

(No. 49.)



1863.

[SECOND SESSION.]

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T A S M A N I A.

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ANGLO-AUSTRALIAN AND CHINA  
TELEGRAPH.

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Presented by Mr. Colonial Treasurer, and ordered by the House to be printed,  
28 July, 1863.



6, *Duke-street, Adelphi, London, 19th March, 1863.*

SIR,

I HAVE the honor to enclose in copy a Letter addressed by Sir Charles Nicholson on the 6th instant to the Chancellor of the Exchequer on behalf of the Promoters of the Anglo-Australian and China Telegraph, asking for Imperial assistance to the Java-Queensland section; also an estimate of the cost of that Line, dated the 5th instant. An influential deputation waited on the Chancellor of the Exchequer on the 27th ultimo, and the above Letter was written at his request, and will fully explain itself.

I think it unnecessary to enclose the documents referred to in it, some of which are already in your possession.

There is no doubt that Her Majesty's Government now attach far more importance to the question of Telegraphic communication with their Eastern possessions and Colonies than they did last year; and I believe the present application will meet with success.

The distinction which is now beginning to be appreciated between deep sea and shallow sea Telegraphs, and the consideration that the whole Telegraphic system proposed by the Promoters belongs to the latter category, is no doubt one of the main causes which has induced this change of feeling.

It is now recognised that Cables laid in a depth varying from 30 to 100 fathoms are seldom broken, and can be easily repaired; the processes of insulating, covering, shipping, and laying Cables have, moreover, made immense progress, and the importance of detailed sounding is now fully recognised. All this has been strikingly exemplified by the success of the Malta and Alexandria Cable.

The manufacture of the Persian Gulf Cable is proceeding rapidly, and the communication between England and India is expected to be completed by the end of this year.

As you are aware, the Promoters have adopted the Overland Telegraph between Brisbane and the South-eastern portion of Gulf Carpentaria, thus reducing the length of the sea Line from East Java to that point to 1830 nautical miles, the total capital required to £710,000, and the subsidy to £35,500 per annum.

You are also aware, that many persons in South Australia desire to see the Terminus of the sea Line fixed at Cambridge Gulf, on the Northern Coast, thereby reducing the length of the sea Line to 1030 nautical miles, but necessitating the construction of a land Line between Cambridge Gulf and Spencer Gulf on the Southern Coast. The land Line proposed by Queensland will traverse a *direct* distance of 1060 statute miles; that advocated in South Australia a direct distance of 1413 statute miles. The actual mileage of wire will, of course, be immensely in excess of that length in each case, but I take direct distances for the convenience of comparison.

The land Line, therefore, advocated in South Australia will be nearly half as long again as that adopted by the Promoters. Moreover, the latter will traverse a country in which there are already settlements to within less than 300 miles of Gulf Carpentaria; whilst in South Australia the cattle stations do not extend beyond Cooper's Creek, which is 1250 miles in a direct line from Cambridge Gulf.

I will here observe that neither in South Australia nor in Queensland is it contemplated that New South Wales, Victoria, Tasmania, and the other contributing Colonies shall be spared any outlay by shortening the sea Line, and reducing the annual subsidy to the Company, since I find that the Governments of both the former Colonies claim the coöperation of the others in constructing and maintaining a considerable portion at least of the land Lines.

As the Cables can be laid between India and Australia in less than Two years from the granting of the subsidies, the Promoters must, of course, see that the land Line that is adopted can be constructed within that time, and can be afterwards efficiently maintained.

So important a communication as that in question cannot be left to depend upon an insecure Line.

It is to be regretted that so many persons are attempting to make the Telegraph the vehicle for preparing the country they are interested in for pastoral occupation, to the detriment of the direct object. I think it my duty to make these general observations; but I must add, that so far as my late communications with the Government of South Australia have proceeded, they completely satisfy me that the Executive of that Colony are prepared to adopt the land Line which the majority of the Colonies agree in, and not unduly to insist upon their own; and it may be that in pointing out the superiority of the Line through Queensland, I am only stating what will meet with universal assent.

I trust, Sir, that you will see that this most important question is making rapid progress, and that the time has arrived for giving definite instructions and powers to the Agents representing the Colonial interest in England, to treat with those who are quite prepared to carry out the work on receiving certain definite assistance.

