



Overland Telegraph Line: 150th Anniversary

Hosted by the [Royal Geographical Society of South Australia.](#)

GeoNight: 1 April 2022

For an interactive map of the OTL click [here.](#)

Background

In 1852 it took months for a letter to reach its destination.

Worldwide postal speeds in 1852	
A letter from London would take ...	Final destination
12 days	New York, USA
13 days	Alexandria, Egypt
19 days	Constantinople in Ottoman Turkey
33 days	Mumbai (Bombay), India
44 days	Kolkata (Calcutta), India
45 days	Singapore
57 days	Shanghai, China
73 days	Sydney, Australia

Background

Proposals for an international connection with Australia, from England were discussed and planned in 1854 and in 1858

The proposed route was by India to Singapore to Indonesia (then Dutch territory) in the north, by cable around the east coast to Brisbane and by landline to Sydney.



Background

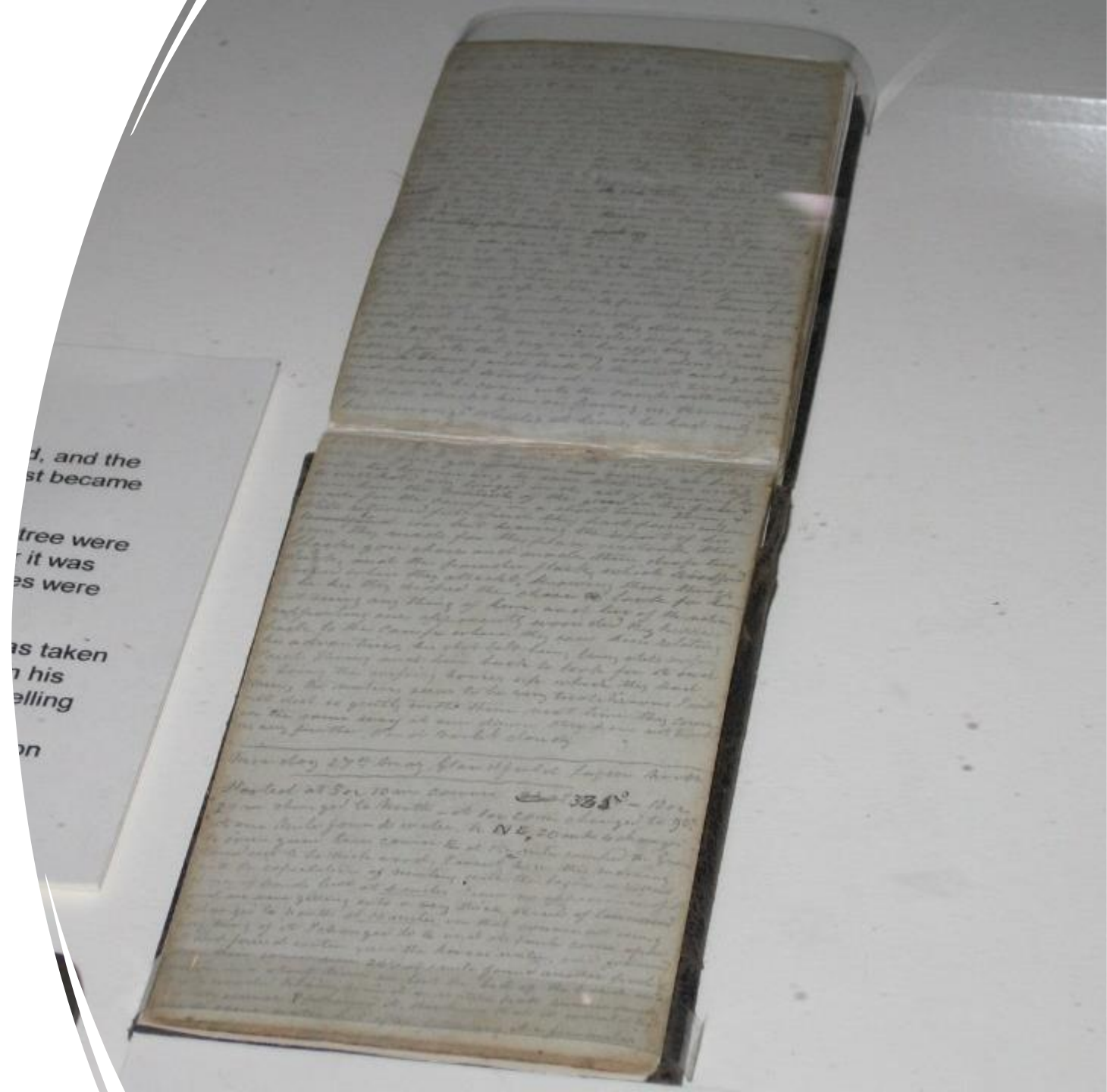
In Australia a telegraph **line from Adelaide to Melbourne was doubled, and a direct line to Sydney was completed in 1866**

A line was run to Port Augusta in 1865 which could be a starting point for extension west or north.



