South Australian
HERITAGE COUNCIL

BETTER HERITAGE INFORMATION
SUMMARY OF STATE HERITAGE PLACE

Observatory House

Observatory House SHP 13392, 2018.

Source: DEW Files, 25 September 2018

ENTRY IN THE REGISTER

Description or notes with respect to a place entered in the South Australian Heritage Register in accordance with either the *South Australian Heritage Act 1978* or the *Heritage Places Act 1993.*

The South Australian Heritage Council may correct errors or inaccuracies in the Entry in the Register in accordance with s21 of the *Heritage Places Act 1993*.

NAME: Observatory House **PLACE NO.:** 13392

ADDRESS: 84 Flinders Street
Adelaide SA 5000
CT 5866/461 F181679 A837 Hundred of Adelaide

CONFIRMED IN THE SOUTH AUSTRALIAN HERITAGE REGISTER:

11 September 1986

COMMENTARY ON THE LISTING

Additional information provided as a part of the content of the South Australian Heritage Register in accordance with s14(6) of the *Heritage Places Act* 1993 'hold information in association with the Register'.

KNOWN AS: Current: Observatory House Office (former Instrument Manufacturer)

Proposed: Observatory House (former Scientific Instrument Manufacturer and Optician) [Belvedere overhanging Flinders Street Road Reserve]

ADDRESS Kaurna Country

Belvedere on southern elevation of the building overhangs the airspace of Flinders Street

STATEMENT OF HERITAGE SIGNIFICANCE

Observatory House demonstrates the evolution of the domestic scientific instrument manufacturing industry in South Australia through the establishment and expansion of a prominent scientific instrument manufacturing and optician business. Scientific instrument manufacturing played a key role in the development of the state by providing equipment for surveying, engineering and navigating. Built in 1906 for George Kohler, Observatory House served as a shop and dwelling for the expanding Otto Boettger business which manufactured scientific instruments for an Australia-wide market. Designed by prominent South Australian architectural firm Davies and Rutt, Observatory House also demonstrates a high degree of creative and aesthetic accomplishment displaying a high standard of design and originality that exceeds typical examples in South Australia. It does so by creatively fusing disparate design elements of Federation Queen Anne and Federation Gothic into a cohesive structure.

INDICATIVE CRITERIA (under section 16 of the Heritage Places Act 1993)

(a) it demonstrates important aspects of the evolution or pattern of the State's history

Observatory House demonstrates the development of the scientific instrument manufacturing industry in South Australia in the late nineteenth and early twentieth centuries. Domestic scientific instrument manufacturing was an important industry as it contributed to the development of the state through the production of surveying,

navigating and engineering equipment, which had previously been imported from Britain and Europe.

The Otto Boettger business was a scientific instrument manufacturing and optician business established by German migrant Otto Boettger in 1877, and sold in 1897 to Boettger's apprentice and successor, George Kohler. The business was a manufacturer and supplier of scientific instruments to the public, as well as the state and interstate governments, and also operated as an optician, manufacturing spectacles. The award-winning business was one of a few early scientific instrument manufacturing companies that grew to become leaders in the field, operating for over 80 years. Demonstrating the growth of the business specifically and industry generally, Observatory House was commissioned by Kohler to expand the business from the original workshop at 88 Flinders Street. Designed by prominent architectural firm Davies and Rutt, and constructed in 1906, the building served as a dwelling and shop, which showcased the various instruments manufactured by the business.

At the time of the construction of Observatory House, the Otto Boettger business was one of only three scientific/mathematical instrument manufacturers listed in the South Australian directory, and one of only 11 opticians. Observatory House therefore demonstrates an important aspect of South Australian history as the site where an influential scientific instrument manufacturing and optician business operated and expanded throughout the early twentieth century.

(e) it demonstrates a high degree of creative, aesthetic or technical accomplishment or is an outstanding representative of particular construction techniques or design characteristics

Designed by prominent architects Edward Davies and Charles Walter Rutt, and constructed in 1906, Observatory House demonstrates a high degree of creative and aesthetic accomplishment. The hipped roof form, interpenetration of the façade, together with its eclectic detailing and the use of Queen Anne style is unusual in a commercial setting. The design successfully incorporates Federation Queen Anne style, including a tower with belvedere, Marseille style roof tiles with terracotta decorative ridge capping and finials, and red brick and stucco dressing, with Federation Gothic elements such as pointed arch windows and ornamentation to the coved cornice and parapet panelling. Observatory House creatively adapts these disparate design elements by fusing them into a cohesive structure. Despite the alteration of the ground floor fenestration, the place's architectural integrity is still intact and can be understood and appreciated. As such, Observatory House clearly demonstrates a high standard of design and originality exceeding other typical examples in South Australia.

SITE PLAN

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide SA 5000

Elements of heritage significance include:

- Observatory House,
- First-storey fenestration,
- Marseille tiled roof,
- Rear of original building including fenestration,
- Original internal fixtures and fittings including staircase with wooden balustrade and cast iron support columns.

Elements not considered to contribute to significance of place include:

- Ground floor fenestration, gold plaques and steps below main entrance,
- Twentieth-century extension to rear of building,
- Non original fixtures and fittings.

Observatory House, Adelaide SA; CT 5866/461 F181679 A837 Hundred of Adelaide

N ↑

LEGEND

Parcel boundaries (Indicates extent of Listing)

Outline of Elements of Significance for State Heritage Place

*Red outline is indicative of elements of significance, noting imperfect alignment of aerial imagery with parcel cadastre for the building. Belvedere on southern elevation of the building overhangs the airspace of Flinders Street.

PHYSICAL DESCRIPTION

Observatory House is a two-storey building, constructed of loadbearing brickwork with characteristics of Federation Queen Anne and Federation Gothic design styles. Observatory House has a distinctive street-facing front elevation, with a stylised mid-section comprising a tower with belvedere.

