

# TOOWOOMBA FOUNDRY

## Extract from Triumph of the Griffiths Family By Bruce Millett

The history of the Toowoomba Foundry is worthy of description because it depicts the pioneering and entrepreneurial spirit of the Griffiths family, it continues to be deeply immersed in the economic development of the Darling Downs, and it reflects the tenacity of an organisation to survive and prosper after 112 years of fluctuating circumstances.

The firm commenced business in 1871 when George Washington Griffiths opened an ironmonger's shop in Ruthven Street, Toowoomba. A number of years later, a foundry was established and became known as the Toowoomba Foundry, a manufacturer of a diverse range of products including windmills and locomotives. The following history is portrayed in terms of the critical events and issues in the life of this successful enterprise.

### 1871 – The Ironmonger's Shop

Towards the end of 1870, George Washington Griffiths came to Australia in the sailing ship *Light Brigade*. Mr Griffiths was twenty-six years of age when he left England with his wife, Isabella, eldest daughter Margaret and eldest son Arthur, to establish a new life in the Colony. During the sea voyage, a Mr J.C. White of Jondaryan, lectured to some of the four hundred passengers and crew on Australian rural life, and the thriving sheep and wool industry on the Darling Downs. It was the glowing account of the Darling Downs by Mr White that influenced this Griffiths family to settle in Toowoomba.

Toowoomba had only been established some twenty years earlier, with the discovery of Josiah Dent's tent on the site where the present Myers Retail store now stands. But in this short period of time, this new urban development was well on the way to becoming a provincial city and the gateway to the rich Downs. In 1870, Toowoomba offered exciting prospects for the new settlers with talent and enterprise. The establishment of railway lines linking Toowoomba with Ipswich, Dalby and Warwick promoted the prosperity of the region.

Upon arrival in Toowoomba, G.W. Griffiths immediately gave up the idea of sheep farming because of the capital and experience required to purchase and maintain the large properties of the day. His experience with woodwork gained him employment in the building trade. With an initial capital of £200 and an average weekly wage of 8/-, he was able to build the family's first cottage within the first twelve months. The cottage was located opposite the present Roman Catholic Cathedral in James Street, Toowoomba.

In 1871, Mr Griffiths and his brother-in-law, Mr W. Atherton, set up an ironmonger's shop next to the City Hall. His father had sent him a couple of consignment of ironmongery which was enough to allow the partners to commence trading under the name of 'Griffiths and Atherton'. Atherton also came from England on the sailing ship *Light*

*Brigade*. He was an excellent fitter and turner and in England, was recognised as a millwright. With this sort of experience, the partners were able to operate a small repair workshop comprising a small lathe, a drill, a steam engine and two small blacksmiths fires. In 1873, Mr Atherton left the partnership but it is believed he remained on in the workshop as an employee of the firm.

At about the same time as Mr Atherton's departure, Mr Griffiths's brother, Mr John Alfred Griffiths, arrived from England. John Griffiths was an engineer with academic qualifications. The two brothers formed a new partnership and the firm was renamed 'Griffiths Bros. and Co.'. The new partnership commenced during a period of increased trade, and before long, the two brothers began to consider expansion. In November 1873, the Toowoomba Chronicle reported that the 'little machine shop of Griffiths Bros. and Co.' was being expanded. In fact, Griffiths Bros. had sold the firm to Holberton and Co. with a view to establishing a Foundry.

### **A New Foundry for Griffiths Bros.**

The beginnings of the present Toowoomba Foundry can be traced to the purchase of two acres of land in late 1874 on the north-west corner of Ruthven and Campbell Streets. The land was purchased for £260 from a Mr Stewart. The position was ideal for the erection of a foundry because it had access to good water, the railway line and the main street. The design and construction of the new foundry was a major enterprise in itself, because construction continued throughout 1875 and the operations didn't commence until the beginning of 1876.

A description of the new establishment was contained in the Toowoomba Chronicle on Saturday 12<sup>th</sup> February 1876. This new Foundry consisted of an office, storerooms, and four large workshops. The first workshop was devoted to the Sawing Department. The second workshop was the Fitting and Machine Shop. The third workshop was used for casting and had the distinction of recording the pouring of the first casting in iron on the Darling Downs. The fourth workshop was occupied by the Blacksmiths and Boilermakers.

Griffiths Bros. advertised themselves as a general foundry and engineering business, and indicated that they were prepared to carry out a variety of work including:

- Castings of all kinds
- Millwright work and gearing
- Forging of all kinds
- Boiler making and repairs
- Twining, shaping, drilling, etc.
- Sawmilling work

By March 1882, the firm proudly advertised that they were the makers of:

- Steam engines and boilers
- Wool presses, patent 'Boomer' presses
- Hydraulic dumping presses, hay and chaff presses, etc. etc.
- Washpool requirements, spouting and soap tanks
- Pumps, deep well pumps

- Pumps specially adapted for windmills and heavy lifts
- Windmills and horse pumps
- Sheep and cattle troughing
- Castings, iron or brass any weight and length
- Verandah, ornamental and palisading castings
- Railway waggon builders, etc.etc.
- And that they undertook jobbing and repairs

Two significant items in the advertisement are the windmills and railway waggons. In 1876, the first of many models of windmills came off the production line. In retrospect, the windmill became a trademark and the mainstay of the firm's presence in a variety of product markets. On the other hand, the railway waggons indicate another side to their business; that of contracting or tendering. Over the years, large contracts, such as those in the early days from the Railway Department, helped the firm to survive.

G.W. Griffiths was obviously an enterprising man. During the first five years of operation of the Griffiths Bros. new Foundry, he, in a personal capacity, undertook the lease of the Albert and Victoria Sawmills near Pechey which is in the Crow's Nest district, to the north of Toowoomba. However, after two years of operation, what seemed to be an attractive proposition, turned into a £900 loss. There was a depression on the Downs in the early 1880's, which affected the timber trade and the lessee often spent days riding about collecting money to pay wages. The loss of his working bullocks due to an epidemic of pleuro-pneumonia was the final determining factor which caused the termination of the lease of the Pechey sawmills.