Background

John McDouall Stuart's crossing of the continent in **1862** proved the feasibility of the project but the discussions lapsed in **1863**



Background

1866 saw a resurgence of English proposals, and early in **1870 the British Australian Telegraph Co. planned to land a cable near Palmerston (Darwin)**

The company sought permission to land the cable in Palmerston (present-day Darwin)

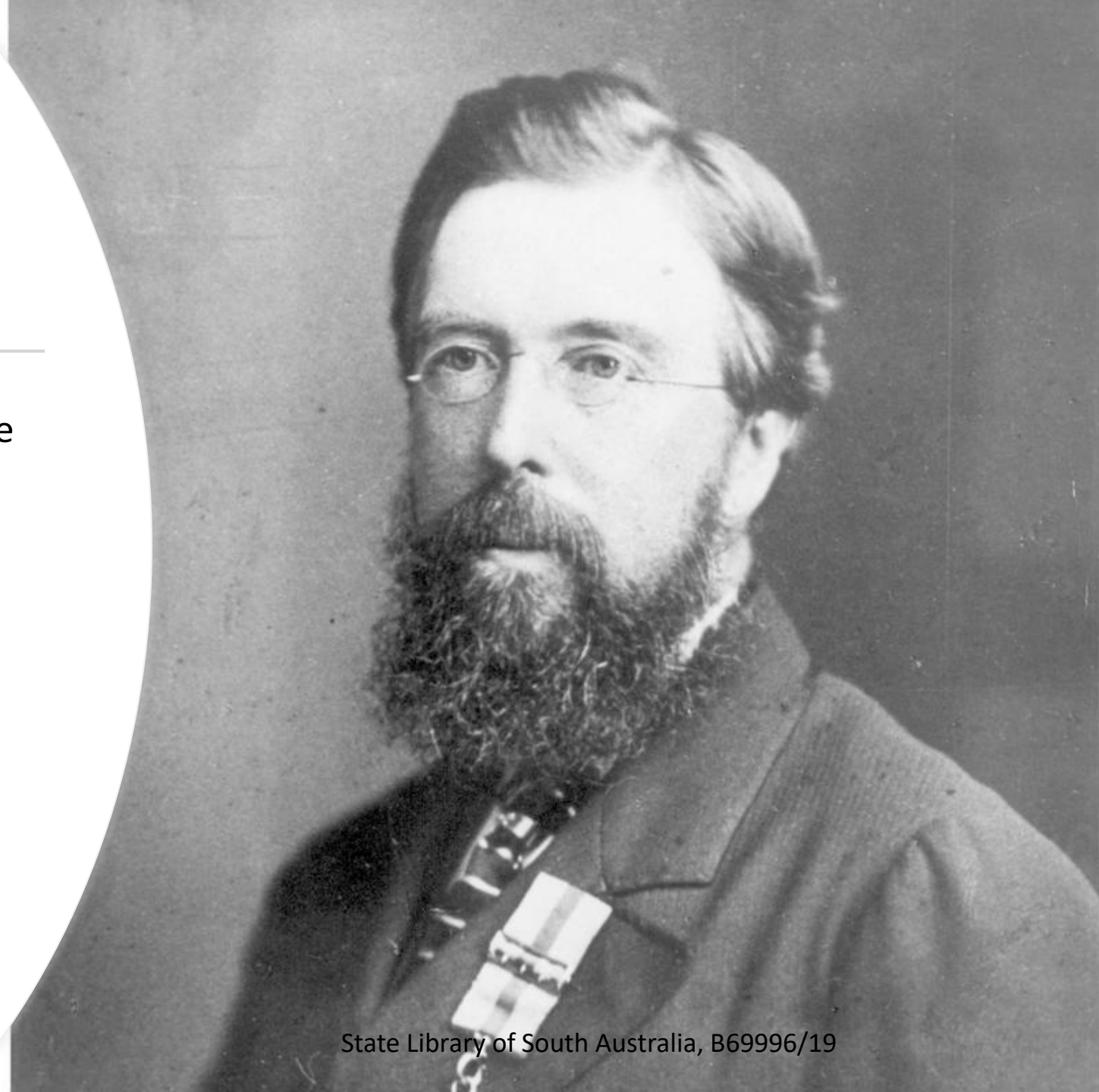
Henry Bull Strangways, premier of South Australia, decided to build an overland line to Darwin, independent of other colonies, and the company accepted.