Features of the front elevation include:

- Central Tower with belvedere containing wooden flagpole, cast iron balustrade, Marseille tiled roof, timber joinery, painted pressed metal ceiling and decorative timber fretwork,
- Marseille tiled hipped roof with decorative terracotta ridge capping and finials,
- Pointed arch fanlight with leadlight and hood moulding to the tower section,
- Two twin pointed arch windows below belvedere with leadlight,
- Four pointed arch windows to first storey with voussoirs and Corinthian style pilasters,
- Two fanlight windows over French doors featuring leadlight to tower section of first floor,
- Gothic-derived ornamentation, including to windows, coved cornice and parapet panelling,
- Timber fretwork and curved cast iron balustrade to first storey,
- Red brick and stucco dressing with English bond brickwork,
- Art Nouveau lettering 'Observatory House Established 1877,'
- Ground floor rendered; main entrance with two fixed windows and timber double doors with sidelights (not original fabric),
- Steps below main entrance (not original fabric),
- Two gold plaques to either side of main entrance (not original fabric).

Other exterior features:

- Hipped roof clad with corrugated galvanised sheet metal to remainder of building,
- Red brick chimney to western elevation,
- English bond brickwork to rear of original building,
- Door and window to rear of building,
- Extension to rear (not original fabric).

Interior features include:

- Staircase with wooden balustrade,
- Cast iron support columns.

Elements of Significance:

Elements of heritage significance include:

- Observatory House,
- First-storey fenestration,
- Marseille tiled roof,
- Rear of original building, including fenestration,
- Original internal fixtures and fittings, including staircase with wooden balustrade and cast iron support columns.

Elements not considered to contribute to significance of place include:

- Ground floor fenestration, gold plaques, and steps below main entrance,
- Twentieth-century extension to rear of building,
- Non original fixtures and fittings.

HISTORY OF THE PLACE

Scientific Instrument Manufacturing

The term scientific instruments refers to 'the material tools used for investigating nature'.[1] Between 1850 and 1930, scientific instrument making or manufacturing encompassed mathematical, optical and philosophical instruments.[2] The term is sometimes used interchangeably with the terms 'precision instruments' or 'mathematical instruments'.[3] The industry grew during the nineteenth century due to the need for scientific instruments for education and economic development, and geographical expansion.[4] Australia relied on British and European imports of scientific instruments, and while minor repairs could be completed by importers, major repairs required shipping back to England or Europe.[5]

By the late nineteenth century, domestic scientific instrument manufacturers were well established in New South Wales and Victoria and serviced their local areas.[6] Many of these scientific instrument makers were trained in Western Europe and brought their skills to Australia.[7] Scientific instrument makers constructed and repaired various equipment, from spectacles and watches to theodolites and barometers, and because of this scientific instrument makers often also traded as opticians, jewellers and watchmakers.[8] As the industry developed in the latter half of the nineteenth century, it was common for instrument makers to expand their premises, and have distinct workshops, offices and showrooms.[9]

In South Australia, the scientific instrument manufacturing industry was slower to develop. Edwin Sawtell is credited as the state's first optician and watchmaker, founding Sawtell's Nautical Optician in Port Adelaide in 1853, and a later store in Rundle Street, during which time he manufactured and sold scientific instruments.[10] In 1882, the South Australian directory listed only three opticians and one mathematical instrument maker. Otto Boettger's business constituted the latter, which moved to Flinders Street that year.[11] By 1906, there were eleven opticians listed in the directory and three mathematical instrument makers including Otto Boettger and George Kohler.[12]

Alongside Sawtell and Boettger's businesses, other prominent scientific instrument manufacturing and optician businesses included Laubman and Pank, which was founded in 1908 and developed important optical instruments, as well as J.M. Wendt who focused primarily on jewellery and watchmaking but also had an optician's department.[13] There were also others in different occupations, such as inventors, astronomers, scientists and mathematicians, who could also be identified as scientific instrument makers.[14]

Scientific instrument manufacturing was crucial to the development of South Australia's colony as scientific instruments were essential to survey new land, develop

infrastructure, and assist in health and education. The domestic manufacturing and distribution of scientific instruments allowed designs to be tailored to the user's request and to the environment, for example, upon Otto Boettger manufacturing a new theodolite, a precision instrument used for measuring angles, the *Port Augusta Dispatch and Flinders Advertiser* remarked that Boettger's 'knowledge of the climatic variation of South Australia enabled him to introduce several improvements'.[15] In some instances, domestically manufactured instruments were also more affordable than imported instruments.[16] Domestic manufacturing of scientific instruments was also an indication of the colony's technological progress and economic growth. Scientific instruments became increasingly important during the twentieth century, as optical instruments were used in weapons in the Second World War. In Australia, the Optical Munitions Panel was established to lead this endeavour, and a branch was developed in South Australia under Sir Kerr Grant.[17]

Opticians

While scientific instrument manufacturers often manufactured optical instruments, some also advertised themselves as opticians. During the nineteenth and early twentieth century in Australia, oculists would look after eye health and dispense prescriptions, while opticians would manufacture and sell spectacles based on the prescription.[18] Although Edwin Sawtell is credited as being the first optician in the state, founding his business in 1853, several mentions of opticians operating in the state appear in South Australian newspapers from 1848 onwards.[19]

Ophthalmic opticians began being advertised in 1887, and they would perform duties similar to modern day optometrists. As in other states, South Australia did not require opticians to have formal training or qualifications until the *Opticians Act* was passed in 1920, and a registration board established in 1921.[20] The Otto Boettger business identified as opticians and later, once George Kohler's sons took over the business, as ophthalmic opticians.

