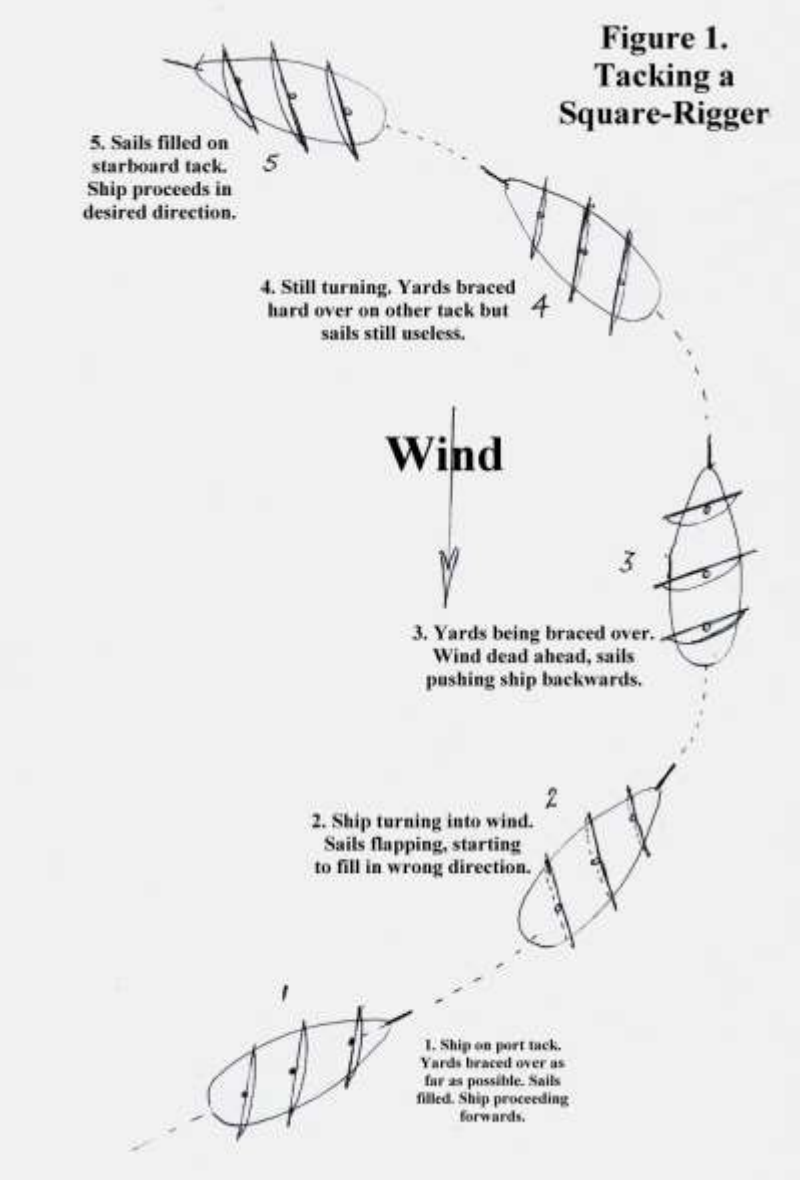
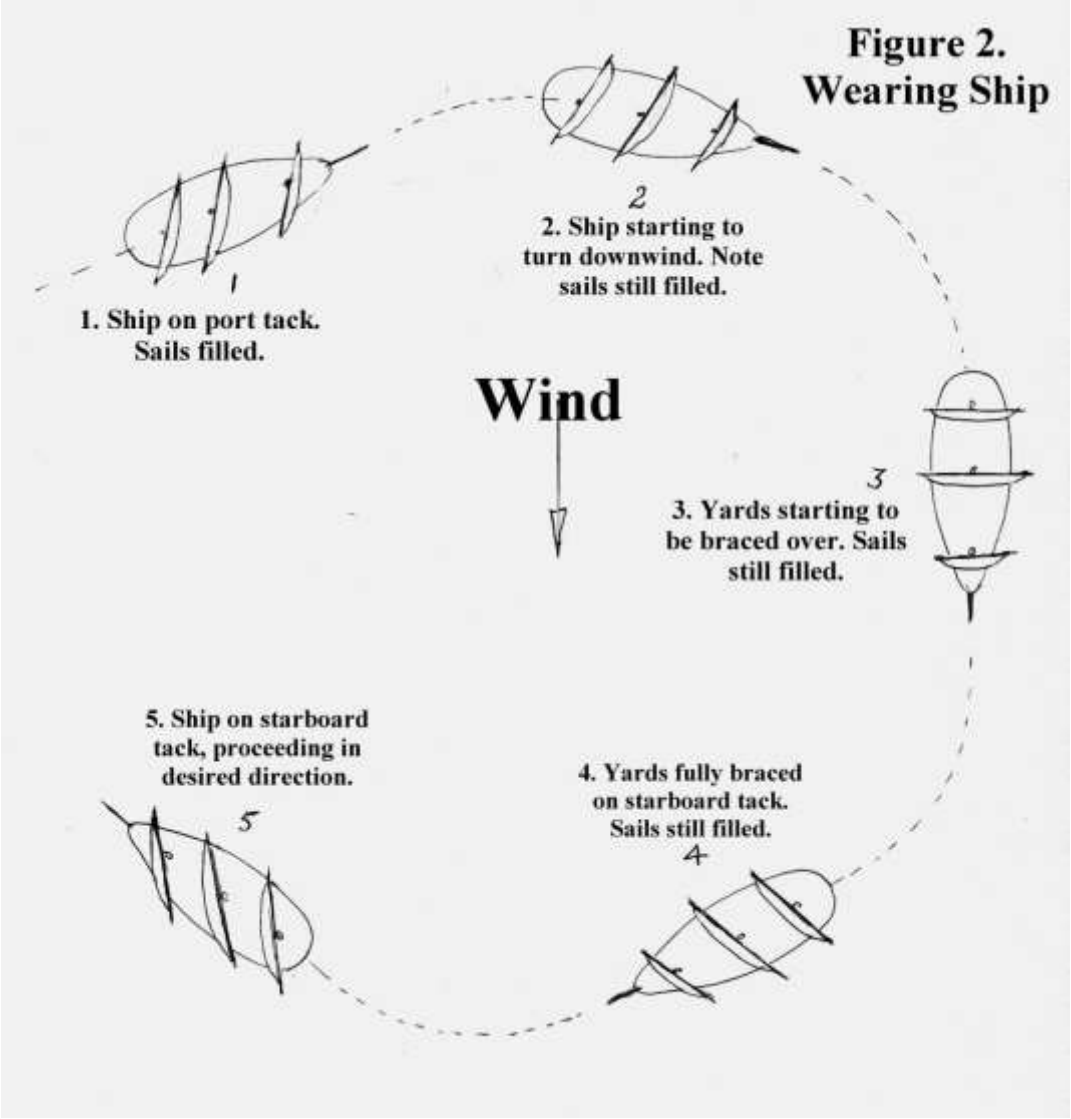
Steamers to pick up mails from wind-bound vessels in the English Channel.

