

1858.

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Legislative Assembly.

NEW SOUTH WALES.

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## ELECTRIC TELEGRAPHS.

(PROGRESS AND PRESENT STATE OF IN THE COLONIES.)

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RETURN to an *Address* of the Honorable the Legislative Assembly of New South Wales, dated 16 April, 1858, praying that His Excellency the Governor General would be pleased to cause to be laid upon the Table of this House,—

“ A Return compiled from the latest official information,  
“ shewing the progress and present state of the Electric  
“ Telegraphs in the Colonies of New South Wales, Victoria,  
“ South Australia, and Tasmania, and the probable date  
“ when the chain of Telegraphic Communication between  
“ the Cities of Sydney, Melbourne, Adelaide, Launceston,  
“ and Hobart Town will be completed.”

(*Mr. Parkes* )

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# ELECTRIC TELEGRAPHS.

*EXTRACT from the Second Report to the Honorable the Secretary for Lands and Public Works, on the Internal Communications of New South Wales, by Captain Martindale, R.E., &c., &c., &c.*

## THE ELECTRIC TELEGRAPH.

In reporting, for the first time, upon this branch of my Department, it will be interesting briefly to trace the rise and progress of the Electric Telegraph, not only in New South Wales but in Australia generally, so far as I possess information upon it at present.

### THE VICTORIA TELEGRAPH.

The Colony of Victoria took the lead in this great inter-colonial work, the construction of a line of Electric Telegraph to connect Melbourne with Williamstown having been directed as far back as the 10th November, 1853, completed in February, 1854, and publicly opened on the 3rd March, 1854, although, pending the introduction of the Electric Telegraph Act, 17 Victoria, No. 22, no charge was made for the transmission of messages by the public until the 1st May following.\*

In September, 1854, an extension of the line was commenced, and on the 5th December following, communication with Geelong was established, and the line from Geelong to the Heads having been in progress simultaneously, communication with Queenscliff was opened on the 30th of January, 1855. A branch line from Melbourne to Sandridge was also completed and placed in operation on the 1st July, 1855, so that at this period there were in operation 72 miles of line as follows:—

Melbourne to Geelong via Williamstown .....	50 miles
Geelong to Queenscliff.....	20 "
Melbourne to Sandridge .....	2 "
Total.....	72†

In the month of November, 1855, it was decided to extend lines respectively from Geelong to Ballarat, and from Melbourne to Sandhurst via Castlemaine. The work was commenced early in May, and the line between Geelong and Ballarat, a distance of 58 miles, was permanently opened on the 14th December, 1856, and communication over the line from Melbourne to Sandhurst tested on the 20th of the same month, the distance being 125 miles.

In the year 1856, also, the Governments of Victoria and Tasmania entered into a correspondence relative to the establishment of a submarine telegraph between the two Colonies at their joint expense, the cost of the portion from Tasmania to Cape Otway to be divided equally, and a branch line from Queenscliff or Warrnambool to Cape Otway to be made at the expense of Victoria.

The submarine portion of the line was carefully surveyed by Mr. McGowan in the months of October and November, 1857, and it has been decided the line should leave Victoria at Parker Cove, Cape Otway, and be laid down to a sandy cove in King's Island, named Victoria Cove. From thence it is to be carried across the island to Sea Elephant Bay, and from this point to the north-western bight of Hunter or Barren Island, passing about three quarters of a mile north of Albatross Island; from the north the line passes to a cove on the south side of Hunter Island, nearly opposite the lower end of Stack Island, and thence to a high sand patch about a mile to the westward, and two miles from Cape Grim, in Tasmania.‡

\* Report of Mr. S. W. McGowan, Superintendent of the Electric Telegraph in Victoria, dated 31 December, 1856.

† The cost of constructing these lines and stations, the latter being on a permanent scale, was £17,600. In May, 1856, the monthly charges were £360, and monthly receipts about £400.

‡ The particulars of the distances, and the length of submarine cable and land line which it will be necessary to provide, are as follows:—

PLACES.	Actual Distance.	Length of Cable recommended.
	Miles.	Miles.
Cape Otway to Victoria Cove, King's Island .....	49	56
Victoria Cove to Sea Elephant Bay (land line) .....	18	..
Sea Elephant Bay to North-west Bight, Hunter Island .....	48	55
North-west Bight to South Cove (land line) .....	8	..
South Cove to Tasmania.....	4½	6
Total.....	127½	117

The cable suggested by Mr. McGowan is a single copper wire cable, the wire of number 16 gauge, the cable to weigh not less than one ton to the mile; the extreme cost of the entire line was estimated at £33,000 in 1856.\*

The effect of this line, when carried out, will be to place Hobart Town in instantaneous communication with Adelaide and Sydney, via Melbourne, as soon as the inter-colonial lines in progress are completed.