Early Site History

The Kaurna people are the traditional owners of the Adelaide Plains, foothills and part of the Mount Lofty Ranges. Kaurna people lived, hunted and undertook ceremonial and cultural practices in the area now known as the City of Adelaide, a once grassy open plain with the Karrawirra Parri/ River Torrens flowing through its centre.[21]

When British colonists began to settle on Kaurna land in the area surveyed by Colonel William Light, Kaurna people immediately faced detrimental impacts. They were forced by the government into a 'Native Location' near the River Torrens in order to allow colonists access to land.[22] Adults and children were later separated, with the 'Native Location' becoming a school for children, and adults relocated to missions located at Poonindie from 1850, and later Point McLeay and Point Pearce (1894),

hundreds of kilometres from Adelaide.[23] While Kaurna people showed resilience and adaptability, the population declined due to introduced diseases, resisting settlement and retaliation from settlers, as well as loss of access to food, cultural sites and ways of living.[24]

Otto Boettger, Scientific Instrument Maker and Optician

In 1877, scientific instrument maker Otto Boettger migrated to South Australia from Germany, where he had worked as an astronomer's apprentice. Upon his arrival, he worked briefly under merchant and inventor Alexander Dobbie before establishing his own scientific instrument manufacturing and optician business named Otto Boettger in Gawler Place.[25] In 1879, Boettger moved his business to the western end of Flinders Street, near the Stow Manse Chambers. At this time he was credited as crafting the first Australian-made theodolite and was the instrument maker to the colony's Surveying and Engineering Department.[26] Boettger then moved his business to town acre 231, 88 Flinders Street, in 1882, renting a larger shop and premises from Ernest Fischer, which served as a factory, retail store and dwelling.[27]

OTTO BOETTGER,

FLINDERS-STREET, OPPOSITE DORSETTA-TERRACE,

CORNER WYATT-STREET, ADELAIDE,

MANUFACTURING OPTICIAN AND SURVEYORS' INSTRUMENT-MAKER.

FIRST AND ONLY MANUFACTURER OF THEODOLITES AND LEVELS, complete from his own design, in the Australian Colonies.

INSTRUMENT-MAKER TO THE SURVEYING AND ENGINEERING DEPARTMENT OF HER MAJESTY'S GOVERNMENT OF SOUTH AUSTRALIA.

O. BOETTGER'S NEW CONSTRUCTED TRANSIT THEODOLITE.

Begs to inform his Friends and Customers that he has OPENED a RETAIL SHOP at his FACTORY, in FLINDERS-STREET, for the SALE of IMPORTED INSTRUMENTS in conjunction with those of his own make.

O. B. having had a good Scientific as well as thoroughly PRACTICAL Education in Germany, and having been engaged in the most trustworthy positions in some of the first Scientific Workshops in Berlin, Vienna, Hamburg, and St. Petersburg, for twenty-five years, can with confidence undertake any work in the Scientific Trade.

The Imported Goods kept in Stock are from the Best and Most Renowned European Makers, which he will, previous to sale, carefully examine and test for correctness.

Being resident at the Factory, O. B. will be able to make Alterations and effect Repairs without vexatious delays.

List of Articles sent on application.

1882 Advertisement for Otto Boettger's new premises at 88 Flinders Street, Adelaide.

Source: 'Advertising', *South Australian Register*, 17 June 1882, p.2.

Boettger's work was displayed at the Adelaide Jubilee International Exhibition in 1887, earning a first order of merit in the scientific instruments category for three of his instruments – a Y theodolite, transit theodolite and level.[28] By 1890 the business had developed an Australia-wide market, with Boettger manufacturing scientific instruments for the South Australian Government, as well as clients from interstate, including the Queensland Meteorological Department. He also manufactured and

sold spectacles and other instruments to the public. Referring to Boettger's workmanship, the Conservator of Water, James Jones remarked that,

> the hydrometers for testing water… have been found to be very useful and absolutely reliable instruments… about two years ago such an instrument was much needed for the country work of the department, as the only available hydrometer was a fragile glass one of European manufacture. At my request, Mr. Boettger designed and manufactured the metal one now found so satisfactory.[29]

In 1896 the business released a catalogue of over 550 scientific instruments manufactured and imported by Otto Boettger. The catalogue included theodolites, levels, mining instruments, magnetic compasses, sun dials, pedometers and spectacles. It also notes that the business's workshop is fitted with the best machinery, Dividing Engines and other appliances, and is always under Otto Boettger's personal supervision.[30] That same year, Boettger produced a theodolite for the construction of the inlet tunnel of Happy Valley Waterworks (now known as Happy Valley Reservoir), South Australia's third reservoir.[31]

In 1899, Boettger purchased a house from the Przygoda family on a portion of town acre 231 alongside the existing shop and premises. He leased this house out while continuing to lease the shop and premises from Fischer for the Otto Boettger business.[32]

1896.

CATALOGUE

OF

Engineering, Surveying, Optical,

AND

SCIENTIFIC INSTRUMENTS

MANUFACTURED AND IMPORTED BY

OTTO BOETTGER,

Optician and Scientific Instrument Maker

TO THE SOUTH AUSTRALIAN AND OTHER GOVERNMENTS.

Sole Agent for DR. CARL ZEISS', Jena, Microscopes, &c.

88, FLINDERS STREET, ADELAIDE,

SOUTH AUSTRALIA.

ESTABLISHED 1877.

J. H. Sherring & Co., Printers, 42, Currie Street, Adelaide.

Front page of Otto Boettger's 1896 Catalogue, displaying the First Order of Merit awarded at the Adelaide Jubilee International Exhibition in 1887.

Source: Otto Boettger, *Catalogue of Scientific Instruments, 1896*.

