
Background research into Charles Todd's diary of a tour on the Continent and in England and of a voyage out to Australia 1885-86 held in the State Library of South Australia as PRG 630/6

Compiled by Kerry Durrant, Volunteer at the State Library of South Australia, 2014

The diary

This diary was written by Todd as a record of his daily activities, from his departure from Berlin at the end of the Telegraph Conference to his first sight of Australia on his way home to Adelaide. He gives no indication as to his reasons for starting a diary at this point. The Anglo-Colonial columns in the South Australian newspapers refer to his extensive round of activities. By no means are all of the details of each day recorded. Although he was involved in ongoing negotiations regarding postal, telephone and telegraphic matters these appear only in passing. Similarly he notes letters written but the listing is probably not a complete record of his letter writing. Apart from his two spells of sightseeing—the first being the trip back from Berlin to London and the second the few days in Wales with his daughter, Lizzie—he was based in London with stays in Stockport with Joseph Oppenheimer and shorter ones in Cambridge and Ongar.

Sources

The National Library of Australia's newspaper digitisation site [Trove](#) was used extensively in the research on the people and background to this diary. Further sources of information used for a variety of entries were the [Australian dictionary of biography](#), [Oxford dictionary of national biography](#), [United Kingdom Census data](#) and [Wikipedia](#). There is a large amount of information about the early days of telephone and telegraph to be found in specialist histories, many of which are available on the Internet, some of which are quoted here.

The people mentioned in Todd's diary fall into various categories:

- Australasian government representatives with whom he was involved chiefly with matters arising from the Berlin Conference
- Business contacts
- Academic, astronomical and meteorological contacts from his early working life in England as well as from his career in Australia
- Telegraphic contacts from his long involvement and interest in this area, as well as friends and associates from his Overland Telegraph project.
- Family, including not just his own immediate members but also members related by marriage
- Friends from Adelaide, as well as those in England, who overlapped with other categories, such as Joseph Oppenheimer, with whom he stayed and with whom he had worked closely for many years
- Friends from church—as a regular churchgoer he met a variety of local people.

TODD BIOGRAPHICAL NOTES

Beginnings

Sir Charles Todd KCMG FRS was born on 7 July 1826 at Islington in London and was educated at Greenwich. He started work at the Royal Greenwich Observatory as an astronomical computer in December 1841 followed by the Cambridge University observatory from 1847-1854.

Sir George Airy, Astronomer Royal 1835-1881, and the Royal Greenwich Observatory

Prior to his appointment to Greenwich Airy had been Director of Cambridge Observatory from 1828. There he showed his remarkable power of organization in setting the establishment on a firm footing both in obtaining equipment as well as staff for observing and for reduction of these observations for publication.

On the retirement of the then Astronomer Royal, John Pond, Royal Greenwich Observatory was seen to be very much in need of such a person to take charge. On taking up the position of Astronomer Royal Airy immediately began to reorganize the whole place so that by 1859 the comment was made that there was "not now a single person employed or instrument used in the observatory which was there in Mr. Pond's time."

A task he regarded as essential was the reduction of sets of planetary and lunar observations made between 1750 and 1830 to render them suitable for publication as he had been doing with his current observations in Cambridge. The team of young men he employed as temporary computing staff for the lunar observations included Edwin Dunkin and his younger brother Richard who were chosen by Airy in 1828. Further members of the group were William Ellis, who started work at the age of 13 in 1841 and Charles Todd who also started in 1841.

On completion of this project, a number of the members including Edwin Dunkin and William Ellis were transferred as more permanent members of staff to the Astronomical Department of the Observatory. Edwin Dunkin retired from Greenwich in 1884 and William Ellis in 1893. Charles Todd had accepted an appointment as Assistant Astronomer at Cambridge University in 1847 but returned to Greenwich, also as an assistant astronomer, in 1854. This appointment was only of short duration as in 1855 Airy was asked by the South Australian Government for a recommendation for the new position of Astronomical and Meteorological Observer, and Head of Electric Telegraph Department in South Australia and recommended Todd.

South Australia

Todd accepted the position in February 1855 and he and his wife, Alice Gillam Bell, arrived in Adelaide in November 1855 along with Todd's assistant, 24-year-old Edward Cracknell and his wife.

At this time there was not a single telegraph line in South Australia let alone the network he had been using in England. In typical fashion, he wasted no time in starting on a South Australian network with the first line from Adelaide to Port Adelaide opened in February 1856. He saw the necessity for connection with the other Australian colonies and in July 1858 South Australia was linked to Victoria near Mount Gambier. This was followed by connection to Sydney in 1868 and eventually the rest of Australia. International connection by the completion of the Overland Telegraph from Adelaide to Darwin and hence via Java to London occurred in 1872. (Todd had originally proposed a transcontinental line to the Governor of South Australia in 1859.)

These were magnificent achievements and Todd involved himself personally in them all. However he certainly did not neglect his other responsibilities and on arrival had also seen to starting the building of Adelaide Observatory on West Terrace. This was completed in 1860. In 1870, while negotiations for the Overland Telegraph were taking place, he had added the appointment as postmaster-general for South Australia to his activities.

The network of telegraph stations enabled him to have a network of meteorological stations which reported daily to the Adelaide Observatory. These observations were processed and published daily as bulletins and maps. These evolved with the networks and the Australian and New Zealand telegraph networks were completed during the 1870s.

Joseph Oppenheimer

Not only was he roughly of the same age as Todd but he also arrived in Australia to take up business in Melbourne at the end of 1855 at almost the same time as Todd arrived in Adelaide. Both were responding to the start of the telegraph era in Australia set in motion by the appointment of Samuel McGowan as Superintendent of the Electric Telegraph in Victoria. South Australia contacted the Astronomer Royal, George Airy, in England for somebody who might fill a similar role in South Australia and it would seem Oppenheimer & Co in Germany also sensed an opportunity. McGowan had worked with Morse in US and the equipment for the first lines in Victoria was bought from Morse which gave one-way traffic only. The first line in South Australia used newly developed Siemens equipment which allowed simultaneous two way traffic and this would have been obtained through Oppenheimer's company in Melbourne.