Barrow Creek Telegraph station

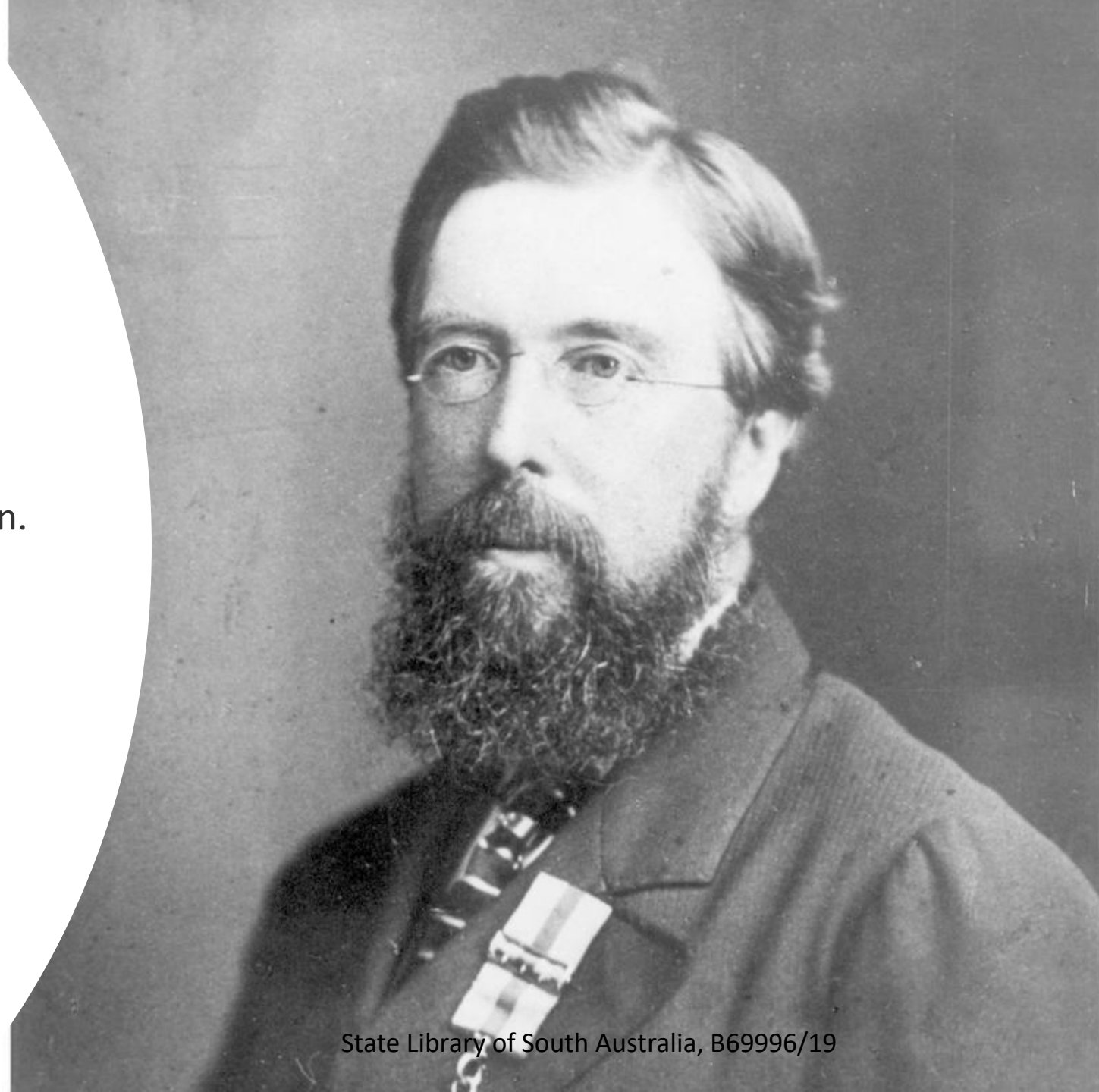
Charles Todd

Charles Todd managed the construction of the OTL who was then Postmaster General and Superintendent of Telegraphs, after being appointed in 1870.



Charles Todd

Sir Charles Todd (1826-1910) was an astronomer, meteorologist and electrical engineer, born 7 July 1826 in Islington, London. He was appointed to the Royal Observatory, Greenwich in 1841. As junior assistant to Professor Challis at the Cambridge university observatory in 1848-54 he assisted in the determination of longitude between the Cambridge and Greenwich observatories by telegraphic means.



Charles Todd

Early in 1854 he returned to Greenwich as superintendent of the galvanic apparatus for the transmission of time signals. This involved close co-operation with the Electric Telegraph Co., and also with C. V. Walker, electrical engineer to the Southeastern Railway, who was one of the pioneer experimenters with submarine cables.