Observatory House

Around 1899, Boettger sold his business to George Carl Wilhelm Kohler, his former apprentice, and travelled to Germany. It is unclear whether Boettger intended to return to South Australia as contemporary newspapers infer that he was returning to Germany to retire due to ill health, however he purchased the Pyrzgoda house the same month he left the state. Boettger passed away in Germany in 1907 having never returned to South Australia. After the sale of the business, which remained trading as 'Otto Boettger', the shop and premise at 88 Flinders Street was leased to George Kohler by Ernest Fischer, as was the adjacent house formerly owned by Otto Boettger. In 1904, Boettger transferred the house's ownership to George Kohler's wife, Caroline Kohler, and this became the site for Observatory House.[33]

Kohler commissioned prominent Adelaide architects Edward Davies and Charles Walter Rutt to design a premise on the site and on 8 August 1905, Davies and Rutt called for tenders to construct the property, which was subsequently awarded to C.H. Martin. Davies and Rutt had designed a new shop and showroom for the J.M. Wendt jeweller, watchmaker and optician business a few years prior.[34]

By 1906, construction of Observatory House was complete, with *The Observer* noting 'Flinders Street architecture has been adorned by the fine premises built for Mr Otto Boettger'.[35] The tower and belvedere were likely included in the design as a space for customers to test their optical instruments, although this is not confirmed.[36] The number of large windows on the first-storey indicates it was likely used as a workshop space. From 1907 onwards, Kohler was advertising the premise as 'Observatory House', and he and his family lived and worked across the two premises at Flinders Street. [37]

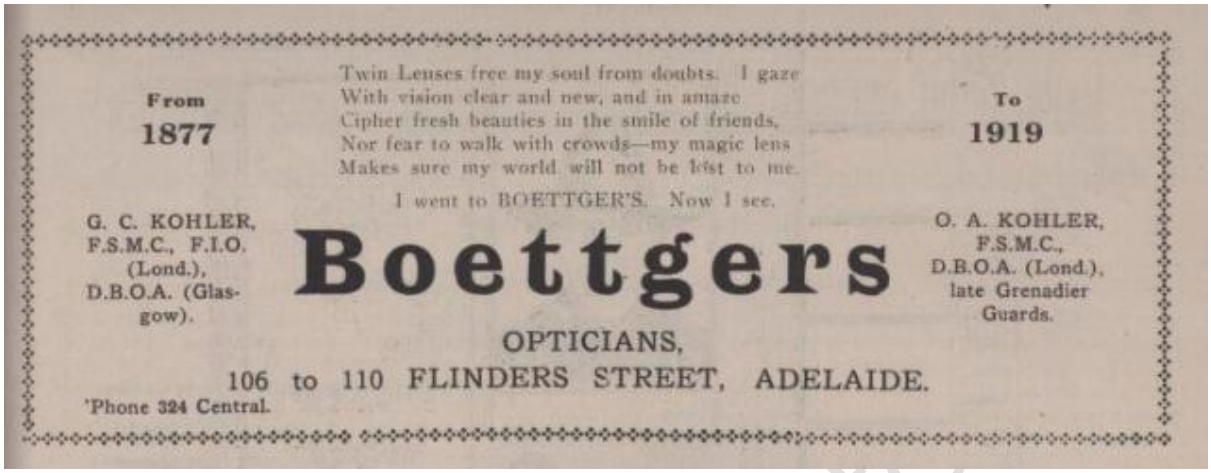
Advertisement for Otto Boettger, 1912. The original premise (since demolished) can be seen to the right of Observatory House.

Source: 'Advertising', *Critic*, 18 December 1912, p.26.

Two of Kohler's sons, George and Otto, became opticians and continued the Otto Boettger business. George (junior) travelled to Europe to pursue his education and in 1912 was admitted to the Fellowship of Worshipful Company of Spectacle Makers (in 1909 only 10 Australians were fellows), and the Institute of Ophthalmic Opticians, London, and in 1913 he gained membership to the British Optical Association.[38] He would later go on to be an elected member of the Institute of Optometrists of South Australia.[39]

The business's name was changed to Boettgers c.1914, and under George and Otto's custodianship, concentrated on the ophthalmic optician side of the business, although other scientific instruments were still manufactured and sold. In 1927, the business ended its lease at 88 Flinders Street and traded out of Observatory House only until the 1950s, when it also occupied the ground floor of the Lenswood building at 82 Flinders Street, which had been built for Kohler in 1926. Boettgers remained in the

Kohler family until its closure in 1973, when Observatory House was sold.[40] Observatory House has since functioned as an office space, and is now home to Hume Lawyers.



Advertisement for Boettgers, 1919.

Source: *R.S.A. Magazine* 4, no.10 (1919): p.13.

Aboriginal Cultural Considerations

The *Heritage Places Act 1993* makes provision for the identification, recording and conservation of places and objects of non-Aboriginal heritage significance. The protection and preservation of Aboriginal heritage is provided for under the *Aboriginal Heritage Act 1988*. Contact the Aboriginal Heritage Unit for listings.

CHRONOLOGY

Year	Event
1837	John Able Smith purchases town acre 230 and 231.
1849	Pisé cottage built on town acre 231.
1852	Town acre 231 sold.
1853	South Australia's purported first optician and watchmaker, Edwin Sawtell, founds Sawtell's Nautical Optician in Port Adelaide.
1854	Land on town acre 231 divided between four parties including Ernest Fischer.
1857	Przygoda family buy two portions of land on town acre 231. On one portion (now 84 Flinders Street), a cottage is built which is owned by the Przygoda family until 1899.
1877	**Otto Boettger migrates to South Australia and establishes a scientific instrument making business in Gawler Place.**
c.1878	Boettger moves his business to the western end of Flinders Street near Stow Manse Chambers.
1878	Boettger applies for patent for 'mechanical apparatus for raising and cooling beverages simultaneously'.
1882	**Boettger moves his business to a portion of town acre 231 (now 88 Flinders Street), leasing shop and premise from Ernest Fischer.**
1887	Boettger's work is displayed at the Adelaide Jubilee International Exhibition. He is awarded a first order of merit for his Y theodolite, transit theodolite and level.
1894	Boettger visits Europe to examine the latest improvements in scientific instrument manufacturing.
1896	**Boettger releases a catalogue of over 550 scientific instruments manufactured and imported by the Otto Boettger business.**
1899	**24 March: Boettger purchases a house from the Przygoda family on town acre 231 (now 84 Flinders Street) alongside the existing shop and premises.**
	Boettger sells his business to George Carl Wilhelm Kohler.
	Boettger moves back to Germany.
1904	**3 October: Boettger transfers ownership of house to George Kohler's wife, Caroline Susannah Kohler.**
	Architects Edward Davies and Charles Walter Rutt design new store for J.M. Wendt, jeweller, watchmaker and optician.