A contract for the portion from Cape Otway to Cape Grim was made on the 7th instant; the date fixed for completion being the 1st May, 1859, and the cost £25,000.

In the course of the year 1857, the telegraphic lines to the western and north-eastern boundaries of Victoria have also been completed; the line via Ballarat, Fiery Creek, Hexham, Warrnambool, and Portland, to the South Australian boundary, having been completed on the 29th December, 1857; and that to the River Murray opposite Albury, via Sandhurst, Kilmore, Longwood, Benalla, Wangaratta, Beechworth, and Belvoir, on the 5th of the same month. The distance from Ballarat to Portland being 230 miles; and from Melbourne to Portland, 338 miles; and from Melbourne to the River Murray, 250 miles.

The lines contemplated for construction during the year 1858 are an extension from Raglan (Fiery Creek) to Ararat; Castlemaine to Ballarat, embracing, *en route*, Maryborough, Donolly, Creswick, &c.; Sandhurst to Kuluca, on the River Murray; and the line, already alluded to, now fixed from Geelong to Cape Otway to meet the submarine line to Tasmania.

Such have been, up to the present time, the exertions of Victoria to establish inter-colonial telegraphic communications; and one cannot but admire the ability and energy with which they have been carried on.

The system of construction is extremely simple, and in accordance with that pursued in America.

The posts used are saplings of blue gum, red gum, white gum, stringy-bark, and iron-bark, except between Melbourne and Sandridge, the posts there being of Baltic deal.

The measurement of each sapling is usually twenty-five feet in length by nine inches square at the base, tapered to five inches at the top; the base of the post is thoroughly charred and tarred for five feet six inches in height, and is buried five feet in the ground; the holes being bored by earth augers. There are thirty posts to each mile.

The insulators are "bell pattern," of the best quality, of hard baked and highly glazed earthenware.

A single conducting wire of number 6 galvanized iron is found sufficient to meet all the ordinary requirements of traffic.

The cost of the lines has varied considerably,—the first, between Melbourne and Williamstown having been contracted for at £193 15s. per mile; the second, between Williamstown and Queenscliff, at £115 15s. From Geelong to Ballarat the line cost £82, and from Melbourne to Sandhurst £73 per mile; the extensions from Ballarat to the South Australian frontier, and from Melbourne to the Murray, on the New South Wales boundary, having cost respectively £65 10s. and £59 15s. per mile.

The system adopted in working is the Morse, the instrument used being Morse's Recording Telegraph, usually in the single acting form; the double acting Morse instruments, manufactured by Siemens and Halske, of Berlin, being used at important terminal stations.† The battery employed is a Groves Battery, or Chester's patent.

The offices are kept open for the transmission of messages by the public generally from 8-30 a.m. until 8 p.m. The regulations for the transmission of telegrams are of the usual nature.

I understand that the Head Office at Melbourne is kept open all night.

In Table 28 will be found a record of the working of the lines, interesting especially as shewing the rapid increase in the number of messages sent, and consequently in the revenue.

The net receipts for the year 1857, including £1,671 8s. 8d. as the value of despatches on the public service, were £3,531 18s. 2d., affording interest at the rate of nine per cent. per annum on £10,000, the round cost of establishing the line,—but Mr. McGowan anticipates, that if office accommodation easy of access were provided at Melbourne, the revenue of that station would receive a marked addition.

#### SOUTH AUSTRALIAN LINES.

The construction of the Adelaide City, Port, and sea-coast line was commenced in December, 1855, opened to the Port on the 18th February, 1856, and to Le Fevre's Peninsula early in the following month. Between Adelaide and the Port the line is over ground; there are thirty-two posts to the mile, and four wires; the insulators are inverted cones of white porcelain. In the streets of Adelaide a six wire cable is laid under ground in divided iron pipes, and the same has been done at the Port, and across Le Fevre's Peninsula; seven hundred yards of a six wire submarine cable being laid under the creek.

The cost of the line, including the erection of stations, was about £3,024, or £600 per mile under ground, and £228 per mile over ground.

The erection of the line to Gawler Town was commenced in January, 1857, and opened to the public on the 14th of April, 1857.