During this same period 1876-1881, however, the Foundry and Engineering business had performed reasonably well. There had also been a significant change to the partnership. During 1876, Mr J.A. Griffiths left the firm to become Assistant Engineer in the Construction Branch of the Queensland Railway Department. Although he was no longer on the staff of Griffiths Bros. and Co., he retained the status of partner with a financial interest. Three new partners were admitted to the firm. They were:

Miss Lilly Griffiths – who later became Mrs Taylor  
 Mr L.W. Marsland – Brother-in-Law to the Griffiths Brothers  
 Mrs Harriott Marsland (nee Griffiths)

This partnership continued until the formation of a public company.

### **A Public Company is Formed**

In 1884, the population of Toowoomba was approaching 10,000 and the prospects for the Toowoomba Foundry were bright. A large contract involving over fifty waggons of different makes, had been completed and further contracts for waggons, worth £13,000 were in hand. The firm's main product lines, particularly the windmills, were competitive in the markets of the day. Mr R.W. Scholefield of Gregory and Scholefield, Accountants, Toowoomba suggested to the partners of Griffiths Bros. and Co. that they form a company with a capital of £5,000; each partner was to take his or her interests in fully paid up shares. The motives for this suggestion are not apparent. As a consequence, however, to the debate on the suggestion, it was agreed to dissolve the partnership and Mr George Washington Griffiths would buy out the interests of the other partners. In

order to achieve this and expand the business at the same time, G.W. Griffiths took steps to form a public company.

A public company was a good proposition for the owner for a number of reasons. Firstly, the firm was experiencing prosperity and growth and therefore was an attractive product in itself. Secondly, Toowoomba and the Darling Downs was large enough to contain the necessary pool of investors. Thirdly, a public company provides expansion capital and still allows the owner to maintain significant control.

A Prospectus for the formation of the company was issued during the first half of 1884. The following is an extract setting out the preliminary details.

## PROSPECTUS

Of the

### TOWOOMBA FOUNDRY and RAILWAY ROLLING STOCK MANUFACTURING COMPANY LIMITED

To be Incorporated under 'The Companies Act of 1863', limiting the Liability of Shareholders to the amount of their shares.

CAPITAL – £20,000, in 4000 Shares of £5 each.

Applications are invited for 3000 of these Shares, to be paid up as follows:

£1 on application, £2 on allotment, and the balance as may be required in calls of not more than 10s. each, at intervals of not less than three months.

#### **Provisional Directors:**

Hon. A.C. Gregory, Esq., M.L.C., C.M.G.  
Hon. W.H. Groom, Esq., M.L.A.  
James Campbell, Esq., M.L.A.  
F.H. Holberton, Esq., J.P.  
J. Lockwood Graham, Esq., J.P.  
W.R. Robinson, Esq.  
G.W. Griffiths, Esq.  
S.G. Stephens, Esq., J.P.  
R. Aland, Esq., M.L.A.

#### **Bankers:**

THE QUEENSLAND NATIONAL BANK, LIMITED.

#### **Solicitors:**

Messrs HAMILTON & SONS.

#### **Brokers:**

Messrs GREGORY & SCHOEFIELD, Toowoomba.

#### **Provincial Secretary:**

R.W. SCHOLEFIELD, Esq.

The composition of the first provisional directors indicates the strength and backing of the venture, with one member of the Legislative Council of Queensland and three members of the Legislative Assembly of Queensland. Perhaps one of the better known local personalities of the day was William Henry Groom, who was a provisional director but did not continue on as a director when the company was fully established, although he continued his association as a shareholder. Groom was a 'rags-to-riches' story and became known as the 'Father of Toowoomba'. Transported for stealing, he became a storekeeper, publican, auctioneer and proprietor of the *Toowoomba Chronicle*. He also became a man of considerable influence for Toowoomba and the Downs. He was mayor of Toowoomba at the time of formation of this company as well as a member of the Queensland Legislative Assembly. He died in 1901 as a newly elected member of the Australian House of Representatives.

The company was sold to the public as a going concern, formerly Griffiths Bros. and co. The vendor offered the business to the company for the sum of £10,000, half of which amount would be accepted as cash and the other half in fully paid-up shares. Mr G.W. Griffiths also offered his services as manager of the company for £400p.a. The promoters of the company saw the financial conditions of sale as lucrative because the present prospects of the Foundry were bright and with further expansions, more profitable advantages could be gained, particularly with the rapid development of the railway system and the increasing demand of railway stock. The promoters expressed their confidence, listing a number of special advantages in the prospectus, namely:

Firstly, it is a well established and paying concern; secondly, being situated at Toowoomba, it is in the centre of a large agricultural district being rapidly developed by the aid of machinery; thirdly, being situated close to the Railway Station, and arrangements having been made with the Commissioner for Railways (in connection with the present extensive additions and alternations being made there) for a Siding to be made into the Works, every facility will then be obtained for the receipt of raw material and despatch of the manufactured article, and repairs and other work for the Railway Department could be undertaken, which now have to go to Ipswich; fourthly, timber, which is the essential material in the manufacture of Railway Rolling Stock, is readily obtained from Highfields at a reasonable rate, and of the best descriptions, and with the further extension of the Highfields Railway, passing as it does through large tracts of good timber, the supply is not likely to diminish for many years to come.

As the promoters suggested, the business looked spectacular at that time, and many towns-people had been impressed and willing to buy shares. As a result, Mr George Washington Griffiths had been appointed managing director at £400 p.a., a Mr W. Jarrot was appointed the first secretary of the company at £150 p.a. and on the 15 December 1884 the provisional directors elected the first full set of directors of the company. They included:

A.C. Gregory, Esq., M.I.C., C.M.G.  
R. Aland, Esq.  
R.W. Scholefield, Esq.  
S.G. Stephens, Esq.  
L. Graham, Esq.