Colin Tabeart

Ocean-going merchant sailing ships of the nineteenth century were generally square-rigged vessels that sailed best when the wind was blowing in the direction that they wished to go. This worked well on the deep oceans, where the prevailing trade winds were followed to the desired destination, but square-riggers were very poor at sailing against the wind. Whereas a fore-and-aft rigged vessel could easily sail as close as 40 degrees to the wind, and so make progress against a head wind by "tacking", a square-rigger could not sail much closer than about 70 degrees to the wind direction, so could make almost no progress against a head wind. In addition, to tack a large square-rigger required plenty of way on the ship to push her thought the dead period when the wind was blowing on the front of her sails, so slowing her down or, in the worst case, driving her astern before she could fill her sails on the new tack. This was called "missing stays", and as the reason for tacking was usually that the ship was about to hit the shore or an obstruction, to be driven backwards usually meant shipwreck. See Figure 1. Because of this, most Captains preferred the safer procedure of "wearing ship", which meant the ship turning down-wind, so never losing steerage way as she came onto the new tack. This required several miles of sea room to accomplish, and also meant that the ship lost ground in the desired direction, as represented in Figure 2. Figure 3 shows a diagrammatic representation of the poor sailing qualities of the square-rigger against a head wind: to get from start to destination in this sketch, the fore-and-aft ship tacks only once; the square-rigger has to wear ship five times. As this procedure required all hands on deck to re-trim the yards on which the sails were set, it was also extremely wearing on the crew, who got little or no sleep in a narrow channel.