1905	**Observatory House is designed by architects Davies and Rutt.** **8 August: Davies and Rutt call for tenders to build Observatory House.** **16 August: George Kohler lodges plans with City of Adelaide council for shop and dwelling on Flinders Street.**
1906	**Observatory House is built at 106-108 Flinders Street (now 84 Flinders Street) by C.H. Martin for Kohler.**
1907	**Shop and dwelling referred to as Observatory House in advertisements.** Death of Otto Boettger.
1910	Otto Kohler is awarded a silver medal for scientific apparatus at the South Australian Exhibition of Manufacturers, Products, Arts and Industries.
c.1914	**The business name is changed from Otto Boettger Optician and Scientific Instrument Maker to Boettgers.**
1920	7 May: Death of Caroline Kohler. George Kohler (senior) inherits Observatory House after Caroline's passing.
1926	George Kohler (senior) commissions four-storey dwelling 'Lensworth Building' adjacent to Observatory House.
c.1927	**Boettgers ends its lease at 88 Flinders Street (adjacent to Observatory House) and operates from Observatory House only.**
1942	Death of George Kohler (senior).
1944	Death of George Kohler (junior).
c.1956	**Boettgers expands to the ground floor of the Lensworth Building (82 Flinders Street) as well as Observatory House (84 Flinders Street).**
c.1957-1986	**Balcony removed from rear of building (northern elevation).**
c.1963-1986	**Ground floor southern elevation redeveloped – fenestration altered, and façade rendered. Southern elevation painted cream.**
1973	**November: Kohler family sell Observatory House and close Boettgers business.**
c.1982-1985	Original Otto Boettger business building at 88 Flinders Street demolished.
1986	**11 September: Observatory House confirmed in the SA Heritage Register.**
1987	**Additional offices added to rear of building approved (Development Application P466).**
1988	**Restoration and painting of southern facade approved (Development Application P1455).**

2018 **Paint front façade approved (Development Application 744/18).**

2022 **Repair belvedere and flagpole approved (Development Application 22028953).**

BIBLIOGRAPHY

Books and Chapters

Apperly, Richard, Robert Irving and Peter Reynolds. *Pictorial Guide to Identifying Australian Architecture: Styles and Terms from 1788 to the Present*. Angus and Robertson Publishers, 1989.

Brenni, Paolo. 'From Workshop to Factory: The Evolution of the Instrument-Making Industry, 1850-1930.' In *The Oxford Handbook of the History of Physics*, edited by Jez Z. Buchwald and Robert Fox. Oxford University Press, 2013.

Cole, Barry. *A History of Australian Optometry: Two Hundred Years of Beating the Tyranny of Distance and Fighting Political Battles to Find New Roles and a New Place in Health Care*. Australian College of Optometry, 2015.

Marsden, Susan, Paul Stark and Patricia Sumerling, eds. *Heritage of the City of Adelaide: an Illustrated Guide*. Corporation of the City of Adelaide, 1990.

Journal Articles

Bolton, H.C. and Nicola H. Williams. 'Scientific Instrument Makers and Dealers in Victoria, 1840-1914'. *Historical Records of Australian Science* 12, no.1 (1998): 15-82.

Bolton, H.C., J. Holland and N.H. Williams. 'The Grimwade Milligram Chemical Balance: An Early Attempt to Establish a Scientific Instrument Industry'. *Historical Records of Australian Science* 9, no. 2 (1992): 107-117.

Optometrists Association Australia. 'South Australia'. *The Australasian Journal of Optometry* 3, no.2 (1921): 17-32.

Warner, Deborah Jean. 'What is a scientific instrument, when did it become one, and why?'. *The British Journal for the History of Science* 23, no.1 (1990): 83-99.

Watkins, Rod D., 'Profile: Donald Herbet Schulz', Clinical and Experimental Optometry 87, no. 3 (2004): 187-190.

Websites

'About Us'. Hume Taylor and Co Lawyers, accessed 9 April 2026 at https://www.humetaylor.com.au/site/about-us/

'Sawtell's Nautical Optician'. SA History Hub, accessed 17 April 2026 at https://sahistoryhub.history.sa.gov.au/subjects/sawtells-nautical-optician/

Evans, Julie. 'David Beveridge Adamson (1823—1891)'. Australian Dictionary of Biography, accessed 7 May 2026 at https://adb.anu.edu.au/biography/adamson-david-beveridge-12766.

Warburton, Elizabeth. 'Alexander Williamson Dobbie (1843—1912)'. Australian Dictionary of Biography, accessed 7 May 2026 at https://adb.anu.edu.au/biography/dobbie-alexander-williamson-12888

Newspaper Articles and Magazines

'A Colonial Made Theodolite'. *Port Augusta Dispatch and Flinders' Advertiser*, 17 September 1884, 2.

'A Morning with an Optician'. *Herald*, 07 September 1901, 10

'A Scientific Exhibition'. *The Victor Harbour Times*, 12 October 1928, 1.

'Advertising'. *Adelaide Times*, 17 December 1849, 1.

'Advertising'. *Critic*. 18 December 1912, 26.

'Advertising'. *Evening Journal*, 14 December 1878, 3.

'Advertising'. *South Australian Register*, 23 January 1879, 1.

'Advertising'. *South Australian Register*. 17 June 1882, 2.

'Advertising'. *The Advertiser*, 8 August 1905, 2.

'Advertising'. *The Advertiser*, 8 July 1947, 16.

'Awards'. *South Australian Register*, 06 October 1887, 7.

'Boettgers'. *R.S.A. Magazine* 4, no.10 (1919): 13.

'General News'. *South Australian Weekly Chronicle*, 6 August 1887, 13.

'General News'. *The Express and Telegraph*, 09 October 1886, 2.

'Improvements in the City.' *Observer*, 26 May 1906, 39.

'Lensworth Building'. *The News*, 18 June 1925, 5.