C. Campbell, Esq.  
G.W. Griffiths, Esq.

The new company Toowoomba Foundry and Railway Rolling Stock Manufacturing Company Limited was fully operational by the end of 1884 and what the shareholders had acquired, in financial terms, is reflected in the following schedule.

## SCHEDULE

### BUILDINGS AND MACHINERY

Sawmill and Tools	£535	
Boiler and Engine Shop	715	
Machine Shop	867	
Foundry	315	
Smithy and Boiler Shop	650	
Pattern Store	490	
Goods Store (2)	120	
Brass Foundry	50	
Office	30	
Yard, Foundry Boxes, Cores etc.	100	£3,872
Pig and Bar Iron, Copper, Tin, etc.	608	
Sundries, Bolts, etc.	200	
Firewood	50	
Timber (Log or Sawn)	50	
Castings	20	928
Freehold Land, including Railway Siding	3,300	
3 Cottages	400	
Goodwill and Contracts	1,500	5,200
		£10,000

It is important to note that the Griffith family purchased sufficient shares of the company after the turn of the century, thus maintaining control. For most of the twentieth century, the Southern Cross enterprise, including the Toowoomba Foundry operated as a private company.

The early history of industrial development on the Darling Downs would be incomplete if some mention was not made of one of the major competing firms. Porritt and Co. grew rapidly to prominence on railway contracts and agricultural machinery. The firm was a major competitor for the Toowoomba Foundry in the early days.

### **The Takeover of Porritt & Co.**

The founder of the Toowoomba Foundry was a man of enterprise and daring. Since 1871, George Washington Griffiths had used all his energies and initiatives to build one of the biggest industrial complexes on the Darling Downs. A brief account of the history of Porritt and Co's Reliance Foundry illustrates further the determination of the man as well as some of the other industrial pioneers of the time. On 13 May 1882, a copy of the following notice appeared in the *Toowoomba Chronicle*.

Reliance Foundry

To Station and Mill Owners

Selectors and Others

Porritt & Filshie  
Engineers, Iron & Brass Founders etc.

Near entrance to the Railway Gates in Russell Street, Toowoomba.

Beg most respectfully to inform the Station Owners and Residents of the Darling Downs that they have COMMECED the above business in all its Branches, and trust by supplying material and workmanship of guaranteed quality, combining strict punctuality and reasonable charges in all favours entrusted to them, to secure their patronage and support.

The entire business will be under the PERSONAL SUPERVISION OF MR PORRITT late Engineer-in-Charge of the Toowoomba Water Works.

P & F are prepared to undertake the manufacture of any special or ordinary work connected with engines, machinery, pumps and mills of every description. Castings in iron or brass made to order from patterns or drawings sent from any part of the District, with the utmost accuracy and despatch.

Engines, Machinery and Pumps of every kind erected or repaired in any part of the District, Engineers Requisites always in stock.

The Reliance Foundry was initiated by Mr Porritt, who had previously worked for Griffiths Bros. & Co. and was also Engineer-in-Charge of the Toowoomba Water Works. He persuaded Mr Robert Filshie that there was money to be made out of an engineering business, and as a consequence, Mr Filshie provided sufficient finance to establish the business in the name of Porritt and Filshie. The firm commenced with bright prospects. In the early 1880's, times were good and work was plentiful. However, after the first year of operation, Mr Filshie sold his share in the business and the firm changed its name to Porritt and Co. The reason for his departure is not known.

In the first few years, the firm won Railway Department contracts for rolling stock and had successes with its 'Reliance' windmill and assorted pumps. At the height of activity, there were as many as seventy men employed. However, by 1887, things were changing. Government work had finished. The carriage shed, for rolling stock was let to deteriorate in preference to suffering losses on further tenders. The only big job undertaken was a contract for twenty six columns with ornamental caps and brackets to be used on the new railway platform at Warwick. With thirty men still employed in the foundry in 1887, Mr Porritt was still confident of maintaining a viable industry for the region and was experimenting with a new chaff sieve. There was a need for such a simple but effective mechanism, for all farmers complained of the dirty condition of the chaff at harvest. The implement was a success.

Although approaches had been made before, the letter from Porritt & Co. to the Directors of the Toowoomba Foundry on 12 January 1891, offering their stock in trade, plant, buildings, land and goodwill for £10,503.3.5d, was the first real indication that things were grim. The early 1890's was a period known as an economic depression with disastrous effects within commerce, industry and agriculture. The Directors of the Toowoomba Foundry left the offer in obedience pending some further offer from Porritt & Co. to accept a price which was considerably lower.

On 7 May 1891, the following notice appeared in the *Toowoomba Chronicle*.

#### NOTICE

HAVING PURCHASED the whole of the PLANT, TOOLS, STOCK-IN-TRADE, and BUILDINGS of the Reliance Foundry, lately carried on by MESSRS PORRITT & CO.

I beg to inform the many friends of Messrs Porritt & Co. as well as our own customers, that having bought the whole of the PATTERNS, TEMPLATES, ETC. of the late firm, we shall be able to supply any specialities manufactured by them at equally reasonable rates.

Both businesses being now under one management, and with increased appliances and less expense, we shall be able to do any work entrusted to us CHEAPLY, EXPEDITIOUSLY and EFFICIENTLY.

For the

TOOWOOMBA FOUNDRY COMPANY, LTD  
RUTHVEN STREET  
G.W. GRIFFITHS  
Managing Director.

Mr George Washington Griffiths reported to his fellow directors of the Toowoomba Foundry that he had privately purchased the Reliance Foundry, and had a written guarantee from Mr Porritt he would not start a similar business within a radius of seventy miles for a period of five years. In his personal capacity, Mr G.W. Griffiths was able to provide some assistance to the Toowoomba Foundry in these hard times by ensuring that the Reliance Foundry would not be a future competitor and incorporating some of the more modern and efficient plant and equipment into the Toowoomba Foundry's production lines.

