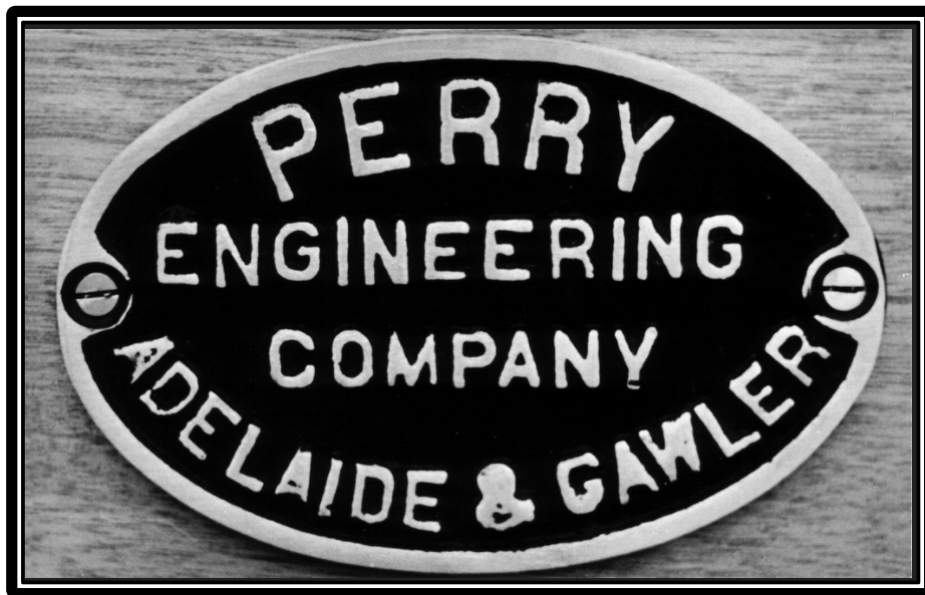


Perry Engineering Ltd.

a brief history



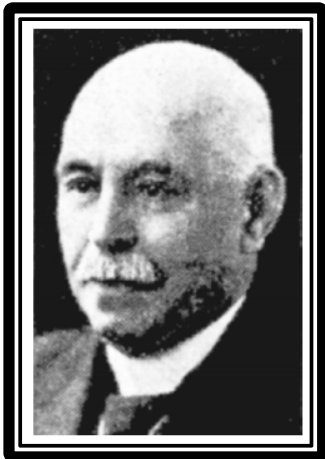
*The trademark/nameplate attached to machinery built by Perry Engineering in Gawler.
https://www.flickr.com/photos/gawler_history/6759699217/*

West Torrens Historical Society Inc.

(G. Grainger, 2020)

*Every effort has been made to provide complete and accurate information,
please advise of any errors or omissions.*

SAMUEL PERRY



Samuel Perry (b. c. 1865), a son of John and Harriet Perry nee Howles of Shropshire, England arrived in South Australia aboard the steamer Liguria in June 1888.

Born in Wellington, Shropshire, Perry had left school at the age of ten and served a seven-year apprenticeship as an ironworker with the prominent Quaker-owned Coalbrookdale Company of Shropshire. He then worked for several years for a marine engineering company in Hythe, Hampshire. At age twenty-two Perry followed his brother, **Reverend Isaiah Perry** (1854-1911) to South Australia.

Samuel Perry, Chronicle, 27 March 1930 p56
<https://trove.nla.gov.au/newspaper/page/8827446>

In South Australia, Perry (who was known to friends as Sam) first worked as a blacksmith and wheelwright with **T.J. Wilkinson and Son, Gawler**, then at iron founders **W. Durnell and Company** of Dale Street, Port Adelaide.

In 1890 Perry went to Melbourne and worked with the **Braybrook Implement Works**, Footscray, then as a foreman with manufacturing engineers **John Danks and Son Limited** of Bourke Street Melbourne. In March 1894 Perry briefly returned to Adelaide to marry **Mary Jane Rofe** (1858-1924) in the Port Adelaide home of the bride's parents. The couple went on to have one child, **Vera May Perry** (1902-1988).

1897 GENERAL IRONFOUNDER AND BLACKSMITH

Returning to Adelaide in late 1897, initially for a holiday, Perry instead almost immediately bought the **Tubal Cain Ironworks** of Hindley Street Adelaide (north-eastern corner of Gray Street) where he set up shop as a 'General Ironfounder and Blacksmith'. (The business was on land Perry leased from **William Henry Gray** of West Torrens).