* Shortland's Bluff to Cape Otway, say 150 miles, at £60 .....	9,000
Cape Otway to Cape Grim, at £100 .....	15,000
Cape Grim to George Town, at £60 .....	9,000

Total..... £33,000

† The chief novelty of this instrument consists in its double action, by means of which a message can be transmitted and received by the same instrument at the same moment.

The length of this line is twenty-eight and a-half miles; there are two wires, about twenty-seven posts to the mile, between sixteen and seventeen feet in length along the line of Railway, and twenty-two feet at all level crossings. The cost of the line, exclusive of the Gawler Town station, was £1,576, or £55 5s. 11d. per mile.

The estimated receipts, including £500 for messages on public service, are £1,700 for the year 1857; the expenditure, £1,232; the net receipts, £468.

The number of messages sent is remarkable, being 30,870 for sixteen months, from the 18th February, 1856, to the 30th June, 1857, as compared with 29,284, the number sent during thirty-three months, ending December, 1856, on the Victorian lines.\*

In April, 1856, the Governments of South Australia and Victoria entered into communication relative to the establishment of an inter-colonial line of telegraph; and in July of the same year, Mr. Charles Todd, Superintendent of Telegraphs in South Australia, proceeded to Melbourne for the purpose of procuring information to facilitate the execution of the desired object; by whom and Mr. McGowan a joint Report was presented to their respective Governments, dated 25th August, 1856.

This Report, after alluding to the importance of connecting New South Wales with the general system, recommended, among other things, that:—

Each Government should erect the line of telegraph within its own territory, and carry it to a common point on the boundary.

The same description of instrument should be used throughout the Colonies; and the code, regulations, and arrangements be as nearly as possible identical.

There should be an equal division of receipts, derived from all *inter-colonial* messages, between what stations soever they may pass.

These suggestions received the general assent of the two Governments.

Mr. Todd, in returning to Adelaide overland, made a careful survey of the country from Portland, and recommended the following as the route for the line to follow:—

“From Adelaide, by the south road, over Tapley’s Hill, through Noarlunga and Willunga to Middleton; thence along the tramway to Port Elliot, and back by the tramway to Goolwa; from Goolwa across to Hindmarsh and Mundoo Islands to Pelican Point, crossing the channels by a single wire submarine cable; and thence along the Coorong to fourteen miles beyond the Salt Creek, or near the Chinamen’s Wells; thence to Mount Benson, along the edge of a flat; through Robe Country to Robe Town; from Robe Town towards Mount Muirhead, till about twenty-two or twenty-five miles from Guichen Bay, when it should turn in the direction of Mount Gambier, and from Mount Gambier by the road to the punt near the mouth of the Glenelg,—the distance being about 325 miles.”

The Legislature approved of the route recommended, and voted in February, 1857, the sum of £20,500 to erect the line; and a contract was entered into for its construction for £40 a mile, the Government finding wire and fittings, and the estimated expense, excluding buildings, but including instruments, batteries, and station stores, being £60 per mile.

In this is included ten miles of submarine cable, at £80 per mile, laid under the Goolwa Channel, and Lake Alexandria. The cable weighs only 17 cwt. to the mile, the core consisting of seven copper wires, (No. 18), forming one conductor, well insulated by a thick coating of gutta percha, and the whole protected by 18 strands of (No. 16) iron wire.

The system of construction, the instruments and materials used, and the general arrangements for working, are closely assimilated to those of Victoria. The posts are, however, only 22 feet long in place of 25; a large extent of the country traversed being destitute of serviceable timber.

This line is intended to be opened on the 1st proximo; and it must be very satisfactory to those who by their efforts and cordial co-operation have contributed so materially to its success, to see inter-colonial communication so rapidly advancing.

#### THE TASMANIAN LINES.

I have not received any official report upon the lines that are being constructed in Tasmania, and am therefore indebted to the reports of Messrs. McGowan and Todd, and to the statements of the daily press, for the scanty information I can at present submit.

I learn, however, that in July, 1856, Mr. Champ, then the Honorable the Colonial Secretary in Tasmania, visited Melbourne for the purpose of inspecting the Electric Telegraph, prior to its introduction into Tasmania, and that, on his return, a line from Georgetown to Mount Lewis was commenced.

In September of the same year a correspondence was opened between the Government of Tasmania and that of Victoria, relative to the establishment of telegraphic inter-communication, the result of which has been the undertaking of the submarine line from Cape Otway to Cape Grim, which I have already detailed in my sketch of the Victoria lines.