### **A Change of Management**

In 1890, the Toowoomba Foundry entered the great depression period with only a small jobbing trade and struggled for survival until 1895 when more rolling stock contracts were gained. These contracts meant a new period of stability until the contracts began to run out in 1901. It was during this period that two of Mr G.W. Griffiths's sons joined the business. Atherton A. was born in 1878 and left school in 1895 to join his father. He commenced as a fitter in the machine shop but soon became an assistant to his father in the office. George Herbert, known to workmates, business associates, and local people generally as 'Bert', was born in 1881 and joined the Toowoomba Foundry in 1898. He

gained valuable experience in his early years as a designer, pattern maker, moulder and windmill erector.

In August 1900, at the age of 22, Atherton A. Griffiths was appointed a Director and Deputy Managing Director of the Company. This was the first of a number of significant promotions in the young man's life. Three years later, he was placed entirely in charge of the business while his father took twelve months leave and returned to England to visit his parents and relatives. Although this was an honour for Atherton, it was nevertheless a big responsibility to accept particularly in 1903.

In that year, conditions of slack trade and general depression re-appeared, similar to ten years prior. The Government had also indicated to the Company that it intended to undertake most of the future work for the Queensland Railways at the Ipswich workshops. The number of workshop employees had been reduced from 100 to 70. It was possibly these conditions that led Atherton and his brother Bert to look to the windmill trade as a means to reduce the dependence on contract work and satisfy a growing market for well-boring and water supply equipment, urgently needed in the coming years to provide fresh water to the thousands settling inland Australia. Mr Bert Griffiths designed the Southern Cross windmill which was a much improved product and superseded the existing windmill designs which were marketed by the Company. With this new product, Atherton was determined to gain a substantial share of the market. The prices of the windmill and all water supply equipment were cut to bedrock in order to achieve the desired market share.

However, Atherton did not remain to see the results of his efforts. Upon his father's return from England, he resigned as acting managing director and as a director of the company, and in February 1904, left to take up a position in England. His resignation placed a greater managerial burden on Bert Griffiths. Although Mr G.W. Griffiths had returned from leave and resumed his role as managing director, his active involvement in the management had diminished somewhat, leaving Bert general responsibility for all affairs except the financial business of the company. Bert was elected a director of the company later in 1904 due to his brother's resignation but in terms of his employment in the firm, he had no official managerial title until 1905.

After approximately a year abroad, Atherton Griffiths responded to a cable from his brother Bert, and decided to return to the company. In 1905, he was re-elected as a director and the two brothers received official management titles subordinate only to their father, who retained the Managing Director's position. Atherton became the Business Manager attending to the general office, sales, buying and finance. Bert was allocated to a position of Works Manager, responsible for Works staff, designing, production and erection. The two brothers consolidated their influence over the executive management of the organisation in the next few years and in December 1908, it was arranged that Mr G.W. Griffiths retire from the active management of the organisation, with Mr A.A. Griffiths becoming Managing Director and Mr G.H. Griffiths remaining Works Manager.

The major distinction in the work carried out by the Toowoomba Foundry over the years is that of producing items for sale on the open market and that of completing work under contract or tender. This distinction is important in relating the history of the Foundry because the opportunities and responses to each of the two categories of work have, in retrospect, been critical to the survival of the organisation. Up until 1923 when a major

decision was taken by A.A. and G.H. Griffiths with respect to the objectives of the company, the success and failures of the Foundry were dependent to a large extent on the ability of the firm to gain major railway and other contracts. When contracts ran out, the firm would bolster its product range in an attempt to gain better market advantages. Until 1923, the Directors of the Toowoomba Foundry would appear to react to the conditions of the day rather than plan for stability and growth over the longer term. As a prelude to the big decision of the joint managers in 1923, it is worth while describing the two products which represent selling and contracting respectively; windmills and locomotives.

## **Windmills**

Over the years, the Toowoomba Foundry has produced a wide range of products for general sale. Steam engines and boilers, diesel and petrol engines, pumps of all descriptions, hay, chaff and wool presses, chaff cutters, and windmills are but a few of the exhaustive list. Many of the products were and still are connected with agriculture. For this reason, seasonal variations and innovations in farm technology have caused products to come and go. The windmill however, has been predominant in the early years, in establishing market stability and enhancing the tradename of 'Southern Cross' around Australia. Even though the Southern Cross windmills are no longer the dominant force in the current range of Southern Cross products, it still has a role in the supply of water. The history of the Southern Cross windmill is in integral part of the history of the Toowoomba Foundry and warrants some mention.

In 1876, Griffiths Bros. & Co. were credited with making one of the first windmills in Australia. Sir Joshua Bell, part owner of Jimbour Station near Dalby, placed an order with Griffiths Bros. & Co. to construct four windmills, based on a windmill which had been previously imported to Jimbour Station from California, USA. These first windmills, known as the 'Griffiths' mill, were direct acting mills and the wheels and towers were of wood. A few years later, the firm produced a lighter windmill with the turntable located on top of the tower. This was known as the 'Economy'.

Up until 1893, the Toowoomba Foundry had a range which included 'the Economy, 'the Improved Economy', 'the Simplex Mill', 'the Little Wonder' and 'the Reliance which was taken over from Porritt's Reliance Foundry, purchased privately by Mr G.W. Griffiths in 1891. In 1893, during the depression and flood, Mr J.A. Griffiths returned to the Foundry and designed the 'Zephyr' windmill. Although there had been some previously made in the United States of America, this was the first geared windmill made in Australia. The first 'Zephyr' had a cellular steel sail while the vane arms were of wood. About 300 were made during the ten year period following 1893. Initially, there was little competition from American windmills during the first years of the 'Zephyr'. The only American mills sold were light wooden ones which had very narrow slatted sails. From 1898, galvanised American geared windmills on galvanised steel towers appeared on the Australian market. The Toowoomba Foundry made no attempt to copy any of these as the 'Zephyr' remained competitive. The 'Zephyr' was only produced when orders were received for them.