The local economy was struggling and in later years Perry liked to recall that in his early days he had employed only 'two men and a boy' and had taken whatever work he could find. This included mending the axle of a hawker's van that had broken down outside his front door or fixing a bicycle pump.

Business slowly improved and Perry moved on to horse-shoeing, general blacksmithing and the building of small carriages and trolleys. One of his important early contracts was to supply iron fencing for Prince Alfred College. At this time Perry lived in Hughes Street, Mile End.

1902 CORNWALL FOUNDRY, ADELAIDE

In 1902 Perry bought from the estate of **James Wedlock** the 0.28 acre/0.11 hectare Cornwall Foundry which adjoined his factory on its northern side; Perry renamed his business as the **Cornwall Foundry** and by now was employing about forty.

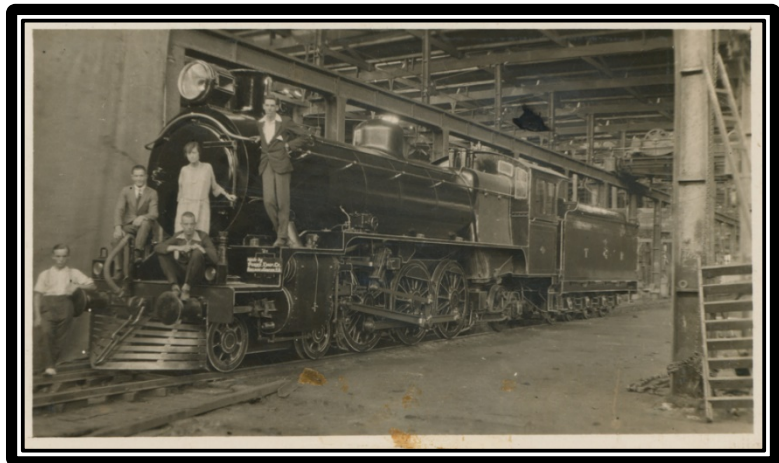
A little later Perry established a 0.14 acre/0.06 hectare bridge and girder yard nearby on North Terrace. Although in mid-1908 Perry won the contract to manufacture poles, support arms and ornamental top pieces for Adelaide's burgeoning electric tram network, from about this time the firm progressively moved into the more lucrative field of supplying builders' steel and ironwork.

The Cornwall Foundry also built small bridges at Narridy/Crystal Brook (1910), Port Adelaide (1910) and Morgan (1912).

A key breakthrough for Perry came in April 1912 when he secured a £17,955 contract to supply ten locomotive boilers to the South Australian government.

Perry was not yet in possession of the equipment required to carry out the order so he sailed to England in May 1912, bought the forty-five separate pieces of necessary machinery and returned to Adelaide in early August. Although Perry now already employed about 120 workers, gaining the locomotive contract precipitated his plans to expand his operations.

Locomotive built by Perry Engineering Co for the Tasmanian railways. B14460 State Library of South Australia



1908 MILE END SOUTH

As early as 1908 Perry had secured 3.9 acres /c.1.6 hectares on the western side of Railway Terrace, Mile End South, about one hundred metres south of today's Sir Donald Bradman Drive, then Hilton Road. (Under an agreement with the owner of the land, the **South Australian Company**, Perry did not formally buy the site until January 1915, when he paid £800).

Perry was attracted to the area because of its proximity to the proposed **Mile End railway yards** and to the city of Adelaide and its relatively low land prices. Perry's later assisted in the building of the rail yards, in late 1911 securing a contract to construct

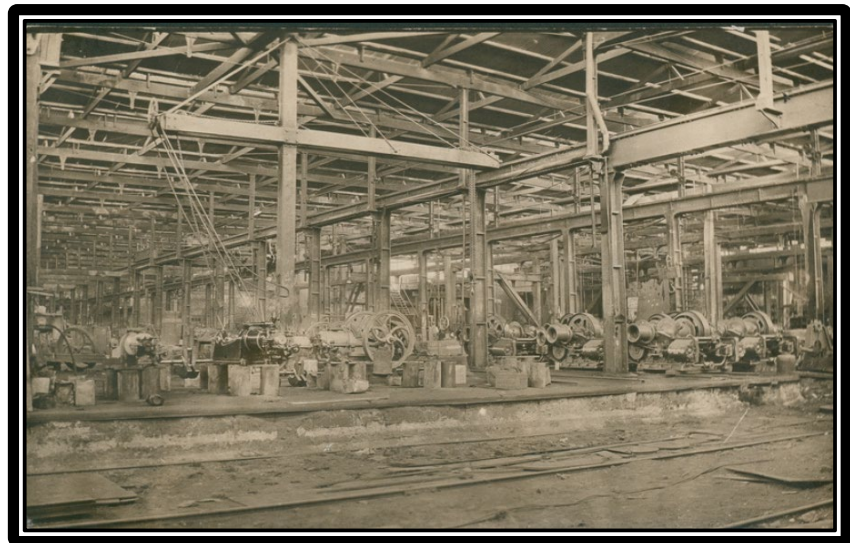
thirty-four coal staiths [unloading docks] for the yards and, in a contract of mid-1913 worth £11,000, to build a bridge on Hilton Road allowing traffic to pass over the yards.