Charles Todd

In 1855 the South Australian government requested Sir George Airy, the astronomer royal, to select an observer and superintendent of electric telegraph at a salary of £400; he nominated Todd, who was appointed on 10 February. He reached Port Adelaide in the *Irene* on 4 November 1855.

Todd was also a councillor for the RGSSA, from 1889-1890.



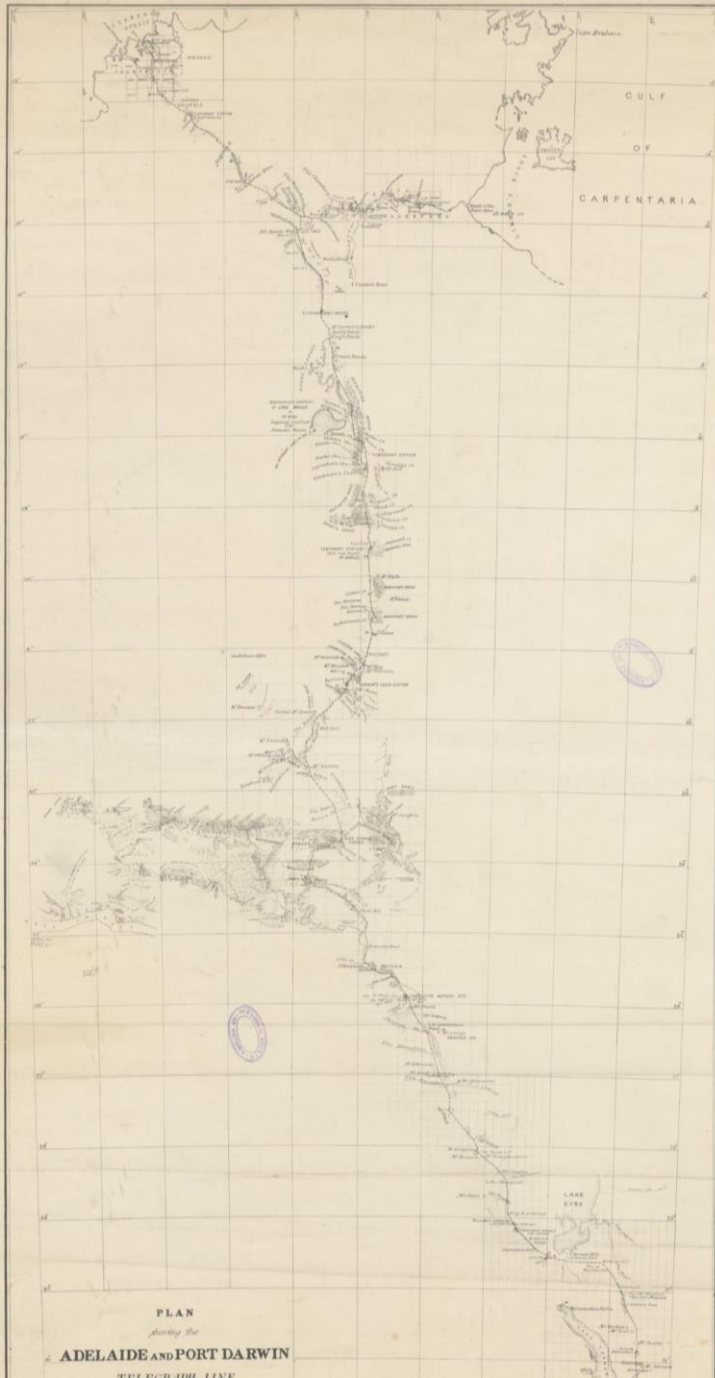
OTL Construction

Charles Todd divided the route into three regions: the northern and southern sections (to be built by private contractors), and the central area to be built by his department.

Southern Section: Port Augusta to Oodnadatta,

Middle Section: Oodnadatta to Roper River

Northern Section: Roper River to Darwin



Route of the OTL

The OTL followed, as close as possible, the route mapped out by [John McDouall Stuart's](#) crossing of the continent in 1862.