How long Oppenheimer was resident in Australia is not clear. He was resident in the Manchester area of Lancashire for the censuses of 1871, 1881, 1891 where he is listed as 'Australian Merchant'. He applied from Manchester for patents for improvements in telegraph poles to South Australia in 1870 and 1884. It is likely that he would have visited Australia to attend to business, for example a visit from August 1872 to January 1873 in the course of which he dissolved his share in a business partnership in Melbourne leaving his former partner to carry it on.

Note that Oppenheimer poles were used in the construction of the Overland Telegraph and a number of them still stand at the site where the two ends of the line were connected in 1872. They were also used in the telegraph line across the Nullarbor. These iron posts had the great advantage of being termite proof as well as, from their construction, providing easier transportation and erection.

Todd's departure from Adelaide and activities in England June-August 1885

On 23 April 1885, Charles Todd sailed from Adelaide to London and returned home in May 1886. The major factor in undertaking this break from Adelaide was a severe spell of illness which gave warning that he had overtaxed his strength and injured his health. Since arriving in Adelaide in 1855 he had accomplished a great amount over a wide range of activities. By this time he was Postmaster General and Superintendent of Telegraphs as well as Government Astronomer and Meteorologist. His work was recognised not only locally but overseas. He had already been awarded a CMG in 1872 and made a Fellow of the Royal Astronomical Society (RAS) in London in 1864.

In typical fashion he seized this opportunity not just to have a well-earned break but also to gain first hand exposure to information on postal, telegraphic and electrical lighting matters in Europe and England, as well as anything else which might be of interest to him and benefit to South Australia. It enabled him to be the delegate for South Australia at the International Telegraphic Conference in Berlin. He was accompanied on this trip by his daughter Lizzie.

The Anglo-Colonial Gossip (SA Register) and Anglo-Colonial Letter (SA Advertiser) write of the same mix of activities which are later taken up by his diary. In London his spells of ill health continued but he did have brief breaks on purely tourist sightseeing trips. Professionally he covered a wide area and in the one day he could spend time on several fields of interest. As well he was able to enjoy concerts and dropping in on friends. This would have been helped by having a home base.

From their initial stay at de Keyzers Royal Hotel, South Kensington, the Todds moved to 6 Vere Street, Westminster in July 1885. Todd had a further stay at the hotel early in November 1885 when he arrived back in London from Stockport feeling very ill before continuing on to Vere Street after a few days.

He arrived in London from Australia on Wednesday, 10 June 1885, and left for Berlin early in August. On his first day in London, Thursday, 11 June, he visited the Agent General for South Australia, Sir Arthur Blyth, and while there spoke with Edward Charles Cracknell. He and Cracknell then went to visit the International Inventions Exhibition which had opened on 4 May in South Kensington. Todd paid a second visit to this exhibition with Neville Blyth shortly after his return from Berlin in early October.

Todd found himself welcomed to London with invitations and he enjoyed these varied occasions. He talked on Monday, 14 June, to the Royal Astronomical Society (RAS) on astronomical activities in South Australia and on Wednesday, 16 June, to the Royal Meteorological Society (RMS) on South Australian meteorological activities.

He had started his working life in 1841 at the Royal Observatory, Greenwich where Sir George Airy was Astronomer Royal and Director of the Observatory from 1835-1881. He was therefore honoured to have the 85 year old Sir George eager to take him on Friday, 18 June, on a thorough tour of the Royal Observatory regardless of considerations of age or health.

On 23 June he visited the Telegraph Construction and Maintenance Company and lunched on board their cable-ship, Seine.

On 24 June he was able to visit Cambridge where his brother, Henry, was employed in a similar position at Cambridge Observatory to that Charles Todd himself left for Adelaide in 1855. Given the time that had elapsed since the two brothers had seen each other it is not surprising they did not instantly recognise each other on the station platform!

On 25 June he had dinner with the President of the RAS. On 30 June he was invited by the president of the Society of Telegraphic Engineers to be entertained and to inspect works at Swindon.

Early in August, on the way to Berlin he visited Hamburg where he met George Rumker, the Director of the Hamburg Observatory and son of Charles Rumker. Charles Rumker was Australia's first official Government Astronomer and was manager of Parramatta Observatory from 1821-1829. There his major work was cataloguing the stars of the Southern Hemisphere. He published his preliminary catalogue in 1832 after returning to Hamburg then the catalogue itself of 12,000 stars was published from 1846-1852.

Todd would have made a number of contacts in Berlin at the conference and he was able to call on them to visit and see for himself manufacturing processes as well as postal, telephone and telegraph offices.

On his return from Berlin via Paris, Todd enjoyed being a tourist and sightseeing at various places. In Cologne (23 September), however, he was taken by Franz Carl Guillaume to visit the Felton & Guillaume Carlswerk plant to see their manufacture of a wide variety of wire including telegraph wire. Then, in Paris he noted (29 September?) the lighting in his hotel. He was also taken around the Central Telegraphy Office, the Telephone Exchange and the Central Post Office on 30 September.

Todd arrived in England from Paris on Thursday, 1 October 1885, and sailed for Australia on Thursday 8 April 1886. He filled these months following a variety of activities covering friends, social activities and business pursuits and a combination of all of these.

FAMILY AND CLOSE CONNECTIONS

Cambridge

Todd's connections with Cambridge date back to his employment as an Assistant Observer at the Cambridge Observatory from 1847 to his return to the Royal Observatory at Greenwich in 1854.

Shortly before departure for South Australia in 1855 he married Alice Bell whose family lived in Cambridge. Alice was one of eleven children, six of whom were alive in 1855 as well as her parents. In 1885 Alice's brother, Edward Bell, was Mayor of Cambridge and lived in the Manor House at Chesterton. By this time, only three children remained and by the end of 1886 only two, Edward and Alice.

