.; making sail; moderate breeze, fine clear weather. 2, P.M., 4, P.M., fore and aft sails set to advantage; moderate breeze, S. W. 8, P.M., wind drawing ahead; took in all canvass. 9, P.M., put expansion on 8th grade. Midnight, moderate breeze ahead, and fine weather.

GREAT WESTERN.

First Voyage from ***BRISTOL*** *to* ***NEW YORK,*** *Monday, the Twenty-Third day of April,* 1838.

SHIP's LOG.

Hour. A.M.	Wind. Direction.	Force.	Course.	Rate. Knots.	Fms.	Revolutns. per Hour.	Sail.	Immersion. Forwd	Aft.	Wave.	Barom.	Therm.
1	N.N.W.	5	N.W. by W. ¾ W.	9	4		Inner jib.			Water smooth.		
2				9	4							
3				9	4							
4	North.			9	4							
5		4		10			Outer jib.					
6				10								
7				10								
8				11								
9				11								
10		3		11								
11			W. N. W.	11								
12		2		11	4		None.					

In Latitude { by Obs. / by D.R. } Longitude { by Chrono. / by D. R. }

P M												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Commencing Number of Counter, 262,600
Ending Number, 283.640.

OCCURRENCES AND REMARKS.

Commences with moderate winds and fine weather. At daylight, watch employed bending cables; hauling up ashes, and getting ready to enter port; set outer jib. At 10, stopped the engines five minutes to receive on board a pilot from New York, and proceeded; high winds and fine weather; in all sail; up topmasts; got working anchor over starboard bow; sent up fore-top gallant mast; off booms from fore yard; passed several vessels. At 11h. 30m., saw the land ahead; hoisted the flags to different mast heads. At 2, entered the port of New York; fired a gun. At 3, was saluted by Fort *Ellises Island*, and returned it, and by every steamer and group of persons we passed, which we returned; we were also saluted by the Sirius, which we returned. At 5, ran up to the Pike-street Wharf, and moored; was cheered enthusiastically by the multitudes of inhabitants that assembled. The chief engineer, Mr. George Pearne, was *severely* scalded, in the act of blowing off the boilers; Roberts slightly. Doctor attended immediately he could be procured, and every attendance given.

ENGINEER's LOG.

10												
11												
12												

ENGINEER's LOG.

Hour. A.M.	Steam Gauge.	Vacuum Gauges. Larbd.	Starbd.	Expan. Valve No.	Revolutions per Hour.	Therm	Boilers In Work.
1	3½				810		
2	.....	26	27½	8	810	64	Twoafter
					13.5		
3					810		
4	.....	26	27½	8	810	64	Twoafter
					13.5		
5					810		
6	.....	26	27½	8	840	65	Twoafter
					14		
7					840		
8	.....	26½	27½	L. 0	960	60	Twoafter
				S. 5	16		& 1 fore.
9					960		
10	.....	26½	27½	L. 0	960	60	Twoafter
				S. 5	16		& 1 fore.
11					960		
12	.....	26½	27½	L. 0	1020	81	All four.
				S. 5	17		
M							
P1M							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Yesterday.
Commencing Number of Counter, 262,660.

At Noon,
Ending Number, 283,640.
At 5, P.M..... 287,354.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with	182½		1154	
Used	27½		56	
Remaining	155		1098	

OCCURRENCES AND REMARKS.

6½, A.M., kindled fires in starboard fore boiler. 7½, A.M., screw loose in larboard eamm; stopped quarter of an hour; tightened up some bearings; put larboard expansion valve out of action; starboard one on fifth grade, and started again. 8, A.M., starboard fore boiler at work. 10, A.M., stopped engines, and took a pilot on board for New York. 11, A.M., kindled fires in larboard fore boiler; saw the land of Neversink. Noon, all four boilers at work. Moored, at 5, to the wharf. Counter on arrival, 287,354.

GREAT WESTERN.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Monday, the Seventh day of May, 1838.

SHIP's LOG.

Hour A. M.	Wind. Direction.	Force	Course.	Rate. Knots	Fms.	Revolutns. per Hour.	Sail.	Vacuum Gauge Larbd.	Vacuum Gauge Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	N.W.	2												
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
P M														
2												70		
3		2												
4		4		5			Inner jib.					70		
5				9										
6	South.	4	E. by S.	9								70		
7				9										
8				9								70		
9														
10												75		
11														
12				5								75		

In Latitude { by Obs. / by D.R. } Longitude { by Chrono. / by Lunar. }

Commencing Number of Counter,

Ending Number, 287,324.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	570		2386	
Used	5		56	
Remaining	565		2330	

OCCURRENCES AND REMARKS.

Commences with light wind and fine weather; sundry labourers and riggers assisting the crew to get the ship ready for sea; employed getting in cargo and stores; bending sails, clearing decks, removing ship, &c. At 11, A.M., got steam up. At 11h. 30m., cast off, and proceeded down the river towards No. 1, Quay, North River, to receive on board passengers and luggage. *Immense multitudes* of people assembled to cheer us, which we returned, also the United States' Frigate Macedonia. At 12h. 30m., P.M., made fast to No. 1, Quay, North River, and received on board our passengers and many of their friends, and others, to accompany us off; fired a gun occasionally. At 2h. 20m., cast off from the Quay, and proceeded down the river, accompanied by thirteen steamers, *thronged* with people, nine of which remained until we reached Fort Hamilton, at which place we stopped, and disembarked the passengers' friends; four of the steamers returned, and the remaining five stopped with us until we came to Sandy Hook; they cheered, and returned at 5; stopped a quarter of an hour and put the pilot into a boat, and proceeded on. At 6, stopped five minutes to receive letters from the ship Wellington, left Portsmouth 11th of April; set inner jib. At 8, larboard outside crank bearing got hot, and, in the act of cooling it with water, the upper brass broke nearly in the centre; stopped and disconnected, and proceeded, at 11h. 30m., with starboard engine; set all drawing sails, and set the watch. At midnight, light winds from the southward; engine performing well; vessel steering badly, in consequence of her being so much by the head; fire in the foremost boilers only.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Tuesday, the Eighth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutions per Minute.	Sail.	Vacuum Gauge. Larbd.	Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	South.	2	E.by S.	7			Jibs and fore spencer.						2	
												72 E.R.		
2				7					27					0
3	N.E.			7		10½								
4				7								70 ...		
5		1		7										
6				7										
7	North.	2		7										
8				7								73 ...		
9				7										
10				7	4									
11				7	4									
12				7	4							74 ...		

In Latitude { by Obs. 40. 9. N. / by D.R. 40. 20. } Longitude { by Chrono. 71. 51. W. / by Lunar. 71. 52. N. } 29 90 41 to 54

PM	North.	2	E.by S. ½ S.	7	4	10½	Main spencer.	27				75 ...	2	0
2				7	4									
3				7	4							75 ...		
4				7	4									
5				7										
6				7										
7				7								76 ...		
8				7										
9				7										
10				7								74 ...		
11				7										
12				7										

Commencing Number of Counter, 287,324.
Ending Number, 298,432. *At Noon.*

THIS DAY's CONSUMPTION OF STORES.

	Coals. Tons.	Coals. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	565		2330	
Used	27	15	56	
Remaining	537	5	2274	

OCCURRENCES AND REMARKS.

Commences with light winds and cloudy; watch employed clearing passengers' luggage and sundry stores off deck; wind variable to the N.E.; in all sail; engineers repairing the broken brass. At 7h. 30m., spoke the ship Columbus, of New London, from Bombay, viâ St. Helena, 46 days, bound to New York; requested to know the distance to Sandy Hook: wind variable to the Northward; set the jibs and fore spencer; several sail in sight. At 11h. 50m., spoke the ship Cosmo, of Bristol, from Bristol to New York, all well; light airs and fine weather; latitude observed at noon; engineers hooping the broken brass; starboard engine performing well; repairing connecting brass with iron hoops; bent the main spencer and set it; all hands employed clearing the decks, lashing spars and water casks, taking in and making sail as required; tradesmen variously employed securing tables and seats, and fitting sundries in passengers' berths. At 7, engineers having nearly finished the binding on the brass, left it until the morning; exchanged colours with a ship having a cross in her fore-top sail; supposed Philadelphia packet; at midnight light winds and fine weather.

GREAT WESTERN.

11				7									74 ...		
12				7											

ladelphia packet; at midnight light winds and fine weather.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Wednesday, the Ninth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	North.	4	E.by S. ½ S.	7			Jibs & fore & main spencer			Smooth.		70E.R.	2	
2				7		10½								
3	N.N.W.			7			Foresail, top-sail, and top-gallant sail.					70 ...		3rd step.
4				7		10½						70 ...		
5				7										
6				7									2	
7				7										
8				3								70 ...		
9														
10						13½		26½	27					
11				8	4									
12				9		13½						74 ...		

In Latitude { 39. 34. N. / 39. 47. N. } Longitude { by Chrono. 68. 39. W. / by D.R. 68. 39. W. } 29 90 56 to 63

P1M			E. ½ S.	9	4							75 ...		
2	S.S. W.	2	E. by S.	10										
3				10		13½								
4	South.			10				26½	27½			75 ...		
5				10										
6				10										
7				9										
8	Calm.	1		10								76 ...		
9	S. S. W.			10										
10				10										
11				10										
12				10								77 ...		

Commencing Number of Counter, 298,432.
Ending Number, 309,944.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	537	5	2274	
Used	22	5	56	
Remaining	515		2218	

OCCURRENCES AND REMARKS.

Commences with light airs, and variable to the N.W. At 2, set the squaresails. At 4h. 30m., the engineers commenced with their job, and at 7h. 30m. completed it; stopped the engines, and set about connecting the larboard engine again. At 10, connected the larboard engines, and proceeded on. At 10h. 30m., the bearings got warm, stopped ½ an hour to cool it and slacken the screws; seamen busily employed getting gaffs up, clearing decks, taking in and making sail, assisting the engineers, &c. At noon, fine, pleasant weather; tradesmen variously employed; set gaff topsails; one sail in sight to the Northward; wind veered to Southward, with heavy rain. At 6, stopped 10 minutes to tighten screw of connecting rod strap of larboard engine. At 8, light airs, next to a calm; in all sails, except gaff topsails. At midnight, light winds and cloudy; set the jibs and fore trysail.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Thursday, the Tenth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	S.W.	4	E. by S.	10			All fore & aft			Smooth.		80 E.R.		
2				10		13								
3				10									3	3rd step.
4				10								80 ...		
5				10										
6				10		13½						80 ...		
7				10										
8				10								80 ...		
9				10		13½	Set square-sails.							
10	W.			10				26½	27			84 ...		
11				10										
12	W.			10		13½						86 ...		

In Latitude { by Obs. 39. 08. N. / by D.R. 39. 32. } Longitude { by Chrono. 63. 1. 15. / by D.R. 63. 31. 0. } 30. 0. 63

P1M	W.N. W.	4	East	10										
2				10	4							86 ...		
3				10	4									
4	North	5		10	4	14						90 ...		
5				10	4									
6				10	4	14								
7				10	4							92 ...		
8	N. N. E.			10	4	14	None.							
9				10								92 ...		
10				10		13¼								
11		4		10										
12				10		13½								

Commencing Number of Counter, 309,944.
Ending Number, 327,907.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow lbs.	Oil. Gals.
Commenced with ..	515	0	2218	
Used	24	5	56	
Remaining	490	15	2162	

OCCURRENCES AND REMARKS.

Commences with light winds and cloudy; set main spencer. At 6h. 30m., exchanged colours with a French brig within hail, could not make out where from or bound. At 9, steady breezes and cloudy; set the square-sails forward; watch variously employed. At 11, saw a barque bearing S.E., with her colours up; supposing she wanted to speak us, hauled towards her. At noon, spoke her; it proved to be the Howard, of Greenock, from the Havannah, ont eleven days, from Key West; light airs and cloudy; kept our course; the engines being stopped four or five minutes, carpenter fitting in deck lights, and refitting others that leaked; freshing winds and cloudy, with heavy rain; ship's cook not able to do his duty. At 8, in mizen gaff topsail. At 9, wind variable to the eastward; in all sail, and furled them. At midnight, light winds and cloudy.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Friday, the Eleventh day of May, 1838.

10				10		13¼								
11		4		10										
12				10		13½								

GREAT WESTERN.

First Voyage from ***NEW YORK*** *to* ***BRISTOL****, Friday, the Eleventh day of May,* 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	N.N.E.	4	East.	10		14	None.			Light from North.				
2	North.			10			Jibs and spencers.	26	27					
3				10	4	14							3	5th step.
4				10	4							80E.R.		
5				10	4									
6	Variable.			10	4									
7				10	4	13½						80 ...		
8				10	4									
9				10										
10	N.N.W.			10			Squaresails on					82 ...		
						13½	foremast.							
11				10										
12				10				27	28			82 ...		
In Latitude { by Obs. 39.50. by D.R. 39.43.						Longitude { by Chrono. by D. R. 58.10.					29.90 58 to 53			
P M	N.N.W.	4	East.	10			Four & aft	27	28				3	5th step.
						13½	sails only.							
2				10				27	28					
3				10										
4	Variable.			10			None					86E.R.		
5	N.W.			10			All plain							
6				10			Fore topmast							
						13	studding sails							
7	W.N.W.			10								82 ...		
8	Variable.			10			In mizen and main spencers and gaff topsails.							
						13½								
9				10										
10	N.W.			10				27	27½			90 ...		
11				10		13								
12				10								96 ...		

Commencing Number of Counter, 327,907.
Ending Number, 346,134.

THIS DAY'S CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil Gals.
Commenced with ..	490	15	2102	
Used	24	5	56	
Remaining	466	10	2106	

OCCURRENCES AND REMARKS.

Light wind and cloudy, with heavy rain; wind variable to the North; set the jibs and spencers. At 7, stopped 10 minutes to tighten the screws of correcting rod brass on larboard engine crank; set the gaff topsails. At 10h. 30m., set the squaresails on foremast; wind variable to the N.N.W., with rain; watch variously employed; carpenter repairing accommodation ladder; joiner making glass stands for cabin tables; cook sick. At noon, in all square sails; furled top-gallant sail; sun obscure. At 4, wind variable; in all sails. At 5, steady breezes from W.N.W.; set all plain sail, and larboard four-top studding sail. At 8, moderate and fine; in main and mizen spencer, and mizen-gaff topsail. At midnight, steady breezes and fine weather.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Saturday, the Twelfth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	N.W.	3	East.	10		14	Square and fore-top studding sails, fore and main spencers.	26	27½	Moderate				
2	Variable.			10		14						88 E.R.		
3	N.N.E.			10			3 spencers and jibs, main gaff topsail.	26	27½				3	3rd step.
4				10		14						87 ...		
5				10										
6		4		10		13½	main gaff topsail in.	26	27½					
7				10										
8	N.E.			10		13						90 ...		
9				10			Outer jib and mizen spencer in.							
10				10		14½						89 ...		
11				10										
12	Variable.	3		10		15		26½	27½			89 ...		

In Latitude { by Obs. / by D.R. 40.10. } Longitude { by Chrono. / by D. R. 54.6 } in 3 days variable 29.90 60 to 63

P M														
1	Variable.	3	East.	10			None.			Moderate			3	3rd step.
2	East.			10										
3				10										
4	N.N.E.			10	4	14	3 spencers & inner jib.	26	27			80 E.R.		
5	Variable.			10	4									
6	North.	4		10	4									
7				10	4									
8	Variable.			10	4	14						77 ...		
9		5		10	4		Square foresail.							
10				10	4		Outer jib.							
11	N.N.E.	6		10			In foresail.							
12				10		13		26½	27½			80 ...		