I have the honor to be,  
Sir,

Your most obedient Servant,  
F. GISBORNE.

*His Excellency Colonel T. G. BROWNE, C.B.,  
Governor of Tasmania.*

6, Duke-street, Adelphi, 5th March, 1863.

DEAR SIR,

WE enclose you an estimate of the first cost and maintenance expenses of the proposed Cable between Java and the south-eastern portion of the Gulf of Carpentaria.

You will see by the specification that we recommend the adoption of a heavy and somewhat expensive Cable; small and cheap Cables have seldom proved permanently successful, and we think it bad policy to spare money on this part of the expenditure. The Core will transmit, with the usual Morse Instruments, from 7 to 8 words per minute between the proposed Stations, the longest Section being 590 knots.

With new improved Instruments this number of words could be doubled.

The outer covering of heavy iron wires is suitable to the depth of water along the proposed route. These wires are moreover to be protected against corrosion by a hard bituminous outer coating.

We believe that the sum named as the cost of this Cable, free on board in England, will agree with the Tenders to be obtained from first-class makers by public competition.

Contractors have hitherto been generally employed for the transport and submerging of Cables, but we think that in a line like the present, where there is really no risk of failure, the large sums usually paid under this head can be saved; and we have framed the estimates on the supposition that the Company will transport and lay the Cable by means of its own Officers.

A large saving will thus be effected, and the Company's Officers will have a thorough control over the execution of this portion of the work, which has hitherto, frequently, not been the case.

The proposed arrangement will also enable a large number of firms to tender for the outer covering.

We propose to use sailing vessels for the conveyance of the Cable, in wrought iron water-tight tanks, from England to its destination.

The adoption of this plan, without any sensible increase of risk or delay, still further diminishes the Estimate below the sum which would be required if the Cable were to be carried (as formerly estimated) in steamers specially built or chartered for the purpose.

The proposed plan entails the purchase of one large and powerful steamer.

The total cost of each of the three sections between India (Rangoon) and Australia, if carried out at the same time and with the same staff, but with an additional steamer, would be as follows; and the work could be completed in 2½ years :—

	£
Rangoon-Singapore .....	450,000
Singapore-Batavia .....	170,000
Java-Gulf Carpentaria .....	725,000
	<hr/>
Total .....	£1,345,000
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You will perceive that, while nothing has been spared to secure a strong and efficient Cable, the utmost possible economy has been studied in the plans for carrying out the work; and the Estimates are consequently very little higher than those laid by you before the Australian Legislatures for a Cable of less than one-third the weight of that now proposed.

The cost of working and maintenance may appear high, but we are convinced by experience that it is desirable to have a very ample staff of first-class men for the superintendence of a Submarine Line, and that, moreover, it is desirable to use a very superior class of Telegraph Clerks to those employed on Land Lines.

We also consider it absolutely necessary to provide an efficient steamer to be maintained constantly on the line in readiness to effect any necessary repairs. Interruptions which need not have lasted more than a few days have on some lines been prolonged for months for want of such a steamer. This boat will also visit the stations periodically.

The Estimate for Home management and engineering is reasonable; and the sum put down for the sinking fund is small, but we believe it to be sufficient. £15,000 per annum is allowed for the repairing steamer, but one half of this cost would be borne by the first two sections if all carried out under one Company; this sum, with about 180 knots of spare Cable provided at the outset, will meet all the expenses of repairs during, say, the first 15 years. At the end of that time the sinking fund of £10,000 per annum, at 4 per cent. compound interest, will amount to over £200,000, which, with the reserve of £60,000, will make an available fund of £260,000 for the complete renewal of about one half of the line, or for the extension of the lines.

The duration of Cables has hitherto depended in a measure on the time during which the outer iron wires remained sound. In some seas iron decays very slowly, in others more rapidly; but it is believed that the bituminous covering will ensure the permanency of the Cable. We therefore are far from anticipating that any section will require renewal at the end of 15 years; but it is certainly desirable that a considerable sinking fund should be provided to meet emergencies.