Todd's younger brother, Henry Todd, was employed as Junior Assistant at the Cambridge Observatory from 1860 to 1890. Todd visited his brother in Cambridge shortly after his initial arrival in England, and again in March 1886 when he visited Cambridge to receive his Honorary MA.

Other family (Ongarie) – 139 Uxbridge Road

This visit to England in 1885-1886 gave Todd the opportunity to catch up with his family again after all his years in Adelaide. As noted above he visited his brother in Cambridge soon after arriving in London in June 1885.

It would seem that the period from his initial arrival in London in June, 1885 to his return there from Berlin late on October 1 gave no opportunity for a meeting with other members of the family. But they had obviously been in touch with each other, as on Saturday, 3 October, he wrote in the diary that 'Mrs King – Mrs Bishop & Mrs Gamble spent day with us.' However, this formality did not persist.

Mrs Mary King was his elder sister, born in 1823. Mrs Elizabeth Bishop, known as Liz or Lizzie, was his younger sister, born in 1830. She had been married to Samuel Bishop (1831-1873) and lived with her two daughters at Roden House, High Street, Chipping Ongar. Mrs Emily Gamble (born Bishop) was Mrs Bishop's sister-in-law. At the time of the 1881 census she was living at Milton Lodge, Uxbridge Road, Hammersmith and at the time of the 1891 census she was living at 139 Uxbridge Road, Hammersmith (i.e., the same house). Hence the diary references to UR, 139, and so on.

A further member of the Bishop family, Joseph, who was brother to Samuel and Emily, was married to Todd's cousin, Mary Emily. They lived in Acton which was a neighbouring suburb of Hammersmith and Shepherd's Bush and thus close to 139 Uxbridge Road.

On 7 November, despite Todd being ill and being looked after in the Royal Hotel, he met his sister, now referred to as Lizzie, at Fenchurch Street Station where she had come in the train from Ongar. They lunched and he escorted her to Hammersmith where she was staying with Mrs Gamble.

The next day Todd spent the afternoon and evening 'at 139', i.e. with his sister and her sister in law in Hammersmith. He records he was in great pain and the next day 'Sister Lizzie and Mrs Gamble' called on him at the hotel where they all watched 'from a front window' the Lord Mayor's Show pass by.

Although Todd returned to Vere Street a day or so later he regarded himself as more or less housebound until departing for Stockport on 18 December. Even then he was 'still in pain tho getting better'.

He travelled to Ongar on 5 January 1886 and stayed there for a week and 'much enjoyed myself'. He, together with 'Sisters Lizzie & Mary & Mrs Gamble', returned to London on 13 January where he again stayed at the Royal and they at 139 Uxbridge Road (UR or 139 UR or 139). From now on the diary notes various meetings of the family members at UR and elsewhere. References to Angaric (as transcribed), i.e. Ongarie or a combination of Ongar and coterie, remind us of Todd's love of jokes as well as being a shorthand for diary writing. Note: OED gives congeries = collection of things merely heaped together, whereas coterie = a circle of persons associated together and distinguished from outsiders; a set; a clique; a meeting of such a circle.

His final farewells included so many of the names from his stay. Departure from Liverpool Street station listed a group, then those who came further to come on board ship were sent ashore until finally EG (Emily Gamble from 139 UR!) and Mary (his sister) went ashore with the pilot to the Isle of Wight leaving him 'very sad at leaving old England – but I am going Home sweet home'.

Oppenheimer/Stockport

Todd made a brief visit to northern England shortly after his arrival in June. The newspaper report states that it was supposed to give him a break from his hectic activity in London but that it seemed to be no less so while away. His first stay mentioned in the diary was from Monday, 12 October, to Saturday, 31 October, when he departed with Lizzie for a few days holidaying in Wales returning to Town on Thursday, 5 November.

He was joined by Edward Charles Cracknell from Tuesday, 19 October, when Todd and Oppenheimer went to Birmingham to meet him and visit the Taunton & Hayward works together. The three of them spent the next day together as tourists in Manchester. On Saturday, 23 October, Todd and Cracknell visited the Liverpool telephone Exchange which Todd found very interesting. Cracknell then returned to London and Todd to Stockport. Todd and Lizzie spent Christmas at Stockport again at South Cliffe from 18 December to Tuesday, 5 January. From there Todd went to stay at Ongar and Lizzie at Cambridge. He was able to spend a weekend in Stockport from Friday, 26 February to Wednesday, 3 March, and visited Manchester Post Office Tuesday, 2 March.

His final visit to Stockport was very brief – overnight only (Tuesday, 6 April / Wednesday, 7 April) – returning less than 24 hours before catching the train to embark on return to Australia.

Return to Adelaide

PEOPLE

The names listed here are mentioned in the diary for the period in which Todd was in England from 6 October 1885 to 9 April 1886.

Adams, John Couch, FRS (1819-1892) mathematician and astronomer, Director Cambridge Observatory 1861-1892. Sponsor of Charles Todd for Honorary MA 1886.

Airy, Sir George Biddell, KCB, FRS (1801-1892) Astronomer Royal 1835-1881
In 1855 he was approached by the South Australian government to select an observer and superintendent of electric telegraphs. He nominated Charles Todd who had started his working life at Greenwich in 1841 before moving to work in Cambridge in 1848. Todd returned to work at Greenwich in 1854 as superintendent of the galvanic apparatus for the transmission of time signals and had become fascinated with telecommunications.

Anderson, Sir James (1824-1893) captained SS Great Eastern on the laying of the transatlantic telegraph cable in 1865 and 1866. He became a major figure in the management of a number of the leading cable companies in Britain. At the 1885 International Telegraphic Conference in Berlin he represented the Eastern telegraph company and the Eastern and South African telegraph company, in both cases as a Director of the company.

<http://atlantic-cable.com/CablePioneers/Anderson/index.htm>

Baker, Sir Richard Chaffey (1841-1911) Barrister, pastoralist and politician. In 1885-86 he visited England to negotiate a postal union between Great Britain and the Australian colonies. In recognition of the success of this important mission he was appointed C.M.G. in 1886.