This line will be in connexion with that to Hobart Town and Circular Head, Georgetown, and Launceston.

I am under the impression that the line, or a portion of the line, between Georgetown, Launceston, and Hobart Town, is now in operation.

The distance between Melbourne and Hobart Town is 682 miles by telegraph, the estimated cost of the line being £45,000.†

#### WESTERN AUSTRALIA.

I have no information respecting the construction of telegraphic lines in this portion of Australia.

#### NEW SOUTH WALES LINES.

While the construction of lines was commenced in Victoria as far back as the end of 1853, and in South Australia at the end of 1855, no contract was made for their construction

\* Report of Mr. Charles Todd, Observer and Superintendent of Telegraphs, South Australia.

† Reports of Messrs. McGowan and Todd, and “Correspondence relative to the Establishment of Electro-Telegraphic Communication between the Australian Colonies.” Victoria, 1856.

in this Colony till the middle of May, 1857; it is not therefore surprising that telegraphic communication should be less advanced here than in the sister Colonies.

As far back, however, as the end of March, 1854, an Estimate of the cost of constructing a line ten miles in length was ordered and sent in to the Government. The estimate amounted to £200 a mile.\*

Towards the end of 1855 (November), the attention of the Government appears to have been again turned to this subject,—a Report from Mr. McGowan, of the probable cost of constructing a line between Melbourne and Sydney having been laid before it.†

In August, 1856, a further communication was made to the Government on this subject‡

In September of the same year, the Chief Secretary, Melbourne, addressed the Colonial Secretary, Sydney, requesting to be informed whether, in the event of the Electric Telegraph being extended to the Victoria side of the river Murray, the Government of New South Wales would undertake to construct a line from Sydney to connect with it.

A Select Committee of the Legislative Assembly§ was appointed on the 31st October, to consider and report upon the subject of the introduction into New South Wales of the Electric Telegraph. The Committee recommended, on the 18th December,—

“That immediate steps be taken, in concert with the Government of Victoria, to connect the Cities of Sydney and Melbourne by Electric Telegraph.

“That a sum not exceeding £38,000 be placed on the Estimates for 1857 for that purpose.”

The Committee recommend also the connexion, at an early period, of the town of Bathurst with the metropolis by Electric Telegraph.

The sum of £38,000 was accordingly placed upon the Estimates for 1857.

A contract was entered into for the construction of the line from Liverpool to Albury, on the 11th of May last, tenders having been called for by public competition.

The result appears to afford another proof of the inadequacy of the system of tender by public competition to provide efficiently for the execution of large public works, especially in a new country.

I was not in the Colony at the time, but I am aware that every pains were taken to ascertain the competency of the contractor and his sureties, to whom, as being the lowest tender, the work was given.

At the same time the Government undertook the construction themselves of the line along the Railway to Liverpool.

It soon became apparent that the contractor was incompetent to perform the work he had undertaken, and, after allowing full time to give him a fair trial, the Government terminated the contract on the 12th October, on the only clause giving the power—that of unnecessary delay.

Negotiations were at once entered into, with the view of avoiding delay, with parties competent to execute the work; the Government considered the terms asked too high, and tenders were again called for by public competition.

The usual delays inevitably attendant upon this system of carrying on public works occurred, and, although the tender of the present contractor was provisionally accepted on the 12th November, it was not until the 18th January last the bond was signed.

The line between Berrima and Picton was completed on the 1st instant, a distance of thirty-three miles; since then the progress of the work has been more satisfactory; and the line will be ready to be opened to Goulburn about the 1st proximo; but I cannot anticipate that the line will now be completed in the time specified without the most strenuous exertions on the part of the contractor.

The price of the present contract is £57 per mile, without instruments or buildings; that of the original contract having been £49 14s. 6d.

In the meantime considerable difficulty had been experienced relative to the line between Liverpool and Picton, a distance of thirty-three miles.

When the first contract was terminated, the works were very incomplete upon this portion, and immediately upon its termination several parties waited upon me to state that they had not been paid, either for materials or labor; some of these were apparently laboring men.

It was evident that these parties had no legal claim upon the State, but the Government were very desirous that they should, if practicable, be paid.

I am happy to state that, after a delay of many months, this has been effected, and the claims sent in, up to the time of the signing of a new bond, have been paid.

The arrangement under which this was effected was the making of a second contract with the original contractor, for the completion of the line from Picton to Liverpool, on condition that the sub-contractors, under the original contract, should be paid their several claims.