Commencing Number of Counter, 6,134.

Ending Number, 362,825.

THIS DAY's CONSUMPTION OF STORES.

	Coals. Tons.	Coals. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	466	10	2106	
Used	26	5	56	
Remaining	440	5	2050	

OCCURRENCES AND REMARKS.

Commences with moderate wind and fine weather. At 2h. 30m., wind veered to the N.N.E.; in studding-sail and squaresails; furled top-gallant-sail. At 3h. 30m., exchanged colours with an American ship, standing to the Westward. At 6, squally, with rain; in main gaff-topsail. At 7h. 30m., furled squaresails; increasing winds, and squally. At 9, in outer jib and mizen spencer; down main and mizen gaffs. At noon, strong breezes and variable, with rain; sun obscured; ship's cook and one seaman sick. At 1, wind variable to the Eastward; in all sail. At 4, wind variable to the Northward; set three spencers and inner jib. At 6, increasing winds; down three topmasts. At 9, set square foresail. At 10, set outer jib. At 11h. 30m., in square foresail. At midnight, strong winds and small rain.

GREAT WESTERN.

9		5		10	4		Square foresail.								
10				10	4		Outer jib.								
11	N.N.E.	6		10			In foresail.								
12				10		13		26½	27½			80 ...			

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Sunday, the Thirteenth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	N.N.E.	6	East.	10		13	3 spencers & 2 jibs.			Moderate		80E.R.		
2				10			In outer jib and main spencer.							
3	Variable.			10										3rd step.
4				10	4			26½	27½					
5		6		10	4									
6				10	4									
7				10	4									
8		4		10	4	13½	Set main spencer.	26½	27			82 ...		
9				10	4									
10				10	4									
11	N.N.E.	3		9										
12				10		14½		26½	27			88 ...	4	

Latitude { by Obs. 40. 44. N. / by D.R. 40. 45. } Longitude { by Chrono. 48. 45. N. / by Lunar 49. 20. W. } 30. 20. 62

P1M	N.N.E.	3	East.	10						Moderate				
2				10									4	
3		4		10										
4	N.E.			10		13		26½	26			88 ...		
5				10	4									
6	Variable.			10	4		None.							
7		3		10	4									
8	S.E.			10	4	14½		26½	27½			92 ...	4	
9	Variable.			10										
10				10										
11				10										
12	Calm.	1		10	4	15		26	27½			94 ...	4	

Commencing Number of Counter, 362,825.
Ending Number, 381,216.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	440	5	2050	
Used	33	15	56	
Remaining	406	10	1994	

OCCURRENCES AND REMARKS.

Strong winds, and cloudy, with rain. At 2, in outer jib and main spencer. At 4, strong winds and clear. At 8, set main spencer; furled foresail; wind variable at intervals two points. At 10, stopped the engines 12 minutes, to tighten the bearings of crank; cook, one seaman, and one fireman, sick. At noon, moderate and clear. At 6, wind variable to the Eastward; in all sail. At 8, strong breezes and clear; wind variable and clear throughout. At midnight, calm.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Monday, the Fourteenth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	E.N.E. Calm.	2	East.	11			None.			Smooth.				
2	N.EbyN.	1		11			Fore spencer and 2 jibs.					E. R.		
3	N.N.E.	2		11									4	
4				11		14½			27			95 ...		8
5	Calm.	1		10	4		None.							
6				10	4									
7				10										
8	North.	3		10		14½	Fore & main spencer, jibs.		27			98 ...	4	8
9	N.N.E.			10										
10				11		15½			27½			102 ...		8
11		2		10	4									
12	East.			10	4	15	None		27			102 ...		8

Latitude { by Obs. 41. 44. / by D.R. 41. 50. } Longitude { by Chrono. 44. 18. W. / by Lunar. 44. 5. W. } 30. 40. 63½

P1M			E. ¼ N.	10	4									
2				10	4								4	
3				10	4									
4				10	4	14½			27½			97 E. R		8
5				10	4									
6				10	4									
7				10	4									
8				10	4	14½			27½			96 ...		8
9				10									4	
10				10										
11				10										
12				10	4	14½			27½			96 ...		8

Commencing Number of Counter, 381,216.
Ending Number, 397,956.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	406	10	1994	
Used	33	15	56	
Remaining	362	15	1938	

OCCURRENCES AND REMARKS.

Commences with light air and variable. At 2, set fore spencer and jibs; light air intermixed with calms and fogs throughout; took in and made sail as required. At 8, set main spencer; watch variously employed, making and taking in sail occasionally; cook, one seaman, and [illegible]reman, sick. At noon cleared up, latitude obscured; in all sail; employed fitting the awnings and spreading quarter deck ditto. At 1, stopped the engine 5m. to speak the American schooner Madrid, from Rotterdam to Philadelphia, out 19 days; took an inventory of Mr. Pearne's effects; Brooking on watch with Mr. Payne, starboard watch. At 9h. 30m., passed a brig bound to the Westward, but could not get any answers to the questions put by Capt. H.; light airs, intermixed with calms, to the end.

GREAT WESTERN.

10				10										
11				10										
12				10	4	14½			27½			96 ...		8

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Tuesday, the Fifteenth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	Variable.	2	E. ¼ N.	11			None.			Smooth.				
2	S.E.			11			Jibs and fore spencer.							
3				11									3	
4				11		14½			27½			96 E.R.		8th step.
5				11										
6	S.E. by S.			10			Main spencer.							
7				10										
8				10		14½			27½			95 ...		8
9				11										
10				11		15½			27½			95 ...		8
11				11										
12				11		15½			27½			95 ...		8

Latitude { by Obs. 43. 02. N. / by D.R. 43. 05. } Longitude { by Chrono. 39. 35. 30. N. / by D.R. 39. 32. } 30 50 67½

P1M	S.E. by E.	2	East	11			Squaresails forward.							
2				11										
3	Variable.			11										
4				11		13			27½			93 E.R.		8
5				11										
6				11										
7				11			None.							
8				11		13			27½			95 ...		8
9				11										
10				11										
11				11										
12				11		14½			27			97 ...		8

Commencing Number of Counter, 397,956.
Ending Number, 418,985.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	362	15	1938	
Used	33		56	
Remaining	329	15	1882	

OCCURRENCES AND REMARKS.

Light airs and fine weather. At 2, set jibs and fore spencer. At 6, set main spencer; watch variously employed painting covers for skylights, getting gaffs up, setting mizen spencer, altering awning for quarter-deck; got main-gaff-topsail down to repair it, having been scorched by the heat of funnel. At noon, light airs and fine weather; cook and two seamen sick. At 3, P.M., set the squaresails forward. At 5, wind variable to the Eastward; in all sail. At 8, light airs, next to a calm; variable winds, intermixed with calms throughout. At midnight, ditto weather.

GREAT WESTERN.

First Voyage from ***NEW YORK*** *to* ***BRISTOL,*** *Wednesday, the Sixteenth day of May,* 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	Eastward	2	East.	11			Inner jib.			Moderate				
2	S.E.			11									3	
3	Variable.			11										
4				10	4	14½			27			100 ER		8th step.
5				10	4									
6	Calm.	1		10	4									
7				10	4									
8				10	4	15			27			100 ...		
9				10						Swell Eastward				
10	S. S. E.	2		10	4								3	
11				10	4		Fore spencer inner jib.							
12				10	4	14½			27½			98 ...		

Latitude { by Obs. 44. 16. N. / by D.R. 44. 30. } Longitude { by Chrono. 34. 43. 0. W. / by Lunar. 34. 40. } 30 40 35

P1M	S.E. by S.	2		10	4									
2				10	4									
3				10	4									
4	Variable.			10	4	15			27½			97 ...		8
5				10									3	
6	S.W.			10										
7				10										
8				10		15			27½			96 ...		
9				10										
10		3		10										
11				11										
12				11		16			27			85 ...		

Commencing Number of Counter, 418,985.
Ending Number, 439,947.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	329	15	1882	
Used	31	15	56	
Remaining	298		1826	

OCCURRENCES AND REMARKS.

Commences with light airs next to a calm; set inner jib. At 6, calm with an Easterly swell up; down inner jib; passed a ship steering Westward; courses down to the Northward; sun obscured by clouds. At 7 h. 30 m. passed a brig; top-sail down, to the Southward; watch variously employed. At 11 h., 30 m., set fore-spencer and inner jib; cook and two seamen not able to do duty—sick. At noon, light airs and fine weather; two seamen trimming coals out of fore-peak, others painting aloft, and paddle-boxes and paddle-box houses; light air from S.W.; stopped five minutes to tighten the connecting strap of larboard engine; in hauling in the patent log, found the regulator gone. At 10 h., 30 m., wind freshing from the S.W.; set the spencers and outer jib. At 11 h., 30 m., set squaresails forward. At midnight, moderate breezes and clear.

GREAT WESTERN.

First Voyage from ***NEW YORK*** *to* ***BRISTOL,*** *Thursday, the Seventeenth day of May,* 1838.

10				11										
11				11										
12				11		16			27			85 ...		

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Thursday, the Seventeenth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Gauge. Larbd.	Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	S.W.	3	East.	11		16	All plain sail necessary.			Moderate				
2				10	4									
3				10	4									
4				10	4	15			27			86 E.R.	3	8
5				10	4									
6				11										
7				9			Fore-topmast studding-sail.							
8		4		9		13			27			75 ...		8
9				10	4									
10				10	4					Short and topping.				
11				10	4									
12		5		10	4	14			27			74 ...	2	8

Latitude { by Obs. / by D.R. 45.52 N. } Longitude { by Chrono. / by D. R. 29.16.W. } 30. 0. 60½

P M		5	East.	10	4					Ditto.				
2				10	4									
3				10	4									
4				10		12½	No studding-sail, plain sail		27			72 ...	2	3
5				10										
6				10						Cross and increasing.				
7		5		10	5									
8				10		12½			27½			76 ...	2	3
9				10										
10		6		10										
11				10			In top-gallant-sail.							
12				10		12½	Set top-gallant-sail.		27½	Ditto.		68 ...	2	3

Commencing Number of Counter, 439,947.
Ending Number, 458,954.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	296	0	1826	
Used	28	10	56	
Remaining	269	10	1770	

OCCURRENCES AND REMARKS.

Commences with moderate winds and fine weather. At 5 h., 30 m., larboard engine crank brass got hot; slowed the engine half an hour to cool it; in the mean time the bands broke out of the brass. At 7, thick weather and heavy rain; set topmast studding sail; four seamen trimming coals out of the fore-peak; coal trimmers in after hold; Mc. Cullin not able to do his duty; one seaman and cook better. At noon strong breezes and heavy rain; sun obscure. At 2 h., 30 m., stopped the engines to disconnect the larboard one, the lower brass beginning to break and the upper bands very open. At 3 h. 30 m., proceeded with one engine; a Westerly swell getting up, carried away the topmast studding sail boom; hauled down the sail; made another boom out of the sliding gunter top-gallant mast, and got it up; wind variable to the Westward; in spencers and jibs. At 8, wind variable to the North West; set spencers and jibs. At 9, squally. At 11, in top-gallant sail. At midnight more moderate; set top-gallant sail.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Friday, the Eighteenth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots	Fms.	Revolutns. per Minute.	Sail.	Vacuum Gauge. Larbd.	Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	N.W.	6	East.	10	4		Spencers, jibs, and 3 squaresails forward.			Moderate increasing				
2				10	4									
3				10	4									
4				10	4	13			27½			68 E.R	2	3
5				10	4									
6				10	4									
7				10	4									
8				10		13			27½			66 ...	2	3
9	Variable to the Westwrd			10										
10		5		10			Added topmast studding sail.							
11	W.N.W.			10						Decreasing.				
12				10		12½			27			74 ...	2	3
Latitude { by Obs. 47. 14. N. / by D.R. 47. 24.				Longitude { by Chrono. 23. 55. 30. / by Lunar. 23. 52.							29. 90.	59.		
P M														
2	Variable.	4		10			Added squaresail.							
3	West.			10										
4				10		12½			27			73 ...	2	3
5				10										
6				4			In spencers and topmast-studding sails							
7	W.S.W.	3		10										
8				10	4	14½			27½			87 ...	3	7
9				10	4									
10				10	4									
11	West.			10	4									
12				10	4	15	All plain squaresail.		27½			82 ...		7

Commencing Number of Counter, 458,954.
Ending Number, 477,761.

THIS DAY's CONSUMPTION OF STORES.

	Coals. Tons.	Coals. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	269	10	1770	
Used	20	0	28	
Remaining	249	10	1742	

OCCURRENCES AND REMARKS.

Commences with strong breezes and clear weather; all sail set to the best advantage. At 4, squally and increasing sea up; watch employed washing deck, &c.; Engineers getting the brass hoop ready for connecting larboard engines. At 8, freshening breezes and squally. At 10, more moderate; set larboard topmast studding sail; passed a brig on the starboard tack, standing to the Westward, about four miles distant; hoisted our colours, but could not perceive an answer. At noon, strong winds and cloudy; got the larboard top-gallant studding-sail on the yard and rove the gear; got the squaresail up and set; two men repairing the gaftop-sail and ...ering after awning quarter-deck. At 5 h., 10 m., every thing being ready to put the brass on and connect the larboard engine, stopped the other engine and secured the wheels. At 5h. 53m., the engine finished, connecting, and set on again; wind variable to W.S.W.; in spencers, squared the yards, and took in fore topmast studding-sail. At 8, hazy weather and light rain. At midnight, ditto wind and weather.

GREAT WESTERN.

8				10	4	14½			27½					
9				10	4									
10				10	4									
11	West.			10	4									
12				10	4	15	All plain squaresail.		27½			82 ...		7

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Saturday, the Nineteenth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Rate. Xths.	Revolutns. per Minute.	Sail.	Vacuum Gauge. Larbd.	Vacuum Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	West.	3	East.	10	4	15	Squaresails on foremast and mizen squaresail.			Moderate				
2				10	4									
3				10	4									
4				10	4	15½			27½			90 E.R.	3	7
5		5		10	4									
6				10	4									
7				10	4									
8		6		10	4	14½			27½			92 ...	3	7
9				10	4									
10		4		10	4									
11	W.N.W.			10	4									
12				10	4	15			27½			91 ...	3	7
Latitude { by Obs. 48. 26. N. / by D.R. 48. 33.							Longitude { by Chrono. 18. 38. 30. / by D.R. 18. 26. 0.				29. 60.	62		
P1M		4	E. ¼ S.	10	4									
2				10	4									
3				10	4									
4		5		10	4	13			27			87 ...	2	7
5				10	4									
6				10	4									
7				10	4									
8		6		10	4	14½			27			76 ...	2	7
9				10	4									
10	N.W.			10	4									
11				10	4									
12				10	4	14½			27			78 ...	2	7

Commencing Number of Counter, 477,761.
Ending Number, 497,068.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow lbs.	Oil. Gals.
Commenced with ..	249	10	1770	
Used	24	10	28	
Remaining	225	0	1742	

OCCURRENCES AND REMARKS.