The 1912 government locomotive boiler contract was too large to be carried out at Perry's Hindley Street premises so in 1912-13 he transferred his entire operation to the Mile End South site; a railway siding was later built running directly into the factory.

Perry's was the first of several businesses to build factories at Mile End South. By the late 1920s Perry's site had expanded to twelve acres/c.4.9 hectares. In later years the company's address was usually given as 122-150 Railway Terrace, Mile End South.

Perry prospered in the decade or so after the move. In April 1915 his company won a £45,650 contract to build six freight locomotives for the commonwealth government for use in the construction of the **East-West transcontinental rail line**. Deciding that the Mile End South site was too small for the project Perry almost immediately bought **James Martin and Company's** ailing **Phoenix Foundry of Gawler**; Perry Engineering (as it was known from October 1916) thereby became the largest engineering company in South Australia.

*1910 Interior of Perry
Engineering Co.,
formerly Martin Phoenix
Foundry.
B 16621/17 State Library of
South Australia*



Perry's production at its Mile End South and Gawler plants expanded to include more locomotives, boilers and general rolling stock for the commonwealth, South Australian, Victorian and Tasmanian governments.

Output included the construction at the Gawler works in 1922 of the six largest locomotives built in Australia to that time – the one hundred ton 'Mountain' (or 4-8-2) engines – for the Tasmanian government. In the company's then largest contract Perry's was paid £164,592 for the total of ten locomotives it built for the Tasmanian government. In a 1927 contract worth £25,880 Perry's built seventeen locomotives for the construction in Victoria of the Hume Weir and the Silvan Dam.

LOCOMOTIVES, ENGINES, SHIP COMPONENTS

Locomotives remained the largest component of Perry's production until the late 1920s. In addition however the company built smaller steam and internal combustion engines; all manner of ships' requirements, including capstans, hoists, windlasses and winches; a wide range of mining and manufacturing equipment including concrete mixers, cranes, crushers, excavators and pumps; road making machinery; cableways for lock construction in South Australia (Overland Corner, 1924); kilns for South Australian and Queensland cement companies; locomotive turntables; and bridges.

BRIDGE CONTRACTS

Among the latter were bridges at Burra and Little Para in 1924 and Paringa in 1926 and a large number of smaller bridges for the SA railways rehabilitation schemes of the mid-1920s.

By the beginning of 1927 Perry Engineering employed around five hundred workers at its two sites, produced an annual output worth £250,000, had an accumulated capital value of £100,000 and exported to among other places, New Zealand, Java and the Malay States.

Mr L.C. (Leslie Cecil) Leslie (1889-1966), Perry's chief designer and technical supervisor for over thirty years from the early 1920s, played a key role in most of the company's design work during these years and was a crucial component in the company's growth. In 1925 the **Made in Australia Council** produced a seven-minute film showing a day in the life of Perry Engineering.

<https://aso.gov.au/titles/sponsored-films/day-engineering-works/clip1/>

SAMUEL PERRY'S COMMUNITY ASSOCIATIONS

By the mid-1920s Perry had risen to a lofty position in South Australian business, holding for various periods positions including as president of the South Australian Employers' Federation, chair of the S.A. Chamber of Manufactures and the S.A Board of Trade and membership of the Adelaide Chamber of Commerce, the Central Council of Australian Employers and the South Australian Board of Industry.

Perry was also a committed Methodist. In addition to **Isaiah**, two of his brothers, **Enoch** and **John**, were Methodist ministers in the United States, as was his nephew **Wesley**, while another nephew, **Charles**, was a minister in South Australia.