Barkly, Sir Henry, GCMG, KCB, FRS, FRGS (1815-1898) was a British politician, colonial governor and patron of the sciences. He was Governor of Victoria 1856-1863.

Beck, John (1827-1903) Director London branch of the Commercial Bank of South Australia. On Wednesday, 24 February, 1886 all payment was suspended, doors were closed and business stopped. (In London, not until the following day.) The bank went into liquidation later that year.

Bell, Edward (1827-1889) Lord Mayor of Cambridge 1886-89. Elder brother of Alice Todd (wife of Sir Charles Todd).

Bell, Sir Francis Dillon, KCMG, CB, MLC (1822-1898). Agent General for New Zealand in London 1880 to 1891.

Bishop, Mrs Elizabeth (Lizzie, Liz) (1830-1907) younger sister of Charles Todd.

Bishop, Joseph (1826-1909) married Mary Emily Todd, cousin of Charles Todd. He was also elder brother of Samuel Bishop who was married to Charles Todd's sister, Elizabeth. Joseph Bishop lived in Acton which was a neighboring suburb of Hammersmith and Shepherd's Bush and thus close to 139 Uxbridge Road where his younger sister Emily Gamble lived

Blackwood, Sir Arthur (1832-1893) Secretary to the London Post Office

Blyth, Sir Arthur (1823-1891) Agent general for South Australia in London 1877-91. He had formerly been Premier of South Australia three times.

Blyth, Neville (1825-1890) brother of Sir Arthur Blyth

Christie, Sir William Henry Mahoney FRS (1845-1922) astronomer. President RAS 1888-90, Astronomer Royal 1881-1910.

Cahill, Dr William Arthur Muston Young (1851-1917) and **Mrs Alice Emily Percy, née King** (1843-1930) Cahill was a medical student in 1881 and a physician and surgeon in 1891 (census data).

Captain of Seine, see Halpin, Charles Robert

Clarke, Lieutenant General Sir Andrew, GCMG, CB, CIE (1824-1902) As surveyor-general of Victoria, he was able to install the first electric telegraph from Melbourne to Williamstown and to report in November 1857 that the service had reached the borders of New South Wales and South Australia. He was a special agent for Victoria from April to August 1864 and acted as agent-general briefly in 1886 and 1891 and longer in 1893.

Coode, Sir John (1816-1892) Civil engineer. He was an active member of the Royal Colonial Institute becoming a Fellow in 1876 and a member of its Council from 1881 until his death. He made two trips to Australia. In 1878 this included recommendations on navigation of the Murray mouth and in 1887 he recommended an outer harbour for Adelaide. (ADB)

Cooke, William Ernest (1863-1947) 'While still at school his mathematical skill had attracted the attention of the Postmaster General and Superintendent of Electric Telegraphs, Sir Charles Todd, who offered a cadetship to Cooke with the Adelaide Observatory. At the end of his undergraduate degree Cooke won the South Australian Scholarship for further study at Cambridge, Oxford or London but decided, instead, to take up the role of assistant to Todd at the Adelaide Observatory.' (*Lumen* Winter 2009 'Lumen Pioneer') In Todd's absence in 1885-1886, he acted as Government Astronomer and as such was responsible for the astronomical and meteorological portion of Todd's Adelaide positions.

Cracknell, Edward Charles (1831-1893) Cracknell and his wife travelled out to Adelaide in 1855 with Charles Todd and his new wife. There Todd and Cracknell took up their positions as Superintendant and Assistant Superintendent of Telegraphs. Cracknell took up the same position in New South Wales on 1 January 1858 and became Superintendant of Telegraphs in New South Wales in 1861. He shared Todd's interest in keeping up to date with telegraphic and scientific development as well as the uses of electric lighting.

Cuthbertson, William Gilmour (1825-1896) General Manager, Bank of South Australia, London 1878-1887.

Dunkin, Edwin, FRS FRAS (1821-1898) astronomer, president of the Royal Astronomical Society (1884-1886). '[In 1838] he and his younger brother Richard were chosen by Airy as two of a band of young men he was then gathering together, quite distinct from the staff of the Royal Observatory, to effect the reductions of the planetary and lunar observations of Bradley, Bliss, Maskelyne and Pond. ... in 1840 he, with J.R. Hind, was attached as computer to the newly formed Magnetic and Meteorological Department at Greenwich under Mr. James Glaisher. ... In 1845, Dunkin was transferred to the Astronomical Department, and took his turn as regular observer with the meridian instruments. ...in 1870, Mr Dunkin was relieved from the work of observing at Greenwich, and was made Superintendent of

Computers, which office carried with it the control of all the reductions relating to observations with the Transit-Circle. ..Mr Dunkin was chosen to fill [the post of Chief Assistant] for three years, dating from ... 1881, Aug.25, so that he ended his official career ... at the age of 63 after a service of 46 years. Since then he has taken little active part in astronomy' Note that he would have been contemporary with Charles Todd who was employed as a computer at Royal Greenwich Observatory from 1841 to 1847.
Obituary notice: adsabs.harvard.edu/full/1899Obs....22...49.

Ellis, William, FRS FRAS FRMS (1828-1916) was an English astronomer and meteorologist President RMS 1886-1887

'...at the age of thirteen, after education at local schools, William Ellis was attached to the temporary computing staff then employed on the reductions of the Moon made at Greenwich between 1750 and 1830 which Airy had organised after the completion of the similar reduction of the ancient planetary observations. When these special computations came to an end in in 1848, Ellis, with some of the others, one of whom was Charles Todd, was transferred to the Astronomical Department of the Observatory. In 1852 ...on the recommendation of Airy the position [of observer at the Durham University] was offered to William Ellis, who went to Durham.

...Charles Todd, who had been transferred to the Cambridge University, was recalled ...in 1854 May. Another vacancy had occurred in the Greenwich permanent staff in 1853 April ... and W. Ellis returned to fill this in the following month, and at once took his place among the regular observers with the Transit-Circle and Altazimuth, the four being, when Todd left Greenwich, as he did shortly after, Henry, Dunkin, Ellis, Criswick. Henry resigned and died in 1856, when W.T. Lynn joined the staff, and the four thus modified, with James Carpenter added, did the bulk of the routine work of the Observatory for nearly twenty years.