Commences with moderate wind, and hazy at intervals. At 4, ditto weather; set starboard fore-topmast studding sail. At 8, passed a barque on larboard tack, standing to the N. W., distance from us about five miles; strong winds and squally. At 11h. 30m., heavy breezes and clear; set larboard topmast studding-sail and fore spencer; two seamen unable to do duty. At noon, fine pleasant weather, set main spencer. At 1, set larboard fore-top gallant studding-sail; in starboard topmast studding-sail. Strong breeze, and variable to the North West. At 4, squally; carried away the larboard topmast studding-sail boom, it being too small, and the spar altogether faulty; carpenter made another out of a rough spar, but it is also too small, the spar not being large enough to make it stouter; got it up and set the sail. At 8, strong winds and clear; commenced using the coal from after coal tank; steam in after boilers only. At midnight, ditto weather; in top-gallant studding-sail.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Sunday, the Twentieth day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms.	Revoluns. per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	N.W.	4	E. ¼ S.	10	4		Squaresails on foremast, and topmast studding sail.							
2				10	4		2 jibs, and main spencer							
3			East.	10	4									
4	N.N.W.	3		10	4	14			27			68E.R.	2	7
5				10	4									
6				10	4									
7	Variable.	4		10	4									
8				10	4	14			27			74 ...	3	7
9				10	4									
10	N.W.			10	4									
11				10	4									
12	W.N.W.			10	4	15						76 ...		
	Latitude { by Obs. 49. 26. / by D.R. 49. 47.			Longitude { by Chrono. 12. 46. 15. / by D.R. 12. 52. 0.					27		29. 80. 60		3	7
PM	W.N.W.	4	E.	10	4									
2	Variable.			10	4									
3				10										
4	W.	3		10		15			27			76E.R.		
5				10										
6	S. W.			10										
7				10										
8	S.S.W.	4		10		15			27			77 ...	3	7
9	Variable.			10										
10		5		10										
11				10										
12				10		15			27			74 ...	3	7

Commencing Number of Counter, 497,068.

Ending Number, 516,876.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	225		1742	
Used	22			
Remaining	203			

OCCURRENCES AND REMARKS.

Commences with moderate wind and clear weather. At 2, spoke the brig Diligence, of Glasgow, from Glasgow for London. Passed two barques standing to the Westward under single reefed topsails and main-top-gallant sail; two ships in sight on the beam. At 6, finished the coals out of one part of coal tank, and got steam in one of the fore boilers. At 7h. 30m., set mizen spencer and aft ditto, and fore-top gallant-sail; got mizen topmast up; set gaff-topsail. At 10, two ships ahead, under a press of sail, steering about E.N.E. At noon, came up with and spoke the above vessels, which appeared to be company keepers; passed between them on larboard side, 1st, the ship Samuel, of St. John's, N.B., from Mobile to Liverpool, out 41 days; starboard side, 2nd, ship Virginie, of and from New Orleans to Liverpool, out 40 days; fine pleasant weather; two seamen sick; took in aft spencer and inner jib; variable to the Westward. At 4, fitted a new one; set starboard topmast studding-sail; in spencers. At 6, wind variable to the S.W.: in larboard studding-sails; set fore and main spencers, hazy with rain. At 8, squally, hazy weather; in starboard studding-sail; rigged in all booms; in mizen gaff-topsail. At midnight, squally; in top-gallant sail; three seamen unfit for duty.

GREAT WESTERN.

9	Variable.			10											
10		5		10											
11				10											
12				10		15			27			74 ...	3	7	

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Monday, the Twenty-First day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction.	Force	Course.	Rate. Knots.	Fms	Revolutns per Minute.	Sail.	Vacuum Larbd.	Gauge. Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	Variable.	from 2 to 6.	East.	10		14½	Various.							
2				10										
3				9										
4				9		14½			27½			80 E.R.	3	
5				9										
6				9										
7	East.	5		9										
8				9		14½			27½			82 ...		
9				9										
10				9										
11		4		9										
12	N.E.			9		15			27½			84 ...		

Latitude { by Obs. 50. 48. / by D.R. 50. 40. } Longitude { by Chrono. 7. 36. / by Lunar. 7. 23. } 29 to 40. 62 to 56.

P M														
				9										
2				9										
3				9										
4				9	4	15			27½			84 ...	3	
5				9	4									
6				9										
7				9										
8				9		14½			27½			80 ...		
9				9										
10				9										
11				9										
12				9		14½			27½			82 ...		

Commencing Number of Counter, 516,376.
Ending Number, 537,256.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Coal. Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	203	0		
Used	24	10		
Remaining	178	10	2128	

OCCURRENCES AND REMARKS.

Commences with variable winds, and squally, with rain; in all squaresails. At 2h. 30m., in spencers, down mizen topmasts, in jib, and down gaffs; wind variable from West to East; took in and made sail as required. At 8, strong winds from the Eastward; made all snug aloft; spoke the barque Leonard, Dobin, of Liverpool; several sail in sight; down top-gallant yard; struck fore topmast; moderate and clear; Mc Cullin, Carr, and Henderson, seamen, and Stone, joiner, sick. At noon, moderate and clear; several sail in sight.

GREAT WESTERN.

First Voyage from NEW YORK to BRISTOL, Tuesday, the Twenty-Second day of May, 1838.

SHIP's LOG.

Hour A.M.	Wind. Direction	Force	Course.	Rate. Knots.	Fms.	Revolutns. per Minute.	Sail.	Vacuum Gauge. Larbd.	Starbd.	Wave.	Barom.	Therm.	Boilers in Work.	Expansion Valve.
1	West.		East.	9										
2				9										
3				9	4									
4				9		15			27½			82 E.R.		7
5				10									4	
6				10										
7				10	4									
8				10	4	15			27½			83 ...		7
9				10	4									
10				11		16			27½			84 ...		
11			East.											
12														

Latitnde { by Obs. / by D.R. } Longitude { by Chrono. / by Lunar. }

P M														
1														7
2														
3														
4														
5														
6														7
7														
8														
9														
10														
11														
12														

Commencing Number of Counter, 537,256.
Ending Number, 557,453.

THIS DAY's CONSUMPTION OF STORES.

	Coal. Tons.	Cwt.	Tallow. lbs.	Oil. Gals.
Commenced with ..	178		2128	
Used	24		56	
Remaining	154		2072	

OCCURRENCES AND REMARKS.

The last 24 hours of Captain's Log not having been filled up, and the ship having the common Log with her, we must assume the run to be very similar to that of Sunday, the 20th. The ship anchored in King-road at 11h. 15m., A.M., of the 22nd.

TABLE OF EXPERIMENTS ON SALTNESS OF WATER.

Accompaniment to Engineer's Log.

Mr. PEARNE, in the letter, page 5, alludes to the Hydrometer, with which he was supplied for the purpose of testing the state of the water in the boilers, as a means of forming an opinion upon the action of the change water pumps. The Hydrometer, furnished him by Mr. BRAHAM, optician, of Bristol, well known for his scientific turn in his line of business, was preferred by him, and the following tables record the experiments. Mr. BRAHAM and myself experimented with a similar one, and found that one pound of salt deposited in ten gallons of rain water caused it to float at 11°. Mr. PEARNE sets down sea water at the same rate. The instrument was labelled to 46°.—C. C.

SATURDAY, 7th April.

Filled the boilers in Kingroad; weighed the water; found it 7°.*

MONDAY, 9th April.

From the change water pumps.	*Temperature.*	*Weight per Hydrometer when cool.*	*Saltnesses.*
	Degrees.	*Degrees.*	*Degrees.*
Larboard aft Boiler	181	24	2 2-11ths.
Starboard aft ditto	153	22	2
Larboard fore ditto	162	20 5	1 9-11ths.
Starboard fore ditto	136	21	1 10-11ths.

TUESDAY, 10th April.

Boiled a portion of the water from each boiler in an open vessel; blowed out all four boilers partially.

Larboard aft Boiler...	218	27	2 5-11ths.
Starboard aft ditto	218	30½	2 8-11ths. ½
Larboard fore ditto	217	23	2 1-11th.
Starboard fore ditto...	220	48	4 4-11ths.

WEDNESDAY, 11th April.

Water boiled as before.

Larboard aft Boiler...	176	22	2
Starboard aft ditto.	144	22	2
Larboard fore ditto	156	20	1 9-11ths.
Starboard fore ditto	142	21	1 10-11ths.

10, A.M., water from the change pump.

Larboard aft ditto	176	22	2
Starboard aft ditto	144	22	2
Larboard fore ditto	156	20	1 9-11ths.
Starboard fore ditto	142	21	1 10-11ths.

3, P.M., expansion valve 7th grade; tried indicator; number of revolutions per minute, 12. 50.

* 5° fresher than common sea water.

THURSDAY, 12th April.

9, A.M., drew water from each boiler at gauge cocks.

	Temperature.	*Weight per Hydrometer when cool.*	*Saltnesses.*
	Degrees.	*Degrees.*	*Degrees.*
Larboard aft Boiler	...	23	2 1-11th.
Starboard aft ditto	...	24	2 2-11ths.
Larboard fore ditto	...	18	1 7-11ths.
Starboard fore ditto	...	26	2 4-11ths.

FRIDAY, 13th April.

7, A.M., drew water from each boiler, and boiled in an open vessel.

Larboard aft Boiler	217	21	1 10-11ths.
Starboard aft ditto	216	20	1 9-11ths.
Larboard fore ditto	217	21½	1 10½-11ths.
Starboard fore ditto	217	24	2 2-11ths.

SATURDAY, 14th April.

From change water pumps.

Larboard aft Boiler	167	23	2 1-11th.
Starboard aft ditto	145	20	1 9-11ths.
Larboard fore ditto	151	22	2
Starboard fore ditto	148	22	2

Temperature of feed from cock larboard fore boiler, 112.°

SUNDAY, 15th April.

Larboard aft Boiler	...	21	1 10-11ths.
Starboard aft ditto	...	25	2 3-11ths.
Larboard fore ditto	...	33	3
Starboard fore ditto	...	35	3 2-11ths.

During last 24 hours obstruction in starboard fore boiler change water cock; blowed off a portion occasionally.

MONDAY, 16th April.

Larboard aft Boiler	...	20	1 9-11ths.
Starboard aft ditto	...	21	1 10-11ths.
Larboard fore ditto	...	39	3 6-11ths.
Starboard fore ditto	...	28	2 6-11ths.

It would appear the blowing had remedied somewhat the saltness in starboard fore boilers exhibited yesterday. The larboard fore boiler seems not to have delivered its brine properly.

TUESDAY, 17th April.

Larboard aft Boiler	...	21	1 10-11ths.
Starboard aft ditto	...	23	2 1-10th.
Larboard fore ditto	...	36	3 3-10ths.
Starboard fore ditto	...	41	3 8-10ths.

WEDNESDAY, 18th April.

	Temperature.	*Weight per Hydrometer when cool.*	*Saltnesses.*
	Degrees.	*Degrees.*	*Degrees.*
Larboard aft Boiler	...	23	2 1-11th.
Starboard aft ditto	...	25	2 3-11ths.
Larboard fore ditto	...	38	3 2-11ths.
Starboard fore ditto	...	52	4 8-11ths.

Although the partial blowing off of both fore boilers has, I believe, been attended to every four hours, the starboard fore boiler seems to have accumulated salt.

THURSDAY, 19th April.

Larboard aft Boiler	...	21	1 10-11ths.
Starboard aft ditto	...	23	2 1-11th.
Larboard fore ditto	...	33	3
Starboard fore ditto	...	43	3 10-11ths.

FRIDAY, 20th April.

Larboard aft Boiler	...	24	2 2-11ths.
Starboard aft ditto	...	25	2 3-11ths.

Larboard fore and starboard fore boilers not at work.

SATURDAY, 21st April.

			From change pump.
Larboard aft Boiler	176	23	19
Starboard aft ditto	160	24	19

At 7, A. M., drew a portion of the water from gauge cocks of larboard fore boiler, and starboard fore boiler, and weighed it, prior to lighting fires.

Larboard fore ditto	...	20
Starboard fore ditto	...	13

SUNDAY, 22nd April.

Larboard fore Boiler	...	39
Starboard fore ditto	...	31

Two fore boilers at work till 9, A. M. 7, A. M., drew a portion from gauge cocks.

MONDAY, 23rd April.

Larboard aft Boiler	23
Starboard aft ditto	25*

Two after boilers only at work.

* In the memoranda several other remarks are made, but as they are noticed according to formula of Mr. P.'s own coinage they are omitted.

APPENDIX.

APPENDIX—No. I.

REPORT TO THE COMMITTEE,

Formed with the view of considering the subject of Foreign Steam Navigation, Bristol, January 1st, 1836.

In consequence of the daily increasing importance of Steam Navigation, and the general impression amongst persons acquainted with the subject, that the advantages possessed by this Port fully entitle it to rank with others, between which and the United States projects for the establishment of a Steam Communication are already on foot, several Gentlemen have commenced the formation of a Company, with the view, first, of examining minutely the feasibility of the undertaking; secondly, for ascertaining in detail from correct data every thing connected with its organization; and lastly, if such an investigation should leave no doubt of a successful and profitable result, to carry it into effect.

The first of these points, the feasibility of the plan, is the principal subject of the present report; and neither the labour of actual survey, nor the trouble of a critical examination, has been spared to arrive at a safe conclusion. Having visited all the principal Steam Ports, and sailed on every Steam Line, where the best practical information was to be obtained, for this express object, the following remarks are submitted, although with great diffidence, as being fully borne out by facts observed, and as the results of a somewhat laborious investigation.

The principal voyages now regularly performing by Steamers are the following:—to Hamburgh, Bordeaux, Lisbon, Cadiz, Gibraltar, Malta, and the Ionian Isles; in the West Indies, from Jamaica to Barbadoes against the trade winds; from Bombay to Suez; and from New York to Charlestown. The voyages from, to, and between these places, have been performed, winter and summer, with regularity and safety, which fact of itself furnishes data sufficient for drawing conclusions favourable to feasibility, and which will be the more decisive when it is considered that most of them have been accomplished in vessels of less than 500 tons, not built for their stations, and with steam power disproportionably weak.

It is not therefore too much to assume that vessels built expressly for their stations, modelled upon scientific principles, and propelled by efficient engines, may be capable of performing long voyages, and may encounter the heaviest gales.

SIZE AND KIND OF VESSEL.

First. The advantages of large Steam Ships over smaller ones, are more apparent in bad weather than at other times; they can hold on a straight course with a gale abeam, when small vessels would be buried in the trough of the sea, and would be compelled to deviate so as to bring their bows or their quarters to the swell, and either way lose ground. They neither lose their way nor do they fall off so soon; they labour less, are more steady to their work, and their paddles are not so often alternately immersed and free.

Secondly. The accommodations for passengers should be at least equal to those of the present first-rate sailing vessels, otherwise a prejudice would be raised against the Steamers which would blight at once every prospect of success; this can best be effected by vessels of much greater dimensions than the largest Steamers now in use.

Thirdly. It is well known that the *proportionate* consumption of fuel decreases as the dimensions and power of the engines are increased, and consequently that a large engine can be worked more economically than a small one. The resistance of vessels on the water does not increase in direct proportion to their tonnage. This is easily explained—the tonnage increases as the cubes of their dimensions, while the resistance increases about as their squares; so that a vessel of double the tonnage of another, capable of containing an engine of twice the power, does not really meet with double the resistance. Speed, therefore, will be greater with the large vessel, or the

proportionate power of the engine and consumption of fuel may be reduced.* This accounts for the success of large vessels over small ones.

Fourthly. A large vessel having more hold on the water is with strong side winds less likely to be forced to leeward than a small one, and exposing a less surface of upper works to her tonnage than a smaller one, is also, according to the foregoing rule, considerably less affected in comparison by contrary gales.†

Fifthly. Expense in equipment does not ascend in the ratio of tonnage. Very nearly the same crew and expense of outfit and stores that 900 tons require, would be efficient in 1200 tons.

Sixthly. It would be of great advantage to be enabled to carry a certain quantity of goods; this on a long passage is impracticable, except in a vessel of considerable tonnage.