After Isaiah's death, in 1915 Perry paid for the building of the Perry Memorial Pipe Organ to a design by the Reverend T. Geddes White; the organ was installed at Holder Memorial Church, West Adelaide (now Mile End).

Perry Memorial Pipe Organ
<https://awuc.org.au/about-2-2/perry-memorial-pipe-organ/>



IMPACT OF GOVERNMENT ISLINGTON WORKSHOP

The late 1920s were challenging for Perry's. By then the South Australian government had centralised and expanded its train construction activities at the modernised Islington Railway Workshop or else secured contracts from interstate or overseas firms. Perry's lost a significant source of revenue.

1925-1937 Black and white photograph of the steel yards at Perry Engineering Company, with a view over the factory roof and over houses beyond at Mile End. Text on verso reads 'Perry Eng. Works. View from top of stairs at entrance to lay-out room'. B 76202 State Library of South Australia





1928 DEATH OF SAMUEL PERRY

In July 1928 Perry closed the Gawler foundry and concentrated the company's work at Mile End South.

The following year the Depression hit suddenly and hard, further cutting demand for Perry's product, while Samuel Perry's health became problematic from late 1929.

Perry died in March 1930, obituaries appearing in all of Australia's major newspapers.

<https://trove.nla.gov.au/newspaper/article/83497715>

FRANK TENNYSON PERRY

What could have been a disastrous time for the company was however averted. For many years Perry had been grooming his nephew **Frank Tennyson Perry** (second son of his brother Isaiah) to take over the running of the business.

Born in Gawler in February 1887, after schooling at Prince Alfred College Frank had started working with his uncle as a sixteen-year-old. He became manager of Martin and Company in 1915 and a few years later the works manager at Mile End South. Industrious, tough and highly astute, by 1927 Frank was general manager of the combined Perry works.

Samuel had been a hard task master. He allegedly told Frank just before his death that if, when Frank eventually took over the company, it ever made a yearly loss he must immediately close it down and sell it.

After Perry's death Frank became chairman and manager of Perry Engineering and immediately set about rationalising and improving production methods at Mile End South. (It was Frank who had made the decision to close the Gawler foundry in 1928).

1931 INCORPORATION

In April 1931 the company was incorporated, becoming the **Perry Engineering Co. Ltd.** Frank and his cousin Charles were two of its three directors, with Frank as managing director. The decision was made to return into the business a high proportion of company profits.

Under F.T. Perry's careful guidance the company was able to ride out the most difficult years of the Depression and by the late 1930s had consolidated its place as the state's largest engineering business.

LARGEST ELECTRIC TELPHER CRANE IN AUSTRALIA

One of its bigger projects of the 1930s included the building in late 1934 of the largest electric telfer crane ever constructed in Australia. The crane, weighing about 125 tons/127 tonnes and with a carrying capacity of 17 tons/17.3 tonnes, was built for the **Mackay Harbours Board**, Queensland for around £16,000.



1935 The Telfer crane constructing the southern breakwall. NQBP Collection

MAJOR PROJECTS

Other 1930s projects included the fabrication from December 1936 of the steelwork for the **University of Adelaide footbridge** (the bridge was put in place in April 1937);



Circa 1937 University Footbridge B 35481 State Library of South Australia

the construction in 1934-51 of nineteen 18-ton locomotives for the north Queensland sugar industry – Perry’s was the first significant builder of locomotives for the Australian sugar industry (some are still in use for tourism purposes); the construction in mid-1938 of a 6500 ton/6604 tonne bulk oil storage tank, holding 1.5 million gallons/3.79 million litres, for **Broken Hill Associated Smelters** at Port Pirie; and in early 1939 the provision for £50,252 of the 1,100 tons/1118 tonnes of steelwork required for the 246-metre **Birkenhead Bridge**. The bridge, officially opened in December 1940, was the first double-leaf bascule – ‘opening’ – bridge built in Australia. By February 1939 Perry’s was employing around 370 workers.

In the 1930s F.T. Perry with others also played an important role in encouraging the state government to develop secondary industry in South Australia and in helping to devise policies to achieve that end.

WAR TIMES

After 1939 Perry’s quickly transitioned to war work. The company manufactured a wide range of military equipment including forgings for artillery shells, mortars, depth charges, torpedo propellers and anti-tank guns; armoured vehicles; aircraft parts; five sets of main engines for Corvettes (small warships); five 75-ft/22.9 metre steel tug boats; mine sweeping winches; fuel storage tanks; cranes for the Hendon and Finsbury munitions factories; mobile refrigeration chassis; and mills for grinding gunpowder.