This contract was made on the 25th February, 1858, and the work completed on the 18th March last, the price paid being £1 per mile less than that first agreed upon, the Government taking the maintenance of the line at once into their own hands.

It is due to the sureties of this second contract to state that it was efficiently carried out.

The line between Sydney and Liverpool, 22 miles, was completed in the early part of October last, but was not then opened.

On the 27th of the same month a line to connect Sydney with the South Head was, by order of the Government, commenced, and was completed early in the following January, at a cost of £657 6s. 8d., or about £91 per mile, including instruments and station fittings.

\* By Captain Mann, C.E., letter dated 29 March, 1854.

† By Captain Towns, letter dated 1 November, 1855.

‡ By Mr. Samuel, letter dated 12 August, 1856.

Mr. Parkes, Chairman.

The cost of this line was increased by most of the holes having to be put down in rock for the posts, and by additional labor in coming through the City.

Detailed statements of the Telegraph Accounts to the 31st December, 1857, will be found in the Appendix, Table 27.

Arrangements having been made with the Directors of the Exchange Company for the use of two excellent rooms in the Exchange as a head office for the present, at a nominal rent, an instrument was placed there, and the Liverpool and South Head lines connected with it, instruments being at the same time set up at those stations.

These instruments were Siemens and Halske's recording instruments, there being no single acting Morse instruments to be obtained. They will be found very useful, especially hereafter as the lines extend.

On the 26th January last, the Liverpool and South Head lines were formally opened by His Excellency the Governor General, and on the following day for general use, and they have worked satisfactorily to the present time.\*

As soon as the line to Goulburn is opened the Colony will possess the power of instantaneous communication over 130 miles.

The inhabitants of Albury having, at their own cost, continued the Victoria line to Albury, applied to the Government to have a station opened; and the necessary arrangements having been made, the Albury Station was connected with Belvoir on the 9th instant, and opened for public business. The temporary station in use has been erected and fitted at the expense of one of the inhabitants.†

I shall have the honor of immediately submitting, for the consideration of the Government, the terms upon which Mr. McGowan, (with whom I have been in communication upon the subject), proposes the accounts for inter-colonial messages should be arranged.

On the 15th March last the Government directed lines to be constructed to connect the Signal Station at Fort Phillip, the Port Office, and Post Office, and the Railway Office, with the South Head and the Albury lines, at a cost not exceeding £200, including instruments and batteries.

These extensions were completed on the 31st of the same month.‡ and they will ultimately effect a saving of labor, as messengers will no longer be required for the purpose of delivering shipping intelligence between the Harbour Office, Post Office, and Signal Station. The advantage to the Railway Department in meeting the wants, and ensuring the safety of the public using the rail, will be very great; and the more so as single lines extend. Indeed, it is barely safe to work a long single line of Railway without the security afforded by the telegraph.

Arrangements have been made by which messages can be transmitted between the Exchange and the South Head at any hour of the day or night, and the office will immediately be opened for night duty.

In order to form an economical staff of operators, who may at the same time be depended upon, young lads are being paid the nominal wages of 2s. 6d. per week, and trained up to a knowledge of telegraphy. Three are, already, fairly expert operators. I am informed this has given rise to some misconceptions as to the number of persons employed at the Exchange, but the system will be found advantageous to the public in whatever light it is viewed.

It will be necessary to take early measures to construct, or obtain, suitable buildings for stations up the country.

The construction of the New South Wales lines is similar to that of Victoria and South Australia; the instruments and batteries used are the same; and it is proposed to assimilate all the arrangements, as far as possible, to those of the sister Colonies.

The posts are sound saplings, twenty-three feet in length, nine inches at the base, and seven or eight inches at the top. They are of box, iron-bark, or stringy-bark, tarred and charred for five feet up from the butt, and the top bound with hoop-iron. They carry a single wire (No. 6, galvanized,) which is insulated from the posts by a brown earthenware insulator, of the umbrella shape, fixed on the top of the posts by a wooden, or, in some cases, iron pin, and secured by a mixture of resin, shellac, and Venice turpentine,—the wire being bound to the insulator at each point by a binding-wire (No. 16), and very perfect insulation appears to be maintained. The instruments used are Morse's Recording Instruments, and the batteries are Chester's Patent; and a sulphate of copper local battery is also being tried. The Offices are open from 9 A.M. to 6 P.M., daily, Sundays excepted, and messages can be sent at any hour of the day or night between the Exchange and the South Head.