Seventhly. As to the kind of vessel; every steamer of large dimensions was inspected both on and off the stocks, in the principal Steam Ports of England and Scotland; great improvements are being gradually introduced, more particularly observable in the Clyde than elsewhere, and I feel confident that a vessel, constructed upon scientific principles, with more regard to the strength required for a long sea voyage than came under my observation, would fully bear out the calculations as to speed and capacity. Such a vessel should be so rigged as to offer a good spread of canvass, for running free in breezes, when, with all sail set, she should average eight knots, with or without steam; or for scudding before the heaviest gales at possibly 11 or even 12 knots. She should also have well-fitted fore and aft sails, for sailing on a wind, or to enable her to reach a port in safety;—this, with the means of throwing her paddles out of gear, would give her resources, and with the other combinations, would render her, in point of safety and certainty, superior to any thing on the water. Long experience shews that steamers, built as they are, with greater length than is usual for sailing vessels, are not only quite as good sea boats, but also sail as fast, whether on a wind or going free as the generality of sailing vessels. The foregoing considerations, together with the following calculations, lead me to the opinion that, for the purpose of carrying cargo as well as passengers, the most speedy and certain passage, the greatest economy of power, and the best assurance of a profitable return for the capital invested, will require a vessel of at least 1200 tons.

2. STEAM POWER, FUEL, &c.

A most important consideration is, the relation of size to speed and power, the grand desideratum being the largest possible size that can be efficiently propelled with the smallest possible power. A vessel of tolerably fair proportions, and which makes in fine weather and smooth water 8 knots, or with a favouring breeze 9 knots, with engines of small power, would increase her speed only to 10 or 11 knots (under the same circumstances as to wind and weather) if her power were doubled. Addition to speed beyond this, in this and similar cases, through the aid of machinery alone, would not repay the sacrifice of space, or the increase in consumption of fuel necessary to acquire it. (Comparisons of power to tonnage, from examples in her Majesty's and the Merchant Service, omitted.)

From the above data it appears that increase of tonnage beyond a certain amount, say 500 tons, does not require increase of power at the same ratio that it does below that amount; my own observation, together with inferences drawn from the above, lead me to believe that a vessel of 1200 tons, modelled on the present improved principles, and propelled by engines of 300 horse power, would contend much better against the elements, and go as fast, as a vessel of 600 tons and 200 horse power of the same build.

There is much difficulty in arriving at the true estimate of the consumption of any steam ship. One sort of coal will go one-fourth further than others, and a good fireman will use one-sixth or even one-fifth less to produce the same effect, than a careless or indifferent one. Some boilers generate steam better, and do not foul so readily as others, and some flues answer better than others. The best sorts of coals are stated to be the Llanelly and the Swansea; the former is called the Langennock, and the latter the Graiola; one authority states them to be as 13 cwt. to 17 cwt. of Newcastle coal; another as 11 to 16. The Hugh Lindsay, on her voyage from

* Practically illustrated by the voyages of Great Western and Sirius.—Ed.
† Ditto.

Suez, found 12 cwt. go as far as 15 cwt. of ordinary coal. I examined many engineers in their vessels at Glasgow, and never found their computed consumption to agree with the fact, which was only ascertainable by calculating the number and weight of the cart loads laid in, the length of time the fires were burning, and the quantity left at the end of the voyage, and even then no estimate could be correctly made of the loss by stoppages—getting up steam—raking out fires—waste of steam—or of any other of the contingencies before alluded to.

In roughly calculating the consumption of engines, 9lbs. per h. p. is usually taken, and that approaches probably to the nearest result of experiments. The question, however, suggests itself—Where have the majority of experiments been made? I should say in London. Certainly not in Bristol, or Llanelly, Swansea, Newport, or Lidney, as the same amount (9lbs.) has been handed down from the first establishment of Steam Packets. If the foregoing calculations, in respect to quality and quantity of coal and power are correct, and the experiments whence conclusions have been adduced were not made upon Langennock, Graiola, &c., &c., 7lbs. of either is equal to 9lbs. of the Northern sorts, and engines of 300 horse power would not consume even 9lbs. of the Northern sorts. In estimating the quantity which ought to be taken on board a steam ship, in the absence of positive information, I think it best to disregard this advantage, although the foregoing induces the belief that 600 tons of that which we shall be able to use, will turn out to be equal to 750 of the sorts in general use.

The quantity required for engines of 300 horse power, at 9lbs. per horse power per hour, would not quite amount to 29 tons per diem, or 580 tons (calculating upon full power and consumption the whole time) for twenty days. But there are circumstances which operate to lessen consumption—when the wind is fair, and both powers are in use, the same quantity of steam not being required, the consumption of coal is proportionally lessened; and when the breeze is steady and strong, the fires might be either kept very low, or suffered to go out.* With a strong head wind (which alone can cause the voyage to be extended beyond fifteen days) the consumption of steam becomes diminished, the number of strokes of the piston being reduced in proportion to the resistance, the quantity at these times required and the fuel would be proportionably diminished. It is therefore certain that, with proper management, even after a twenty days' passage, a considerable portion of the coal would remain unexpended.†

But under ordinary circumstances, say in ten cases out of twelve, the passage outward would be completed in much less time; and the return passage, in all probability, would seldom exceed thirteen days; the quantity therefore unconsumed at the end of the voyage would average full a quarter of the quantity shipped, thus rendering it unnecessary to purchase for the homeward passage more than 300 tons, or at that ratio on increased or diminished power.

3. LENGTH OF PASSAGE.

The average passages of sailing vessels are from Liverpool to New York thirty-six days, and from New York to Liverpool twenty-four, upon a calculation of ten years. A steamer of 1200 tons, well modelled, and fitted with engines of 300 horse power, would in smooth water and calm weather, make at least nine knots per hour; in strong breezes, head to wind, 6 or 7. This computation would much diminish the period of twenty days before given, and the prevalence of westerly winds would ensure an average return passage of about thirteen days.

In the heaviest possible gales, dead against her, it might be necessary to bring her to the wind under reefed storm trysails, when assisted by the engine at about one third the power, she would seldom go less than five knots, never miss stays, and

* All idea of putting the fires out and disconnecting has been since abandoned. The Great Western's engines will always be kept at work.

† The Great Western's voyage, although to a degree corroborating this prediction, proves the calculations to have been more favourable for our project. Her engines are 450 horse power. She steamed fifteen days outwards and fourteen days and some hours homewards — Estimated average consumption outwards, 30 tons per diem; 28 home. At New York there was left coals enough for from four to five days' steaming, and at Bristol enough for six or seven days. In our advertisement we state her coal stowage as sufficient for 20 days' steaming, and the state of the weather, together with crowds of visitors, caused her shutting out more than 100 tons.

within 4½ points of the wind, would make but little if any lee way, and would always be able to take advantage of every shift, if even of one point, in making her traverses.

4. LOCAL STATIONS.

In the shortest track to New York, there is no place to touch at, nevertheless going to the Western Islands would be no great deviation to the Southward; and St. John's, Newfoundland, is very little out of the direct track to the Northward. At the former, in the Port of Fayal, I should recommend the establishment of a depôt, of ut least 500 tons of coal. At the latter, coal in any quantity may always be obtained. Touching at either would depend upon the discretion of the captain, who would hardly pass their longitudes unless he felt assured that his supply was sufficient for the remainder of his voyage. And it may be observed that in the former case a finer steaming parrellel would in a great measure make up for increase of distance, and in both the current of the Atlantic, from the tail of the Banks of Newfoundland to our own coasts, would be proportionally avoided.

5. NUMBER OF PASSENGERS.

The number of Steam Ships, built and building, the daily extension of old lines, and the formation of new, the increase of factories for the production of marine engines, all shew that steam is rapidly superseding sailing vessels, whether for long or short distances; no line having been hitherto established without having immediately had the preference, and ultimately taking away all the passengers from the sailing vessels. New York, the great emporium of the Western World, is almost hourly increasing in importance; and although Liverpool is the general resort of her men of business, yet there are many grounds (too long to notice here) for believing that a regular line of vessels from Bristol would cause a vast influx of persons from America, and that a still greater number would take their departure from her quays;—not among the least of these the all but certain establishment of cotton spinning factories.*

Besides the New York Line, for which so many of our citizens have subscribed, it behoves me to allude to others, which, either in respect to investment of capital, or improvement of trade, may be found to offer advantages worthy of consideration. The Lines established, the number of vessels plying and the numbers *about to ply*, to and from the ports of Continental Europe, afford tolerable grounds for presuming that success has crowned the efforts of enterprising capitalists of other places. In the absence of sufficient information, as to the state or prospects of trade with those ports, I content myself with alluding to Bordeaux, Oporto, Lisbon, Cadiz, Gibraltar, and the West Indies.†

APPENDIX—No. II.

DIMENSIONS OF STEAM SHIP GREAT WESTERN.

	Feet.	Inch.
Length from forepart of Figure-Head to afterpart of Taffrail ...	236	0
Length between the Perpendiculars	212	0
Length of Keel	205	0
Breadth in clear of Paddle-Wheels	35	4
Breadth over Paddle-Boxes	59	8
Depth of Hold	23	2
Tonnage by Measurement	1340	0
Length of after Saloon Deck	75	0
Length of after Lower Deck	73	0
Length of fore Cabin Deck	59	0
Length of Engine-Room	72	0

* Since established.

† The position of Bristol for ingress and egress—its distance from London by the Great Western Railway—its advantages as a coal district, and the spirit of improvement, will force the conviction of her being the best English port for Western or South Western Steam Navigation.

DIMENSIONS OF ENGINES, &c.

Diameter of Cylinder		73½	Inches
Length of Stroke		7	Feet
Weight of Engines, Wheels, &c.		310	Tons
Weight of Boilers		90	Ditto
Water to each 20 tons		80	Ditto
Diameter of Wheel		28 Ft. 9 in.	
Length of Floats		10 Feet	
Number of ditto		4	
Depth of ditto ...	No. 1, of Iron	4½	Inches
Description, Cycloidal.	No. 2, of Wood	12	Ditto
	No. 3, of Ditto	10	Ditto
	No. 4, of Ditto	8	Ditto

DISPLACEMENT.

	Ft.	in.		Tons.	cwt.	qrs.	lbs.
At	6	8	Draught of water at launching	694	8	0	12
...	10	0	... ...	1202	9	3	18
...	13	4	... ...	1750	6	0	25
...	16	8	... ...	2305	4	0	23

WEIGHTS OF MATERIALS.

Oak Timber 16592 @ 58	429	12	1	4
Elm ditto 3340 @ 37½	74	11	0	8
Hard Pine 12431 @ 40	221	19	2	16
Yellow ditto 4339 @ 34½	71	5	3	0
Oakum, Pitch, Tar, Paint, &c.	6	10	0	0
Iron-Work, Copper and Composition, to Hull...	60	0	0	0
Carvers' Work, Head and Stern	0	12	0	0
Water Closets, Lead-work, Pumps, &c....	2	10	0	0
Cooking Apparatus, &c.	1	15	0	0
Cabins and Furniture	24	0	0	0
Anchors and Chain Cables, &c.	23	0	0	0
Rigging, Masts, and Spars	15	0	0	0
Boats	4	0	0	0
Sundries for Crew and their Chests	10	0	0	0
Weight of Hull, Masts, Rigging, &c....	944	15	3	0
Water, Provisions, and Stores, for 120 Passengers and for Crew	41	0	0	0
Passengers and Luggage	16	0	0	0
Iron—Ballast	40	0	0	0
Coals and Cargo	850	4	1	0
Engines and Boilers	400	0	0	0
Water in ditto	80	0	0	0
Total	2372	0	0	0

APPENDIX—No. III.

GREAT WESTERN STEAM SHIP COMPANY,

Established by Deed of Settlement, dated 2nd June, 1836.

DIRECTORS.—Peter Maze, Esq., *Chairman*, Robert Bright, Henry Bush, Henry Godwin, Thomas R. Guppy, Thomas Kington, *Deputy Chairman*, Robert Scott, Thomas Bonville Were, Christopher Claxton, R.N., *Managing Director*.

TRUSTEES.—Joseph Cookson, John Harford. Thomas Kingsbury, John Vining.

AUDITORS.—C. Bowles Fripp, John Moxham, John Winwood.

BANKERS.—Miles, Harford, and Co., Bristol; Barnetts, Hoare, and Co., London.

SOLICITORS.—Osbornes, Ward, & Sons, Bristol; Swain, Stevens, & Co., London.

At the First Annual General Meeting of the Proprietors, held at the Commercial Rooms, Bristol, on Thursday, 1st March, 1838, PETER MAZE, Esq., in the chair, the following Report of the Board of Directors was read :—

At the First Meeting of Proprietors, as prescribed by the Deed of Settlement, your Directors have much to Report, which is highly favourable to your public-spirited undertaking.

As the period approaches for the solution of the great problem of Steam Navigation between the Old and New World, the prospect of success becomes increasingly confirmed by the investigations which your Directors have found it necessary to undertake, and by the means which you have placed at their disposal for the accomplishment of that important object.

They had long cherished a hope that an account of voyages accomplished would have formed part of their Report; but the magnitude of the work has required materials of increased dimensions, together with calculations and considerations of precaution, which have protracted the well-applied exertions of the various parties engaged.

To superintend the progress of your undertaking, and minutely to watch the various ramifications of the construction and arrangements, your Directors were fortunately enabled to prevail on Mr. CLAXTON to take upon himself the important duties of Managing Director.

It soon became apparent that it would be impossible to include in a contract the numerous deviations in strength, fastening, and form, from the customary mode of building Steam-Boats, and also to carry out those improvements which would be certain to suggest themselves as the work progressed. It was, therefore, determined to secure the services of Mr. PATTERSON, as shipbuilder, with whose skill and probity your Directors have to express themselves highly satisfied.

From amidst several competitors for the construction of the Machinery, Messrs. MAUDSLAY, SONS, and FIELD, of London, were selected. Their general experience, arising from having made a great number of the largest marine engines, being most extensive, their resources, through their factory, vast, and their ingenuity in new adaptations well known, your Directors were induced to rely on their power of producing engines much larger than had been hitherto attempted, and of the highest class; and, as far as it is possible to form an opinion, upon the declarations of numerous well-informed and scientific individuals, there is every reason to believe the result will justify the expectation.

For the valuable and gratuitous superintendence of Mr. J. K. BRUNEL, who has, in the kindest manner, been in constant communication with Messrs. MAUDSLAY, SONS, and FIELD, and your Directors, they are indebted for the most important assistance on all scientific points connected with the construction, as well of the Vessel as the Machinery.

The Engines, with Cylinders of 73½ inches in diameter, with 7 feet length of stroke, and with several adaptations for the economy of Steam and Fuel, are equal to 450 horse power. The Boilers are constructed on an entirely new principle, which has greatly economised space, and, it is believed, will very much lessen the consumption of Coal. They consist of four distinct and independent Boilers, so that the Engineer can work such number only as circumstances may require; while, by means of passages reserved between them, he can cool, examine, repair, and clean those not in use. The Wheels have the cycloidal paddles, which possess very decided advantages.

The destination of this vessel has particularly engaged the attention of those interested in Naval Science, and your Directors cannot allow this opportunity to pass without publicly acknowledging their deep obligation to the Board of Admiralty, by whom an earnest interest has been shewn in your undertaking. Not only have the plans, drawings, and calculations of her Majesty's Steam Service been readily placed at the disposal of your Directors, but they are indebted to Sir WM. SYMONS for important suggestions, and to Mr. LANG, the able, practical builder, in the Royal Dockyard, at Woolwich, for continual communications of the most valuable character. Your Directors dwell with pleasure on these proofs of official and public appreciation of your objects.