As London-bound ships get further eastward up the English Channel, sea room diminishes rapidly beyond Plymouth, the shoals and other hazards increase, and the wrecks around the Kent and Brittany coasts bear witness to the problems involved. Figure 4 illustrates the narrowing effect caused, particularly, by the Channel Islands and Cap de la Hague, and subsequently by the Strait of Dover. It also shows the lee shores created on both sides of the Channel with the wind from East North East, a lee shore being one downwind of a ship, onto which she would be driven if she lost motive power. Trying to beat off a lee shore in a square-rigger was not every Captain's idea of heaven; to become embayed off the rock-strewn coast of Brittany in a contrary wind spelt almost certain disaster. The problems were bad enough in broad daylight with good visibility so that the Captain knew where he actually was on the chart; at night, or in foul weather when visibility might be down to half a mile, and the position known only approximately by dead reckoning, seamanship skills of the highest order were demanded of the Captain and his officers. Any wind from about North to around South East was distinctly unfriendly to ships trying to make port any further up the Channel than, say, Plymouth. It could take many days, and sometimes weeks, to complete that final part of the voyage, even for the crack clippers of the 1850s, frustrating in the extreme for passengers and crew, and the cause of significant delay to the mails prior to the introduction of steam packet services. This was, indeed, the principal reason why Falmouth was chosen as the packet port for all the deep-water services in the days of sail. The 2 or 3-day land journey between Falmouth and London was almost always quicker than the sea journey, in whatever direction.



The other problem for a sailing ship was lack of wind. Whilst this was unusual in the Western Approaches and the English Channel, it did happen, especially in the summer. The strong tidal currents in the Channel required more than just a little wind to make significant progress against the tide. In light winds ships would attempt to drift up-Channel on the tide and then anchor when the tide turned, repeating the progress on the next favourable tide. In this way 20 miles or so a day might be achieved. Again, weighing anchor by hand with no power-assistance was a back-breaking evolution, distinctly not Jolly Jack's idea of fun.

Since the Post Office sailing packets all put into Falmouth (weather permitting), the prime delay to the mails was to ship letter mails. These were not particularly important for news from Europe, since that generally came by packet across the Channel to Dover and other packet ports several times a week, but news from North and South America and the West Indies by the monthly packets was usefully supplemented by ship letter mails, and there were no packets to Africa or Australia at this time, so news from those continents was keenly sought, and had to come by private ship. Against this background the Post Office decided to experiment with a contract steam ship available at a strategic point, to go to sea when weather conditions indicated potential problems getting up the Channel to contact ships making no progress, and relieve them of their mails for conveyance to Falmouth or other convenient port for onward transmission by land. This logical move was not purely an altruistic attempt to speed the mails; it was financially attractive to the Post Office as the following consideration of the way that ship letters were charged will show.

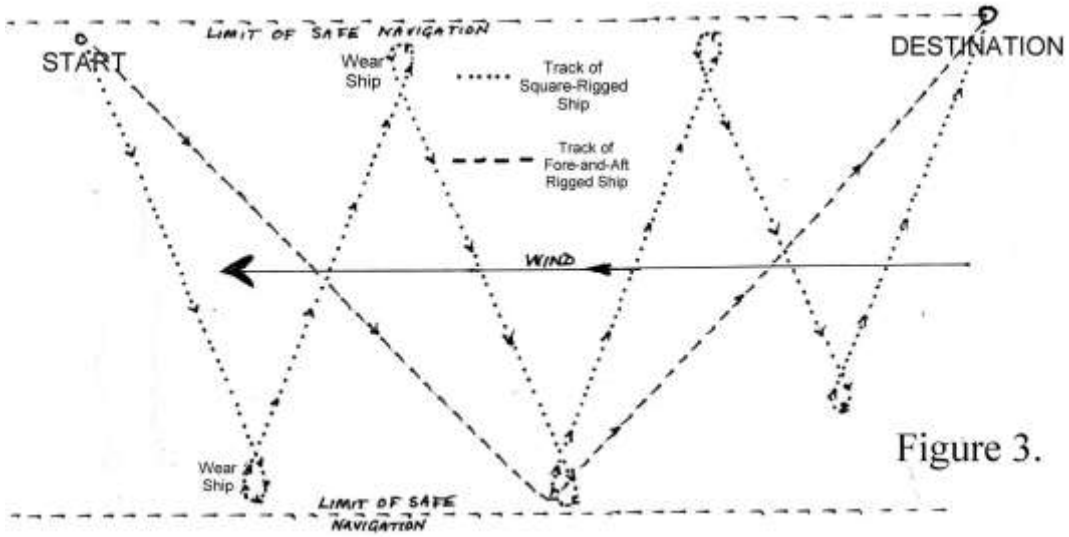


Figure 3.