Todd left Greenwich in 1855, and his work, which had been the care of the newly introduced galvanic apparatus within the Observatory and the Time-Signals, was handed over to Ellis. ... he had been with Mr Dunkin one of the observers in the Harton Colliery pendulum experiment in the autumn of 1854....' Obituary notice:
adsabs.harvard.edu/full/1917MNRAS..77..295

Fergusson, Sir James (1832-1907), governor of South Australia 1869-1871. His greatest achievement as governor was his part in securing the route of the overland telegraph line through the Northern Territory to Port Augusta.

Fitzgerald, Charles Lionel Wingfield (1820-1890) Chairman Consolidated Telephone Company. His father Major Henry Thomas George Fitzgerald (1820-1890) lived at 20 South Eaton Place.

Forbes, George FRS (1849-1936) electrical engineer. In 1882 Manager of British Electric Light Company.

Gamble, Mrs Eleanor Emily née Bishop (1833-1891) sister in law of Todd's sister, Elizabeth Bishop (née Todd).

Garrick, Sir James Francis (1836-1907) Postmaster general 1883-84. Agent general for Queensland in London 1884-1895 He attended the Postal Union Conference at Lisbon in 1885 .

Giles, Christopher (1840-1917) Surveyor, deputy overseer of Knuckey's construction parties for Overland Telegraph. In 1887 accountant in SA Post and Telegraph.

Gouraud, Colonel George Edward (1842-1912) Edison's agent in London. He was also a director of Consolidated Telephone Maintenance & Construction Co. Enthusiast of new electrical inventions hence Todd's train trip to Brighton with him, mentioned in the diary for Monday 29 March, to see electric lighting of the train. Gouraud subsequently became famous for introducing the new Edison Phonograph cylinder audio recording technology to England in 1888.

Graham, Andrew (1815-1908) astronomer. Senior Assistant at Cambridge Observatory 1864-1903

Greenhalgh, Dr Thomas (1833-1908) general physician and for many years honorary house surgeon of the Stockport Infirmary.

Halpin, Captain Robert Charles (1836-1894) 1st officer Great Eastern for Atlantic cable laying 1865/66. He 'was in command of the cable fleet consisting of *Edinburgh, Hibernia and Investigator* which laid the cable from [Port Darwin, Australia to Banjoewangi, Dutch East Indies](#) in 1871.' In 1885 he brought 'CS *Seine* from Birkenhead to London following the fitting of a new engine and boilers by Laird's'.
<http://atlantic-cable.com/CablePioneers/Halpin/index.htm>

Hanson, Lady Anne née Hopwood (1826-1895), **Ellen Caroline** (1859-1923) and **Edith Annie** (b.1865) Lady Hanson was the widow of Sir Richard Davies Hanson (1805-1876), 2nd Chief Justice of South Australia and 1st Chancellor of University of Adelaide. Ellen and Edith are two of their children who were with their mother on a trip to England in 1886-1887.

Harley, Dr George (1829-1896) and **Mrs Emma Jessie née Muspratt** (1836-1919), **Ethel Brilliana** (1862-1940), **Edward Vaughan Berkley** (1864-1923). Dr Harley had his medical practice in Harley Street, London where Todd called on them. The family also lived in Stockport and the diary mentions Todd and Lizzie spending time with them on their trip there in October.

Hesse, Frederick Edward (1852-1922) Secretary Eastern Extension Australasia and China telegraph company (Sir John Pender – Chairman). Delegate at Berlin

Hoskins, Admiral Sir Anthony Hiley (1828-1901) Vice Admiral and Second Naval Lord 1885-1888, First Naval Lord 1891-1893. [Commodore in command on the Australian Station](#) 1875-1879.

Huxley, Thomas Henry (1825-95) president Royal Society 1883-85, biologist.

King, Mrs Mary (1823-1900) elder sister of Charles Todd - see Family.

Knuckey, Richard Randall (Dick) (1844-1914) Surveyor, overseer of one of the construction parties for Overland Telegraph. In 1887, Inspector of SA Post and Telegraph Services. Knuckey Lagoon near Darwin was named after him.

Lamb, Sir Horace (1849-1934) Founding professor of Mathematics at University of Adelaide 1876-1884. In Adelaide both Lamb and Todd had been members of the University Council as well as members of the Board of Governors of the Public Library Museum and Art Gallery. Accepted appointment to Owens College a part of the federal Victoria University in Manchester in 1885.

Lassell, William, FRS (1799-1880) merchant and astronomer.

Momerie, Alfred (born Mummery) (1848-1900) In 1883 he was chosen morning preacher at the Foundling Hospital. Between 1881 and 1890 he published numerous books and collections of sermons on the philosophy of Christianity, which attained considerable vogue. Their style was brilliant, their views latitudinarian. (p. 10)

Muspratt, Mrs Frances Jane née Baines (1840-1910) Aunt of Ethel and Vaughan Harley and wife of Edmund Muspratt.

O'Halloran, Joseph Sylvester (1842-1920) Secretary of the Royal Colonial Institute (1883-1909) and member of commission in London for Adelaide Jubilee Exhibition, 1887.

Oppenheimer, Joseph (1821-1893) born in Germany and became a naturalised British subject. He acted as purchasing agent for the South Australian Government. He had a long involvement with telegraphy and with Todd and is frequently mentioned in this diary.

Peek, Sir Henry (1825-1898) A leading member of a committee formed in Wimbledon 'for the preservation of Wimbledon Common and Putney Heath unenclosed, for the benefit of the neighbourhood and public'. The committee successfully fought against potential enclosure,

and against the private use of this land, and its objectives were eventually met by the passing of the Wimbledon and Putney Commons Act, 1871. He became the first chairman of the body of Conservators incorporated under the Act to hold and manage the Commons, and whose duty it was to 'keep the Commons open, uninclosed, and unbuilt on' and to 'preserve, as far as maybe, the natural aspect and state of the Commons'. He lived at Wimbledon House, Parkside – long since demolished and replaced by new roads and houses, one of the roads, Peek Crescent, bearing his name. He was a partner in a firm of colonial merchants and an MP for Mid Surrey 1865-1884.