In commemoration of the enterprising spirit of this part of the empire, in which the undertaking originated, and as a link connecting the great Line of Railway Communication between the metropolis of England and the Americas, your first vessel has been named the "Great Western." Her dimensions are,

Length between perpendiculars 212 feet, Length over all 236 feet, Beam 35½ feet, Breadth from out to out of the paddle-boxes 59-8 feet, Depth 23½ feet, and Registered Admeasurement 1340 tons. Her floors are of great length and over-run each other, they are firmly dowelled and bolted, first in pairs, and then together by means of 1½ inch bolts, about 24 feet in length, driven in four parallel rows, scarfing about 4 feet. The Scantling is equal in size to that of our line-of-battle ships, it is filled in solid, and was caulked within and without up to the first Futtock Heads, previously to planking, and all to above this height of English Oak. She is most firmly and closely trussed with iron and wooden diagonals and shelf pieces, which, with the whole of her upper works, are fastened with screws and nuts, to a much greater extent than has hitherto been put in practice. She has Stowage for 850 Tons of Coal, or Coal and Cargo combined, without touching upon her provision and water room for 300 people. Besides ample space for Officers and Crew (comprising about 60 persons), there are state-rooms, &c., for 128 first-class passengers; there are also 20 good secondary berths, and should it eventually be found advisable to forego cargo space altogether, about 100 more sleeping berths might be easily and conveniently arranged.

The durability of such of her timbers as may be exposed to alternations of dryness and moisture has been, they trust, secured by the application of Kyan's Patent Process; and every effort has been made to combine the various points of Naval Architecture and Engineering, so as to render them most effectual in a service requiring speed, strength, and accommodation, and in which she will have to compete with the finest sailing passenger vessels in the world.

In studying the convenience, comfort, and decoration of the Cabins, points which are of great importance in a vessel carrying passengers of a superior class, your Directors have engaged the services of Artists and Tradesmen recommended by their taste and experience. The ornamental work of the principal apartment will, your Directors trust, be found as well adapted to its purpose as it is novel and beautiful in its application. It is the joint production of Edwd. Thomas Parris, Esq., Historical Painter to her Majesty, and of Messrs. Jackson and Sons, of Rathbone-Place, London. The compartment Paintings of the latter of these gentlemen are in a very high style of art, and zeal appears to have influenced him in a far greater degree than emolument.

In the upholstery department, Mr. Webb, of Bond-Street, London, has been selected to supply the principal articles; and the mattresses and bedding have been prepared by Mr. Stafford, of Bath.

In the appointment of Officers, your Directors have been careful to obtain the strongest testimonials, and have exercised their best judgment. The Commander, Lieut. Hosken, R. N., was dispatched to New York in the American packet-ship Garrick, in December, in order to make several preliminary arrangements, and his return is now daily expected; his arrival out having been reported in the public prints of America, the contents of which shew the deep interest felt in your undertaking at that extremity of your projected line. Mr. Matthews, the First Officer, has had many years' experience in the command of Steam Vessels, abroad and at home; and in executing the important duties which, in the Captain's absence, have devolved upon him, he has given entire satisfaction. One of the most active and efficient Pilots, for the Bristol Channel and Irish Coast, has been permanently engaged as an officer in that capacity.

To Messrs. Maudslay, Sons, and Field, the Directors have left the nomination of Officers for the Engineering Department. The Chief Engineer has been appointed, and they can only hope he will do justice to the strong recommendation of those gentlemen.

It is intended to take four young gentlemen, as Cadets in the "Great Western," who are to be instructed in Navigation and practical Engineering. Three have already been appointed, and there are several applications for the only vacancy. These appointments have been eagerly sought for, and your Directors are gratified to believe, that the novel system which they have introduced will be of the greatest benefit, both to your service and Steam Navigation generally. The premium for the four years' indenture has been fixed at present at £200 each.

A gentleman, of high professional character and great experience, has been appointed to the situation of Ship's Surgeon.

The Engineers have assured your Directors that they intend to commence their trials of the Machinery in about ten days, and immediately on receiving their favour-

able report, the day of her departure from Bristol will be fixed, which they have every reason to believe will be early in April.

To remedy in future the great inconvenience, expense, and labour, which were incurred in building in a yard of limited space, and also to hold your stock of timber, (which is equal to the construction of a steamer of more than 200 tons,) together with your ways, planks, scaffolding, stages, and standards; and, for the more permanent operations of the Company, they have taken, on a lease of 21 years, determinable by the Company at 7 and 14, most convenient premises on the lower part of the Bristol Floating Harbour.

In laying before you the audited Account of Receipts and Expenditure to the 31st January, with a sketch of payments made to this day, as well as an estimate of the probable outlay up to the time of her leaving London, your Directors have to state that your Vessel and Machinery will cost a sum considerably exceeding that which was estimated in the Prospectus. Calculations founded on the experience of persons best entitled to consideration, soon carried the conviction, that, although the smaller size might, under favourable circumstances, not prove a failure, yet, to insure success, a larger Vessel, with more powerful Machinery, greater Coal stowage, and more ample Passenger accommodation, would be necessary; they, therefore, deemed it to be their bounden duty to incur the increased expense to effect the object you had in view. At the same time, they have the satisfaction of saying, that they expect that the cost of the "Great Western" to sea will be less, in proportion to her size, than the average of other Steam Vessels, whose strength, construction, and other qualities, are far inferior.

In accordance with the provisions of the Deed, three of your Directors, Messrs. MAZE, BUSH, and WERE, have retired, by ballot, and their names have, with their consent, been put up for re-election, in compliance with the 120th clause of the Deed of Settlement.

Your Directors look with perfect confidence to the result of the approaching voyage of the "Great Western," and expect that it will be their gratifying duty, immediately on her return to this country, to lay down a second Vessel for the New York line. No doubt on their own minds has hitherto prevented their taking this step; but, after mature consideration, they have deemed it due to those by whose confidence they have been honoured, not to engage the Capital of the Company more deeply until experience shall have proved the correctness of their anticipations.

Signed, PETER MAZE, Chairman.

It was then Resolved, on the motion of Captain WALCOTT, R.N., seconded by SAMUEL LUCAS, Esq., that the Report now read be received, and printed for circulation amongst the Subscribers.

On the motion of THOMAS KINOSBURY, Esq., seconded by THOMAS CRUTTWELL, Esq., that the thanks of the Company be given to J. K. BRUNEL, Esq., for the important services he has so liberally rendered.

On the motion of T. H. ENGLAND, Esq., seconded by WILLIAM MORGAN, Esq., that the very efficient manner in which the affairs of the Company have been conducted by CHRISTOPHER CLAXTON, Esq., R.N., as Managing Director, entitles him to the warmest thanks of the general proprietary.

On the motion of Dr. CHARLES FOX, seconded by RICHARD ROBINSON, Esq., that this Meeting gratefully acknowledges the assiduous and gratuitous services of the Board of Directors.

On the motion of W. H. CASTLE, Esq., seconded by F. H. FALKNER, Esq., that the retiring Directors, PETER MAZE, HENRY BUSH, and THOMAS BONVILLE WERE, Esqrs., be reappointed.

On the motion of Mr. WOODMAN, seconded by THOMAS KINGSBURY, Esq., that JOHN WINWOOD, Esq., be appointed Auditor.

On the motion of Mr. JOHN STAFFORD, seconded by Capt. WALCOTT, R.N., that a List of the Proprietors and their Addresses be hung up in the Office.

On the motion of THOMAS CRUTTWELL, Esq., seconded by Miss LUCAS, that the Directors apply to those Shareholders who have not paid up all the Calls now due, and require payment on or before the first day of May next; and, in default of payment, that the Directors resort to such means as they shall think proper to recover the same. PETER MAZE, Chairman.

The Chairman having left the chair, it was taken by Capt. WALCOTT, R.N., when a vote of thanks to Mr. MAZE was moved, seconded, and carried unanimously.

EDW. WALCOTT.

APPENDIX—No. IV.

THE FOLLOWING JOURNAL OF THE OUTWARD VOYAGE

Is from the pen of Mr. Foster, a highly talented Gentleman, of Philadelphia.

SATURDAY, April 7th, 1838.

Our departure from Bristol was at the appointed time of sailing. Having got on board a small steamer, a twaddling little thing, we left the foot of the Cumberland, or outer basin, at a few minutes past 2, P.M., to join the Great Western, at the mouth of the river Avon, not Shakspeare's, a tributary to the Severn; and upon which, at some 10 or 12 miles from its confluence with the parent stream, Bristol is situated.

The day was an unpropitious one. A strong breeze, almost a gale, blew dead against us; the clouds loured, and a cutting rain, alternated with a fitful sunshine. Had our lots been cast in those good old times, when Nature, in her freaks, revealed to grandames the mysteries of buttermilk and unhatched eggs, we had surely deemed it ominous, for the elements seemed to fret and fume over the commencement of the voyage. Thanks to the darkness of the latter days, however, the wind to us was but wind, and the rain but rain; so wrapping our cloaks still closer about us to exclude both, our duckling of a steamer was permitted to paddle on.

The scenery in the vicinity of Bristol is, perhaps, the finest of its character in England, and passing down the Avon it is seen in some of its most enchanting features. For some miles below the city the shore on either side is a continuity of stupendous carboniferous limestone rock, sometimes attaining the height of 300 feet above the water mark. Starting from the stream, with but a narrow road or tow-path at the base, occasionally to relieve the abruptness, they rise piling mass on mass, and vein on vein, frowning in naked crags, the impracticable precipice; or, yielding their severity, gently recede, grudging their rude cliffs to the mountain larch.

At one point on the river, the heights of Clifton were visible, with their graceful crescents peering above, like the creations of a fairy land. Near to these we passed the site of the contemplated Suspension Bridge over the Avon. The workmen are as yet engaged only on the abutments, enormous structures, wrought upon the hill side, resembling rather the gigantic efforts of a giant race (the engrafting of rock on rock) than the work of common men. An iron bar, 785 feet in length, stretched from summit to summit on either side, at an elevation of 172 feet from low water mark, shows the precise spot, height and length, of the intended bridge.

At another point our attention was attracted by men procuring a particular sort of stone. It was at a little distance from the river, but at one of the most precipitous and highest points of rock. They seemed to use nothing but crow-bars in the work, the part to which their attention was given being soft. They stood upon small cliffs almost at the top of the precipice, with ropes about their waists, and passed over the summit, to assist them in ascending and descending, as well as to guard against any unhappy slips, and prying the stone from its bed, it came down in huge masses, rattling and rebounding as it struck, with a noise almost of thunder.

Beyond this rocky section the shore breaks into finely sloped hills, abounding in wood, hedge, and lawn. Foliage had not yet burst; still had the plough and harrow been busy, contrasting delightfully the warm and mellow earth with the verdure of the sward, already in the rich hue of spring.

The rise and fall of the tide in the Severn is 30 feet, and having the flood against us, our passage was prolonged.

We reached the Great Western at about 5, P.M., and strange it seemed. So strongly had curiosity been excited by this vessel, that we, who had now come to take our departure by her, were obliged to wait whilst a small steamer, thronged with eager visitants, left her side to make room for us.

We joined her; and as is ever the case on ship-board at the appointed moment of sailing, every thing was pell-mell. It seems little short of professional, or in conformity with some quirk in a sailor's creed, that it should be so; and had not experience given me a hint of this fact, I would really have been dismayed: spars, boards, boxes, barrels, sails, cordage, seemingly without number, stirred well together, coals for the ground work, baggage to infinity; Captain scolding, mates bawling, men growling, and passengers in the midst of all, in the way of every thing and every body,

is a pretty good description of the state of a ship's deck generally, when about to get under weigh.

It happens mostly that a very little time is sufficient to put matters in tolerable order, and off they go, relying upon the sea to do the rest, in shaking persons as well as things into their proper places. With us, however, the derangement was little beyond this, and the breeze having now increased to a gale, it was determined by Capt. HOSKEN to lie by until the morning; so each installing himself into his little castle, found enough to do in the arrangement of it to amuse him for the evening, and all, I believe, found an early bed made welcome by a day of fatigue.

SUNDAY, 8th.

At 8, A.M., this morning, our ears were saluted by the low roar of the furnaces, which announced the kindling of the fires, the note of preparation for departure.

At 9 the steam was up; our colours were hoisted; the British ensign at our gaff, while that of our sister country, the land of our present hope, was assigned an honourable place at the fore. The call for all hands was immediately made, with the order to man the windlass. It was over two hours before the anchor was to the bow, a delay at which all grew impatient, but unavoidable by reason of the great scope of chain out, and everything being new the windlass worked stiffly.

At 12 we were fairly off, and whatever misgivings might previously have assailed us in the contemplation of our voyage, I believe that at this moment there was not a faltering heart amongst us. Such stability, such power, such provision against every probable or barely possible contingency, and such order presented itself everywhere on board, as was sufficient to allay all fear. That there should latterly have been a doubt as to the practicability and safety of a passage by steam across the Atlantic, seems indeed strange, when with any effort of reason we look at the question. The North Sea and the Mediterranean, by the way of Gibraltar from England, have been long navigated by steam; and it is now nearly two years since the passage to India, by way of the Cape of Good Hope, has been successfully made by four or five different vessels; and in all this there has surely been as much encountered as is ever likely to assail a navigation by the same means between Europe and America. Yet, that doubts have existed on the score of this new attempt, extensively, and in the minds of many who ought to be able to form a correct judgment upon the subject, there can be no question. It is a weakness of our nature that sometimes so strangely permits our imagination to beset us with difficulties, which exist only in the fact that an effort to confront them had not been made. Thus it was in a former age, that regions unexplored were invested with fancied terrors, and more than half the globe lay for centuries unknown.

The evening found us at the mouth of the Bristol Channel, Lundy bearing N., making our way against a head wind, and an ugly hard sea.

MONDAY, 9th.

The morning opened upon us delightfully, and with such a face as made our steamer glorious; sunny and quiet, the sea heaved in glassy volumes, disturbed only immediately around us by the plunge of our paddle wheels, and the rapid progress of the vessel. To one accustomed to the associations of the sea, as they are usually presented to a voyager on a sailing vessel, the effect was very striking. In *his* feelings the waves and the expanse of the water have in some measure taken the place of friends and a stirring world; and their ripplings and splashings are to him like the voice and glee of boon companions, or their tossings and foamings as the angry discord of other elements; and the absence of these, the quietude of a calm, the glare of the unruffled ocean, convey to his feelings a sense of solitude and silence not less powerful, perhaps, than would the wilderness itself to one accustomed to the jarrings and jostlings of the every-day world. This, indeed, is the only solitude the sailor knows, the only silence he truly feels; and to see the repose of the deep thus invaded, our vessel coursing on, I can scarcely call it else, for her swiftness appeared the eagerness of hot pursuit, seemed strange, as the sight of some startling apparition of active life in the midst of the unbroken desert.

At 10, A.M., a light breeze from the northward, made sail; several vessels in sight.

At 12, noon, came up with and spoke the American ship Neponset, of Boston, four days out of Liverpool, for Charlestown.

At 5, P.M., wind a-head, in all sail; thick fog and a heavy head swell; weather looking dirty.

TUESDAY, 10th.

Fairly shaking hands with Old Neptune, through a head wind, and over a head sea. The incipient symptoms of yesterday have become confirmed cases this morning. Sea sickness stalks in stifling horror amongst us, and the dreadful cry of "Steward," "Steward," the last ejaculation of despair, comes from a dozen nooks, hurried in a piercing treble, or growled forth with muttered maledictions on the dilatory bucket bearer, in the deep tones of thorough bass.