The Malta-Alexandria Cable, only 1300 knots long, and situated near England, cost the Imperial Government nearly £500,000. This fact alone will show that our Estimate of £725,000 for a stronger Cable 1830 knots long to be laid in Australian waters is framed in the most economical manner. This Estimate is, however, the result of careful consideration; and we are convinced that the work can be efficiently carried out for the above sum in less than two years.

We enclose a small Map of the proposed Lines,

And remain

Your obedient Servants,

FORDE & FLEEMING JENKIN.

F. GISBORNE, *Esq.*, *London.*

P.S.—The difference between our present Estimate and our original Estimate of £710,000 is due to the sudden rise in the price of Gutta Percha.

## ANGLO-AUSTRALIA AND CHINA TELEGRAPH.

### *ABSTRACT of Specification for a Cable between Java and the South-east end of Gulf of Carpentaria.*

#### MAIN CABLE.

7 copper wires in a strand weighing per knot . . . . .	150 lbs.	
3 coverings of gutta percha and 3 of Chatterton's compound. . . . .	230	
Total weight of Core . . . . .	380 lbs.	= 3.40 cwt.
Jute and tar . . . . .		4.20
10 best iron wires, No. 6. B. W. G. . . . .		52.40
Outer protection—Clark's patent . . . . .		14.00
Total weight per knot of main Cable . . . . .		<u>74.00</u>

#### SHORE ENDS.

Core as above . . . . .		3.40 cwt.
Jute and tar . . . . .		9.50
10 best iron wires, No. 1, B. W. G. . . . .		121.10
Outer protection—Clark's patent . . . . .		20.00
Total weight per knot of shore ends . . . . .		<u>154.00</u>

## LENGTH OF CABLE REQUIRED.

Cape Sedano (East Java) to Cœpang (Timor).....	590 knots.
Cœpang to Port Essington .....	525
Port Essington to Cumberland Straits .....	285
Cumberland Straits to Gulf Carpentaria.....	430
Total direct distance.....	1830
Slack probably used 5 per cent. ....	92 knots
Spare Cable for subsequent repairs, say 10 per cent. ....	183
Total for slack and spare Cable.....	275
Total Cable required .....	2105
Of which main Cable.....	1855 knots.
shore ends .....	250
	2105

*ESTIMATED Cost of Line, to be carried out in Two Years from the signing of the Contract.*

	£	£
1855 knots of main Cable, at £157 10s. per knot.....	292,162	
250 knots of shore ends, at £252 per knot.....	63,000	
Insurance, 5 per cent. on £355,162 .....	17,758	
Total cost of Cable free on board in England, including insurance during voyage 8000 tons of Cable conveyed to its destination in sailing vessels specially chartered and fitted with wrought iron water-tight Cable tanks, pumps, &c. ....	—	372,920
One steamer 1600 tons gross register fitted with large water-tight Cable tanks, with picking up and paying out machinery..... (N.B.—This steamer will take out 1000 tons Cable.)	40,000	62,975
Coals during the outward voyage and laying the Cable, in all 345 days, at 25 tons per day, 8625 tons, at an average of 50s. per ton.....	21,563	
Wages, stores, provisions, insurance, special stores, and contingencies .....	39,134	
Total cost and working expenses of steamer .....	—	100,697
Five Stations, with furniture, instruments, land line, and salaries of clerks, during construction of line .....	43,130	
Engineering and Electrical staff employed to superintend the manufacture in England and to lay the Cable .....	34,217	
Expenses of management in England.....	10,000	
Total Stations, salaries, and management .....	—	87,347
Interest during construction .....	—	37,500
Reserve Fund.....	—	60,000
Total cost of line .....	—	£721,439
Say total Capital .....	£725,000	

NOTE.—The above Estimate is £15,000 in excess of that furnished you on 22nd November last. The excess is due to the late rise in the price of Gutta Percha, which, however, may not be maintained.