In 1902, Mr A.A. Griffiths with the assistance of Mr H. Eastgate then leading blacksmith at the Foundry, designed a galvanised steel wheel for the 'Zephyr' windmill. Previously they had put a galvanised steel vane on the mill.

The 'Zephyr' windmill then with a galvanised wheel and painted steel tower and a galvanised vane bore some resemblance to the imported American windmills.

Also in 1902, Mr Bert Griffiths who had been a railway wagon and carriage builder at the Foundry was sent to the Show Grounds with Mr Ernie Hindmarsh, still employed in the company's tool shop, to erect two of these 'Zephyr' windmills. There were numerous American steel windmills on exhibition. The advertising literature which was distributed at the time, described the immense numbers of these windmills that had been sold in the United States, and the magnitude of the firms manufacturing them. In some cases there were pictures of the large workshops where the windmills were produced. This situation caught Bert Griffiths's attention, particularly as the 'Zephyr' windmills would not revolve at anything like the speed with which the US mills did. The windmills were attracting a great deal of interest, and the slow speed of the 'Zephyr' was adversely commented on by onlookers. Discussing the problems of selling the 'Zephyr' against the American competition with his father, G.W. Griffiths, Bert was informed that the American mills were a cheap product. The Toowoomba Foundry Company could not possibly produce cheap mills such as the American counterparts.

However, it was agreed that Bert Griffiths could make sketches and drawings of a very cheap windmill which the Foundry might sell in competition with the American ones.

The sketches of this windmill which G.W. Griffiths named the 'Eureka' were made in an exercise book. Bert, being a woodworker, made the patterns. The whole concept was cheapness. Studies were made of the curvature and angle of the sails and a very fast running wheel was designed to go with the 'Eureka' windmill. These mills were sold very cheaply and were a success in terms of sales. There was no difficulty in selling them as they soon earned a reputation as good pumpers.

G.H. Griffiths went out erecting the mills, carrying tools on horseback and at that time climbed every windmill he came across. He also collected catalogues and literature regarding windmills from America, England and Germany. It soon became evident that the 'Eureka' windmill was not good enough to build up a permanent trade on and it was equally evident that a very big and permanent trade was desirable.

Bert Griffiths then, on the knowledge he had gained of windmills, designed a new mill of extreme simplicity but which was very robust.

The patterns for this new 8ft mill were made by G.H. Griffiths and E. Williams, a pattern maker at the Foundry.

The 'Southern Cross' windmill, as designed and named by Bert Griffiths, was to become one of the 'success' products which allowed the Toowoomba Foundry to regain stability and profitability after losing government railway contracts to Ipswich in 1902. Mr A.A. Griffiths was also part of these developments but he resigned from the company in early 1904, before the 'Southern Cross' had time to establish itself in the market. However, at the end of 1904, Mr G.H. Griffiths who had been in regular communication with his brother sent him a cable advising him not to remain in England but to return to Australia immediately, because of the success of the Zephyr and Eureka windmills, and the increasing popularity of the Southern Cross.

When A.A. Griffiths returned in early 1905, the 8ft. Southern Cross Windmills, by this time, were selling well. A lot of the lands about Toowoomba had been cut up into small farms. A.A. Griffiths took a bicycle and rode around Eaton Vale, Harrow and other places selling windmills. People demanded the Southern Cross but he had nothing but the 8ft. mill to sell, so he sold 10ft. and later 12ft. for quick delivery. Jury patterns were produced for these windmills in a few weeks, and in 1905, 8fts., 10fts. And 12fts. Were being manufactured in considerable numbers.

The 'Southern Cross' windmill was the forerunner of a whole range of windmills that were manufactured and sold under the trade name of 'Southern Cross' from 1903 until the present day. The mills have been improved over the years through the research and design efforts of such men as G.H. Griffiths, W. Boshammer and A.B. Lindley. The firm added to its range of windmills in 1925 when it completed an amalgamation arrangement with the Eclipse Windmill Company which operated on the land next door to the main workshop of the Foundry. The managing directors of Eclipse Windmills Company, Messrs E.A. & H.J. Cohoe, became shareholders of the Toowoomba Foundry and also took up managerial duties with the organisation.

The windmill still has its place today as a cheap source of power for pumping water in out-back areas. But the Southern Cross windmills serve as a monument to the early pioneering days, to the hardships, to the ingenuity of the pioneers, and not least of all, to the establishment of 'Southern Cross Machinery' as a producer and supplier of quality agricultural products. The 1903 Southern Cross Windmill was one of the major sales successes which later led to the creation of the Southern Cross Sales Organisation.

## **Locomotives**

Up until and including World War I, the large contracts, particularly the railway contracts, were instrumental in establishing the Toowoomba Foundry as a prestigious and capable manufacturer. Even since 1882, when the firm was still operating as Griffiths Bros. & Co., the contracts were many and varied. These contracts included ballast waggons, hopper waggons, goods waggons, buffers for waggons, 80,000 steel sleepers for the Normanton railway, carriage bogies, timber waggons, explosive waggons, lavatory waggons, insulated waggons and passenger waggons. However, the contracts for locomotives represented one of the biggest challenges of all.

In 1910, The Queensland Government called tenders for the supply of steam locomotives of the B15 passenger class. These contracts were seen by the Toowoomba Foundry as a stepping stone to building traction engines. A competitive tender of £3,000 for each locomotive was submitted. It was expected that Walkers Ltd. would have an advantage with respect to this tender because the firm had been in this line of business since 1873 and had the patterns, jigs, tools and experienced tradesmen for the job. The Toowoomba Foundry had no previous experience at building steam trains. However, the Government awarded a contract for twenty locomotives to the Toowoomba Foundry while Walkers Ltd. were given a contract for seventy and the firm of Evans, Anderson and Phelan received a contract for twenty. All contracts were awarded at the Toowoomba firm's quote of £3,000.