At 2, A.M., two sail in sight: a large ship abeam, to windward, standing E., a ship on the weather bow, close hauled on the larboard tack; wind W.S.W. Soon discovered a black ball painted in the foretopsail of the latter, by which we knew her for a packet ship; hoisted our colours, the American at the fore; kept the steamer up a point, and at 11 passed and spoke her; the South American, 7 days out of Liverpool, for New York.

Whatever might have been the kindness and good-will with which we graced our greeting of this fellow wayfarer of the deep, and however warmly and sincerely we would have yielded to any claim upon our charities in his behalf, yet I much fear that with it all, we entertained at heart a feeling that betook of unbecoming exultation. It was impossible almost that it could be otherwise, and the frailty can hardly be called unpardonable.

The meeting of a packet ship, a creature I may call it of proud eminence, was a sort of contest, and triumph was at that moment in our hands. The feelings of the sailor are ever enlisted for his own ship, whatever she may be; yet sailing, quick sailing, being the beauty, the point of pride, the one thing needful to constitute her perfect, whenever that is found, especially if combined with other merits, she is supremely the object of his regard above all else that he may meet. Her conquests are his, and he would be little less affected by any thing impairing her high claims, than if he himself had become the victim of disaster and defeat.

Our salutations were in the courtesy of the seas; our colours were answered by his numbers, to which we again responded by hoisting ours. Thus decked with flags we bore up to speak him. As we approached, the steamer stretched to windward, though not near enough to hail; our engines were stopped; the ship shot a-head, and gathering our way again we passed under his stern and up to leeward. It was a noble sight; she was under topgallant sails, making the best of a fresh breeze, dead a-head, jammed upon a wind, a sailor would term it, and I really know no phrase of more polished form by which to convey the idea better even to a landsman.

Fancy her careening to the breeze, plunging at one moment, the foam rolling in volumes beneath her bows; rising at the next, up, up, her polished copper bare, her keel almost out, seeming the very exertion of instinctive effort, then down with a plunge, dashing off the foam again, every inch of canvass stretched to its uttermost, and the wind seeming in her very teeth; fancy this, and you have some notion of a ship at sea "close hauled." Her sides were crowded with passengers; there were but two ladies. We, too, bore a "cottage," with its flaunting veil, and our pride dilated in the display of such a sharer in the venture of our voyage.

Our Captains exchanged the mystic tone; the indefinable bellow of a "hail;" "where from," and "how long out," were soon asked; adieus were made; and exchanging three hearty cheers, first given by our friends, the steamer urged her way a-head, the helm was ordered hard a-starboard, our colours were hauled down, and we were again upon our course.

At 3, P.M., a ship to leeward, by the wind, on the larboard tack.

At 4, P.M., wind hauled to S.W.; made sail. Day ends with fine breeze and smooth sea.

WEDNESDAY, 11th.

This morning we were surprised by the appearance of a bouquet on one of our cabin tables: hyacinths, daffodils, violets, and primroses at sea! It were vain to inquire whence they came, so we scout the question, and, like good heathens, receive them, rendering thanks to the Nereides.

It would be difficult for the uninitiated to conceive how ardently every circumstance on shipboard is taken hold of, however trifling it may be in itself, that can in any way be made to contribute to agreeable occupation, or even to momentary pastime. The mind seems unwillingly to partake of the restraint upon our corporeal freedom, and to shrink instinctly from its accustomed flights to others of a narrow

range: a sail in the distance, a wearied land-bird flitting by, an excursion in the boat, a gun let off, a burning barrel turned adrift, the veriest jest that can be named, trifles that at another time and in another mood would scarce cast the shadow of a gnat upon one's brain, are then made the objects of delighted interest; they are sought with the zeal of hungry childhood, and if by chance the incident, as in the present instance, assume a familiar feature of domestic life, a household seeming, it is seized with the quick avidity, and enjoyed with the zest, of a stolen pleasure.

At 6, A.M., passed a large ship, showing French colours, standing to the eastward.

At 8, A.M., a brig standing to the westward; wind hauling to the northward, jibbed ship and set square foresail and foretopsail.

At 11, A.M., an American ship to leeward, standing E.

The day ends with a fine breeze from N.E.; all sail set; a large swell out of W.S.W.

THURSDAY, 12th.

The repose of last night might be compared to a tossing in a blanket, and a dance of pot-hooks and frying pans was nothing in din to the glorious clatter among the moveables that accompanied it; to the sailor it would be quite enough to say, the wind was "right aft," the text to a whole chapter of horrors. The motion of a ship under sail has sometimes been compared to the noble bearing of a stately horse: it is a pretty similie, and a vastly exciting one when upon a smooth sea we can fancy our nag ambles well; or even in a breeze, when mounting the waves with a "side wind," the exhilaration of the moment may persuade us that we prance upon the deep; but with the wind abaft, the roll, the interminable ceaseless roll, is beyond the power of imagination to liken to anything to which Providence ever gave a gait. The congregated infirmities of all the halt in Christendom could scarce be worse.

The difference of motion by a "side wind" and the wind abaft is, that with the former, however the ship may pitch, she is still so much inclined always, pressed over by the wind, that whatever moves is sure to go to the lower side, or "down to leeward," and will there lie quietly. But when before the wind, the ship rolls, descending to equal points on either side, and the consequence is, that every thing, not absolutely spiked or lashed down hard and fast, plays at every oscillation to the utmost of its tether, accompanying the movement with its own peculiar music of creak, clatter, or squeak, as the case may be. Sometimes as if by way of climax, the water tumbles in over one gunwale, swashing over the deck, and dribbling by every aperture into the cabin below; then rolling again, as if to court the embraces of a sister wave, the ship descends, and again it pours a briny sweet one over the other. Sitting or standing at such a time is equally an exertion of our best powers of tenacity, and to take to one's berth may be likened to seeking refuge within the arms of a "demented sentry box." And with all this, the confusion, the row among chairs, trunks, and all the locomotive paraphernalia of the cabin, the never-dying conflict of platters, spoons, and dishes in the Steward's room, the creaking of bulkheads, and the occasional thump and rumble of a "fetch away" on deck, form an aggregate of ludicrous discomfiture, unequalled by the most refined misery which any derangement or disorder on shore could possibly inflict. I speak now of what sometimes occurs at sea. We have not had anything quite of this order.

At noon, thick weather and moderate breeze at E.

At 8, P.M., wind hauled to N.N.E.; set fore-and-aft foresail, mainsail, and mizen; sea smooth, and the ship literally flying through the water.

FRIDAY, 13th.

A fine morning; the sea in its richest livery, a brilliant blue, studded with flowing "white caps," and looking gay and merry. The day has been interesting by experiments upon our engines: the object was to ascertain the speed of the vessel relatively with the degree of power applied, and the required consumption of coal.

The gradations were arrived at by the camm, a part of the engine adapted to "cut off the stroke," as it is technically termed, to any desired proportion, which is done by its action on one of the principal valves, in such a manner as partially to close it. The proof of the amount of pressure was shown by an instrument called the indicator, which was screwed upon the cylinder, communicating with it from within for the purpose, and which, by the action of the engine, most ingeniously given to it, described with a lead pencil upon paper a parallelogram cutting off one

corner, showing the precise vacuum in the cylinder, and by this the proportion of power applied.

To a novice, the whole process seemed a mystic operation, and reminded one of the story of an Indian, who, seeing a steam-engine, fancied that a spirit lay imprisoned within the boilers, and that by building a fire beneath them, it was excited to fury, and thus put the whole in motion.

The paper and lead pencil in such hands, and the close observation of the besmutted engineers, might verily be said to bear some resemblance to the intercourse of imps with an incarcerated devil.

The experiments strikingly illustrate the mechanical principle of the difference between the ratio of power applied, and that of its results. Our sails were set during the day, with the wind from the southward, but so light as could have had no appreciable influence on our experiments.

The morning was thus well nigh consumed; and a day thus began at sea, to and fro on deck—upon the wing as it might be, is seldom given in the end to sedentary occupations, or to any pursuit more profitable than a prolonged lounge. Our strolls for the afternoon lay between the jib-boom end and the poop, watching the heaving of the sea and the motion of the vessel; and we were at least exhilarated, if made none the wiser by our peregrinations.

The day ends with fine weather, the wind at E., in all fore-and-aft sail.

SATURDAY, 14th.

The bouquet has our care. It is now among the first duties of the morning to look to it; to cull its withered leaves and replenish the water. It has become a matter of ambition with us to carry into New York a flower still fresh, though plucked in England. How incongruous it seems that a simple violet should become the testimony to a great achievement! even to beard the philosopher himself.*

Saturday afternoon on board ship is made to bear some likeness to the termination of the same day on shore by a likeness in its duties; a general clearing up and marked preparation for Sunday. We had enough of it. Forgetting all else in the bustle, I will merely mention that our decks were "holy stoned!" "Hast ever seen or heard of holy stones?" They are of the good old family of grindstones, bearing a relationship to it, kindred to that of squeaking pigs to their grandmother. To describe them—they are blocks of stones something larger and nearly as heavy as a square 56 pounds weight. They have brush handles attached, and are used, with as much sand as may be needful to aid the operation and bring the mus[illegible] a certain pitch, to scour the deck. Now imagine a dozen or more of these put in motion over head, some two or three feet above you, for the purpose and in the manner that I have named—*that* is "holy stoning simply"—infliction in the first degree, and suited to an age ere the inquisition became an exquisite. But the moment chosen invariably happens to be that at which you have just fallen into an afternoon nap, or are enjoying the rapture of delicious morning dreams!—and this; but I cannot find a name for the foul torture.

The day being smooth, the engines were stopped at noon, for the first time on the passage, to examine the paddle wheels, and to "screw up." Lay by two hours.

At 2, P.M., proceeded. At 3 came up with and passed a small brig steering W. The day throughout has been fine, with a light breeze from the southward, and smooth sea. All sail set.

SUNDAY, 15th.

Commences with a fine breeze from the southward and a smooth sea; a brilliant morning. All sail set, our ship going nobly on. No where is the influence of fine weather upon the spirits more strongly felt than at sea; a bright day, a fair wind, and the sea glittering in the sun, seems spells which charm every element of happiness within us to activity and life. This seems strange in the absence of so much generally associated with our pleasures, yet it is so; and the reason, I take to be, is this—that though deprived of so much that under other circumstances might minister to feelings of a grosser birth, yet the freedom from care, and the abstraction from the

* Dr. Lardner, in his work on the steam-engine, 1836, declares the project—the enterprise—one of the boldest in the application of steam power—the then contemplated intercourse between London and New York by steam—to be impracticable.

world which every one at sea feels, leaves us the more susceptible to a subtle influence and a high enjoyment.

Sunday on board ship is mostly as marked and as perceptible by every external characteristic as it is on shore. Swept decks, clean clothes, smooth chins, and no work among the crew, are as distinct from the every-day complexion of a sea life, as are closed shops, smart dresses, and a quiet air, from the week-day bustle of a crowded city: and with these even the sun at sea has the same Sunday look he seems to wear when smiling upon the Sabbath of one's home. At 11, A.M., we have service in the upper cabin; prayers read by the Captain. At 1, P.M., exchanged signals with a large American ship, standing E. Day ends with a fine breeze from S.W. and an increasing sea.

MONDAY, 16th.

Morning comes and evening goes at sea, as elsewhere, and every day has its chronicle. A ship is a little empire; it has its monarch and his chief councillors, its patricians and plebeians, its codes and customs, its laws and their vindication, its fashions, and its follies; and the history of a voyage might be compared to the annals of an era in the existence of one of those greater members of the world's community. There is this difference, that while men remain sufficiently unchanged at sea to carry still the seeds of discord and disunion within, it is left to a nobler influence from without, than that of a fear of our fellow men; a dread of the elements themselves, to overcome them; an influence that, in its character of an apellant to our fears, one is almost ready to believe involves the only principle of combination; the only impulse to a common purpose, to which our imperfect natures are susceptible. A member of our state, of the plebeian order, was this morning given over to the chief judge, and by the chief judge to the king! In plain truth, Jack had been refractory, and refusing his work, he was brought to judgment. The hearing was a short one; a negociation was entered upon with the belligerent, and terms offered for his ratification; either to do duty and share the privileges and protection extended to faithful subjects, or to do nothing and share nothing appertaining to those things which men are pleased to deem wholesome and comfortable—meat and drink. Jack was too much a man of the world to desire to place himself in a position so peculiar as the latter would have entailed, so, accepting the former, the affair was ended.

At 6, A.M., the wind chopped into N.W., with a strong breeze, handed all sails; a heavy swell out of S.W.

At noon wind more moderate and hauling to the northward, set reefed fore-and-aft foresail and mainsail.

At 9, P.M., wind hauled to S.W., blowing hard; made the ship snug under reefed fore-and-aft foresail on the larboard tack.

At 11, P.M., wind backed to N.W., in a hard squall and increasing, with a high cross sea running, in all sail; a foul night.

TUESDAY, 17th.

An appropriate figure-head for our ship would be, Vulcan with Neptune by the beard, and old Æolus fairly under foot. Such had been the picture had Ovid told the story of our voyage, for it seems little short of a conquest of the elements.

The past night and day have afforded us in some measure an opportunity of testing the power of steam against the adverse influences of weather, a gale in our teeth, and a sea a-head, which in volume is seldom found in any part of the Atlantic beyond the limits of the Banks of Newfoundland. Our ship behaved nobly. She plunged and rolled, as every vessel in similar circumstances must have done, often burying her paddle wheels to the shaft, and was as uncomfortable as any huge cradle, well tossed and tumbled, could be; yet her motions were easy, and her progress without intermission.

In consequence of the heavy sea, the working of the engines was reduced to ten revolutions per minute, during which time it is shown by the result of the observations of the morning that we made an average of five and a half knots per hour.

The morning found our cabin in some confusion, as is usual on shipboard after a rough night. Among other mishaps, the little pitcher holding our bouquet, had "fetched away," and the flowers lay bruised and strewed about the carpet. Our drowsy senses, after a wakeful night, seemed little affected by the event; an undisturbed nap, and an absence of care for our own proper equilibrium on a smoother sea, will doubtless leave us more alive to our loss.

At 5, A.M., passed a brig lying to under close-reefed main-top-sail, and balance reefed trysail.

At 11, A.M., on the eastern edge of the Banks of Newfoundland. Exchanged signals with a large barque showing English colours, steering to the southward.

At noon wind moderate.

At 6, P.M., stopped the engines, and hove to for a cast of the lead; had bottom at 25 fathoms.

WEDNESDAY, 18th.

It is quite clear we have no fraternity with the fishes. The porpoise, the most frequent of our ocean visitors usually, whose gambols around the bows are often the subject of a moment's interest to the voyager, comes now, dashing forward with its merry troop in all their accustomed glee, until near our paddle-wheels they turn—startled by the splashing, and dash off, tumbling and rolling, it would seem, upon each other in their haste, like a bevy of frightened children, who had become suddenly assured of having mistaken a hobgoblin for a well-known friend. In making a voyage in the Great Western, every day affords occasion for the expression of astonishment at the progress of science and the attainment of human power; and, as vain or as common place as the question may appear, it seems to present itself there, invested with something like solemnity; when and at what point shall the pile be shaken which constitutes the sublime fabric of human knowledge? But a few generations since, and the ocean upon which we sail, the continent to which our course is directed, aye, more than half the world, were beyond the ken of man! And now what are they? what is man himself, and what are human means, wrought out by the divinity within us, compared with the creature and his aids of those days! The question, where will these find an end? is irresistible.

At 5, P. M., smooth sea and moderate breeze from S. W.

At 6, P. M., a large ship to leeward, steering E.