'Messrs. J.M. Wendt'. *Critic*, 23 November 1904, 21.

'No title'. *The South Australian Advertiser*, 17 April 1880, 4.

'Obituary'. *Observer*, 7 September 1907, 38.

'Obituary'. *The Chronicle*, 7 September 1907, 44.

'Pneumatic Beer-Engine'. *Adelaide Observer*, 16 February 1878, 12.

'Police Court'. *South Australian*, 4 April 1848, 2.

'Preserving the Eyes'. *The Advertiser*, 14 February 1914, 23.

'Return of Herr Boettger'. *South Australian Register*, 13 December 1894, 5.

'The Exhibition'. *The* Advertiser, 1 April 1910, 10.

'The Happy Valley Waterworks'. *Adelaide Observer*, 13 June 1896, 42.

Archival

City of Adelaide Archives

Adelaide City Council Archives. *Return of Plans submitted to Council and Local Board of Health under 27.28 and 53 of the Building Act, 1881 1903-1915*. Accession 1169, 27.

Adelaide City Council Archives. *Return of Surveyor of Notices Received for Building Work under Section 51 of the Building Act, 1881 1895-1910.* Accession 2167, 126.

Adelaide City Council Archives. '1854'. *Assessment Books, 4th Series Volume 1*.

Adelaide City Council Archives. '1883'. *Assessment Books, 4th Series Volume 30*.

Adelaide City Council Archives. '1888'. *Assessment Books, 4th Series Volume 35*.

Adelaide City Council Archives. '1899'. *Assessment Books, 4th Series Volume 46*.

Adelaide City Council Archives. '1900'. *Assessment Books, 4th Series Volume 47*.

Adelaide City Council Archives. '1905'. *Assessment Books, 4th Series Volume 52*.

Adelaide City Council Archives. '1906'. *Assessment Books, 4th Series Volume 57.*

Adelaide City Council Archives. '1980-1981 Gawler, Hindmarsh, Grey'. *Assessment Books, 4th Series Volume 128.*

Adelaide City Council Archives. '1984-1985'. *Assessment Books, 4th Series Volume 1.*

National Library of Australia

Boettger, Otto. *Catalogue of engineering, surveying, optical and scientific instruments manufactured and imported by Otto Boettger, optician and scientific instrument maker to the South Australian and other governments*. Otto Boettger, 1896. https://nla.gov.au/nla.obj-39928893/view?partId=nla.obj-39928908#page/n0/mode/1up

Directories

South Australian Directory for 1882 (Sands and McDougall Limited, 1882).

South Australian Directory for 1906 (Sands and McDougall Limited, 1906).

South Australian Directory for 1956 (Sands and McDougall Limited, 1956).

Heritage Surveys

Department of City Planning, *City of Adelaide Heritage Study: Volume 2 Hindmarsh Ward*. City of Adelaide, 1983.

Land Titles

Certificate of Title Vol. 2343 Folio 78.

Certificate of Title Vol. 382, Folio 222.

SITE DETAILS

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

DESCRIPTION OF PLACE:	Two-storey office building featuring Federation Queen Anne and Federation Gothic style design elements.	
HISTORIC THEME/S	5. Developing South Australia's Economies 5.1 Developing South Australia's economy 5.7 Understanding scientific and technological development 5.8 Developing manufacturing, engineering and construction and service industries 6. Developing Social and Cultural life (Supporting and building communities) 6.9 Innovating and advancing knowledge	
DATE OF CONSTRUCTION:	1906	
REGISTER STATUS:	Nominated: 20 March 1985 Provisionally entered: 12 September 1985 Confirmed: 11 September 1986	
CURRENT USE:	Office building, 1973 – present	
PREVIOUS USE(S):	Scientific instrument manufacturing and dwelling, 1906 – 1973	
ARCHITECT:	Edward Davies and Charles Walter Rutt, 1905 – 1906	
BUILDER:	C. H. Martin, 1906	
LOCAL GOVERNMENT AREA:	City of Adelaide	
LOCATION:	**Street Address:**	84 Flinders Street Adelaide 5000 SA
LAND DESCRIPTION:	**Title Reference:**	CT5866/461 F181679 A837
	Hundred:	Adelaide

PHOTOS

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

Observatory House, 1912. Note the associated shop and dwelling to the right of the building, since demolished.

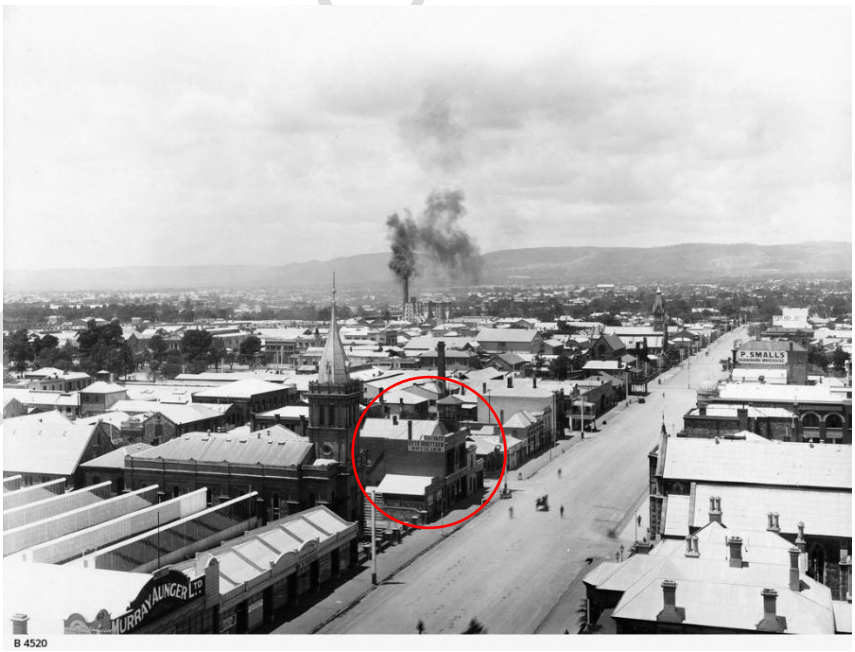
Source: SLSA, B 1804.

