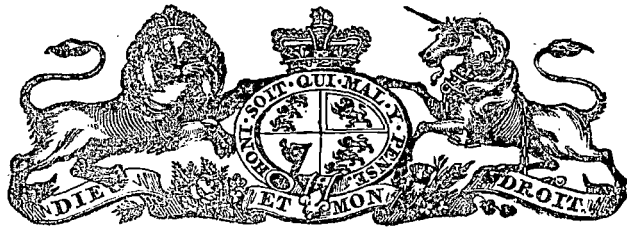


(No. 92.)



1864.

T A S M A N I A.

S U B M A R I N E C A B L E.

REPORT OF THE SELECT COMMITTEE.

Presented by Mr. Davies, and ordered by the House to be printed,
31 August, 1864.



REPORT of the SELECT COMMITTEE on the SUBMARINE CABLE.

THURSDAY, 21 JULY, 1864.

Ordered, that a Select Committee be appointed to enquire whether any, and if so what, means can best be taken for the restoration of the Submarine Cable between Tasmania and Victoria. (*Mr. Davies.*)

Then the following Members were nominated to be of the said Committee :—

MR. PERKINS.
MR. SHERWIN.
MR. LEWIS.
MR. BALFE.

MR. DODERY.
MR. JOHN LORD.
MR. DAVIES.

DAYS OF MEETING.

1. 26 July, 1864. *Present*—Mr. Dodery, Mr. John Lord, Mr. Sherwin, Mr. Balfe, Mr. Davies.
 2. 28 July, 1864. *Present*—Mr. Dodery, Mr. Sherwin, Mr. Davies.
 3. 31 August, 1864. *Present*—Mr. Lewis, Mr. Sherwin, Mr. Davies.
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WITNESS EXAMINED.

W. R. Falconer, Esquire, Director of Public Works.

R E P O R T .

Your Committee have held three Meetings, and have examined such Witnesses as they considered were competent to give evidence on the subject; and have also had before them communications from the adjoining Colonies, which are annexed to this Report. And your Committee have come to the decision that it would be undesirable, in a pecuniary point of view, to take any steps for the re-establishment of the present Cable,—specimens of which were exhibited to your Committee.

JOHN DAVIES, *Chairman.*

August 31, 1864.

EVIDENCE.

MR. FALCONER, *Director of Public Works, examined.*

By Mr. Davies.—I am Director of Public Works for Tasmania, and Inspector of Telegraphs. The Submarine Cable has been laid during my tenure of office. I have a knowledge of its history since its first submersion, during its active operation, and since it became silent.

I am aware that a few days after it was first laid it gave way, close to the shore at the north end of King's Island, owing to the rocky bottom and its entanglement in the kelp. Its direction was subsequently changed by the Contractor, who relaid it to a sandy patch about 2 miles from its former bed.

The Cable shortly afterwards became broken again, off Sea Elephant's Bay, 18 miles south from the northern end of the Island, and did not again work between Tasmania and Victoria. It worked, however, for a considerable time between Circular Head and Low Heads; also between King's Island and Cape Otway. The intervening space was silent.

Several attempts were made by the Governments of Tasmania and Victoria to splice the Cable between King's Island and the Hummocks.

The expeditions were not sufficiently strong to effect the repair: they were sent more for the purpose of ascertaining the nature of the damage.

The Report of their investigation is as follows:—

“The Cable was damaged for about 4 or 5 miles out from King's Island towards the Hummocks; and no repair could be effected without additional shore end of Cable, which would require a steamer to lay it.”

No estimate was made as regards the probable cost; but it was recommended that further survey should be made to ascertain whether there were loose rocks on the bottom at that spot.

An estimate was made then, at a cost of £12,000, to lay a new piece of Cable from the Hummocks to the north end of King's Island, it being believed that there were rocks at Sea Elephant's Bay which had caused the fracture.

I have been to King's Island, and also to the Hummocks. A land line runs across King's Island, a distance of 18 miles, and across the Hummocks, 6 miles. Between the two islands a very strong current runs; and if rocks exist on the bottom there, the injury to the Cable must of course be great.

We have no means at present of ascertaining whether the Cable from Circular Head to the Hummock is perfect or otherwise: the distance is about 30 miles.