THURSDAY, 19th.

To an accustomed sailor, a minion of the winds, it is long before the novelty of a steamer at sea, with all the attendant circumstances of its internal economy, can wear itself into familiarity. Chiefly he feels a strange relief in the absence of care about the weather or the winds, sources to which he has habitually looked for a large portion of his contentment. The never ceasing question of the morning to which he is used, "how is the wind?" or "how does she head?" presents itself at his waking like the remembrance of some nauseous morning dose, now discontinued; and in place of the excitement among his fellow voyagers by a *fair* wind, and the prospect of a fine run, or the despondency by a foul one and all sorts of evil forebodings, he hears the common parlance of every-day life, or, issuing from his room, finds them distributed in groups awaiting breakfast, in the discussion of the merits of their favourite picture! The space too, and, as far as regards the Great Western, the splendour around, continually surprise him. The light spars, light sails, and light rigging on deck, look like light walls and great windows to an accustomed prison, robbing it of half its terrors. A sailor, to whom a dark cloud has ever been a thing of watchful apprehension, like a stealing, crafty enemy, cannot cast his eyes aloft, but feeling a new sense of safety, he will turn to the squall with a grin, and, looking it in the face, bid it "blow its heart out."

The richness below, the cabin, seems the expression of individual taste, and the elegance of a bountiful hospitality, rather than a provision for the common participation of the wayfarer; and this at sea, too! The change is a pleasant one, and to the older voyager, unfamiliar as it may be, it is, perhaps, the more delightful, as he alone can truly estimate the change, a transition from the endurances to what may be called the luxuries of the enjoyments of a sea life.

At 4, P.M., came up with and spoke the American ship Jefferson, of Baltimore, 35 days from London for New York.

At 10, P.M., fresh breeze from S.W., and much sea.

FRIDAY, 20th.

A thoroughly uncomfortable day, and decidedly a bad road, with such tracks left us to crawl over as the wind god makes when there has been heavy work; our coach rolling and pitching abominably to the very hubbs. A more than usually heavy sea has left us little with which to occupy ourselves to-day beyond the care needful to maintain that position which is the pride of our nature—a well-poised equilibrium

on both legs; the motion of the ship was greater this morning than any we had before had; nearly calm, or the little wind there was nearly a-head; our sails were of no service, and a heavy sea, such as usually follows a violent gale, tossed us like a floating bird upon the waves; it was satisfactory, however, as affording further illustrations of the capabilities of the vessel. Her engines were eased, yet she continued at the speed of seven or eight knots per hour; and those features in her model which, before sailing, were the only grounds of doubt, as far as mere model was concerned, her length and sharpness, seemed now the characteristics best adapted to her purpose: she cleaved the sea upon her water-line, while her bearings below are quite sufficient to give her buoyancy, almost without a plunge, and a remarkable consequence of this, aided by her length, is that her way, though abated (as must ever occur to any vessel upon a head sea), is yet never wholly lost; hence have we been, during the whole voyage, without that jar and check by the strokes of the sea to which vessels are usually subject under similar circumstances. The nature of the propelling power has also an important agency in this distinction; the action of the paddle-wheel being from the centre of the vessel horizontally, has no effect upon her perpendicular motions, whilst that of the mast, under a heavy press of sail, being from above, acts partially as a lever upon the hull, to make every plunge the more severe. There is another remarkable distinction in the Great Western: an absence in a great measure of sensible motion or jar from her engines; this arises as well from the strength of the vessel as from the character of the engines themselves; a very low pressure, a short stroke, and a slow movement.

Towards evening the sea became more smooth, the wind hauling to the northward: sudden transitions of this kind more than once upon our voyage have led us to the idea that the power of locomotion gives us an advantage never before dreamt of—that we are enabled in some measure to verify the Munchausen story of keeping the rain at our horse's tail; that, in short, we may very much decrease the endurance of foul weather by running out of it. It would, at all events, be an interesting subject of inquiry, by a comparison of Log from time to time with the account of other vessels, to ascertain how far the changes arising from this circumstance really do occur.

SATURDAY, 21st.

We have to congratulate ourselves upon another fine morning and another smoother sea. With a fine breeze from the northward, we are staggering under all our canvass, and the engines in full play, it is impossible to conceive anything of human sway or human power upon the deep more exhilirating or delightful. Few positions in life carry with them a greater spell upon the feelings, or excite us to a nobler sense of our own nature, than that of the voyager upon the ocean, when his ship, bending under a press of canvass, and mounting majestically at every succeeding wave, she urges her rapid way. Such magnitude, such power, and yet so child-like! a word, the slightest movement of the helm, and she is governed; the winds and the very sea seem to be under his control.

With us, too, there is much to aid the excitement; we are of the *first** to make

* Note by the Editor.—This is an error; and our author's remarks and congratulations on the priority of the Great Western in navigating the Atlantic by steam, are without foundation. To Americans belong the honour of being the first to show the safety of steam navigation across the Atlantic. The following account of the voyage is from the "New York Courier and Enquirer" of the 26th ultimo:—

"Captain Moses Rogers, in the year 1819, left the port of Savannah, in a steamer of the same name, on the 25th May, and came to anchor at Liverpool on the 20th June. She left Liverpool on the 23rd of July, for St. Petersburgh, and on the 9th of September moored off Constradt; on the 6th October she left Constradt, and on the 30th November anchored off Savannah, having on her return voyage stopped four days at Arundel, in Norway. During the whole of this period she met with no accident, except the loss of a small boat and anchors. The steam-ship 'Savannah' was built under the superintendence of Capt. Rogers, and was launched in the port of New York on the 22nd August, 1818. Her wheels were so constructed that they could be taken on board, in case of necessity, in about twenty minutes." The "Spy in Washington" adds, that when the 'Savannah' sailed from Liverpool for Russia, the British journals of the day suggested that this 'steam operation may in some measure be connected with the ambitious views of the United States.' Such are the facts in connection with this expedition of Captain Rogers, and we publish this to vindicate the merit of his achievement. In conformation of the statements of our correspondent, we annex the following paragraph from the 'Star' of last evening:—

"THE FIRST STEAM-SHIP ACROSS THE ATLANTIC.—Without wishing in any manner to derogate from the honour that belongs to Lieut. Roberts, of the 'Sirius'

the great adventure, to establish that success which may, and probably will, mark an era in the intercourse, in the *fraternity* of a wide world. The afternoon was diversified by a sharp snow squall. It continued until our masts, sails, and rigging were completely hung in its fleecy drapery; and until the snow lay nearly two inches upon our decks; the result of all which was, a thorough set to at snow-balls by all the idlers of the cabin. The declining sun seemed to announce our approach to the shores of America. Without that diversified richness of the sky which sometimes awaits upon the day's departure there, it yet had enough of characteristic to proclaim it as its own.

A mass of heavy clouds had gathered above and around, darkening the day. It broke in the west, and rose in a broad, low, and strongly defined arch, like the lifting of a curtain, displaying the setting sun through an atmosphere so rich and so pure, that the fancy might almost deem it such as angels dwell in. The ocean lay tinted in its hues, blending the gold and purple with its own deep blue, and as the sun sank still lower, streams of light shot upward, bathing the heavens and the whole canopy of clouds in floods of richest crimson. It was a sunset and twilight of the new world.

Saturday evening, on board ship, is mostly a time of some distinction, and this being the last we looked for on our voyage, both dinner time and evening were made merry, at the former the health of our Captain was drank, for the tenth time, I believe, on the passage, and responded to with that enthusiasm which warm hearts own, when feeling points to an object worthy their high regard. The evening had its own sweet toasts of sweethearts and wives, and more than this, but this, to all the rest, was as the key-note to the overture.

Day ends with a breeze from the northward, all sail set, close hauled.

SUNDAY, 22nd.

The day has partaken of something of the excitement of anticipated arrival; the anchors were got over the bows, the cables were got up and bent, and all those arrangements made which mark the approach to land; and, as is ever the case, among the idlers, the disposition to do little else than lounge and talk, and dream of the things of the morrow, prevailed over every other incentive to occupation. At 5, P.M., spoke the packet-ship Westminster, 48 hours out of New York for London. At 8, A.M., a sail to windward, close hauled, on the starboard tack. At 10, A.M., a sail to leeward. Day ends with a moderate breeze from N.W., and a smooth sea. All sails set, close hauled.

MONDAY, 23rd.

The morning of arrival to the journalist is one of brief periods: objects multiply upon his attention too fast; the occasion itself distracts him; the number of vessels within the horizon, the bustle of active preparation, the momentary expectation of making the land and the dimly-descried pilot-boat in the distance, are excitements too great to admit of that equanimity which is needful to prolonged remark; one almost breathes hurriedly at the thought of all that flits before him in the delightful picture of gratified curiosity, or of home, friends, and fireside enjoyments, which his imagination paints as so nearly within his reach. To pursue our narrative; we have a morning such as in every way we could have desired, bright and tranquil; the enjoyment of it is in happy keeping with our recollections of the whole voyage. At 10, A.M., we were joined by the pilot; his boat, a graceful little schooner, came down before a fine breeze, and, hauling up to windward, salutations were exchanged, his

steam-ship, just arrived from Cork, it is due to our country to state, that to America belongs the credit of having first accomplished a steam voyage across the Atlantic Ocean. This took place in the year 1819, which is therefore 18 years since. The 'Savannah,' built here in New York by Francis Fickett; owned by Daniel Dodd; Stephen Vail, of Speedwell, near Morristown, built the engine of the ship: Captain Rogers was her commander, and she sailed to Europe twice. She visited Liverpool and Stockholm; the King of Sweden, Bernadotte, was on board of her, and presented Captain Rogers, with a stone and muller (now in the possession of Mr. George Vail), as a token of his gratification at the success of the enterprise. The ship also visited Petersburgh, and Capt. Rogers received from the Emperor a present of a silver tea-kettle, as a token of his gratification at the first attempt to cross the Atlantic by steam. The 'Savannah' afterwards went to Constantinople, and the captain received presents from the Grand Seignor."

skiff was launched, and a few moments brought him to our deck. It was amusing to observe the wonderment of the tenants of the little craft at our vessel: if eyes and mouths be any indices to feeling, their must have been something not often of this earth in theirs.

At 12, noon, the cry of land ran through the ship; and in an instant there was a rush to the poop, the rigging, the forecastle, the highest points of the vessel; it was there, a-head, "Land, O!" was re-echoed loudly and merrily upon every tongue. It is difficult, impossible, justly to describe the expressions which pervade a ship at the moment of first discovering land. It is a look of joy, not the expression of a common passion, but a highly wrought sense, an eruption of the feelings, which displays itself in all that tongue can utter, all that smiles can say, all that eye can speak. It is a time as well of grave ejaculation as of merry jest. "My country!" cried one, extending his arms half solemnly, and with a look of thought. "And *there*, cried another, peeping through his nether eye, and pointing to the broad sheet of foam which marked our way upon the water, far as eye could reach, "*there* is the *road* to mine."

There is something, too, of the ludicrous withal at such a time. The resurrection of "other" clothes, and the exchange of hats for caps, make such changes as seem almost to claim the necessity of other introductions. The rusty jacket has suddenly become the superfine black long-tailed, and the out-at-elbows of yesterday, sports now, perhaps, the finest fleece of the flock. Our progress was rapid, and the land which at first was but a dark line upon the horison's verge, a cloud seemingly, at its early birth, soon became distinctly visible the heights of Neversink.

At 3, P.M., we passed the Narrows, opening the bay and harbour of New York, our sails all furled, and the engines at their topmost speed. As we proceeded, an exciting scene awaited us. Coming abreast of Bradlow's island we were saluted by the fort with 26 guns, and the coincidence of this with our own movements on board, heightened our enjoyment of it immeasurably. The sky-lights to our cabin abaft are made to form two tables on deck, mahogany topped, with a most witching look of invitation to a repast upon them, whenever a smooth sea and sunny day made it pleasant to dine or lunch beneath the awning. It had been agreed amongst us, some days previously, that before we left the ship, one of these tables should be christened Victoria and the other President. Wine and fruit had been set out upon them for this purpose; we were standing round the former of them, the health of Britain's Queen had been proposed, the toast drunk, and amidst the cheers that followed, the arm was just raised to consummate the naming, when the fort opened its fire. The effect was electric. Our colours were lowered in acknowledgment of the compliment, and the burst which accompanied it from our decks, drinking to the President and the country, and breaking wine again, was more loud and more joyous, than if at the moment we had unitedly overcome a common enemy. As we neared the city, the first object to which our attention was now given was the Sirius, lying at anchor in North River, gay with flowing streamers, and literally crammed with spectators, her decks, her paddle-boxes, her rigging, mast-head high; passed round her, receiving and giving three hearty cheers, and then turned towards the Battery.

Here myriads seemed collected; boats had gathered around us, in countless confusion, flags were flying, guns were firing, and cheering again,—the shore, the boats, on all hands around, loudly and gloriously, seemed as though they would never have done.

It was an exciting moment—a moment of triumph! Experiment then ceased—certainty was attained—our voyage was accomplished!

APPENDIX—No. V.

EXTRACT FROM THE JOURNAL OF COL. WEBB, Sen.,

EDITOR OF THE NEW YORK COURIER.

Off Sandy Hook, Monday, May 7th, 1838, 6, P.M.

After one of the most exciting and beautiful spectacles that has ever been seen in the new world, the pilot has left us, and the Great Western, alike the admiration and wonder of two hemispheres, is once again upon the broad Atlantic with her bows directed homeward, practically illustrating the triumph of science and skill over the winds and waves of the ocean.

It is impossible to compare the scene we have just witnessed with any similar event in the history of our city: and, therefore, it is the more difficult to convey to you any adequate idea of the number of persons assembled to greet our departure, the enthusiasm they evinced, or the display made by the aquatic spectacles got up without any concert in action, and very far exceeding any thing that has taken place on previous occasions.

In 1823, New York poured forth its tens of thousands of inhabitants, and put in requisition all its steam-boats and water craft, to celebrate the meeting of the waters of Lake Erie and the Atlantic, and at the same time testify the respect and gratitude of her citizens for the genius, science, and patriotism of the great Clinton—who, amidst the jeers and taunts of political opponents, and the lukewarmness, doubts, and timidity of friends, nobly persevered in the construction of that stupendous work (the Erie Canal), which has secured to his native city the immense trade of the interminable regions of the great west, and to his memory a name as imperishable as the valleys and hills by which it is traversed. That important work had been brought to a successful and triumphant termination—the waters of Erie and the Atlantic intermingled, and great was the rejoicing and splendid the aquatic exhibition got up for the occasion.

Again, in 1824, a somewhat similar scene was exhibited in our bay, when the good La Fayette, the friend of Washington and the champion of Liberal principles in the old and the new world, came among us by invitation, and received the homage of a nation of intelligent and grateful freemen, grateful to one who had nobly struggled in their cause when it most wanted friends, and desirous of testifying their gratitude and esteem by all the tokens of respect and affection which it was in their power to exhibit. Numerous steamers, freighted with a grateful multitude, escorted him to our battery, and tens of thousands were there ready to give him the most heartfelt cheers upon his landing. It was, indeed, a glorious and instructive spectacle; and to this, and the opening of the Erie Canal, we have long referred, as the two occasions in the history of the new world, which stood unrivalled for the character of the display and the number of persons who were partakers in it.