Despite gloomy predictions as to the inevitable failure of this enterprise, the staff set to work. Mr G.H. Griffiths, who had been appointed Works Manager in 1908, made a quick

trip to England, purchased machinery in Glasgow and at the Manchester Trade Fair, spent a few weeks at the Beyer Works there and a few at the Ipswich Railway Workshops. He was a competent sketcher and was fortunate in securing the services of a Mr Jessop from Tasmania and a Mr Bailey, both good draftsmen. They introduced an innovation by making all parts of the locomotives interchangeable and drew individual blueprints for every component. Another improvement introduced was the precision grinding of all pins and openings in the motion rods and valve gear. Competitors had always cast the cylinders for locomotives upright in the moulds, which meant allowing a substantial amount of machining to cut away the blisters and impurities which gathered at the top. The Toowoomba Foundry moulds for the cylinders were made at an obtuse angle, and the molten iron entered by a passage or 'gate' at the bottom. Space was left for the bubbles and dress to rise and collect in a bowl in the sand. It was a simple matter to trim this off the casting during dressing. The moulding shop never lost a casting. This is an example of a number of improvements made to the production technology to achieve better efficiency.

Although none of the tradesmen had had experience in building locomotives, the boiler makers had made many stationary engines, and Mr Walter Hampson proved a capable foreman. A Mr Harper had previously been employed rebuilding steam trains and therefore he was put in charge of the erecting shop in the hurriedly extended premises. The two Government inspectors, the Simpson brothers, found little to correct or adjust. Construction began in 1910 and the whole batch was completed by 1912. In the minutes of the Directors meeting for the 9/4/1912, Mr G.W. Griffiths said that he considered the company was to be congratulated on the job turned out.

Before the last of the B15 class locomotives were finished at the Toowoomba workshops, a further contract for fifteen C16 class locomotives with Walschaert valve gear, was awarded to the company by the Government. This contract was worth £60,000 in total. The last of the C16's were delivered by the Railway Department. It was commissioned on 21 April 1915 and withdrawn from service on 28 May, 1964, after travelling 1,134,533 miles around Queensland. This engine is currently on display at the Redbank railway museum yards in Brisbane.

In 1914 the Commonwealth Railways called tenders for the building of ten 20" cylinder saturated steam locomotives, and the Foundry, full of confidence with their success with Queensland engines, tendered on a weight basis of £60,000. World War I had begun, material was scarce and costly, and many of the staff enlisted, but work commenced. On account of these engines' greater weight, the Commonwealth Government agreed to pay an extra £5,000 on completion of the order.

They had Stephenson valve gear with D slide valves working on vertical instead of horizontal faces, and were 4'8.5" gauge. They were subsequently fitted with superheaters. Steel castings were made by the firm of Charles Ruwold in Victoria. The Toowoomba Foundry draftsmen had not drawn the patterns for the crossheads large enough to allow for shrinkage of the castings during cooling, with the result that during machining traces of black from the plumbage linings of the moulds were exposed. Mr Rankin, the Commonwealth Railway inspector, was not as experienced nor as helpful as the Queensland Railway inspectors, and inclined to reject them. However, as those locomotives were desperately needed for the Trans-continental line, he was persuaded to allow them to be used. No standard gauge track was available for testing the assembled locos, so they were jacked up and placed on rollers for this purpose.

When the first locomotive contract was awarded, the Toowoomba Foundry employed some 155 workers. At the peak of construction of the steam trains, the number of workers rose to some 333. However, as the contracts ran out, the number of jobs for the local Toowoomba people diminished and by 1918, the workshops and offices only employed some 70 staff. These figures give one indication of the impact the locomotive contracts had on the firm and the local economy. Although the building of the locomotives had been a great engineering challenge capably met by the Foundry, and had added to the firm's prestige as a manufacturer, it became evident, particularly after the war, that the dream of building steam traction engines had to give way to the realities of the internal combustion engine which was proving to be a more convenient source of power. Rail contracts, like those of shipbuilding, are uncertain. When they run out, the firm is put in some jeopardy.

The building of the locomotives by the Toowoomba Foundry in the early 1900's was a milestone in the firm's history for two reasons. It proved the ingenuity, quality and enormous capacity of the organisation for industrial manufacture. It also proved that it was time for the firm to devote this capacity to longer term stabilisation and growth. The big decision of 1923 was concerned with the future of manufacturing; contracts versus products.

### **The Big Decision**

In 1916, the profit for the year was most disturbing for the directors of the Toowoomba Foundry. The profit had dropped dramatically to almost a loss situation. The director's report for the year contained the following statement. 'The present high cost of material and labour has resulted in a decreased volume of business being done, and it has been considered necessary to reorganise your manufacturing establishments on a smaller scale. Part of the company's plant has been sold and some of it has been scrapped owing to obsolescence.'

It was decided between Messrs A.A. and G.H. Griffiths that much of the company's plant should be sold. The reasons for this decision have not been recorded but an extract from a memorandum dated 10.2.1916 in connection with an offer of the plant to the Government reads:

Failing a sale, it is the purpose of the Toowoomba Foundry Company to dismantle its Toowoomba Works, the Plant would be mostly sent to its Works at Rockhampton or Sydney, more likely the latter, because of the more favourable labour conditions prevailing there.

The buildings would be demolished and sold piece meal, and it is proposed to cut the land up and sell it in blocks. This land is approximately nine acres and adjoins the railway yards and has a number of railway sidings already leading into it, and it seems specially suited as a site for a Railway Works and Depot.

The present proprietors desire to sell and intend removing because of the movement of their trade to their NSW and Central Queensland establishments. There are really but two proprietors of the Toowoomba Foundry Company's stock, Messrs A.A. and G.H. Griffiths, and it is proposed that one look after the

firm's interest in Queensland, and the other in New South Wales. Toowoomba is not a suitable centre for the trade which the Company is now doing, it consists very largely of distributing heavy lines of merchandise, such as bore casing, piping, angle iron etc., so that failing a sale of the Toowoomba Works it will be necessary to dismantle it and realise.