I am of opinion that the Cable from Circular Head to Tamar Heads might be repaired at a very trifling cost, only one mile of new Cable being required; provided, of course, that no further injuries have been sustained since that portion was broken by the anchor of a vessel.

Any other Cable would answer if spliced on to the present one.

It would, in my opinion, be desirable for the interests of the Colony to have the Cable from Circular Head to Tamar Heads repaired, if a competent person could be found to undertake the duty. I am of opinion that Mr. Packer, with a little practice, might be able to effect it.

The amount of Revenue derived from Messages between Circular Head and Launceston, when that Line was in working order, was very inconsiderable.

The general idea which has since prevailed as regards the course which should have been adopted, is, that the Cable should have been, in the first instance, laid between Tamar Heads and Cape Schanck, which, according to the Marine Survey taken by Captain Stokes, averages a depth of 40 fathoms on a sandy bottom.

Mr. Savage repaired the Cable at Tamar Heads, but it never worked since he mended it. I believe that, had the splice been properly effected, the Line might have been in working order at the present time. I consider that Mr. Savage's reports on the subject of the Cable were very unsatisfactory.

The Victorian Government refused to sanction any further outlay on the Cable, and consequently the Tasmanian Government ceased its efforts to remedy the damage.

Copies of Mr. Savage's Report were forwarded to the Superintendent of Telegraphs in Victoria. The Victorian Government did not act upon Mr. Savage's report, but refused to grant further assistance as recommended by Mr. McGowan, the Superintendent of Telegraphs.

The Contracts for laying down the Cable were £50,000, as will be seen by the Return which I hand in. (Paper handed in.) Several persons, including Mr. M'Naughtan, considered Mr. Savage to be a highly competent person. I cannot say what the opinion entertained of Mr. Savage by Mr. Butcher was. I do not think Mr. Savage was competent or qualified to superintend and command an expedition of the kind.

I produce three specimens of the Cable: they are all in perfect working order, although one of them has been much chafed by the rocks. A portion which I have at Launceston (taken, I think; from King's Island) has specks in the copper wire which render it extremely brittle, and consequently useless at those places.

There must have been some original defect in the copper wire where these spots present themselves,—no chafing on rocks would have caused these spots; but they would, no doubt, increase on account of the heavy batteries that had to be kept at work, and the connection would at last be destroyed.

The Cable across the Straits might be repaired, but at a very considerable cost. It would be impossible to estimate the amount without survey.

To lift the Cable, for the purpose of selling it, would cost more than any sum it could afterwards realise.

Great advantage would no doubt accrue to Tasmania from the renewal of Telegraphic communication with Victoria, but it would not be commensurate with the expense of repairing the old Cable.

The terms of the Contract as first made between the Tasmanian Government and the Contractors were, that the Cable should be kept in working order for three months after being laid; subsequently this was altered by the Government to one month. Had the original Contract been carried out, no payment could have been made or demanded.

I am not able to say whether the Victorian Government recognised the terms of Contract finally agreed upon.

I beg to hand in Mr. M'Gowan's Report as regards the leasing of the Line, and repairs; the annual expense of the Line, and the annual receipts. This Report was given to Captain Gilmore when preparing to visit England about two years ago, with a request that he would endeavour to make arrangements in England with parties there to repair the Line, and afterwards lease and work it. Captain Gilmore has not reported in writing the result of his enquiries, but he stated verbally to Mr. M'Gowan and myself that no parties he had seen in England on the subject would entertain the proposition; and he also stated that he had been informed that "it was one of the worst Cables that had been manufactured in England, and had not been made to last." I believe I have given his exact words.

I produce a specimen of the proposed Cable from the east end of Java to Moreton Bay: it has seven copper wires. I have read the terms of the proposed contract, which are as follows:—(Proposed contract read.)

The tender for this Cable would be at £220 per mile: that for the Tasmanian Cable was about £200.

I am of opinion that a Line should be kept in thorough working order for at least three months after having been laid before payment should be made.

I have sent to Melbourne for samples of the newest Cables manufacturing in England, and expect them here by the next trip of the *Southern Cross*. I have also written to Mr. M'Gowan for his opinion as to the idea of repairs to the present Cable, and also as regards the notion of laying down a new cable.