Pender, Sir John (1816-1896) Sir John Pender carried on business as a merchant at Glasgow and Manchester, but is chiefly known in connection with submarine telegraphy. When the Atlantic cable was proposed he was one of 345 capitalists who contributed £1,000 each towards the experiment. When the project seemed on the eve of failure and the risk of losing the capital, something like £2,000,000, that had already been expended seemed imminent, Sir John gave his personal guarantee to the Gutta-percha Company for £250,000 to enable a final effort to be made, which was successful. After this Sir John Pender became the leading spirit in submarine telegraphy, and was chairman of directors of a dozen of the chief cable companies, including the Eastern Extension Company, with which Australia is chiefly concerned. (Trove obituary). At the 1885 International Telegraphic Conference in Berlin he represented the Black-Sea telegraph company, the Direct United States Cable company, the Eastern telegraph company, the eastern Extension, Australasia and China telegraph company and the Eastern and South African telegraph company, in all cases as President of the company.

Preece, William Henry, FRS (1834-1913). From 1870 to 1899, as an engineer with the Post Office telegraphic system, he contributed many inventions and improvements to this system, including introducing the Telephone system to England in 1877
<http://highfields-arc.co.uk/biogs/whpreece.htm>

Pritchard, Charles (1808-1893), FRS, FRAS President RAS 1866-1868 Savilian Professor of Astronomy at the University of Oxford (1870-1893). In 1882 Pritchard commenced a systematic study of stellar photometry and was a pioneer in the possibility of employing photography in astronomical investigations.

Rayleigh, Lord (1842-1919) OM PRS Secretary Royal Society 1885-1896 President Royal Society 1905-08, Nobel Prize Physics 1904.

Richards, Admiral Sir George Henry, KCB, FRS (1820–1896) was Hydrographer to the British Admiralty from 1864 to 1874. Upon his retirement in 1874, he was made managing director of the Telegraph Construction and Maintenance Company which, under his direction, laid thousands of miles of submarine telegraph cables. A fellow of the Royal

Society and of the Royal Geographical Society, Richards was knighted in 1877 and reached the rank of admiral in 1884.

Sampson, Miss Hannah (b.1841) Housekeeper for Joseph Oppenheimer, Stockport (UK census)

Samuel, Sir Saul (1820-1900) NSW Postmaster general 1872-75, 1877, 1878-80. Agent general for NSW 1880-1897. He negotiated with the Peninsular and Oriental and the Orient shipping companies for weekly mail services to the colony. In 1891, when the Australian colonies joined the International Postal Union, he also represented Queensland at the Postal Convention in Vienna.

Shuter, William (1830-1911) Secretary, Telegraph Construction & Maintenance Company 1867-1889

Smith, Sir Robert Murray (1831-1921) Agent general for Victoria 1882-1886, represented Victoria at the Berlin Conference 1885

Spurgeon, Charles Haddon (C.H.) (1834-1892) was a British Particular Baptist preacher. Spurgeon remains highly influential among Christians of different denominations, among whom he is known as the "Prince of Preachers". He was the pastor of the congregation of the New Park Street Chapel (which then moved to the Metropolitan Tabernacle) in London for 38 years. The Metropolitan Tabernacle was purpose built and had seating for 5000 with further standing room for 1000. Spurgeon was a prolific author of many types of works including sermons, an autobiography, commentaries, books on prayer, devotionals, magazines, poetry, hymns and more. Many sermons were transcribed as he spoke and were translated into many languages during his lifetime. Spurgeon produced powerful sermons of penetrating thought and precise exposition. His oratory skills held his listeners spellbound in the Metropolitan Tabernacle and many Christians have discovered Spurgeon's messages to be among the best in Christian literature.

Squires, Henry Charles (1850-1930) Cambridge solicitor and future husband of Charlotte Elizabeth Todd.

Stewart, Professor Balfour (1828-1887) Director Kew Observatory 1859-1870 where he became interested in problems of meteorology and terrestrial magnetism. Professor of Physics, Owens College, Manchester 1870-1887.

Stokes, Professor George (1819-1903) President Royal Society 1885-90, physicist.

Todd, Hedley Lawrence (1860-1907) Younger son of Charles Todd.

Todd, Henry David (1836-1900) younger brother of Charles. Astronomer at Cambridge Observatory.

Whipple, George Mathews, FRAS FRMS (1842-1893) Superintendent Kew Observatory 1876-1893.

Wolverton, Lord (George Glyn, 2nd Baron Wolverton) (1824-1887) Post Master General 17 Feb 1886 – 20 July 1886.

LEARNED SOCIETIES

Royal Astronomical Society www.ras.org

'The 'Astronomical Society of London'...was born on 10 March 1820..The original objectives were simply the promotion of astronomy..a Royal Charter was signed ... in 1831 and the Society assumed the name it has used ever since...When the Society was started there were very few professional astronomers, but by the end of the 19th century there were many more...To cater for the growing enthusiasm for amateur astronomy the British Astronomical Association was started in 1890. Several early scientific societies in Britain had their origins as a dining club, when travel was more difficult than now and an overnight stay was convenient after a meeting at which its members would discuss the latest scientific results. The RAS (was) conceived at such a dinner.... Since then, the RAS Club has continued solely as a social club which meets for dinner following the organised scientific meetings. Todd was elected a Fellow of the Society 8 April, 1864.

Royal Colonial Institute www.thercs.org

'Founded in 1868 as Colonial Society, its name changed shortly thereafter to Royal Colonial Society; and again in 1870 to Royal Colonial Institute then in 1928 to Royal Empire Society and in 1958 to Royal Commonwealth Society. Todd became a member of the Institute in 1886.

