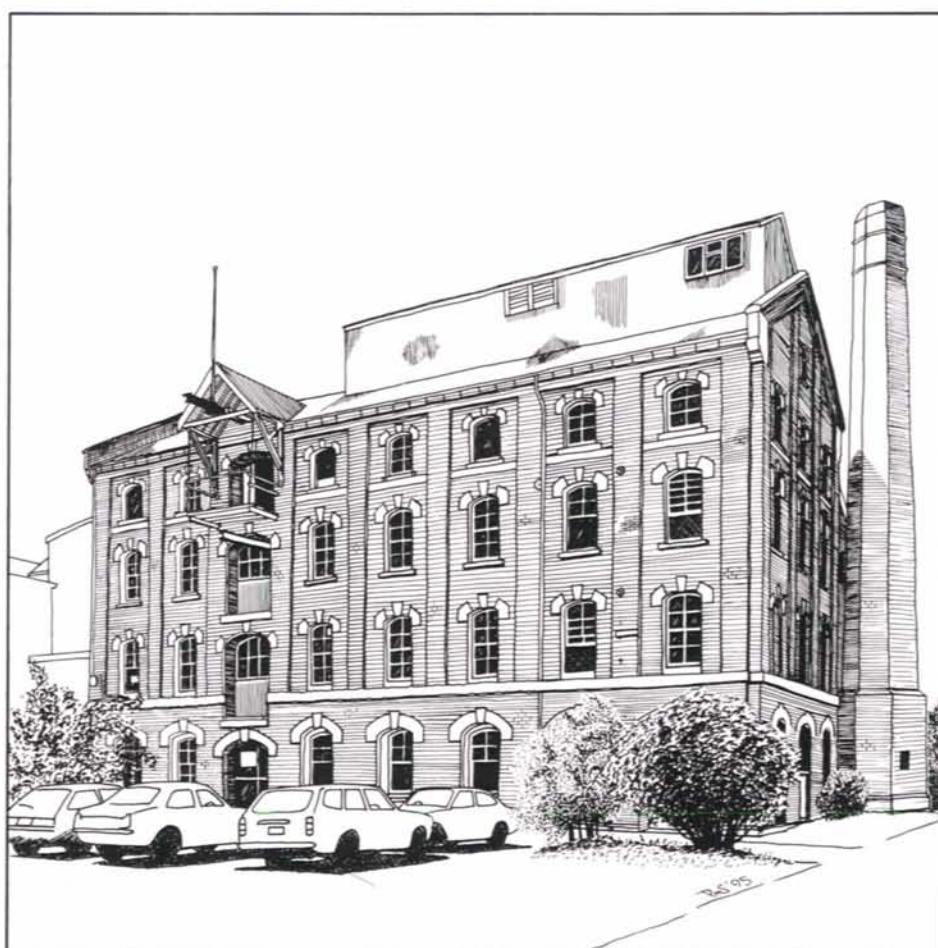
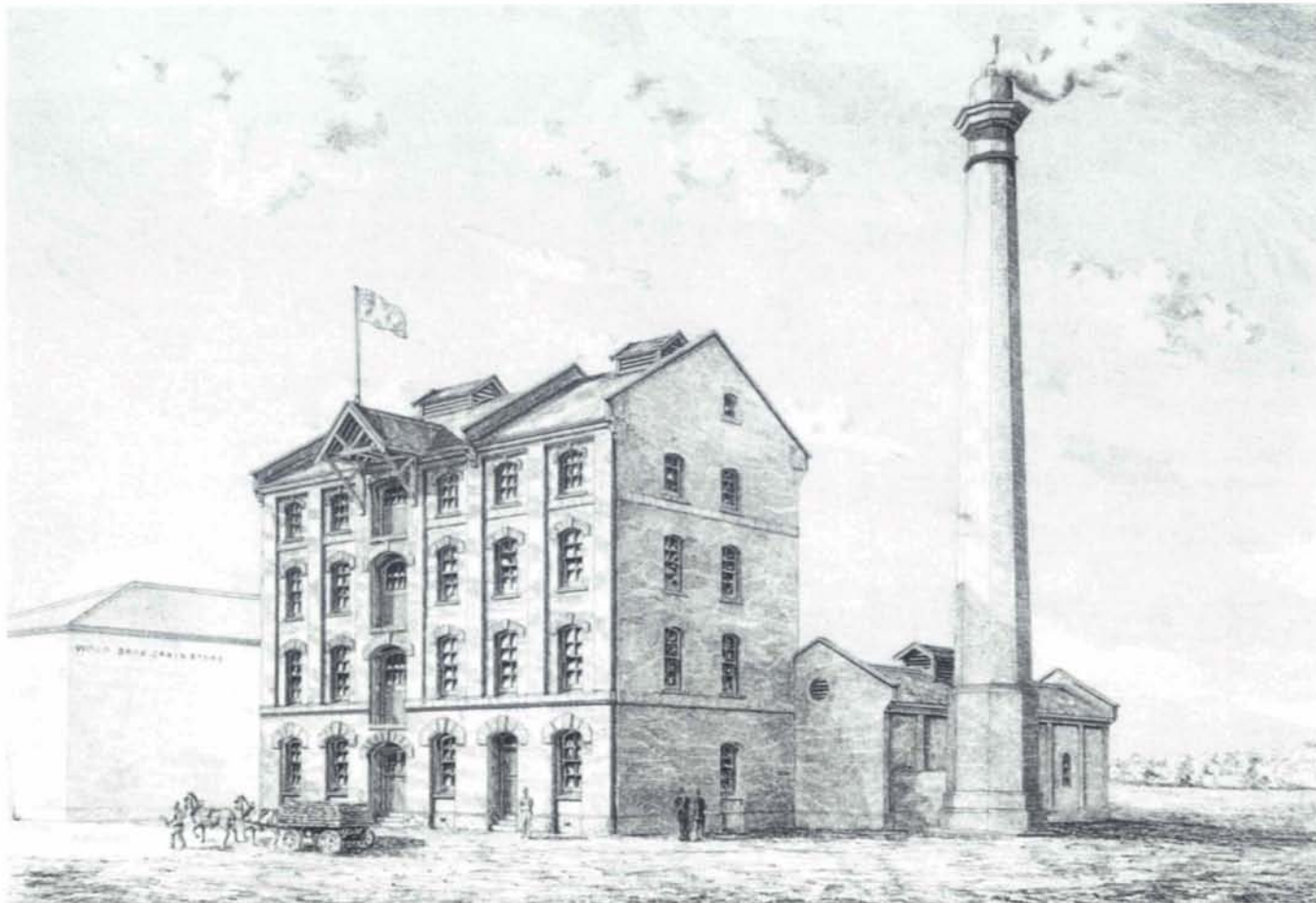