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

Observatory House, 17 June 1925.

Source: SLSA, B 2719.



Panorama of Flinders Street, 1916. Observatory House can be seen circled in the centre of the image.

Source: SLSA, B 4520.

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

Eastern elevation of Observatory House, viewed from Wyatt Street, 16 August 1956. Note enclosed balcony, since removed.

Source: SLSA, B 13698.

Southern elevation of Observatory House, 15 March 1963.

Source: SLSA, B 13698.

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

Southern elevation of Observatory House c.1970s Note the altered fenestration at ground level and painted facade.

Source: DEW Files.

Observatory house c.1982-1985. Note signage on eastern elevation now covered by adjacent building.

Source: DEW Files, c.1982-1985.

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

Southern elevation of Observatory House c.1999

Source: SLSA B 71869/37.

Southern elevation of Observatory House, October 2018.

Source: DEW Files, October 2018.

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

Portion of hipped roof with terracotta tiles, decorative capping, ridging and finial on southern elevation, and galvanised steel on northern side.

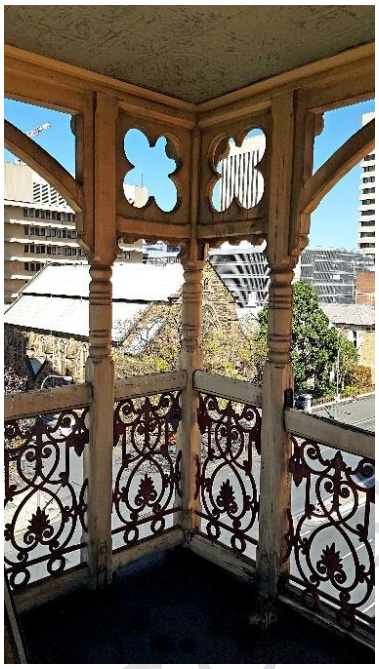
Source: DEW Files, 11 October 2018.

Door to access belvedere.

Source: DEW Files, 11 October 2018.

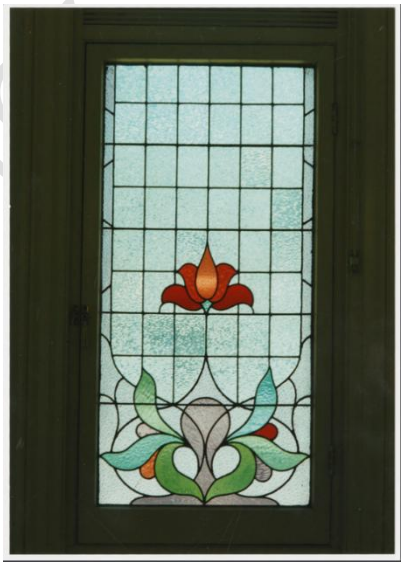
Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide



View of north-western corner of belvedere. Note the iron balustrade, timber joinery, decorative fretwork and pressed metal ceiling.

Source: DEW Files, 11 October 2018.



Portion of window holding leadlight, as seen from interior of building.

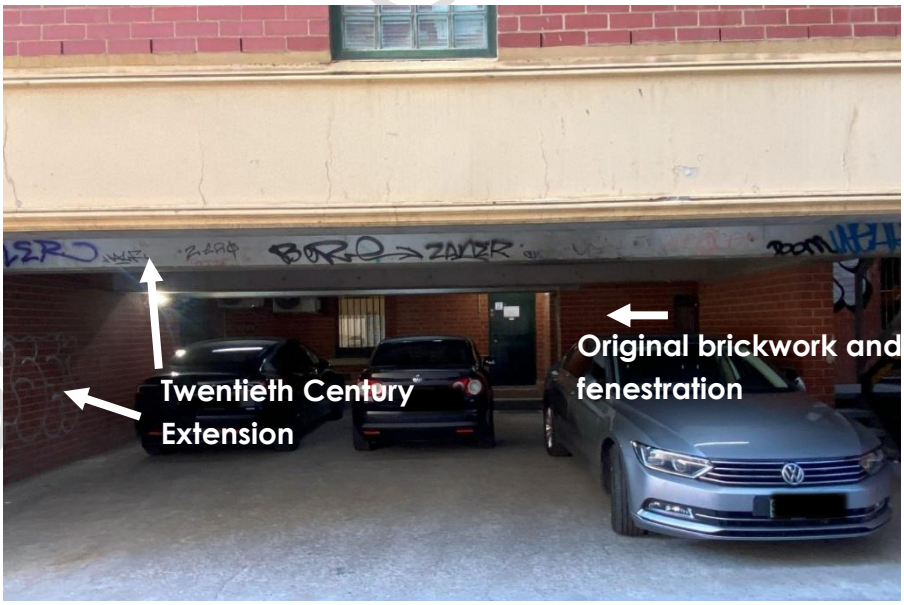
Source: SLSA, B 71772/26.

Observatory House **PLACE NO.: 13392**

84 Flinders Street, Adelaide

Fanlight and French doors leading to balcony, located on eastern and western side of tower section of first storey.

Source: DEW Files, May 2026.



Rear of building, note original brickwork and fenestration.

Source: DEW Files, May 2026.