I cannot say if the Victorian Government would join in a scheme for laying a Cable between Tamar Heads and Cape Schanck.

The shore end at Circular Head is, I believe, in perfect working order, the bottom there being sandy.

No portion of the Submarine Cable is at work now.

I could not recommend that a quantity of the Cable should be raised, if required, for laying across the Derwent, as this might involve greater expenditure than the cost of a new Line of Cable.



Public Works Office, Launceston, 6th August, 1864.

SIR,

I BEG to forward you herewith letter, accompanied with two samples of Submarine Telegraph Cable, received from Mr. M'Gowan, the Superintendent of Telegraphs of Victoria.

I beg particularly to recommend your attention to Mr. M'Gowan's recommendation, that it be "a condition that the successful Tenderer would be required to guarantee the integrity of the work for twelve months."

I am, Sir,

Your most obedient Servant,

JOHN DAVIES, *Esq., Chairman of the Telegraph
Cable Committee.*

W. R. FALCONER.

*Department of Electric Telegraph,
(Office of the General Superintendent.)
Melbourne, 3rd August, 1864.*

MY DEAR SIR,

I AM in receipt of your favour of the 27th ultimo, and in compliance with your request have sent per *Southern Cross S.S.* two samples of Cables as seen by you when you were last at my office. One sample (the copper-sheathed) is made by Messrs. Siemens and Halske, the other by Glass, Elliot, and Co. I do not consider that the copper-sheathed would be so serviceable as the other for Bass' Straits, as it is not intended for anything but deep sea work, or soundings at least below 200 fathoms, while the other was designed by Messrs. Ford and Fleeming Jenkins specially for the Telegraph to India Companies lines in the China Seas and Torres' Straits. This latter specimen of Cable is in every respect the best I have yet seen for such conditions as we have in Bass' Straits: it is of great strength, increased conducting power, from the enlarged size of the copper wires, and well protected against corroding or abrading influences by the iron sheathing and outer covering of Jute and Clark's patent, a kind of hydraulic cement.

The following are the components of this Cable:—

7 Copper wires in one strand, per knot	150 lbs.
3 Coverings of gutta percha and 3 of Chatterton's compound	230 lbs.
	—————
Weight of core	380 lbs. = 3.40 cwt.
Jute and tar	4.20
10 best charcoal iron wires, No. 6.	52.40
Outer covering, Clark's patent	14.00
	—————
Weight per knot complete	74.00 cwt.
	—————

The shore-ends would be prepared in the same way, but of much heavier materials, and would weigh 154 cwt. to the mile.

Messrs. Glass, Elliot, & Co. give their prices for the above, as follows:—

For Main Cable, f. o. b. £151 per mile.
For shore-ends

£244 ditto.

You will, of course, note that the above estimates and prices are for nautical miles. Considering that the prices stated are intended to cover all expenses of shipment, I do not look on them as unreasonable, or as being more than fair to the Manufacturers.

The old Cable having now been so long abandoned, the chances of utilising any portion of the several sections are remote, or at best very uncertain: it therefore appears to me that a proper course to adopt would be to invite offers for laying a new Cable,—Tenderers to furnish samples of the Cable they would propose to supply. Make it a condition that the successful Tenderer would be required to guarantee the integrity of the work for 12 months, or that he might have a lease of the communication for a stated term of years, under certain conditions.

If notices were published at home, I am sure you would receive several Tenders. Notices might likewise be published in the Colonies as well, although I do not consider that you would be likely to obtain more eligible local Tenders than were sent in on the previous occasion.

The best landing for the Cable on this side would be Westernport Bay, about 10 miles to the eastward of Cape Schanck,—any other part of our coast in the vicinity of Cape Schanck would be altogether too rock-bound for the safety of a Cable. Our present line to Cape Schanck could easily be connected with the Cable, so that the cost for land line would be very trifling.

You may retain the samples of Cables, as I have kept duplicate portions here.

Trusting that the matter may be taken up in a practical and energetic spirit,

I remain,

Yours faithfully,

W. R. FALCONER, *Esquire, Hobart Town.*

SAMUEL W. M'GOWAN