It is anticipated that within one month of the Department taking over and delivery of material to the Works, shell bodies would be turned out ready for the vanishing and packing which would be more conveniently done at Ipswich.

Mr G.H. Griffiths at present Works Manager at Toowoomba would undertake the management for a period of twelve months, and would during that time, if so desired, make arrangements for the future control of the Works. Mr Griffiths would however be prepared to vacate the management at any time to suit the Government's convenience. Salary per annum £750.

The determination to sell the plant continued after the Government rejected the offer of sale, and a lot of the plant was sold. In addition, during the 1916/1917 financial year, the last of the Government Locomotive contracts were completed, and a further considerable proportion of the Company's plant used on that work was sold.

One of the influencing factors in this particular set of events was the recent establishment of production plants at St Peters in Sydney and at Rockhampton. In 1913, the Toowoomba Foundry Company bought Reeves Fitzroy Foundry in Rockhampton as a going concern for £4,250 and used the works to manufacture a considerable number of geared and direct acting windmills. In 1914, the Toowoomba Foundry Company had extended its sales office in St Peters, Sydney to include a production capability. It was thought that there would be brighter prospects for sales in the New South Wales and Central Queensland regions.

However, despite these efforts, the Toowoomba operation remained intact and in 1917, Bert Griffiths joined the Australian Imperial Forces (AIF) and went to war. Upon his return in 1919, Bert found the Company in a state of confusion and some deterioration. Consequently, considerable reorganisation and rebuilding was undertaken over the ensuing years. Production was ceased at Rockhampton and Sydney and £10,000 was spent on new plant and the reorganisation of the Toowoomba Works as the sales turnover had began to increase considerably from 1919 on.

In 1923, Messrs A.A. and G.H. Griffiths made a decision of great importance which has profoundly affected the future development of the company. They decided that the development and sale of the proprietary Southern Cross line of products throughout Australia and overseas, would be their main objective. They also decided that they would not, as a manufacturing concern, attempt to bid for Government contracts for anything except the proprietary lines manufactured in their works nor would they undertake jobbing work. They would concentrate on standardised quantity and mass production. On 17 December 1924, the Company drew up an Objective for the development of business during the period of 1924 to 1930. The objective is as follows.

**OBJECTIVE**

QUEENSLAND	(1)	Sales Organisation by Territories.	
	(2)	Servicemen ensuring Goodwill and continued business.	
	(3)	Complete control of our business – no Agents.	
	(4)	Turnover –	
		Toowoomba average annual	£100,000
		Brisbane average annual	£ 16,000
		Rockhampton average annual	£ 60,000
		Townsville average annual	<u>£ 60,000</u>
			<u>£236,000</u>
	(5)	Development Cairns Territory.	
	(6)	Development Northern Territory of Australia.	
	(7)	Engines Factory.	
NEW	(1)	As in Queensland.	
SOUTH	(2)	As in Queensland.	
WALES	(3)	As in Queensland.	
	(4)	Turnover – Annual.	£100,000

NEW TERRITORY – 1925 to 1926 to 1930 at latest.

1<sup>st</sup> Branch in Western Australia.

2<sup>nd</sup> Branch in South Australia.

3<sup>rd</sup> Branch in Victoria.

Development of Territorial Sales Department and Servicemen should produce staff for this.

1926 – 1927

Bar, Angle, and Steel Works in Newcastle with Galvanising Plant.

1930

South Africa.

**From World War to World War**

The first world war had its effect upon the business of the Toowoomba Foundry with increases in the cost of materials and labour, the decline in sales, and a contribution of £60,000 to war loans. It also made a significant impact upon the people of the Toowoomba Foundry. In excess of 130 men and enlisted during the period and these numbers included Mr G.H. Griffiths and Mr L.A. Boyce, grandson of G.W. Griffiths.

In 1917, soon after his marriage, Bert Griffiths enlisted, and his talents as an engineer were utilised to best advantage in a sapper's unit in the army. At the end of the war, he was sent from camp to camp. While waiting in England for his return home and subsequent discharge, he took the opportunity to inspect manufacturing plants and purchased new machinery and machine tools for the Toowoomba Foundry. He gained a passage back through the United States of America where he inspected engineering works and witnessed some of the new techniques employed. Upon his arrival and

discharge in Brisbane in 1919, Bert was classified as 'Absent without Leave' and consequently was not on the Government payroll for the period of his adventures.

Bert came home to see his baby son for the first time. In the ensuing happy years two more children were born, then tragedy struck. His wife passed away after only eight years of married life, leaving him a widower with three young children. He employed housekeepers to care for them, than at the age of fifty-two, he remarried, and three more children came to bear the name of Griffiths. The family home was 'Barrymount', at the eastern end of Jellicoe Street in Toowoomba. It has since been used as a Masonic home for boys, but the large block of land has now been subdivided into choice home sites.

Mr Leslie A. Boyce, a nephew of A.A. and G.H. Griffiths, was wounded in France during the first world war and when discharged, he joined the company as an assistant to A.A. Griffiths. In 1922, he became a director and over the years, demonstrated sufficient managerial expertise to be appointed General Manager in 1944.

After World War I, the company went through a period of reorganisation and the development of the first formal company Objective in 1923 was a significant milestone for the future. In 1924, the founder of the organisation, Mr G.W. Griffiths, died at the age of eighty. In the early 1930's, the volume of trade had significantly dropped due to the great depression and profits were affected accordingly. However, at no stage did the Toowoomba Foundry run at a loss.

When World War II broke out in 1939, the sales offices for the Toowoomba Foundry had developed into a large network of outlets for the Southern Cross products, covering most of Australia, and some overseas countries. There was offices in Toowoomba, Sydney, Charleville, Townsville, Rockhampton, Melbourne, Perth, Tamworth, Moree, Lismore and South Africa.