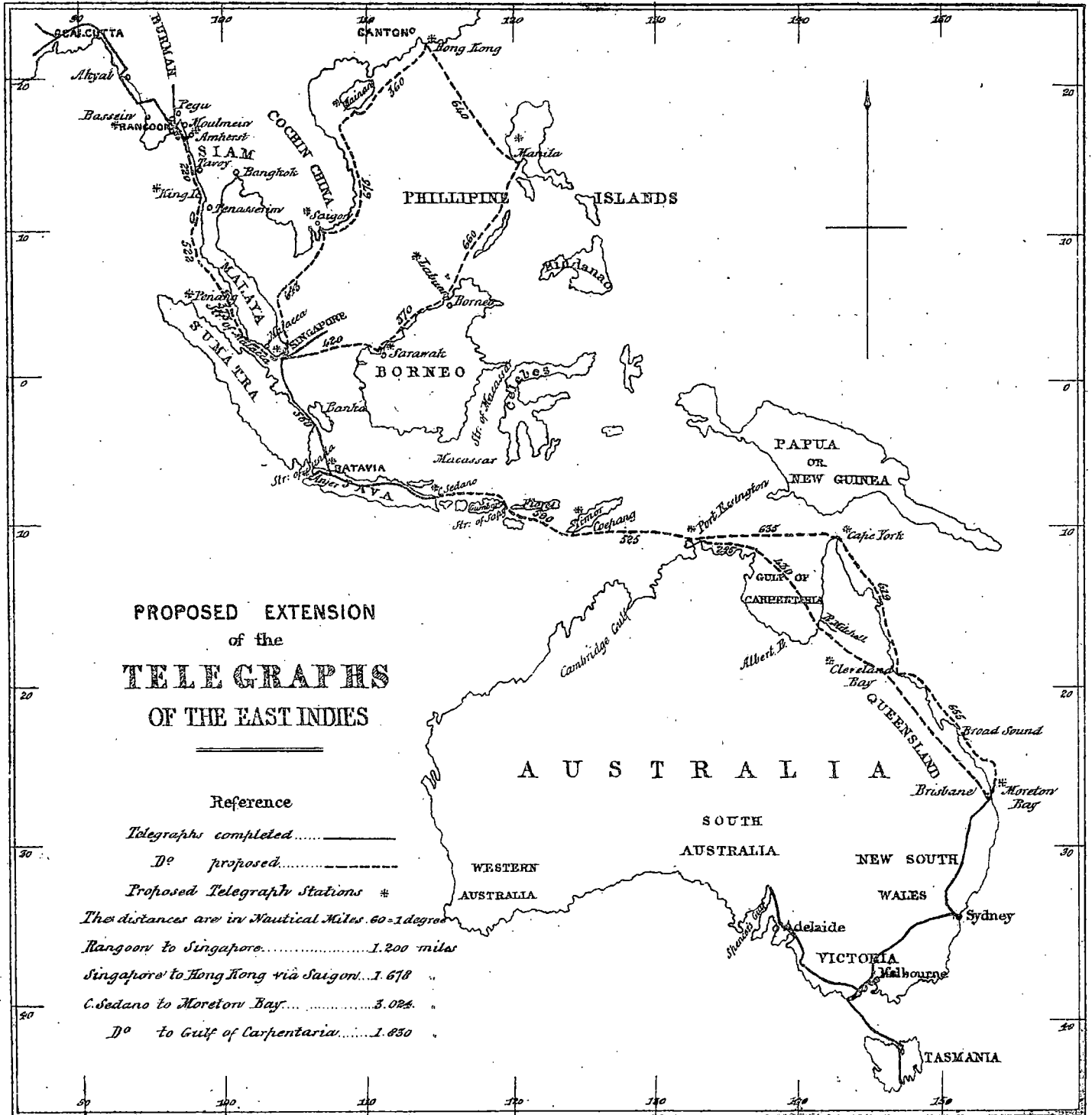
## MAINTENANCE PER ANNUM.

	£
5 Stations, including general superintendence.....	15,000
* Annual cost of steamer and stores .....	7500
Direction and home expenses with Engineer .....	5500
Removal Fund .....	10,000
Total .....	£38,000

\* This amount of £7500 is only one half the total cost of keeping a steamer on the station. The remaining half of the cost is chargeable to the Rangoon-Singapore and Singapore-Batavia Sections.

FORDE &amp; FLEEMING JENKIN.

6, Duke-street, Adelphi, London,  
5 March, 1863.



[Copy.]