This itself was built on a route used by Aboriginal people for millennia

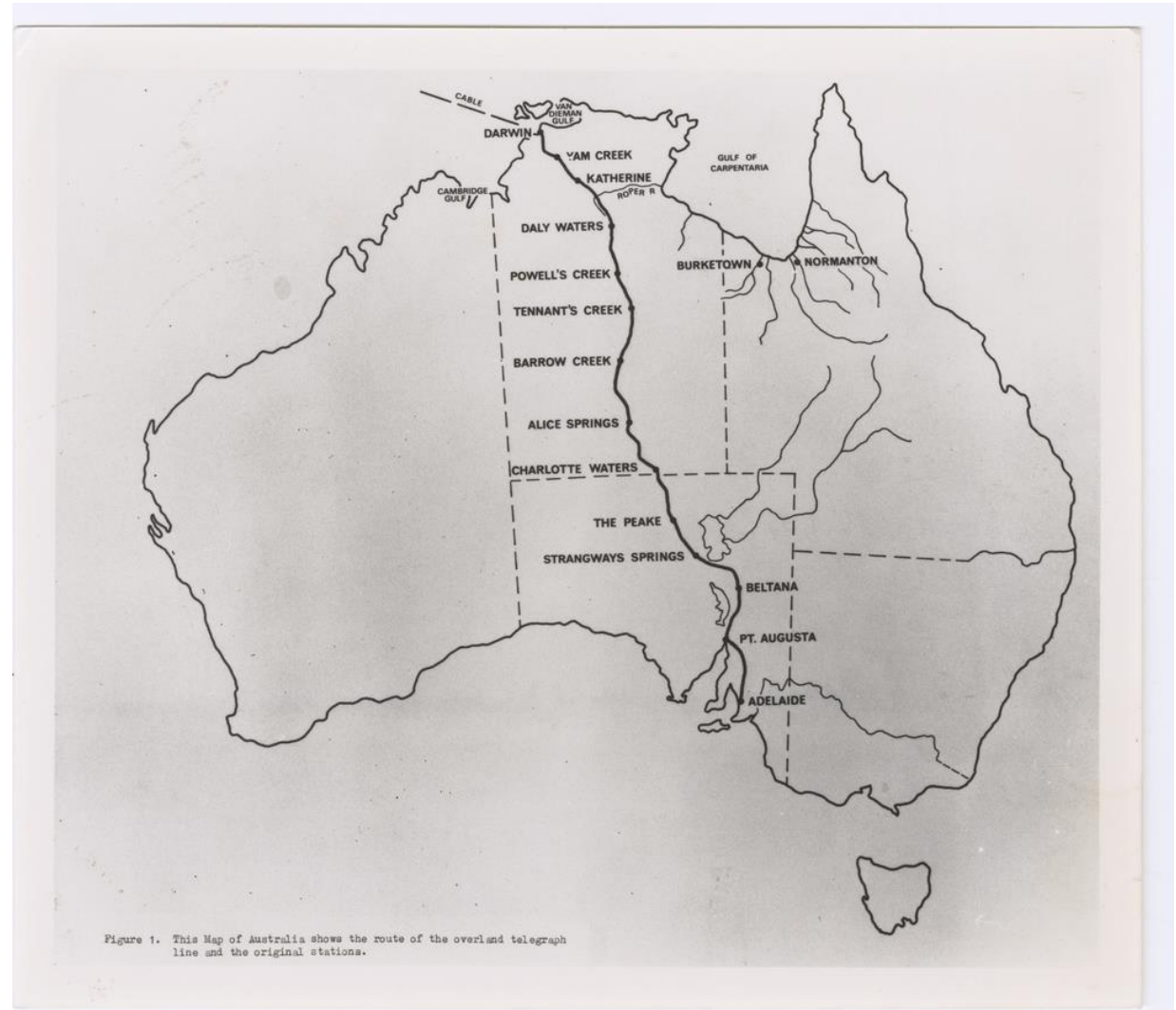


Figure 1. This Map of Australia shows the route of the overland telegraph line and the original stations.

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State Library of South Australia



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*Camp of the Northern Territory Survey Expedition
Island Telegraph
Construction Party
Port Darwin*