Royal Meteorological Society www.rmets.org

'The Royal Meteorological Society was founded as the British Meteorological Society on 3 April 1850. It became the Meteorological Society in 1866, when incorporated by Royal Charter, and the Royal Meteorological Society in 1883, when Her Majesty Queen Victoria granted the privilege of adding 'Royal' to the title.' Todd was elected to the society in 1886.

Royal Society www.royalsociety.org

'Its official foundation date is 28 November 1660,...From the beginning, Fellows of the Society had to be elected, although the criteria for election were vague and the vast majority of the Fellowship were not professional scientists. In 1731 a new rule established that each candidate for election had to be proposed in writing and this written certificate signed by

those who supported his candidature....In 1847 the Society decided that in future Fellows would be elected solely on the merit of their scientific work.' Todd was elected a Fellow of the Society 6 June 1889.

INDUSTRIAL

Consolidated Telephone Construction and Maintenance Co

The early history of the telephone in England is a fascinating and not a simple story involving a numbers of companies which formed and combined and recombined. One such occurred in 1881 when the [United Telephone Co](#) and Gower Bell Telephone Company formed Consolidated Telephone Construction and Maintenance Co Ltd to manufacture their telephones and equipment. telephonecollecting.org/national.html

Barraud & Lunds

Barraud & Lund, founded in 1750 by Huguenot watchmaker Francis-Gabriel Barraud, had a long-standing reputation for high-quality timepieces, including marine chronometers, clocks and watches. By the middle of the nineteenth century, the firm had extensive foreign markets and added John Richard Lund, a chronometer maker, to their business. (From http://americanhistory.si.edu/collections/search/object/nmah_1204723)

Construction Co GP works see Telegraph Construction and Maintenance Company Ltd

de la Rue www.delarue.com

'De La Rue has designed and printed postage stamps since the 19th Century. Our first stamp ...was released in 1855'. 'De La Rue's designers ...work closely with Postal Authorities to ensure that stamps are protected from attempts at counterfeit and fraudulent alteration'.

Fugitive Inks: To counter attempts at forgery, removal of cancellations and reuse of stamps fugitive inks for printing were trialled extensively. These inks easily fade or break up in water or chemicals or both. However, despite much research and experimentation, the problems were never entirely resolved satisfactorily. The chief problems in the late 19th century were physical, in that care was required in storage and handling due to sensitivity to light and rubbing in particular, and also the unpopularity of the very limited range of colours.

In the diary Todd notes his agreement with de la Rue to abandon the doubly fugitive ink for South Australian stamps as a failure.

Dents www.dentlondon.com

In 1814 Edward John Dent established the firm and also constructed, in that year, the first Standard Astronomical Clock for the Admiralty. The firm has a long history of producing famous timepieces with probably the most famous of all being Big Ben which was completed in 1859.

On this trip Todd purchased a clock from Dents for the then Public Library of South Australia where it can be seen in the Mortlock Wing of the now State Library of South Australia still keeping accurate time.

Eastern Extension Company The British Australian Telegraph Company (BAT) was formed by John Pender to link Australia direct to British telegraph cables, by extending the cable from Singapore via Java to Port Darwin. South Australia was awarded the contract to lay the overland telegraph from Port Augusta to Port Darwin and Charles Todd was chosen to supervise the project. In 1873, three British companies, The British India Extension Telegraph Company, The British Australian Telegraph Company and The China Submarine Telegraph Company were amalgamated to form the Eastern Extension Australasia and China Telegraph Company (Eastern Extension).

http://www.iscpc.org/information/Gentlemen_of_the_Cable_Service.htm

Johnson and Phillips Ltd (also written as Phillips & Johnson)

Founded in 1875 and located in Charlton, south-east London, the company offered:

“Complete equipments of cable machinery, accessories and stores for cable laying and repairing steamers.” Their products also included: “Telegraph, telephone and insulated electric cable of all kinds” and “Machinery and plant for electric cable manufacture”.

Previously Johnson had been chief engineer in the laying of the British Australian Cable expedition commanded by Captain Halpin. He left the Telegraph Construction Co to join with SE Phillips.

<http://atlantic-cable.com/CableCos/JohnsonPhillips/index.htm>

Lund & Blockley

The firm was a major watchmaker in India and had offices in London on Pall Mall. The Lund was a brother to the Lund of Barraud & Lunds. The firm is most famous for the "Explorer Watches" they made for the Royal Geographic Society that were used on polar and tropical exploration.

Negretti and Zambra www.negrettiandzambra.co.uk

The firm was founded in 1850 by Henry Negretti (1818–1879) and Joseph Zambra (1822–1897) and soon gained a good reputation both at home and abroad owing to the excellence of its products. In the early days the firm's activities were confined to the manufacture of meteorological ... Instruments. In 1851 they patented a maximum thermometer and ..Even

in 1950... this type of maximum thermometer was in universal use and the only one employed for meteorological readings. (The firm's website gives a history of the firm including contemporary illustrations of their premises.)

Instruments used in the Adelaide Observatory at the time of the diary were obtained from this firm. Todd, however, was not satisfied with what he perceived as the varying usefulness of instruments on arrival in Adelaide. He had brought this up at a meeting of fellow Meteorologists only a year previously (*SA Parliamentary Papers*). Owing to the fact that they had been paid for on ordering and the shipping time there had seemed no solution. It would seem that he took the opportunity of being in London to visit the firm and get advice which he has duly noted in the diary.

Oriental Telephone Company Ltd

This company was established on 25 January 1881, as the result of an agreement between Edison, Alexander Graham Bell, the Oriental Bell Telephone Company of New York and the Anglo-Indian Telephone Company, Ltd. The company was licensed to sell telephones in Greece, Turkey, South Africa, India, Japan, China, and other Asian countries.

<http://edison.rutgers.edu/list.htm#TTFor>

Siemens

Established in England in 1843. Soon after the firm entered the cable-laying market becoming one of the market leaders. The company opened its first UK factory (Telegraph Works) in 1863 to produce submarine cables as well as all kinds of telegraphy items in Woolwich (Charlton).