6th March, 1863, 5, Cleveland Row, St. James's, S.W.

SIR,

THE Deputation connected with the Anglo-Australian and China Telegraph, which had the honor of waiting upon you on the 27th ultimo with the special object of ascertaining whether H.M. Government would co-operate with the several Australian Governments in carrying out the Java-Queensland Section as part of the Line between India and Australia, were invited by you to state in writing the result of previous negotiations upon this subject, and the amount and nature of the assistance which H.M. Government was expected to give.

I have, therefore, the honor to recapitulate that, as regards the first section of this Telegraphic system, viz., the Line between Rangoon and Singapore, the promoters have been informed by the Secretary of State for India that he cannot entertain any proposition for its execution until the Treasury shall assist in carrying out the extension to Australia.

The next link in the chain, viz. the Line between Singapore and Java, has lately been subsidised by the Netherlands Government, but it is a condition that it shall only be carried out contemporaneously with the Rangoon-Singapore Telegraph.

As regards the last section,—that, namely, between Java and Queensland,—action was taken upon it in 1860 by the Colonial Governments as follows:—

The Legislature of New South Wales authorised its Government to subsidise the Line to the extent of £9625 per annum.

The Legislature of Victoria gave a similar authorisation, to the extent of £13,000 per annum; and all the other Colonial Governments, except that of South Australia, promised proportionate contributions.

To the contribution of Victoria was annexed a condition, that the Home Government should contribute something. The Victorian then offered to find half of the whole annual subsidy that might be required, provided H.M. Government found the other moiety.

It would appear from a Minute of the Postmaster-General of Victoria, dated 16th day of June, 1860, that the Government of Victoria contemplated reducing its quota by the contributions of South Australia, Tasmania, and West Australia, which would leave the contribution of the Home Government to be reduced by the contributions of New South Wales (which had not required the co-operation of the Home Government), Queensland, and New Zealand.

The Government of South Australia refused to contribute, because it wanted the terminus of the sea Line to be fixed at Cambridge Gulf, on the northern coast of Australia, instead of in Queensland. Practically, however, the contribution of the Home Government was thus reduced to one-fifth of the whole subsidy.

The failure of the Red Sea line prevented any further action being taken about these subsidies, but on the 15th of last July the promoters again applied to the Governments of Australia to revive them.

The Government of Queensland has since then expressed its willingness to contribute, and that of South Australia now views the proposition favorably.

It is confidently expected that the next few mails will bring favorable answers from the other Colonies, and that the whole assistance required of them will be granted.

The length of the Submarine Line from the east point of Java to the south-eastern point of Gulf Carpentaria will be 1830 nautical miles; from that point the Queensland Government will undertake the land Line to Brisbane.

It would appear from the Admiralty charts that the Cable can be laid in a depth of about 50 fathoms for nearly the whole distance. The estimated capital required to lay the Submarine Line is £710,000; and the Colonies are expected to pay an annual subsidy of 5 per cent. upon four-fifths of that sum, or £28,400 per annum for 30 years from the completion and during the working of the Cable, in return for the gratuitous transmission of State messages to that extent in each year, and with the right of fixing the tariff of State and private messages in conjunction with the Company, which amounts to a veto subject to arbitration.

As regards the remaining fifth of the capital which H.M. Government have been asked to deal with, the promoters originally proposed that H.M. Government should grant a subsidy of 5 per cent. per annum upon such fifth,—say £7100 per annum, upon the same conditions, *mutatis mutandis*, as the Colonial subsidies depend upon.

The result of the interview has, however, left an impression on the minds of the promoters that H.M. Government are indisposed to meet that proposal, but might not be unwilling to subscribe a portion of the capital above mentioned.

The promoters would regard such an arrangement as equally calculated to further their views. They, therefore, desire respectfully to submit to H.M. Government their readiness to give effect to the undertaking, provided the latter shall see fit to subscribe a sum equal to one-fifth of the capital above mentioned; H.M.

Government receiving a proportionate share of the profits of the undertaking, but not participating in the Colonial subsidies, the sole object of which is to enable the remainder of the capital to be raised. Should the late rapid rise in the price of gutta percha be maintained, the cost of the Cable may have to be increased by some £20,000.