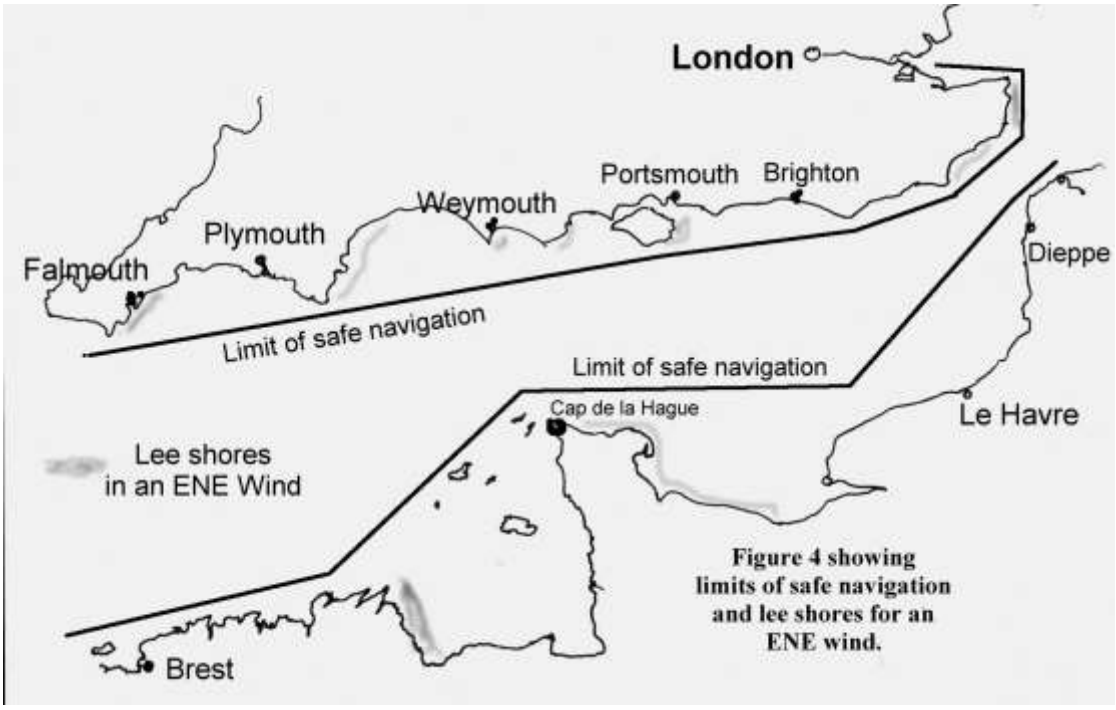


Figure 4 showing limits of safe navigation and lee shores for an ENE wind.

The postage required from the recipient of a ship letter in the 1830s consisted of two elements: a standing charge of 8d ship letter rate, wherever the letter was landed, and UK inland postage from the port of landing to the place of destination. To take a common example, a letter to London landed at London would net the Post Office just the 8d ship letter fee; the same letter landed at Falmouth would net the same 8d, plus UK inland from Falmouth to London of one shilling, a 150% increase in revenue. This increase was considered likely to more than pay for the cost of the contract steamer, as may be seen in the Minute reproduced below.

The following advertisement appeared on page 1 of ***The Times*** dated 19 October 1836:

"His Majesty's Postmaster General is ready to receive Tenders to contract for the Conveyance of letters from vessels windbound in the Channel by a steam vessel of not less than 100 HP to be stationed at Falmouth. The vessel to be properly manned and equipped to the satisfaction of the Postmaster General, and to proceed to sea when she shall receive directions from the agent to the Post Office at Falmouth. The letters received from vessels to be delivered at the first port that can be conveniently reached. The contract will be for 12 months certain subject to 3 months notice to quit from either party to it after the expiration of that period. Sealed offers to be delivered at the Secretary's Office of this Department before noon on 31st inst., endorsed "Tender for Steam Vessel at Falmouth". By Command, WL Maberly[1], General Post Office."

Colonel Maberly summarized the results of this advertisement in a Minute to the Postmaster-General, quoted in full below.

[1] Colonel WL Maberly, Secretary to the Post Office.

Report to the Postmaster General dated 9 November 1836[2]
Steamers to pick up mails from wind-bound vessels in the English Channel.