Port Darwin (Palmerston) 1870

8 June 1870 Port Augusta to Port Darwin Telegraph Bill introduced

16 June 1870 Bill received assent

20 August 1870 Work team leaves Port Augusta by ship for Port Darwin

15 September 1870

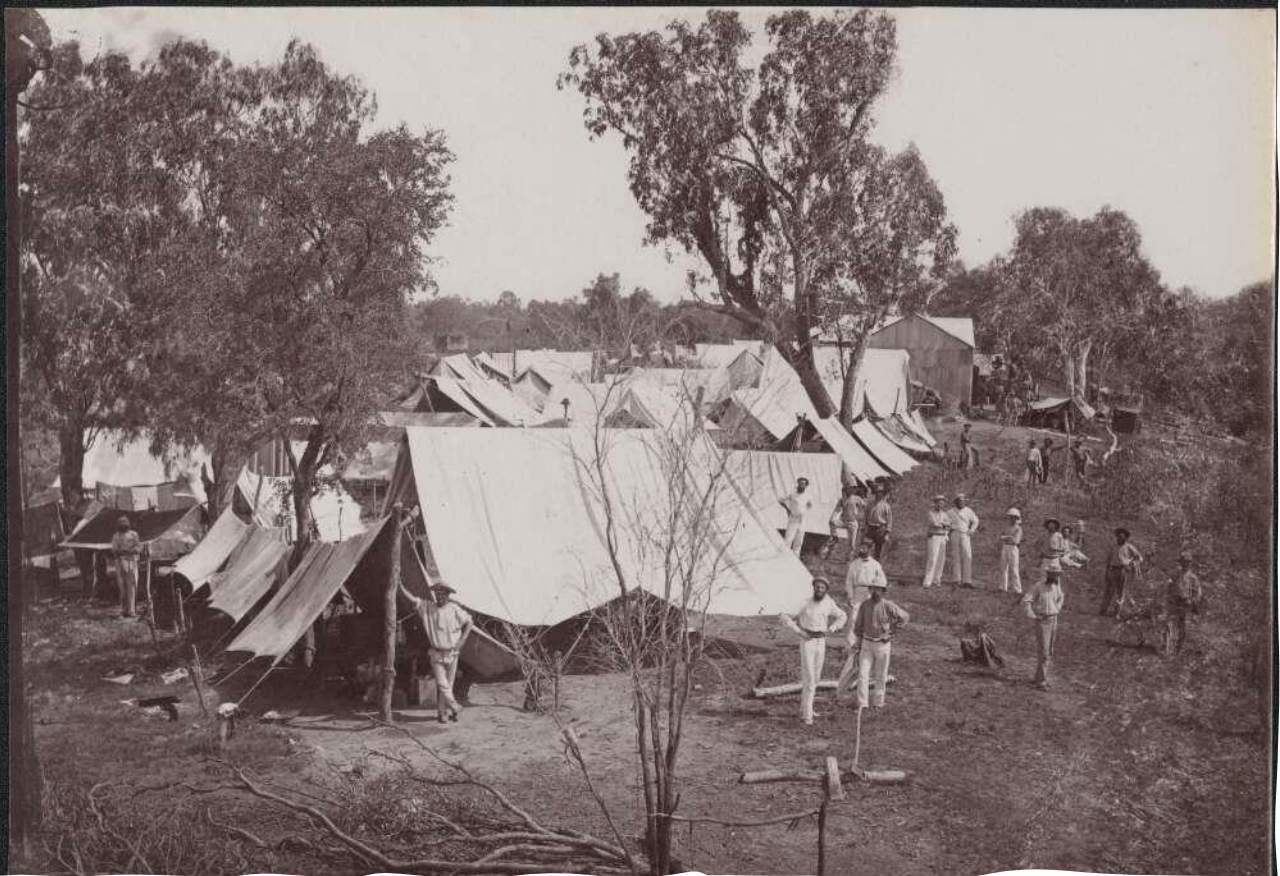
First pole ceremoniously sunk at Port Darwin.

This was the first of 36, 000 poles that were needed, planted at 80 m apart.

Here is an image of the event.



B



Workers of the Overland
Telegraph Line in ~1870,
Southport Darwin

Workers of the OTL in Roper River,
1870

18 November 1871

The Underwater cable reached came ashore at Lameroon Beach (Darwin) on **18 November 1871** from Java, Indonesia.

The first successful international message was received the next day.