THE
ARCHITECTURAL
HERITAGE
OF
CHRISTCHURCH
9. Wood's Mill





Preface

The features of Christchurch today are to a large extent those of the built environment. The charm of the city essentially depends on the buildings, places and objects planned by people over successive generations. The quiet dignity of the city owes much to its early buildings. It is still possible to trace the history of Christchurch in the many fine examples of colonial architecture that remain. Action by the City Council, the New Zealand Historic Places Trust and other public interest groups has saved several important city buildings including the former Provincial Government Buildings, the Trinity Congregational Church, the Theatre Royal, the Nurses Chapel, the former University (now the Arts Centre) and the former Government Building in Cathedral Square.

As the City grows and changes, there is a danger that buildings of historical or environmental value may be thoughtlessly or needlessly destroyed. Though the Christchurch City Plan lists almost 600 historic buildings places and objects, many of our heritage buildings have survived by good luck rather than good management. The survival of our heritage buildings is largely determined by understanding their social and architectural history and thus their significance within their own community or to the city as a whole. Many buildings are lost when they simply fail to continue to meet the requirements of the community they were built for. Although the City Plan and the New Zealand Historic Places Trust encourage the preservation of historic buildings and objects it is essentially the determination of the community that effectively protects and revitalizes buildings it considers important.