At the peak of wartime production Perry Engineering’s workforce rose to around 1250, about one-third of whom were – controversially at the time – women. (Before the war Perry’s had had just one female employee, Miss R. Gardiner, Samuel Perry’s secretary).

During the war Perry’s expanded to cover almost twenty acres (8.1 hectares) at Mile End South, making it one of the most substantial engineering companies in Australia. F.T. Perry also played a key role in the construction of Australia’s overall defence materials production strategy. In September 1939 he succeeded **Essington Lewis** on the federal government’s Advisory Panel for Industrial Organisation and in 1940-45 he was honorary chairman of the Board of Area Management for South Australia.

By the 1940s Perry had also risen to prominence in various state and federal boards: he was for example one of the founders and the first president of the **Australian Metals Industries Association** (1943-48) and president and vice-president of the

Associated Chambers of Manufactures of Australia (1938-42); he was also president of the **South Australian Iron Trades Employers' Association** (1930-38); president of the **SA Chamber of Manufactures** (1939-41) and president of the **SA Metal Industries' Association** (1940-48).



*Frank Tennyson Perry South Australian Centenary
: official civic record of South Australia 1936*

In politics Perry had served on the St Peters council as an alderman (1922-32) and mayor (1932-33). A powerbroker in **South Australia's Liberal and Country League**, Perry had been the member for the House of Assembly seat of East Torrens in 1933-38. He was a member of the Legislative Council for Central No. 2 division in 1947-65.

PEACETIME CONTRACTS

As Perry's re-tooled for peacetime one of its first projects was in late 1945 a contract for two hundred rail freight wagons for Ceylon (Sri Lanka), to that time the company's largest overseas contract. It was the beginning of over a decade of prosperity.

In early 1946 Perry's gained contracts for cableways to be used in the construction of the **Butler's Gorge dam**, Tasmania and the **Keepit dam**, New South Wales and for a 10 ton/10.2 tonnes capacity gantry crane for BHP Whyalla.

The following year it supplied a 560 ton/569 tonne hydraulic press for **SA Rubber Mills**, Edwardstown. Perry's continued to manufacture trains for the Queensland sugar industry, including in late 1948 a £49,000 order for seven steam engines.

In January 1949 Perry's won a £150,000 contract to make electric cableways for use in constructing the **Kiewa River hydroelectric scheme** at Mt Bogong in Victoria.

By far the company's largest contracts of this time were connected with the construction of the £10 million **Warragamba Dam**, west of Sydney, NSW, then the largest dam built in the southern hemisphere. Perry's won the Warragamba contracts against competition from engineering companies across the world.



https://www.researchgate.net/figure/Warragamba-Dam-main-wall-construction_fig6_289972099

LARGEST CABLEWAY

In August 1947 Perry's secured a £190,000 contract to supply two 1610 feet/490.7 metre electrically driven cableways capable of carrying 4000 tons/4064.2 tonnes of concrete and other material per day.

In September 1947 it won, with a British company, the £393,454 contract to build a 12.5 mile/20.1 km double cableway from Penrith to Warragamba to carry building materials for the dam (both the 1947 projects took two years to construct and install, the latter being by far the largest cableway built in Australia and one of the largest in the world).

From November 1949 it constructed two 19-ton/19.3 tonnes winches, then the largest built in South Australia, for use in the dam's construction

1948 PUBLIC COMPANY

In April 1948 Perry Engineering became a public company, thereby increasing from twenty-five shareholders to 290. By February 1949 the company's initial nominal share capital of £250,000 had doubled. The Perry family retained just over 50% ownership of the company while three Broken Hill mining companies, for whom Perry's were doing considerable work, were given a total of 30%.

The company continue to prosper during the 1950s. Two of the company's larger projects of the decade included in May 1953 a £205,000 contract to supply two 10 ton, 1900 feet/579 metre aerial cableways for the construction of the **Tinaroo Falls dam** in North Queensland, and in June 1954 a £70,000 contract to erect tanks at the **Port Pirie uranium treatment works**.

LAST STEAM LOCOMOTIVE

Perry's also continued to build locomotives and freight wagons, though on a much smaller scale than previously. It produced its last steam locomotive, the 'North Eton 7', for use in the North Eton sugar mills in Queensland in 1952. (Today the many locomotives produced by Perry's remain of great interest to train buffs).