"My Lord,

In compliance with your Lps[3] instructions I caused advertisements[4] to be inserted in the London Papers inviting Tenders for the service of a steam vessel, of not less than 100 Horses Power for the purpose of collecting letters from vessels wind bound in the Channel, the following have been presented.

1. Hayward. 70 horse power, £6250 per ann. with a deduction of £6 per diem, when not employed.
2. Robinson. 80 horse power, £4400 p ann.
3. Harris. 120 do, £8450 p ann. (£650 per lunar month)
4. Bessel. 100 do, £6000 per ann. with coals (General Steam Navigation Co) £3500 without coals.

"Mr. Bessell also tendered vessels of 120 and 160 Horses Power respectively, but I do not enter into those points, because the power of 100 Horses was considered sufficient for the purpose.

"The parties having made their tenders in such different form, I deemed it advisable to call upon Mr. Bessel, Mr. Harris, who alone had proposed to furnish vessels of the required power for further Tenders, taking as the basis of the contract the principle laid down by Mr. Hayward, viz a deduction from the total sum required for every day the vessel should not be engaged in the P.O. service, and the result of my application to the two parties has been, that after an interview which they requested to have with me for further information on the subject fresh tenders have been sent in, that from the General Steam Navigation Company at £3000 per ann., with an addition of £19 per day for every day employed - the other from Mr. Harris at the rate of £7500 p ann., finding everything & allowing the P.O. half the receipts from passengers & towing, £7200 without that allowance, £5900 if coals are found by the P.O., and £10400 allowing a deduction of £14 per diem, for every day when not employed, and allowing ½ the proceeds from Passengers & towage.

"Your Lp will observe from these offers that notwithstanding all the explanation which was afforded, I have still been unable to induce the parties to tender upon the principle I wished; as however in the present state they furnish me with the means of making such a comparison as is sufficient for all practical purposes, I have been satisfied to receive them as they are, and now proceed to state the data upon which I recommend Your Lp to accept the offer of the Steam Navigation Company as by far the most advantageous to the Public. The chief point to be considered in bringing these tenders into comparison is the probable number of days which the vessel may be employed upon the service, Mr. Attwood, the Managing Director of the Steam Navigation Company cordially admitted in his conversation with me that his estimate had been formed on the supposition that 150 days wd be the period for which the vessel would be required. Mr. Phillips, the agent for the New York packets, who was good enough to call upon me, in order to furnish me with inf[ormation] calculated that the steamer would have to be dispatched from Falmouth at least 30 times in the year and that she ought to cruise upon a line drawn about 49.30 latitude, and as far west as Your Lp should decide, he even said to the 8th degree of longitude. Though I should conceive you would scarcely authorise the vessel to proceed to so great a distance to the west, at least 3 or 4 days would be consumed upon such a voyage, and we have therefore the opinions of these 2 parties, the one calculation of the service to last 90, the other 150 days.

"To obtain however still further information on this point, which after all must be wholly conjectural, I have caused a return to be made out of the daily arrivals, at all ports east of Falmouth, of vessels with ship letters during the last year, & assuming that where the no. of arrivals was ten or upwards, on any particular day, that these vessels were previously wind bound, to account for their coming in in such unusual numbers, I find the number of occasions when such arrivals took place within the year was 56. Taking 56 therefore as the number of times which the steamer would have to go out from Falmouth, and 3 days as the average of the trip, we again get a number of days not far different from that taken by the Steam Navigation Company, & tho' in my opinion the period for which we shall require the service of the steamer will be much less not exceeding 120 or 130 days, this number may be assumed to be sufficiently accurate, in the absence of all other information, to enable you to decide upon the question. Taking then the number of days at 150 the comparison between Mr. Bessell of the Steam Navigation Company, and Mr Harris would stand as follows. The S. Navigation Co. offer the vessel at the rate of £3000 per ann, and £19 per day for every day she shall be employed by this Dept, which at 150 days, amounts to £2850, making a total for the year of £5850. Mr Harris offers the vessel for the sum of £10400 per ann. with a deduction of £14 per day for every day she shall be employed[5]. This sum still assuming 150 days to be the number for which the vessel would be required, gives 215 as the no. of days when [em]ployed amounting when multiplied by 14 to the sum of £3010 per ann. & involving a total expence of £7390. From this however is to be deducted the amount of half Towage and passage Money as stated in No. 4 of the second tender marked B and which from a comparison of No. 152 of the same paper they estimate at £300 per ann. leaving the total amount of the tender at £7090, or £1240 more than that sent in by the Steam Navigation Company. I assume therefore Your Lp will adopt the terms offered by this Company, should you agree in the reasoning of this report as to the principles which should guide your acceptance of the Tender. Your Lp will see that in their first offer, the Steam Navigation Company tendered for the service at a fixed sum of £3500 per ann. provided the coals necessary for the service were provided by this Department. Taking the consumption of coals at the rate of 12 lbs per Horse Power, per hour, the calculation of the Steam Navigation Company (a little more than 12 tons per day) at 25/- per ton, it would amount at the 150 days to £2325 per ann. Upon this principle therefore the total sum would be £5825 per ann. or £25 less than upon that which I have submitted for your approval. But against this there must be placed on the other side, the necessity of having a Depot of Coals at Falmouth, or even if we could procure a supply from the Admiralty Store, the necessity of constant