One of the major aims of the series, *The Architectural Heritage of Christchurch*, is the identification and description of the city's valuable historic buildings in the hope that greater public awareness of their importance will increase their chance of survival. Even if preservation should prove impossible in some cases, the series gathers information, illustrations and analyses of each building to provide a published record of the city's rich architectural heritage.

If these booklets encourage you to think about the historic significance of Christchurch architecture, and help you to recognize the special value of the city's historic buildings, then they will have served their purpose.

Wood Brothers' Addington Mill

Introduction

The history of flour milling in Christchurch owes a large debt to the entrepreneurial nature of William Derisley Wood who in 1856 founded a firm that was to span 114 years of milling history in the region. Within this time Wood Brothers operated mills using almost every available source of milling power and technology. The first mill was powered by wind, the second by water and the third mill by steam and then electricity.

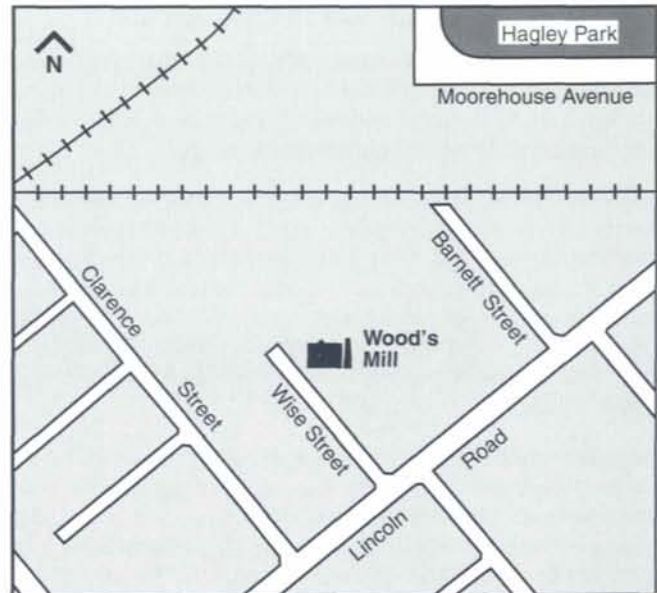
It is the intention of this booklet to outline the historical development of the Wood Brothers involvement in the flourmilling industry in Christchurch and discuss the architectural and historical significance of the Addington Mill.

Canterbury's potential as a grain-growing area had been recognized by the Deans Brothers from the earliest onset of colonization in the 1840s:

From the facility with which immense quantities of wheat can be grown, it is of the utmost importance that mills or the material for mills, with thrashing power attached, should accompany the first settlers; one water and one windmill would probably be sufficient at first.¹

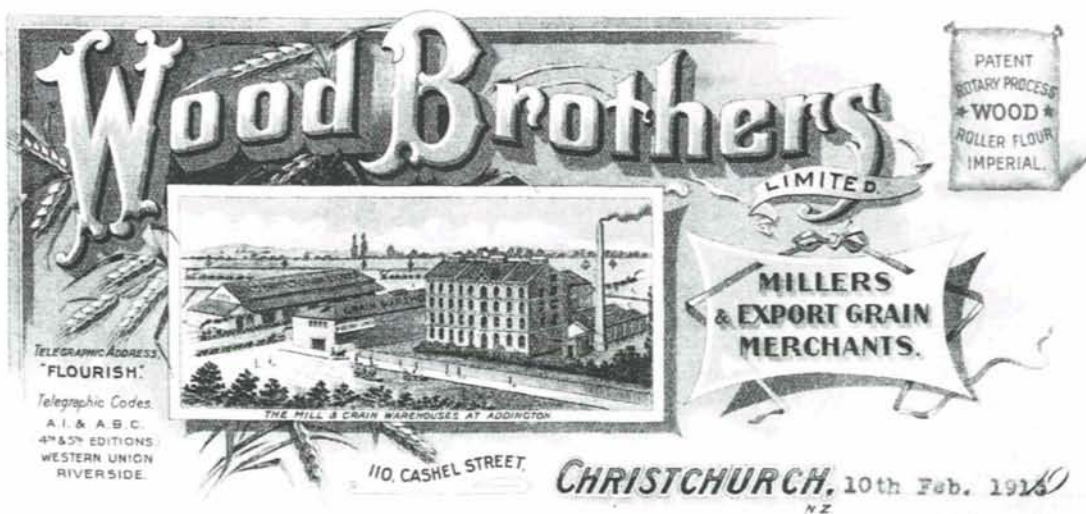
As the Deans brothers had predicted, Canterbury soon became the chief wheat-growing province of the colony. Consequently the flour milling industry occupied a prominent position from the early days of the settlement.