1950s ACHIEVEMENTS AND NEW DIRECTION

In 1954-55 Perry's earned an after tax profit of £128,846, its best ever profit result to that time.

F.T. Perry had been awarded an MBE in the 1951 New Year honours and was knighted (KB) in the New Year Honours of 1955. In addition to its corporate success

Perry's also had a generally excellent relationship with its staff: it was regarded by most as a compassionate company to work for and had an active social and sporting club.

In 1956 Perry's son-in-law **Donald (Don) H. Laidlaw** (1923-2009) joined the company as a senior executive; in January 1961 he became joint managing director, then chairman in late October 1965, a few days after the death of Frank Perry. (Laidlaw had married [Audrey] **Vivienne Perry** (1925-1964) in Adelaide in June 1949).

Laidlaw took the company in a new direction by deciding to concentrate on the manufacture of structural steelwork for buildings and mechanical presses for the booming local automotive manufacturing industry. (The automotive presses were huge, weighing over 200 tons and exerting pressures of 1800 tons on a sheet of steel for a car roof panel).

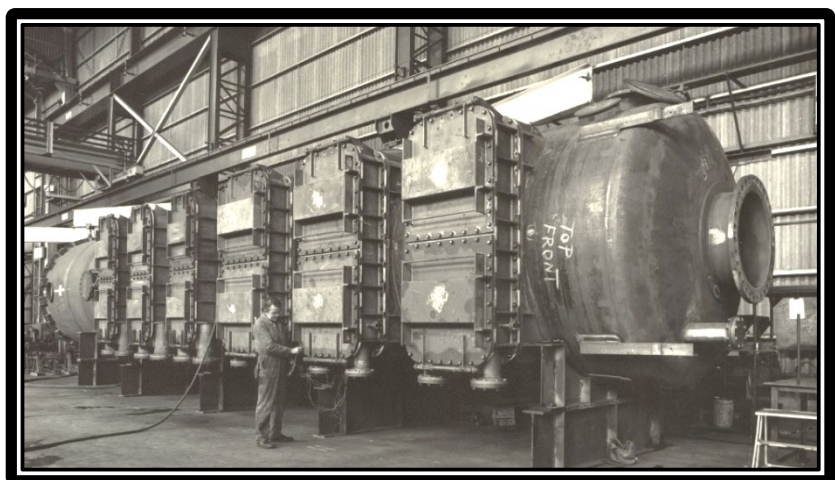
Perry's eventually built over four hundred presses for automotive and general industry; this became in Laidlaw's words 'a bread and butter line'.

In the 1950s and 1960s Perry's also built spare parts for motor vehicles: steering boxes for **Chrysler Australia Limited** were sourced from Perry's adjacent plant.

The company's prosperity was reflected in its workforce numbers. In 1960 Perry's employed what was to remain its largest ever peacetime workforce, around 1200 workers from forty-two countries, up from 600 in 1950.

Later in the 1960s Laidlaw became an advocate for the employment of women, negotiating an agreement with the **Australian Society of Engineers** that saw Perry's become the first major employer of women in the Australian manufacturing sector. Laidlaw also served in the late 1960s as president of the **Metal Industries' Association of Australia**.

1965 Manufacture of large scale industrial item (boiler?) by Perry Engineering Company Limited at its industrial site at Mile End, with an employee standing beside it. BRG200/25/2/2 State Library of South Australia / Perry Engineering.



1960s ACQUISITIONS AND EXPANSION

In 1961 the company announced it would build two plants at Whyalla, one for heavy duty steel fabrication and another for the construction of aluminium windows.

In August 1961 Perry's began a contract to build paper making and pulping equipment for the **British Walmsley (Bury) Group Limited**.

More significantly, in the wake of the opening of its Tonsley Park plant, Chrysler Australia in October 1965 sold its 6.5 acre/c. 2.6 hectare site at Mile End South to Perry's for £225,000.

The total factory area owned by Perry at the site now covered more than 750,000 square feet (17.2 acres/ c.6.96 hectares) making it the largest heavy general engineering plant in Australia. (Perry's later progressively sold off the land, for example in October 1991 selling portion to the **Le Cornu Furniture Discount Centre**).

In 1965-66 Perry's profits were a record \$781,438. In August 1966 Perry's won a contract to manufacture forging machines for the new (opened November 1967) Chrysler plant at Lonsdale.