[2] POST 41/6, Packet Report Book, pages 424-425 and 439-446
[3] Contemporary abbreviation for "Lordship's"
[4] See transcript of advertisement ***The Times*** for 19 October 1836 above
[5] The subsequent argument makes it clear that here is meant, "employed by her owners, not the Post Office".

superintendence in giving them out to the steamer, as well as the absence of all check to control the consumption of the Company. In point of fact 12 lbs per Horse Power, per hour is in my opinion a very low average, as it appears from the Returns of our Packet Agents which I enclose that the expenditure in our Packets is much larger. From these reasons, however favourable the proposal appeared at first, I was induced to reject it fully satisfied that the payment of a sum of money was the best and easiest method for the department as relieving us from any establishment, & all but the simplest accounts.

"You will be not a little gratified to remark, that however expensive the service may seem at first there is every reason to believe we shall be amply remunerated for the outlay.

"By the return I have already alluded to you will perceive that the number of letters conveyed by the ships I assumed to have been detained during the past year was 163,000 in round numbers, the inland postage of which, if brought to Falmouth, would produce a sum of £8150 and is much above the amount of the offer I have submitted for your approbation. Your Lordship will therefore most probably have the gratification of contributing largely to the accommodation of the commerce and manufactures of the country, while the Revenue will be more than compensated for the expenditure by which the object has been attained.

"I trust therefore Your Lp will authorise me to communicate to the Steam Navigation Company that you are prepared to adopt their proposal for this service, and direct me to instruct the Solicitor to take the necessary steps for drawing out the contract, in order that your wishes may be carried into execution with the least possibly delay.

Initialled WLM[6].

This report was endorsed by the Postmaster General the Earl of Lichfield: "There cannot be clearer statement to prove that the most advantageous tender is the one made by the Steam Navigation Company. Mr Peacock[7] may be instructed to prepare the contract forth with. The probable beneficial results to the Service of this steamer is very satisfactory."

The service was introduced to the public and to ships' masters by GPO Notice dated February 1837[8], which read:

"Notice is hereby given, that His Majesty's Postmaster General has employed a Steam Boat for the purpose of collecting Letters from Vessels which may be detained in the entrance of the English Channel, either by contrary Winds or Calms, and landing them at the first convenient Port.

"The Commanders of all such Vessels are therefore requested to deliver their Letters to the Officer on board the Steam Boat, appointed by the Postmaster General for the purpose, who is authorized to give receipts for the same, in order that the Ship Letter Gratuities, payable upon those letters, *may be secured* to the Commander of the Vessel bringing them.

"This Steam vessel will at present be distinguished by a Post Office *Blue* Ensign.

By Command, WL Maberly, Secretary."

It is not known how long this service lasted, but the pecuniary advantage to the Post Office was eroded on 5 December 1839, when uniform inland postage was introduced. So a letter landed at Falmouth for London attracted only 4d over and above the ship letter charge. From 10 January 1840 the pecuniary advantage evaporated, ship letters being rated 8d wherever landed. It is therefore unlikely that the service extended much beyond 1840. The relative abundance of Falmouth ship letter markings in the late 1830s is almost certainly due to the operation of this service.

Acknowledgement. Grateful thanks are due to Heritage Royal Mail, alias the Post Office Archives at Freeling House, London, for permission to quote the relevant Minute in full.

This article was first published in the *Journal* of the Postal History Society in 2004.

[6] Colonel WL Maberly, Secretary to the Post Office.
[7] Presumably the solicitor used by the Post Office.
[8] POST 107