The first Wood's mill, a windmill, was in Windmill Road, now Antigua Street, on the present day site of the Canterbury Brewery. The first flour was produced from the mill on the 25th of August 1856.² By 1860 the requirements of the colony had outrun the capacity of the windmill and Wood secured a lease on land and water rights on part of the Deans Estate where Christchurch Girls' High School is now sited. Powered by a water-wheel, the mill was completed in 1861 ready for the 1862 harvest. Mill power was increased in 1880 with the introduction of a "double" water turbine. In 1889 the millstones were replaced by steel rollers.



The introduction of roller milling was so successful that Wood Brothers decided in 1890 to expand further and build a roller mill powered by steam, lit by electricity and serviced by rail. This decision resulted in the erection of a large four storey brick mill in Wise Street, Addington. The six bay mill was designed by the architect J. C. Maddison. Wood Brothers continued to operate the mill at Riccarton for a further five years until the lease expired. The roller machinery from this mill was then transferred to the Addington mill. The Riccarton Mill was sold and continued to operate until 1970.

The new plant, capable of producing ten sacks of flour per hour, a capacity double that of the Riccarton Mill, began operating in 1891. By 1936 the Addington Mill had the largest output in the South Island - 33 sacks of flour per hour. In 1970 Wood Brothers Limited sold the mill complex at Addington bringing to a close four generations of flourmilling by the Wood family in New Zealand. Today the mill buildings are used for a variety of functions. The tall brick grain silo of 1913, an Addington land mark, is still used in the flourmilling industry.



¹ Wright, M.J. *Changing Patterns of Flourmilling in the South Island: 1840-1973* M.A. Thesis (unpublished) University of Canterbury 1973, p.25.

² *The Cyclopedia of New Zealand* vol., 3, 1903, p.346.

William Derisley Wood (1824-1904) and the formation of Wood Brothers Ltd

Born on the 17th of December 1824, William Derisley Wood, was one of six sons of Eliza and Robert Wood of Gipping Valley, Suffolk, England. William Wood's father was a miller and operated a flour mill at Great Blakenham.³

Wood emigrated to New Zealand on the *Randolph*, one of the first four Canterbury Association ships. Arriving in Lyttelton on the 16th of December 1850, tradition states that Wood did not step ashore until the next day - his 26th birthday. He had come to the new colony expecting to die young for it was thought he was suffering from tuberculosis. (A doctor had suggested a long sea voyage as a possible cure.) He lived to a hearty 80 years of age.⁴