1965 Aerial view of Perry Engineering Company Limited industrial site at Mile End South, looking west (bounded at left hand side by Scotland Street and at front by Railway Terrace). The photograph's tonal colour of the surrounding suburban area has been 'greyed' to enhance the area of the factory site. BRG200/25/2/1 State Library of South Australia / Perry Engineering

JOHNS & WAYGOOD PERRY ENGINEERING LIMITED

Despite the positive outward signs, Perry's management realised in the mid-1960s that South Australia's thirty-year manufacturing boom was beginning to slow. The company felt it could secure longer term national growth only through an alliance with another established company. Thus in mid-September 1966 Perry announced its intention to merge with **Johns & Waygood Holdings**, a Melbourne-based lift and escalator manufacturer founded in 1888.

The new company, **Johns and Waygood Perry Engineering Limited**, had an issued share capital of \$13.5 million, with Johns and Waygood holding 67% and Perry 33%. The merger was completed in December 1966, Don Laidlaw becoming deputy chair and joint managing director of the new company.

The Adelaide Advertiser newspaper described **Johns and Waygood Perry**, which eventually went on to employ over five thousand workers, as a 'new giant ... on the Australian industrial scene'. But, with Johns and Waygood holding two-thirds of the new company's ten board positions, Perry's business decisions would now be made in Melbourne.

1977 JOHNS PERRY LTD ; BORAL-JOHNS PERRY

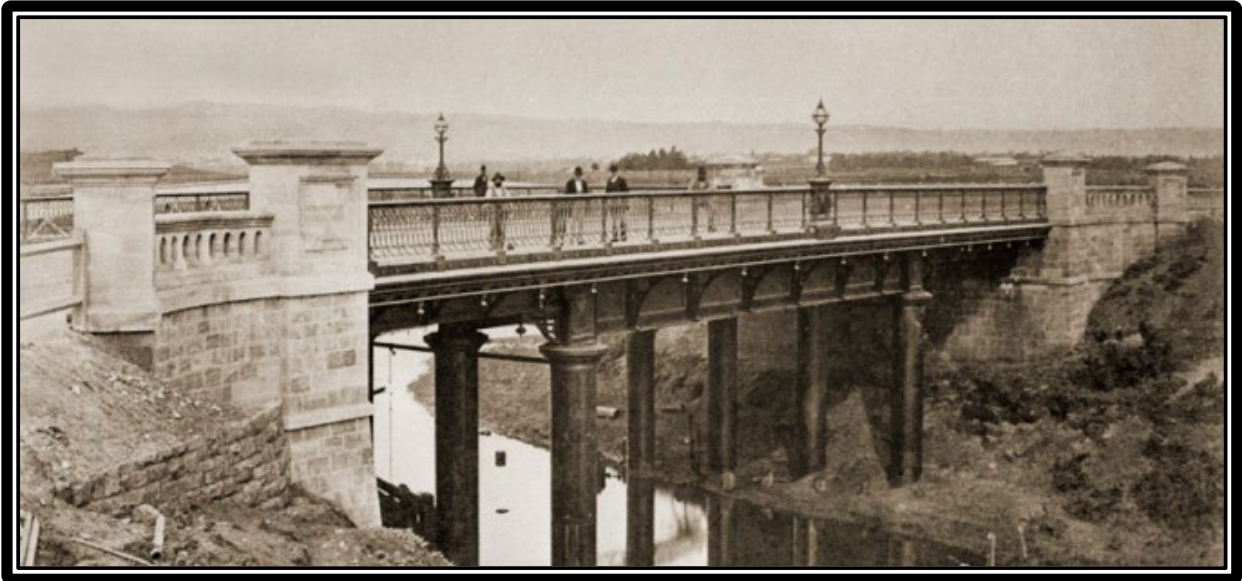
Over the next twenty years the ownership and nomenclature of Perry Engineering changed through a series of corporate manoeuvrings. In March 1977 Johns and Waygood Perry became **Johns Perry Ltd**, which then was acquired in a \$180.42 million takeover by **Boral** effective from February 1986; the new company was briefly named **Boral-Johns Perry**. Notwithstanding its various corporate cloakings Perry Engineering remained a distinctive part of the Australian engineering environment.

In the 1970s and 1980s Perry built chassis for **Holden**: Laidlaw was said to be especially proud of how the company had won the tender to manufacture the chassis for the Holden Kingswood range of cars - a project which lasted thirteen years and produced 1.5 million frames. Perry also built the chassis for the HQ Holden One-tonner into the 1970s.