The reasons which exist for asking H.M. Government to contribute to the Java-Queensland Telegraph, some of which may be termed inducements, are shortly as follows:—

- 1st. Victoria made such a contribution a condition to granting its proportion of the subsidy.
- 2nd. The Secretary of State for India has made the same condition to aiding or constructing the Rangoon-Singapore Telegraph, which is necessarily the first section of the proposed Telegraphic system.
- 3rd. The Australian Governments will require the assistance of H.M. Government, which cannot be of any value without responsibility in making the preliminary arrangements and during the progress of the work.
- 4th. H.M. Government will, by taking a share in the undertaking, acquire a right of control which will be of the greatest importance in all questions affecting the political interests of the Empire in the Southern and Eastern hemispheres.

In the event of H.M. Government subscribing a portion of the capital (say one-fifth of the whole), it would be conceded that they should appoint one-fifth of the Directors. And as a protection to public interests, there would be no objection to giving them extraordinary powers in time of war, as well as a veto upon the tariff of State and private messages, subject to arbitration in conjunction with the other contributing Governments. Nor would there be any objection to giving the contributing Governments a compulsory power of purchasing the Line, at say 30 years' purchase of the net average receipts for the 3 years immediately preceding the purchase.

It is as unnecessary to dwell upon, as it is impossible to exaggerate, the importance of this great undertaking, which, I venture to believe, will meet with your entire sympathy.

A Submarine Line of Telegraph extending between India, China, and Australia would give the British Government the practical control and command, at all times, of all the Telegraphic communications between the French, Dutch, and Spanish Settlements of the East, with the respective States to which they belong in Europe.

The promoters will feel greatly indebted if you will give the present application your early consideration, as the negotiations with the various Governments concerned cannot be matured until H.M. Government have signified the extent of their co-operation.

Should that decision be favorable to the views of the promoters, they will register themselves as a Company under "The Companies Act 1862," in the expectation that the pending arrangements with the other Governments will then be brought to a speedy and successful termination, upon the attainment of which result they will be prepared to carry out contemporaneously the various sections of the India-Australia Telegraph.

I have, &c.,  
(Signed) CHARLES NICHOLSON.

*The Right Honorable W. E. GLADSTONE, M.P.,  
Chancellor of the Exchequer.*

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6 Duke-street, Adelphi, London, 25th March, 1863.

SIR,

SINCE writing to you on the 19th instant, the enclosed Letter, dated on that day, has been received by Sir Charles Nicholson from the Lords Commissioners of the Treasury.

You will observe that the Treasury undertake to deal with the question at once.

I have been asked why the Queensland land Line to Gulf Carpentaria, if adopted, should not be carried on to Port Essington, making that the Terminus of the sea Line.

My answer has been, that the intermediate country is not settled, and that so important a communication as that between Australia, India, China, and Europe cannot be left to depend upon a Line of Telegraph which would undoubtedly be liable to perpetual interruption. Moreover, that such a Line would replace the safest portion of the sea Line, Gulf Carpentaria being one vast bed of mud about 30 fathoms in depth, and with no currents; that it is well known that for through communication between distant points a sea Line laid in a moderate depth offers far greater advantages than the most secure land Line.



The absence of intermediate Stations with local business, and the more constant and uniform action of a Cable which is not influenced by changes of temperature and weather, and is not liable to the numberless small accidents to which a land Line is exposed, are among the principal causes.

I have the honor to remain,  
Sir,

Your most obedient Servant,  
F. GISBORNE.

*His Excellency Colonel T. G. BROWNE, C.B.,  
Governor of Tasmania.*

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[Copy.]

*Treasury Chambers, 19th March, 1863.*

SIR,

I AM commanded by the Lords Commissioners of Her Majesty's Treasury to acknowledge the receipt of your letter of the 6th instant, with reference to the proposed Anglo-Australian and China Telegraph; and I am to state that My Lords will lose no time in dealing with the subject, so soon as they have received another communication on the same subject, the immediate or very early arrival of which they are given to understand may be expected.

I am, &c.,  
(Signed) F. PEEL.

*Sir CHARLES NICHOLSON, Bart.  
5 Cleveland Row.*

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