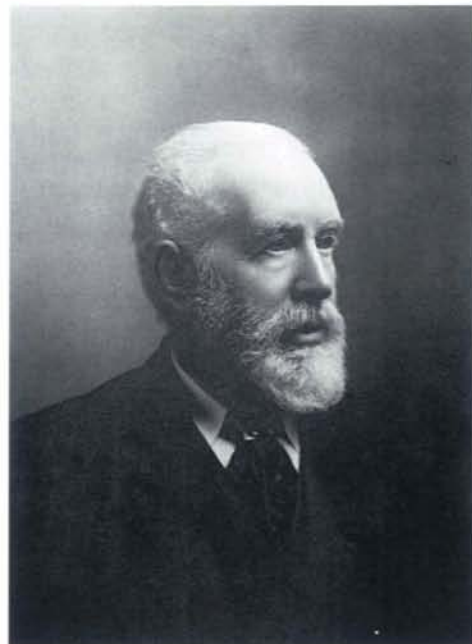
Wood's first job in the young colony was as secretary to Robert John Godley the Canterbury Association's agent. He then transferred to the Land office in Christchurch and occupied a position there for twelve months. In 1852 Wood went into partnership with William Chisnall taking up the 'Sand Hills' run which stretched from the estuary to the outlet of the Styx River. Chisnall and Wood farmed the property for a short time supplying milk to Christchurch. In 1853 they sold the run to Messers Moore and Kerr.⁵

Wood and Chisnall's next pastoral venture was a Government lease of 1500 acres - part of what was to become the 'Snowdown' run in the Malvern district. Their first season was a bad one and Chisnall sold his share in the venture to Wood. In 1855 Wood finding the run too far from Christchurch, sold the lease to Messers Dudley and Leach. At this time Wood decided to go to Sydney and meet up with his brother Charles who was a surgeon in the Navy.

Arriving in Sydney to find his brother had left for Vancouver, Wood decided to return to England. His trip back was an eventful one. In 1855 he met and married Anna Maria Wilson and purchased a windmill and milling machinery from Whitmore and Binyon at Wickham Market. Wood returned with his wife to New Zealand on the *Oriental*, arriving in Lyttelton on April 12, 1856. The prefabricated windmill building and its sails travelled with him on the *Oriental*; the windmill machinery arrived on the *Westminster* in the August of 1856. This marked the beginning of the 114 years of Wood family involvement in the flourmilling industry in New Zealand.⁶

In 1860 Wood's brother Henry Thayer Wood emigrated to New Zealand and the firm of Wood Brothers was founded. Henry took an active part in the establishment of the Riccarton Mill. He and William also established a water powered mill near Winchester which was later sold to Daniel Inwood. Henry Wood returned to Clapham, London in 1864. He died there in 1871.

In 1872 Wood took his accountant Mr. Peter Cunningham into partnership with him. Cunningham had started as a youth working at the mill. Wood soon discovered that Cunningham had an outstanding ability with figures and employed him in the office as an accountant. In the 1860s Cunningham conceived



W.D. Wood

the idea of exporting excess grain to England. The idea was a pioneering move, for it was not known how well the grain would survive the three month journey. The trial shipments were successful and Wood and Cunningham established a merchant and shipping firm building a large warehouse in Lyttelton. After several years Cunningham went into the exporting business in his own right and the partnership was dissolved.

Wood established another partnership with Messers Shand and Beaumont and in 1880 the firm was known as 'Wood, Shand and Company, General Merchants, though Wood retained the milling business.

A notice in *The Lyttelton Times* on the first of February 1882 announced William Wood's retirement in favour of his son Henry and Mr. Samuel Sinclair, a past manager of 'P. Cunningham and Co.' The firm was to trade under the name of 'Wood, Sinclair and Co.,' with the Riccarton Mills being "...worked under the supervision of our Mr. Henry Wood, who has for sometime been connected with the business. The grain and export trade will be conducted by Mr. Sinclair."⁷ In 1888 Sinclair retired and Henry bought out Sinclair's interest.

Once again the firm became known as 'Wood Brothers' and in 1892 was formed into a limited liability company with William Derisley Wood as the Chairman of Directors and his son Henry as the Managing Director. Three of Henry's brothers, William, Peter and Derisley, were also directors from 1892.⁸

It was not until the 1960s that Wood Brothers offices were established on site with a mill. The first on-site office was built in part of the flour and grain store in Wise Street. Over the years the administrative side of the business had been housed in

³ The mill remained in operation until 1928 when it was destroyed by fire.

⁴ Author in conversation with W.D. Wood's great-grandson, Mr. Simon Wood, June 13th 1994. The family believed that a fall from a horse at 79 years hastened W. D. Wood's death.