Siemens provided the electric lighting for the 1885 Inventions Exhibition.

The flat land adjoining the Thames at [New Charlton](#) has been a significant industrial area since Victorian times. A notable establishment was the [Siemens Brothers](#) Telegraph Works opened in 1863, which manufactured two new [transatlantic cables](#) in the 1880s, and contributed to [PLUTO](#) in World War 2. (Wikipedia)

... in 1875 2,565 miles of cable to cross the Atlantic were supplied by the firm. The works also produced all kinds of telegraphy instruments, apparatus, materials and new inventions <http://www.charltonparks.co.uk/the-parks/industrial-history/>

Taunton & Hayward works R H Taunton and Hayward of Star Tube Works, Birmingham

Troughton & Simms (Simms' Works)

Formed in 1826 when Edward Troughton took William Simms as a partner, this London firm manufactured large and small mathematical instruments with customers worldwide. From 1860 they were located at Charlton. The firm produced hundreds of astronomical instruments for observatories around the world.

Telegraph Construction and Maintenance Co ('Telcon')

Gutta percha was introduced to England in 1843, and in 1845 the Gutta Percha Co was founded. Among its many uses, gutta percha proved to be an ideal insulator for submarine cables, and as a further benefit for cable use it was found that gutta percha's insulating properties improved under the pressure and temperature conditions of the ocean bed. Gutta percha remained the prime material for submarine cable insulation for over 80 years.

Glass, Eliot and Co developed from wire rope to cable making and into submarine cables with the core manufactured by the Gutta Percha Co.

The Telegraph Construction and Maintenance Company (Telcon) was formed in 1864 by merging Glass, Elliot and Co. with the Gutta Percha Co., and was to become the dominant company in the manufacture and laying of submarine cables. The first Chairman of the Company was John Pender. The works at Greenwich were the HQ and main production base for almost 100 years. The company made the 1865 and 1866 transatlantic cables and (as its forerunner Glass, Elliot and Co), the 1857 and 1858 cables.

The [SS Great Eastern](#) laid much of the transatlantic cable. In 1872, the Company owned [SS Edinburgh](#) - launched in 1855 and built as a passenger vessel by [Tod and McGregor](#) of Glasgow. It was converted to a cable ship which was used by the British-Australian Co.

From Grace's Guide to British industrial history.

Warrington Wire Rope Company

In 1834 the first wire rope was made. Wire ropes were used extensively for submarine cables, elevator cables in skyscrapers and bridges such as the Brooklyn Bridge which still has its original cabling!

The Warrington Wire Rope Works were situated at Warrington, Cheshire. However Warrington Wire Rope has a specialist meaning and it is not known if this rope type was produced by this factory. For further information about the fascinating history of wire rope see:

www.ropetechnology.com/bro_engl/casar_history.pdf

[A short history of wire rope - Roland Verreet](#)

OTHER NOTES

International Inventions Exhibition

Opened in South Kensington on 4 May 1885 and closed 6 months later. It focussed on inventions and music following up the London International Exhibition 1862. Particular interest came from the progress in the use of electricity which was used extensively as an intrinsic part of the setup. A very full account was given on page 4 of the *Sydney Morning Herald* of Monday 20 July 1885 which can be accessed on Trove.

Trafalgar Square

...Since its construction, Trafalgar Square has been a venue for political demonstrations, though the authorities have often attempted to ban them. ...On "Black Monday" (8 February 1886), protesters rallied against unemployment; this led to a riot in Pall Mall. A larger riot (called "Bloody Sunday") occurred in the square on 13 November 1887. (Wikipedia)

Universal Postal Union

Was set up in 1874 – bilateral agreements. Australian Colonies joined as members in 1891.

Agents General in London at time of Todd's visit

Sir Saul Samuels (1820-1900), New South Wales

Sir James Francis Garrick (1836-1907), Queensland

Sir Arthur Blyth (1823-1890), South Australia

Robert Murray Smith (1831-1921), Victoria

Sir Francis Dillon Bell (1822-1898), New Zealand

These are mentioned in the diary chiefly as a result of their involvement in the negotiations over the establishment of a parcels post between England and the colonies. Todd is reported as signing on behalf of South Australia on 8 April 1886 – the day he sailed from England to return to Australia. The Agent General for Victoria signed on 9 June 1886 and the first parcels were dispatched on 7 July 1886. (New Zealand was not prepared to participate at this stage.)

This continued to be a point for discussion at each Intercolonial Postal Conference (between the Australian colonies) until overtaken by the Australian Colonies officially joining the Universal Postal Union on 1 October 1891 (Australia itself became a member on 1 October 1907 as did New Zealand .)?

DELEGATES TO BERLIN CONFERENCE (those mentioned in Diary in bold)

From: Conference telegraphique internationale (1885: Berlin, Allemagne), Liste des participants.

Official delegates

Charles Todd, Director General of Posts and Telegraphs, South Australia

Edward Cracknell, Director General of Telegraphs, New South Wales

John Henniker Heaton, representing Tasmania

Robert Murray Smith, Victoria (3rd session only)

M. Fribourg: Director at the Ministry of Posts and Telegraphs, France

Company representatives (with speaking rights but no voting rights)

John Pender representing:

Black Sea telegraph company as Company President (and Lewis Wells)

Direct United States Cable company as Company President (and John William Fuller)

Eastern telegraph company as Company president. Also **Sir James Anderson** Director (and Lewis Wells, Jules Despecher – Paris representative -and M Hibberdine)

Eastern Extension, Australian and Chinese telegraph company as Company President (and Lewis Wells and Jules Despecher – Paris representative) also **JE Hesse** as Company Secretary

Eastern and South African telegraph company as Company President. Also **Sir James Anderson** Director (and Lewis Wells).

Henry Weaver representing:

Anglo-American telegraph company as Director (and Jules Despecher—Paris representative)

West India and Panama telegraph company as Director (and WS Andrews also a Director)

Also Compagnie française du télégraphe de Paris à New York, Western Union telegraph company as Director of Anglo-American telegraph company