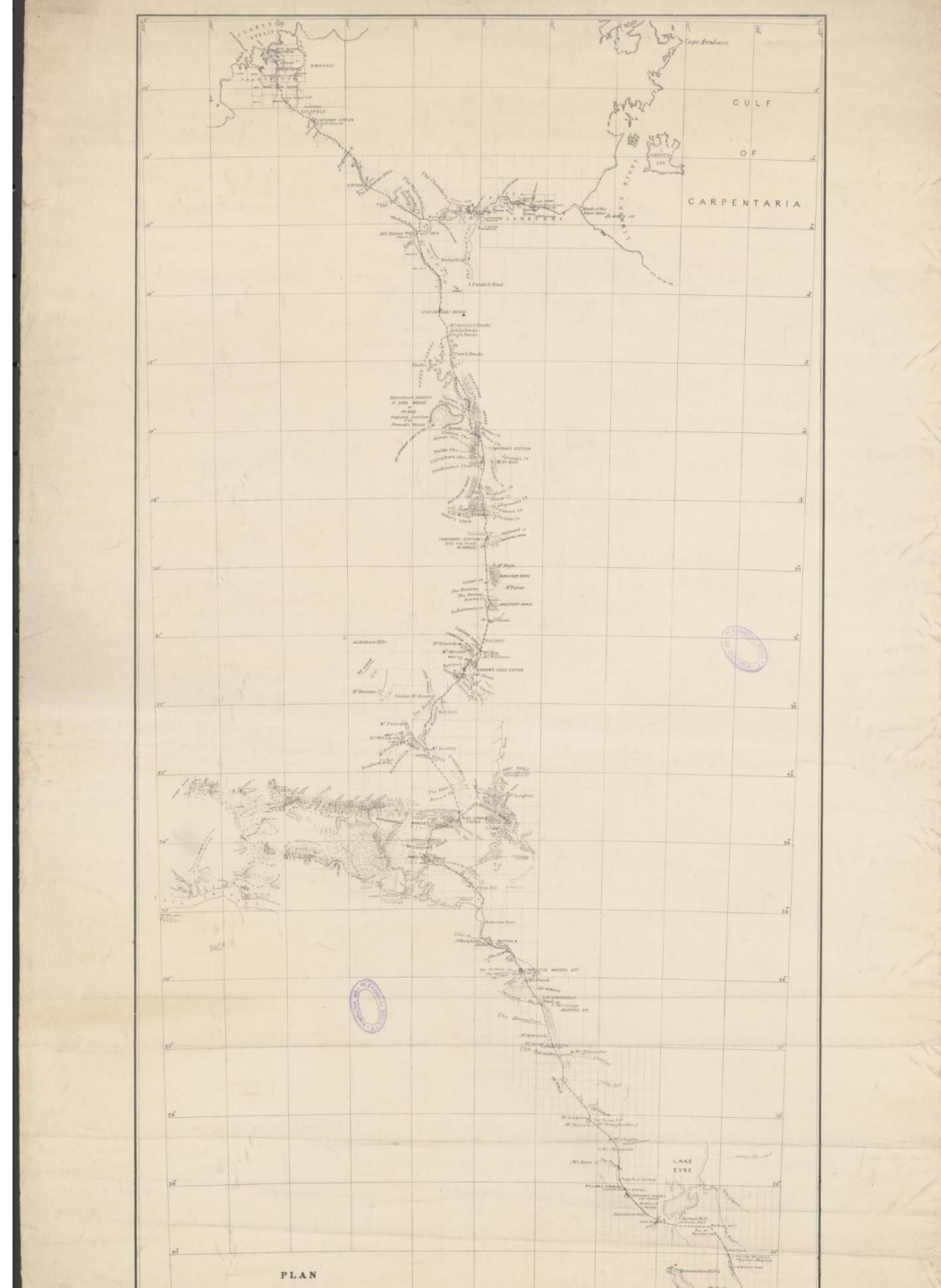
OTL Construction

The construction of the northern section of the line was delayed during the **1870/71 Wet Season** (from November-March) which caused flooding and waterlogging.

The workers were plagued by mosquitoes, suffered disease, and complained about the rancid food.

The original contractors were cancelled and the SA government (led by Todd) became in charge of the northern section

Map showing telegraph line, sections and stations. Relief shown by hachures and spot heights. "Country shewn between Lat. S 23 and 26 and Long. 129 and 135 is from Mr. Ernest Giles' Explorations 1872".



OTL Construction

In **July 1871**, Robert Patterson was put in charge of the Northern section of the OTL and relocated north.

He divided the remaining section into four sub-sections to be worked.



(L-R) John A.G. Little, R.C. Patterson, Charles Todd and A.J. Mitchell
State Library of South Australia, B4639



B 9762

21 January 1872 Charles Todd goes into the field to restart work from Roper River

Todd inspected the incomplete section between Elsey to Tennant Creek in July 1872, accompanied by R. Patterson.