⁵ G. R. MacDonald, *Dictionary of Canterbury Biographies* Canterbury Museum Library. This venture is commemorated by the naming of the Chisnallwood Intermediate School in Breezes Road.

⁶ *The Lyttelton Times* April 16, 1856, p.7; *Lyttelton Times* September 10, 1856.

⁷ *The Lyttelton Times* February 1, 1882, p.1.

⁸ *Wood Brothers 1856-1950 Centennial Narrative* Christchurch, 1950, pp.8-9.

offices at 198 High Street and later at 110 (later renumbered to 207) Cashel Street.⁹

Wood maintained his interest in farming. In 1892 he was listed as owning 14,203 acres of freehold land with an improved value of 24,067 pounds.¹⁰ His sons Charles and Walcott who were among the first students to attend Lincoln College (now Lincoln University), farmed the land, 'Swyncombe Station', inland from Kaikoura, which included a further 28,000 acres of leasehold land.

A keen chess player, Wood was elected as the first President of the Canterbury Chess Club in the March of 1866.¹¹ He was

a Christchurch City Councillor, as was his son Henry, in the early years of municipal institutions. He was a member of the Mechanics' Institute and served on the North Canterbury Hospital Board of which he was at one time the chairman. His obituary stated that at the time of his death he was one of the oldest members of the Chamber of Commerce and during his long life had "...taken a keen interest in all that referred to the welfare of Canterbury."¹²

William Derisley Wood died on the 30th September, 1904, in his eighty first year. He is buried in the Wood family plot at the Linwood Cemetery.

Anna Maria Wood (1827-1919)

Born in England in 1827, Anna Maria Wood was the third daughter and youngest of the five children of Mr and Mrs Thomas Wilson of Hadleigh, England. Her father was a miller and malt merchant from Hadleigh. Anna's sister Sarah was married to William's friend and farming partner William Chisnall.¹³



A. M. Wood



The Woods' home at Riccarton

Anna and William were married at 12 noon on August 25th, 1855 in the Cathedral Church, Suffolk.¹⁴ They returned to Christchurch in the April of 1856. By the end of that year Anna and William were living in a small wooden colonial cottage next to the windmill in what is now Antigua Street. According to family tradition Anna initially helped in the mill sewing the bags. It is known that she mended the silks and made calico flour bags.¹⁵

Anna and William had seven sons, William, Henry, Charles, Walcott, Robert (who died in infancy), Derisley and Peter and one daughter, Eliza.

William and Anna moved to Riccarton after the water mill was established there. Wood Lane, Fendalton, was the drive to their home and a foot bridge over the Avon connected the property to the mill. Once the mill at Addington was established they moved to a property on Papanui Road; it was named *Blakenham* after the town where William's father's mill was situated in Suffolk.

In 1896 Anna and William returned to England to visit their respective families. Anna died in Christchurch on the 23rd February, 1919 aged ninety-two and is buried with William at the Linwood Cemetery.

⁹ Wood Brothers were also involved in the Canterbury Flour Mills in Ashburton. In 1899 Derisley Wood was appointed manager of the mill and in 1901 Wood Brothers purchased the company. It remained as a private business until 1924 when a public company was formed. *The Canterbury Roller Flour Mills Company Ltd :100Years 1873-1973* p.6.

¹⁰ From: *The Appendices to the Journals of the House of Representatives, 1892, B 2 oa* in Gardner, W.J. (ed) et.al. *A History of Canterbury vol.III: 1876-1950* Christchurch, 1965, p. 88.

¹¹ *The Lyttelton Times* March 15, 1866.

¹² *The Press* October 3, 1904, p.7.

¹³ From a letter written by Anna Wood, c.1906, describing "...the particulars of my family", private collection. On his marriage certificate William describes himself as a stock owner.

¹⁴ *ibid.*

¹⁵ G.R. MacDonald *Dictionary of Canterbury Biographies* Canterbury Museum Library.