When the line is opened through to Melbourne it may be anticipated the Electric Telegraph will be a reproductive work. Mr. McGowan, as I have already stated, is of opinion the Victoria lines will pay more than nine per cent.

I submit for the consideration of the Government, the importance of early extensions, at least, to Bathurst and Newcastle; the latter would, among more important matters, greatly facilitate the effective supervision of the Northern Railway.

The Government are aware of the immense importance of telegraphic communication with England *via* India.

The prosperity of the Colony, and its unity as a State, are inseparable from improvement in the existing condition of Internal Communication, whether Railways, Roads, or the Electric Telegraph be considered.

I have, &c.,

B. H. MARTINDALE.

\* These lines were constructed, and the instruments set up, under the immediate superintendence of Mr. Lay, now operating Clerk at Albury.

† Mr. Nichols.

‡ The assistance the Government have afforded me, by the appointment of Mr. Cracknell as Assistant Superintendent of Electric Telegraphs, permitted this service to be thus rapidly and efficiently performed.

RETURN showing the Progress and Present State of Electric Telegraphs in the Colonies of Victoria, South Australia, and New South Wales, up to July 31, 1858.

COLONY.	LINE.	LENGTH.	WHEN COMMENCED.	WHETHER COMPLETED OR IN PROGRESS.	COST.	REMARKS.
					£ s. d.	
Victoria .....	Melbourne to Williamstown .....	4	November 10, 1853 ..	Completed, February, 1854 .....	775 0 0	
Do. ....	Williamstown to Geelong .....	46	September, 1854 .....	Completed, December 5, 1854 .....	5,334 10 0	
Extension from						
Do. ....	Geelong to Queenscliff .....	20	September, 1854 .....	Completed, January 30, 1855 .....	2,315 0 0	
Do. ....	Melbourne to Sandridge .....	3	.....	Completed, July 1, 1855 .....	.....	
Do. ....	Geelong to Ballarat .....	58	May, 1856 .....	Completed, December 14, 1856 .....	4,756 0 0	
Do. ....	Melbourne to Sandhurst .....	125	May, 1856 .....	Completed, December 20, 1856 .....	9,125 0 0	
Do. ....	Ballarat to Portland and South Australian } .....	230	1857 .....	Completed, December 29, 1857 .....	15,065 0 0	
Do. ....	Boundary .....					
Do. ....	Melbourne to Belvoir .....	250	.....	Completed, December 5, 1857 .....	14,937 10 0	
Do. ....	Castlemaine to Ballarat .....	.....	.....	In progress .....	.....	
Do. ....	Queenscliff to Cape Otway .....	.....	.....	Progress .....	.....	{ To connect Tasmanian lines by submarine cable via King's Island to Cape Grim.
South Australia ....	Adelaide to Portland and Le Fevre's Peninsula .....	10	December, 1855 .... {	Completed to Port Adelaide, February 18, 1856, Le Fevre's Peninsula, March, 1856..	3,024 0 0	
Do. ....	Adelaide to Gawler Town .....	28½	January, 1857 .....	Completed, April 14, 1857 .....	1,576 0 0	
Do. ....	Adelaide to Victorian Boundary .....	300	May, 1857 .....	Completed, June, 1858 .....	20,500 0 0	
New South Wales ..	Sydney to Liverpool .....	22	June 1, 1857 .....	Completed, October 1857, and opened January 26, 1858 .....	.....	
Do. ....	Sydney to South Head .....	7	October 27, 1857 .....	Opened, January 26, 1858 .....	637 6 8	
Do. ....	Liverpool to Pictou .....	32	May, 1857 .....	Completed, March 18, 1858 .....	.....	
Do. ....	Pictou to Albury .....	350	January, 17, 1858 ....	In progress .....	.....	{ Opened to Goulburn, 17 May, 1858; completed to Yast, June, 1858; probable date for completion to Albury, October 15, 1858.
Do. ....	To connect Signal Station, Post Office, Post Office, and Railway Station .....	2	March 15, 1858 .....	Completed, 31 March, 1858 .....	198 4 8	
Tasmania .....	Launceston to Hobart Town .....	120	.....	.....	.....	
Do. ....	Georgetown to Launceston .....	40	.....	.....	.....	
Do. ....	Georgetown to Cape Grim .....	.....	.....	.....	.....	{ To connect the Victorian lines by submarine cable via King's Island to Cape Otway; submarine cable to be completed, 1 May, 1859.