But a new era has come upon us—skill, science, and enterprise, called into activity by the inexhaustible wealth of that nation "whose merchants are princes," have brought us in closer contact with a father-land; the distant conceptions of Watt, and the *predictions* of Fulton, have been realised; the broad Atlantic has been safely, and, as we believe, profitably navigated by steam; "England and her eldest daughter," London and New York, have been brought within twelve days' sail of each other; time and space have alike been measurably annihilated; the descendants of the pilgrims and of those from whom they separated in the hour of persecution, have been brought in closer union; and two great nations, descended from a common ancestry, speaking the same language, and having the same birthright in the literature which adorns it, have had the bonds of national friendship and fraternal feeling more securely rivetted around them by the arrival, in the western hemisphere, of the Great Western and the Sirius, under circumstances which clearly demonstrate, not only the practicability, but the advantages, commercially, of navigating the Atlantic Ocean by steam.

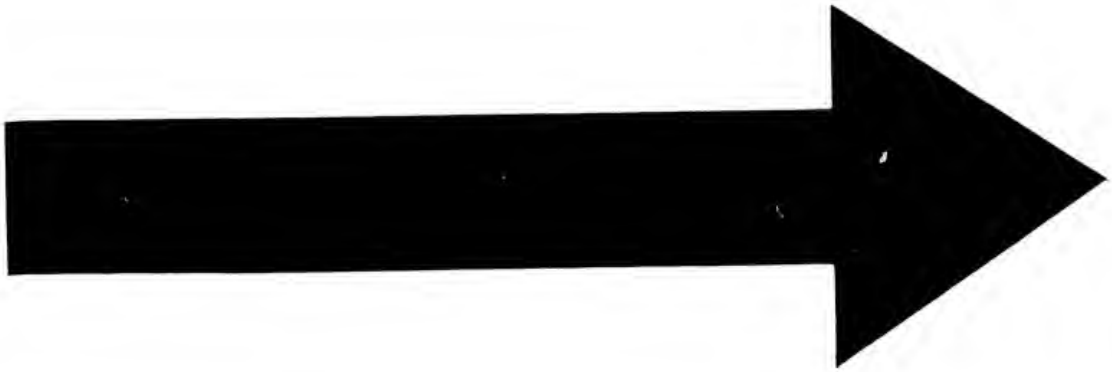
The arrival of these two steam ships in our waters, within a few hours of each other, produced an excitement in our city, which was more universal, and extended further among all classes of our population, than any event since the war of 1812; and our authorities and citizens generally, vied with each other in doing honour to the enterprising commanders, who had so successfully achieved the great work in which they had embarked. But it was not possible until this afternoon, justly to estimate the full extent of the excitement which existed, or properly to appreciate the universal enthusiasm which this novel event had imparted to every portion of our population. We knew that the subject was on the lips of all, and that the usual salutations of the day were always followed by congratulations upon the arrival of these thrice welcome strangers in our waters; we knew that the Great Western was literally run down with thousands of all classes, eager to look upon this eighth wonder of the world, this steam leviathan, which had thus realised their most sanguine anticipations in relation to the ultimate navigation of the Atlantic by steam; we knew, too, that the Sirius, was very generally looked upon as a kind of *interloper*, chartered for the purpose of snatching honours from those to whom they justly belonged, and that the exhibition of interest at *her* departure was no test of what would be

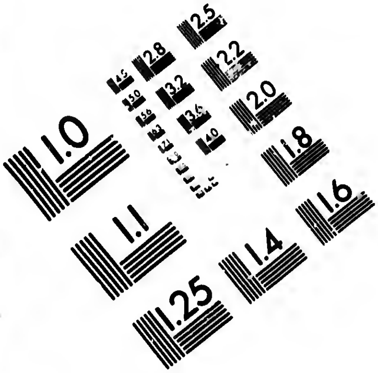
evinced when the Great Western, a ship built for the very purpose of bringing the two countries nearer together, and looked upon emphatically as "our own," should leave our shores, yet, notwithstanding all this, we did not and could not anticipate such an outpouring of public feeling as has this day been exhibited.

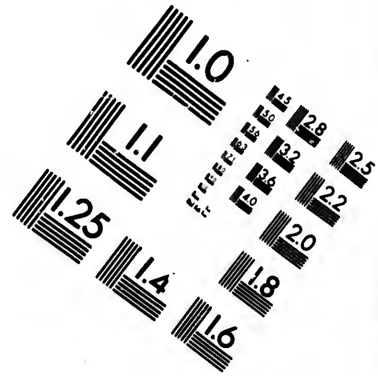
The ship was advertised to sail from the Battery at 2, P.M., and at 12, A.M., the Battery and piers on the North River, commenced filling with our people, anxious to get a sight of the Great Western on her arrival from her berth in the East River. At one o'clock, Broad Way, Greenwich-street, and indeed every avenue leading to the Battery, were literally thronged with persons and carriages wending their way to the scene of excitement; in about half an hour, steam-boat after steam-boat came dashing round the Castle on the Battery, presenting to the eye dense masses of human beings, who appeared to be crowded together after the manner of sheep on board of a North River tow-boat destined for the market, but who, actuated by the excitement of the occasion, were forgetful of every inconvenience, and only too happy if they could gain admittance on board either of the steamers destined to accompany the Great Western to the lower bay. About the same time, the Gazelle, the Wave, and other beautiful barges belonging to our boat-clubs, and manned by their members in neat and appropriate uniforms, shot forth, and with hundreds of others equally gallant and adventurous, but less conspicuous skiffs and shallops, literally covered the surface of the water for a considerable distance from the noble stranger. The crowd on the Battery, the roofs of houses, and the piers, continued constantly to augment until near two o'clock, while at the same time the number of steamers had increased to thirteen—the smaller craft being absolutely innumerable. Two was the hour of departure, and, at this moment, never did the bay of New York present such a scene as was visible from our quarter-deck. There was presented to the eye, at a single glance, *thirteen* beautiful steam-boats, covered with a dense mass of human beings, now dashing close to the Great Western, and giving her the most enthusiastic greetings, and anon winding their way amidst the myriads of small craft which every where covered the surface of the water; and then, when the spectator turned from this scene of life and bustle to the shore, the first object that arrested his attention was a noble pyramid of freemen, literally covering and hiding from view what from its position he knew to be Castle Garden; and as his eye wandered from this, it rested upon such a dense mass of human beings, such a multitude of living, moving forms, as in the New World at least, was never seen before. Every part of our immense Battery, every house-top, every pier-head, and the yards and masts of every vessel, for the distance of a mile from Whitehall, was crowded with the "human form divine;" and when our gallant ship, in whose honour this vast multitude had assembled, gracefully moved from the pier where she was lying, the long, united, and continuous cheers which filled the air, spoke a degree of enthusiasm which it is not possible to describe. To those who look only at the surface, this was no more than a grateful tribute of praise and approbation to those who had devised, and those who had accomplished this noble undertaking. And such in truth it was; but another, a deeper, and far holier feeling prompted this voluntary assemblage, and operated unseen, and perhaps unacknowledged, upon this vast concourse of our fellow-citizens.

There was a period when the great mass of our population looked upon England as our enemy, and upon every Englishman as hostile to the growth and prosperity of our country. But we rejoice that that time has passed away. The events of the late war not only gave us confidence in our institutions and ourselves, but won for us the *respect* of England and of the world. Where there is not mutual respect, mutual esteem can never exist. This is equally true with regard to individuals and nations; and the knowledge that England does respect us, has had a tendency to enable those who once nourished a hostile feeling towards her, to look upon our relative situations without prejudice, and in that spirit of friendship which should ever exist between two great nations having a common origin.

When the Great Western fell off from the pier, and slowly but majestically moved up the North River, responding at intervals to the loud-mouthed artillery, and still louder cheers from the Battery, the thirteen steam-boats, with their numerous passengers, assembled in honour of her departure, literally surrounded us, with all their colours flying, bands playing, hats and handkerchiefs waving in the air—and a more imposing or exciting spectacle never gladdened the eye. Amidst the continued roar of artillery, and the deafening shouts of the multitude from the shore and boats, we







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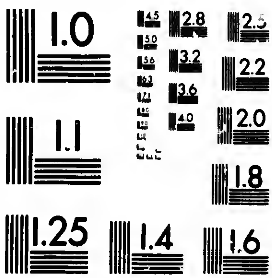

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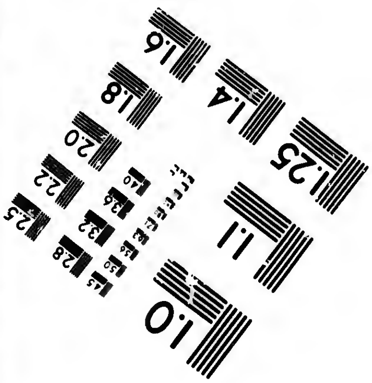

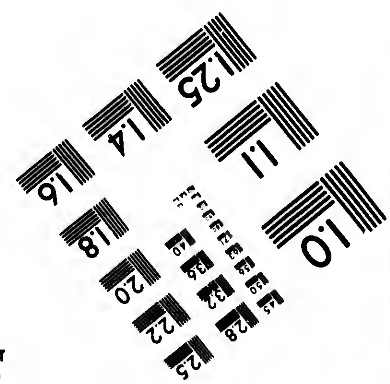

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passed up the North River, made a circuit toward the Jersey shore, and stood down in the direction of the Narrows. As we thus again passed the Battery and the immense multitude (not less than fifty thousand) congregated on it, we received their parting benedictions, re-echoed from the decks of the steam-boats who accompanied us.

Thus escorted, proudly and gallantly we winded our way till we reached the Narrows, nine miles. Here we "lay to," while boat after boat approached us, and took from our decks his Excellency William M. Marcy, the Governor of the State of New York, Mr. Bradish, the Speaker of our House of Assembly, many of our municipal officers and most distinguished citizens, together with two or three hundred friends of the passengers who had accompanied us thus far on our voyage. Then followed the parting cheers—the heartfelt "God speed you," gratefully responded to—and all but five of our splendid escort of steam-boats took their departure. Again we proceeded on our course, with many a watery eye among us—the mind involuntarily recurring to all that *might* happen to our relations and friends before we again meet; but there was no time permitted for such reflections. The gallant steamers still playing around us, the music and the shouts which at intervals proceeded from each, and the responses which we were constantly called upon to make to their greetings, made us feel that we were still "at home"—still surrounded by the warm hearts of friends and countrymen, doing honour to the noble ship in which we floated, and sending forth good wishes and solemn prayers for our prosperous voyage to the shores of merry England.

And now all is quiet, and the excitement is past. The last shout from the thousands on board the steam-boats, as one after another they passed under our quarter, giving and receiving three hearty cheers, have died away—the last gun has been fired from our bows, and as its rumbling sound went booming over the bosom of the broad Atlantic, I could not but imagine that it was conveying to the shores of England the cheering intelligence that our adventurous barque was on her return, and calling upon the inhabitants of Bristol to give her such a reception as shall in a measure correspond with the high honour bestowed upon her by their *neighbours* of New York. In the distance we can still see our volunteer escort of steamers, vying with each other in friendly strife to reach their homes; and now the pilot, the last link between the retreating shore, our homes, and ourselves, is quietly passing in his frail skiff to the beautiful skipper waiting his arrival. He too is gone—a dead silence pervades all, where but recently all was life and bustle; and now the merry voices of the sailors, and the prompt and energetic orders of the Captain, passed rapidly from officer to officer, recal us from the thoughts of home and friends to conjectures upon the length of our voyage. By universal consent twelve days is the period fixed upon, and I confess I should not be surprised if it were accomplished in eleven. That the passage will be made in less than ten days, within the period of two years, I do not entertain a doubt, any more than I questioned the entire success of this noble enterprise, from the time it was first announced. Every moment increases my confidence in the security and capabilities of the Great Western, and if we do not dine in Bristol on the evening of the twelfth from this, it will be solely attributed to some unfortunate occurrence, which cannot now be reasonably anticipated.

APPENDIX—No. VI.

STEAM COMMUNICATION BETWEEN BRISTOL AND AMERICA.

At a Public Meeting of the Merchants, Bankers, and Citizens of Bristol, held the 7th of June, 1838, in the Guildhall,

The Right Worshipful JOHN KERLE HABERFIELD, Esq., Mayor, in the Chair,

The following Resolutions were passed unanimously:—

Moved by DANIEL CAVE, Esq., and seconded by C. PINNEY, Esq.,

1.—That this City hails with delight the opening of Steam Communication between Great Britain and the United States of America, as the certain means of drawing closer the intimacy and of promoting the prosperity and happiness of both countries.

Moved by T. K. Bayly, Esq., High Sheriff of Bristol, and seconded by P. F. Aiken, Esq.,

2.—That, whilst justly proud of having been the Port in which this mode of connexion between the Old and the New World has taken its rise, Bristol is deeply sensible that the signal success of her enterprise is mainly to be attributed to the warm feeling with which its accomplishment was received on the shores of America, and this City most gratefully and eagerly acknowledges the generous kindness and splendid hospitalities showered on the Great Western by the Government, the Civic Authorities, and the Inhabitants of the United States.

Moved by G. W. Franklyn, Esq., and seconded by Samuel Waring, Esq.,

3.—That the Mayor be requested to communicate the foregoing Resolutions to our Brethren of the United States, now happily brought again into close approximation to the country of our common origin.

Moved by J. B. Clark, Esq., and seconded by W. Tothill, Esq.,

4.—That, turning to considerations of a local nature, this City is most deeply impressed with the benefits which will accrue to it from becoming the great point of communication between London, the Continent of Europe, and the New World, and with the conviction that those benefits are now placed within its grasp, by the bold attempt and well-merited success of the Great Western Steam Ship Company.

Moved by J. E. Lunell, Esq., and seconded by J. Harding, Esq.,

5.—That the thanks of the Inhabitants are due to the Great Western Steam Ship Company, and that this Meeting calls upon all interested in the welfare of Bristol, to support it in its splendid enterprise, that industry may find new channels of employment, that the value of property may be re-established, and the ancient repute of the City restored.

Moved by G. W. Hall, Esq., and seconded by S. Dibsdall, Esq.,

6.—That a Committee be formed, consisting of the Chairman and the Movers and Seconders of these Resolutions, with power to add to their numbers, to carry into effect the spirit of the above Resolutions, by whom a tender of co-operation shall be made to the Directors in such a scheme for the increase of the Proprietary as may be considered best adapted to ensure the prompt and great extension of the operations of the Company.

Moved by Robert Bright, Esq., and seconded by G. W. Franklyn, Esq.,

7.—That this Meeting most earnestly entreats the Directors of the Dock Company to take into their immediate consideration the means of affording encouragement to the operations of the Great Western Steam Ship Company, by such remission of dues and such increased accommodation as may render this Port the most economical and convenient, as it is the best in situation for Western arrival and departure; thereby to ensure to it the permanent possession of the line of steam communication so happily commenced, to the universal benefit of Bristol, and which, if now lost, no enterprise or expenditure can regain; and that the Mayor be respectfully requested to be the medium of communicating this resolution to the Board of Dock Directors.

Moved by J. B. Clark, Esq., and seconded by J. Harding, Esq.,

8.—That the thanks of this Meeting be and are hereby given to Christ. Claxton, Esq., R. N., for the unwearied energy and great ability displayed by him as Managing Director of the Great Western Steam Ship Company.

(Signed) J. K. HABERFIELD, Mayor, Chairman.

The Mayor having vacated the Chair, and the same being taken by D. Cave, Esq.,

It was moved by J. B. Clark, Esq., and seconded by R. Bright, Esq.,

That the cordial thanks of this Meeting be given to the Right Worshipful the Mayor, for his kindness in taking the Chair, and for his efficient conduct of the Business of this Meeting.

(Signed) D. CAVE, Chairman.

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Errata by the Engineer in Log:

Page 2, line 20, 724 should be nearly 6¾lbs. per horse-power per hour.