At the outbreak of the Second World War, the Commonwealth Government called on the company for assistance in manufacturing thousands of engines – stationary and marine – compressor units, generating and alternating sets, pumping and other equipment, for supply to the fighting forces of the Commonwealth, as well as to those of the USA, and the Netherlands East Indies. Also a very large contract, made up of several orders, was let for the manufacture of Shell Primers for which a separate factory was eventually built. During the period of the war, some 2,600,000 primers of artillery shells were produced. The period of War brought heavy demands on the company's manufacturing capacity, both for defence and civil requirements, and at times it was very difficult to keep up to the needs of both.

There was great expansion to the company's plant and buildings in Toowoomba and the factory was continually working to full capacity on a three shift basis during the period, with its wages personnel having increased from 208 to 1,044 in 1944, but declining to 782 in 1945, after the War he ended, and averaging about 900 for the next few years. The demand and the storage and manpower necessitated the introduction of female labour into the Works which has gradually declined since the war.

At the conclusion of the war, the Toowoomba Foundry received a letter from Wm H. Donaldson Jr., Brigadier General, US Army, Commanding, expressing thanks to the management and staff for 'the behind-the-scenes' work which is so necessary in military

operations and which, more often than not, goes unrecognised'. The letter acknowledges that without the supply, construction and service by Companies such as the Toowoomba Foundry, the task of the United States Forces in Australia of maintaining supply lines to Allied Forces in the Pacific would have been practically an impossibility.

During the Second World War, another significant change occurred in the management structure. In 1941, Bert Griffiths resigned from his position as joint managing director, leaving A.A. Griffiths as Managing Director and Chairman of the Board. In 1944, the Board of Directors of the Toowoomba Foundry Company appointed a Council of Management consisting of four directors. The Directors of their positions were:

Mr L.A. Boyce – General Manager  
Mr P. Dorfield – Sales Superintendent  
Mr A.A. Chote – Works Manager  
Mr H.A. Griffiths – Chief Inspector

The period from the first world war to the second world war inclusive contained times of stability and turbulence, depression and growth and times of anxiety. However, in this period, the company had grown considerably, diversified and prospered. The management of the company had also been further decentralised, moving from the original founder, to joint managing directors, to a Council of four.

### **Industrial Enterprises Pty Ltd**

Following the war, the Toowoomba Foundry continued to prosper with the gross output exceeding £1 million for the first time in the year 1948. This was in spite of a variety of difficulties including a shortage of materials, strikes and inflation. Also in 1948, 'Mr A.A. Griffiths, then Chairman of the Board and President of the Southern Cross Associated Companies in Australia, died in Toowoomba at 69 years of age. Bert Griffiths then became president.

In 1949, a holding company was formed and named Industrial Investments Pty Ltd, for the purpose of ultimately acquiring the whole of the shares, with the exception of the Director's qualifying shares, of both the manufacturing and retailing companies in Australia. On 30 June 1954, the Chairman of the Board gave the following address to the shareholders.

There have been important changes in the structure of what we have known as the Southern Cross Organisation. As you are aware that was a group of Companies comprising Toowoomba Foundry Pty Ltd as the central organising and managing unit and a number of independent companies situated in the different States and main localities which sold the Toowoomba Foundry Company's manufacturers. There has been difficulty in maintaining efficiency under that system and as your directors have been for years working towards bringing all the companies together under the ownership and financial control of a holding company, now Industrial Enterprises Ltd., and have reached finality in that direction, the time has been thought suitable to make the holding company the active administrator in place of Toowoomba Foundry Pty Ltd. For that purpose Industrial Enterprises will set up its own office which will be separately housed and be independent of any other office. The Council of Management will

in future derive its authority from Industrial Enterprises' Board of Directors and Toowoomba Foundry Pty Ltd will be separately managed. Your Directors have appointed Mr H.A. Griffiths General Manager of Toowoomba Foundry Pty Ltd and Mr L.A. Boyce will be Industrial Enterprises Ltd General Manager.

Industrial Investments Pty Ltd had been renamed Industrial Enterprises Ltd and had acquired the shares which it had been originally set up for.

In January, 1959, a new era in the management of the organisation commenced. Mr H.A. Griffiths was appointed Managing Director of Industrial Enterprises Ltd and its subsidiary companies. Herbert Atherton (Bunty) Griffiths is the eldest son of Mr G.H. Griffiths. He joined the firm in June 1936 and worked in a variety of departments in his early years. In 1941, he was appointed a Director and three years later, he was promoted to the position of Chief Inspector of the Company's products. Under the new arrangements determined in conjunction with the holding company, Mr H.A. Griffiths worked closely with Mr Leslie Boyce. These early experiences, especially with people of the calibre of his father, his uncle Mr A.A. Griffiths and Mr L.A. Boyce, were vital to preparing him for over twenty years of active participation as the chief executive officer of the Southern Cross Organisation.

Mr Leslie Boyce retired from active management in 1957 but remained on the board, from time to time, in an advisory capacity. This was the end of an active career which lasted more than 40 years which included appointments as sales manager in Rockhampton, General Manager of Toowoomba Foundry and General Manager of Industrial Enterprises Ltd.

Mr G.H. (Bert) Griffiths retired from active involvement in the management in 1944. However, he maintained his involvement through various positions on the Board of Directors. In different ways, he still worked for the Company. In 1949, he journeyed from Australia to South Africa in his motor launch 'Coongoola II' which was powered by two 60hp diesel marine engines made by the Toowoomba Foundry. The trip was primarily a business strip to investigate the sales potentialities of the Company's products in various countries visited along the route. Bert passed away in 1977 at the age of 96, ending a colourful career in commerce and industry on the Darling Downs.

The holding company name was changed from Industrial Enterprises Ltd to Southern Cross Corporation Ltd in March 1984. The board of directors felt this was necessary to incorporate the Southern Cross name and image at the apex of the organisation. At the same time the new S.C.C. logo was adopted.

In July, 1984, Mr H.A. Griffiths retired after 48 years with the organisation, the last 25 of which were as managing director. The organisation, under the direction of a board of directors and Mr Richard Griffiths who succeeded Mr H.A. Griffiths as managing director.