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B 18699

OTL Operation, horse pulled wagon

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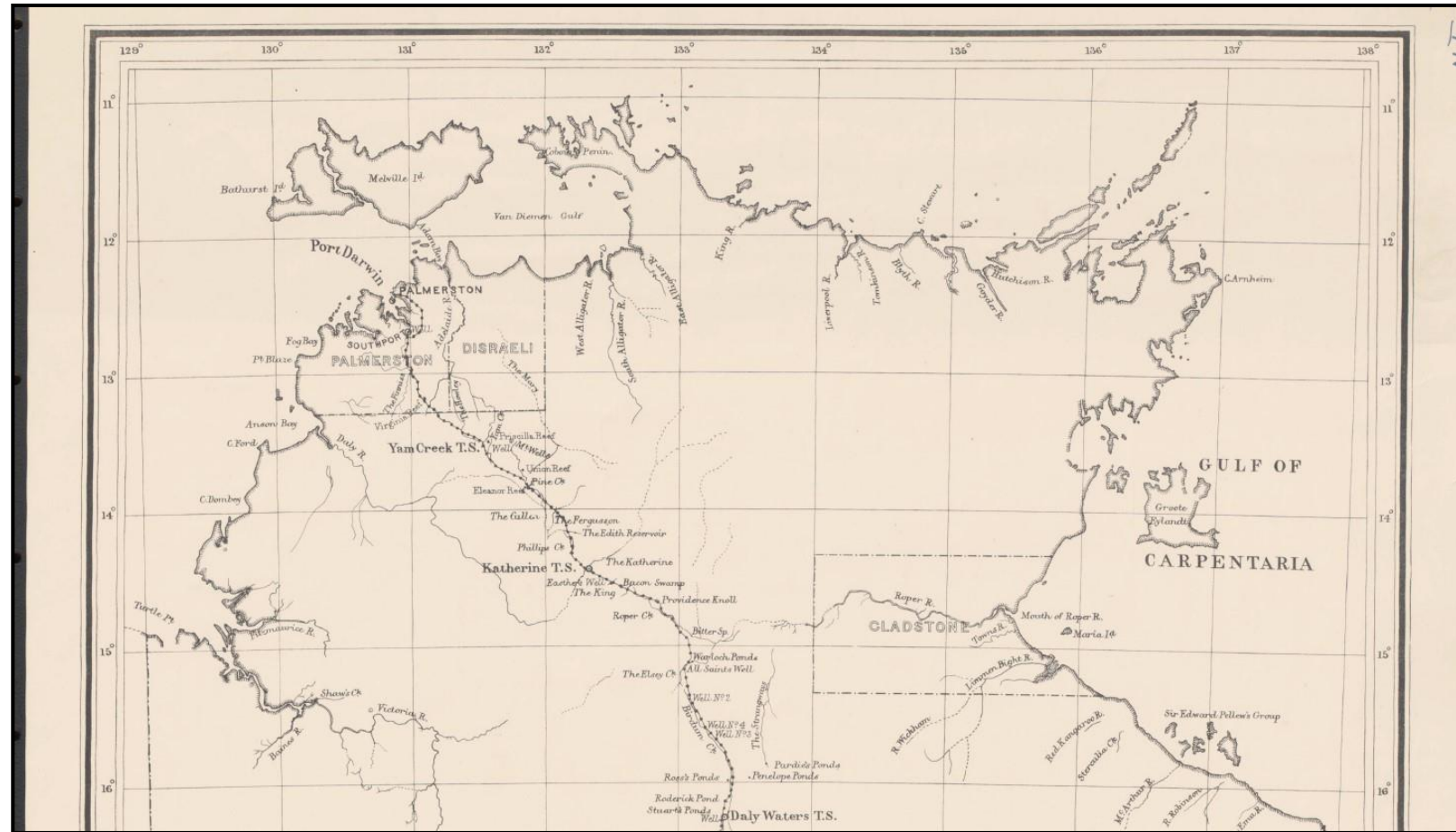
RGSSA Connection

The Estafette carried messages between the ever-closing ends of the constructed telegraph line until it was finally joined up in 1872.

John Lewis, one of the past presidents of RGSSA, ran the horse relay, which carried information and connected the two lines (northern section with the completed middle and southern section).



22 May 1872 Todd sends first telegram across Australia from Port Darwin to a temporary station on Elsey River; then by horse to Tennant Creek; then by telegraph to Adelaide. This took 9 days



Map showing telegraph line, sections and stations in the northern section. Relief shown by hachures and spot heights. "Country shewn between Lat. S 23 and 26 and Long. 129 and 135 is from Mr. Ernest Giles' Explorations 1872"

Frew's Pond

The final connection between the different section of the OTL was made on 22 August 1872, approximately 8 months behind schedule.

There is a memorial located to the event on the Stuart Highway (the main road, Darwin to Adelaide), indicating Frew's Pond 7 km to the west



There were 12 repeater stations (to receive and transmit message) for the route, spaced ~250 km apart.

Follow this [link](#) for the mapped route of the OTL, with historic photographs, and an idea of the sheer scale of the project!





Charles Todd Exhibition 2022

The OTL story told through the diaries of Stuart, Giles and others. Charles Todd's work as a founding member of the RGSSA

[AT THE ROYAL GEOGRAPHICAL SOCIETY](#)

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NORTH TERRACE ADELAIDE

MAY TO DECEMBER 2022
ONLINE CATALOGUE [HERE](#)

- Sweet, Samuel White. (). *Camp of the Overland Telegraph Line workers at Roper River, Northern Territory, approximately 1870* Retrieved March 26, 2022, from <http://nla.gov.au/nla.obj-153072856>
- Sweet, Samuel White. (). *Workers on the Overland Telegraph Line, Southport, Port Darwin, Northern Territory, approximately 1870* Retrieved March 26, 2022, from <http://nla.gov.au/nla.obj-153072257>