REVISIONS

Date	Changes

[1] Paolo Brenni, 'From Workshop to Factory: The Evolution of the Instrument-Making Industry, 1850-1930,' in *The Oxford Handbook of the History of Physics,* ed. Jez Z. Buchwald and Robert Fox (Oxford University Press, 2013), 584.
[2] Brenni, 'From Workshop to Factory: The Evolution of the Instrument-Making Industry, 1850-1930', 585.
[3] Deborah Jean Warner, 'What is a scientific instrument, when did it become one, and why?' *The British Journal for the History of Science* 23, no.1 (1990): 85.
[4] H.C. Bolton, J. Holland and N.H. Williams, 'The Grimwade Milligram Chemical Balance: An Early Attempt to Establish a Scientific Instrument Industry', *Historical Records of Australian Science* 9, no. 2 (1992): 107.
[5] Bolton, 'The Grimwade Milligram Chemical Balance: An Early Attempt to Establish a Scientific Instrument Industry', 108.
[6] H.C. Bolton and Nicola H. Williams, 'Scientific Instrument Makers and Dealers in Victoria, 1840-1914', *Historical Records of Australian Science* 12, no.1 (1998): 16.
[7] H.C. Bolton and Nicola H. Williams, 'Scientific Instrument Makers and Dealers in Victoria, 1840-1914', 16.
[8] However, engineers, astronomers, scientists and others also developed scientific instruments.
[9] Brenni, 'From Workshop to Factory: The Evolution of the Instrument-Making Industry, 1850-1930', 611-612.
[10] 'Sawtell's Nautical Optician', SA History Hub, accessed 17 April, 2026, https://sahistoryhub.history.sa.gov.au/subjects/sawtells-nautical-optician/.
[11] *South Australian Directory for 1883* (Sands and McDougall Limited, 1883), 58-59.
[12] Boettger had already returned to Germany by this stage but was still listed in directories. *South Australian Directory for 1906* (Sands and McDougall Limited, 1906), 1094 and 1097.
[13] 'Our Story', Laubman and Pank, accessed 27 April, 2026, https://www.laubmanandpank.com.au/about-us/our-story; 'A Scientific Exhibition', *The Victor Harbour Times*, 12 October 1928, 1; 'Preserving the Eyes', *The Advertiser*, 14 February 1914, 23.
[14] For example, Alexander Dobbie and David Adamson; Elizabeth Warburton, 'Alexander Williamson Dobbie (1843—1912)', Australian Dictionary of Biography, accessed 7 May, 2026, https://adb.anu.edu.au/biography/dobbie-alexander-williamson-12888; Julie Evans, 'David Beveridge Adamson (1823—1891)', Australian Dictionary of Biography, accessed 7 May, 2026 at https://adb.anu.edu.au/biography/adamson-david-beveridge-12766.
[15] 'A Colonial Made Theodolite', *Port Augusta Dispatch and Flinders' Advertiser*, 17 September 1884, 2.
[16] 'No title', *The South Australian Advertiser*, 17 Apr 1880, 5.
[17] Watkins, Rod D., 'Profile: Donald Herbet Schulz', *Clinical and Experimental Optometry* 87, no. 3 (2004): 188.
[18] Barry Cole, *A History of Australian Optometry: Two Hundred Years of Beating the Tyranny of Distance and Fighting Political Battles to Find New Roles and a New Place in Health Care* (Australian College of Optometry, 2015), 32.
[19] Including architect George Thomas Light and William Little. 'Police Court', *South Australian*, 4 April 1848, 2; 'Advertising', *Adelaide Times*, 17 December 1849, 1.
[20] Barry Cole, *A History of Australian Optometry*, 59.

[21] 'Kaurna Voices: Cultural Mapping of the Adelaide Park Lands', City of Adelaide accessed 16 April, 2026, https://www.cityofadelaide.com.au/community/reconciliation/kaurna-voices/.
[22] Christine Lockwood, 'Early Encounters on the Adelaide Plains and Encounter Bay', in *Colonialism and its Aftermath: A History of Aboriginal South Australia*, ed. Peggy Brock and Tom Gara (Wakefield Press, 2017), 68.
[23] Lockwood, 'Early Encounters on the Adelaide Plains and Encounter Bay', 81.
[24] Lockwood, 'Early Encounters on the Adelaide Plains and Encounter Bay', 67, 81.
[25] 'Advertising', *South Australian Register*, 14 January 1878, 2.
[26] 'Latest News', *Evening Journal*, 17 April 1880, 2.
[27] The street numbering changes over time. Begins as 84-88 Flinders Street, then 106-110 Flinders Street, then back to 84-88 Flinders Street.
[28] 'Awards', *South Australian Register*, 06 October 1887, 7.
[29] 'General News', *South Australian Weekly Chronicle*, 6 August 1887, 13.
[30] Otto Boettger, *Catalogue of engineering, surveying, optical and scientific instruments manufactured and imported by Otto Boettger, optician and scientific instrument maker to the South Australian and other governments* (Otto Boettger, 1896), https://nla.gov.au/nla.obj-39928893/view?partId=nla.obj-39928908#page/n0/mode/1up.
[31] 'The Happy Valley Waterworks', *Adelaide Observer*, 13 June 1896, 42.
[32] Adelaide City Council Archives, '1900', *Assessment Books, 4th Series Volume 47*.
[33] The site stayed under Caroline Kohler's ownership until her death in 1920; Adelaide City Council Archives, '1904,' *Assessment Books, 4th Series Volume 51*; Adelaide City Council Archives, '1905,' *Assessment Books, 4th Series Volume 52*; Certificate of Title Vol. 382, Folio 222.
[34] The premises has since been demolished. 'Messrs. J.M. Wendt', *Critic*, 23 November 1904, 21; 'A Morning with an Optician', *Herald*, 07 September 1901, 10; 'Preserving the Eyes', *The Advertiser*, 14 February 1914, 23.
[35] 'Improvements in the City', *Observer*, 26 May 1906, 39.
[36] Susan Marsden, Paul Stark and Patricia Sumerling, eds., *Heritage of the City of Adelaide: an Illustrated Guide* (Corporation of the City of Adelaide, 1990, 133-134.
[37] 'Advertising', *The Areas' Express*, 27 December 1907, 2.
[38] 'A Successful South Australian Student', *The Mail*, 31 May 1913, 3; 'Advertising', *The Register*, 01 November 1913, 14.
[39] Optometrists Association Australia, 'South Australia', *The Australasian Journal of Optometry* 3, no.2 (1921): 32.
[40] Certificate of Title Vol. 2343 Folio 78.