In the 1970s and 1980s Perry worked on defence projects such as the manufacture of lift trucks for loading bombs onto planes, and in the 1990s contributed to the development of the prototype **Bushcraft armoured military vehicle** as well as to the **Collins Class submarine** (hull segments, interior platforms and storage tanks) and Anzac frigates (rudders and stabilizers).

Civil projects included work on the **Adelaide Festival Centre**, **Goldsborough House** (North Terrace) and the **Yallourn W power station** in the early 1970s; telecommunication antennae in the late 1970s and mid-1980s; the Olympic Dam and

the Northern Power Station in the mid-1980s; and in the mid-1990s the steel fabrication work for the new Hindmarsh Bridge, Port Road.



HRP.Hindmarsh Bridge.Nomination.Nov 2014.pdf Engineers Australia

The then Minister for Transport, **Diana Laidlaw** – a daughter of Don Laidlaw and a granddaughter of F.T. Perry – opened the bridge in November 1996. In the event it proved to be one of Perry's last major projects.

Throughout these years Perry Engineering also continued to manufacture cranes, castings and forgings, elevators, escalators and trenchers.

Don Laidlaw had retired from Johns and Waygood Perry at the end of 1973, though he remained on the board until 1988. In January 1989 he was made an officer of the Order of Australia (AO) for his services to business and to the community.

In the wake of a long term nationwide downturn in manufacturing, which was especially acute in South Australia, the end of Perry Engineering came somewhat suddenly. By the early 1990s Perry's annual sales had fallen to around \$40 million per year and the company had not made substantial profits for several years.

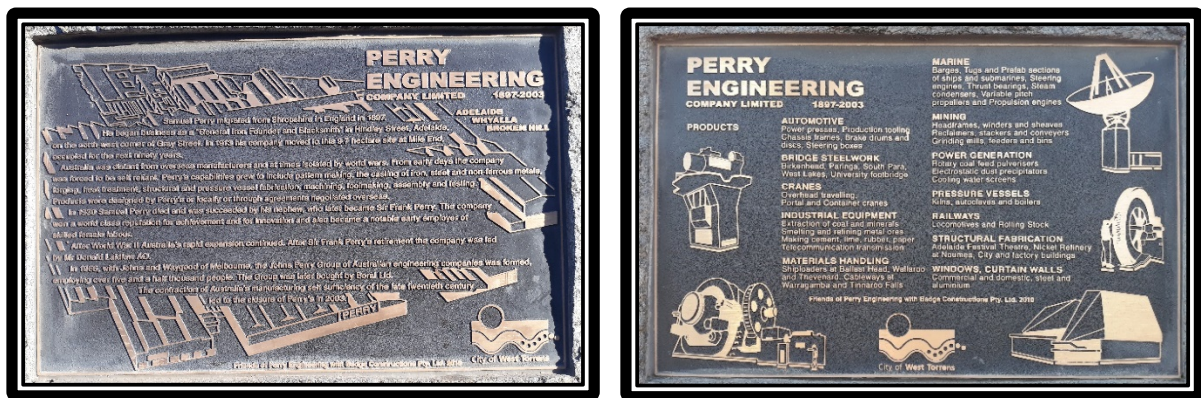
1977 POPE ELECTRIC MOTORS GROUP

As part of a company-wide rationalization Boral shed its engineering division in January 1997 and sold Perry Engineering to the Adelaide-based **Pope Electric Motors Group**. Large scale sackings at Perry's followed in 1998-99. Perry Engineering was placed into receivership in May 2000 (when it still had 120 workers) and was subsequently liquidated, though the process was not completed until October 2007.

2004 SITE BECOMES MILE END HOMEMAKER CENTRE

In May-July 2002 most of the buildings on the former Perry's site were demolished to allow construction of the \$50 million **Mile End Homemaker Centre**; the first stage of the centre opened in December 2004. In 2004-5 the last of the Perry's buildings were demolished to make way for stage two of the Homemaker Centre; the centre is now called the '**Mile End Home Shopping Centre**'.

After eighty-seven years Perry Engineering's time at Mile End South came to an end. A perhaps poignant reminder of what had been is a memorial plaque, partly funded by the Friends of Perry Engineering, unveiled at Railway Terrace adjacent to the Mile End Home Shopping Centre in late 2010.



Perry Engineering Railway Terrace Memorial Plaque WTHS 2020

The State Library of South Australia has an extensive collection of items from Perry Engineering limited refer: BRG 200

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Update 13/8/21

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