Wood's windmill

William Derisley Wood, who came from a long line of millers, had worked at a water powered mill at Great Blakenham in Suffolk, England before emigrating to New Zealand in 1850. He was also familiar with the process of milling flour by means of a wind driven mill as there were many windmills fueled by the North sea breezes in the area of England where he had grown up.¹⁶ No doubt the return trip he made from Christchurch to this area of England in 1856, coupled with his knowledge of the obvious need for mills to supply flour to the young Canterbury settlement, was central to his decision to return to New Zealand and establish a milling industry.

The prefabricated mill building and sails weighing 8 tons had arrived with Wood in Lyttelton in the April of 1856 aboard the *Oriental*. The machinery arrived in the August of 1856 aboard the *Westminster*. It had been purchased from Whitmore and Binyon at Wickham Market, and consisted of 126 packages and one bale, a total weight of some seven to eight tons. The standard price for a complete export mill of this type was around £600 plus packing and shipping.¹⁷ The mill, of the type known as a smock mill with a fantail, consisted of an eight sided wooden tower on a circular wooden base. It had four common sails so constructed as to "take in the cloth" when the wind rose. The sails were slatted with self adjusting "shutters" to spill excess wind in strong gales thus preventing the danger of fire from a build up of friction heat. The wheat was ground by two pairs of French Burr Stones. The stones had to 'dressed' regularly; this being a process of recutting the grooves in the stones.¹⁸

Wood erected the mill on a section he had purchased from his former partner William Chisnall in Antigua Street near the present Canterbury Brewery site. The street, for the duration of the mill's existence, was known as Windmill Road and appears on some early street maps under that name.

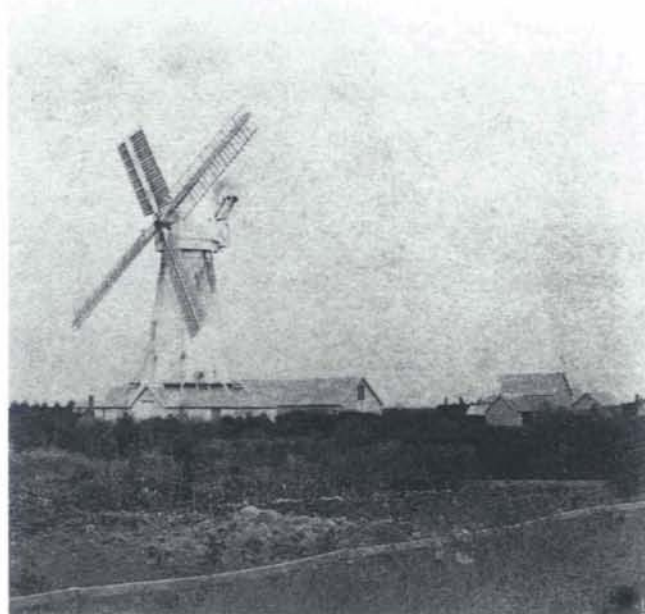
The erection of the mill attracted much media attention and *The Lyttelton Times* carried regular reports of its progress stating in one article on the 16th July, 1856:

*It [the windmill] forms a conspicuous object upon the Plains, and indicates how the beauty of Christchurch would be improved by the erection of lofty buildings, whether churches with spires, factories with chimneys, or mills that go by wind.*¹⁹

On the 25th August 1856 the mill produced its first flour. On the 10th of September *The Lyttelton Times* carried a further report on the mill's progress stating that the design of the mill was well suited to the climates of the Plains and

*...we understand, is calculated to turn out the finest description of work. The advantage will, no doubt, tend to raise the value of Canterbury flour in the markets of the neighbouring colonies.*²⁰

Other flour mills had been established prior to the erection of Wood's windmill. By the July of 1853 Daniel Inwood announced in *The Lyttelton Times* that he had to date "...ground 1700 bushels ... the mill is capable of grinding 10,000 bushels per



Canterbury Museum

W.D. Wood's windmill, 1860

annum."²¹ By 1854 Woodford and Stephens were advertising the erection of a water powered mill on Rural Section No.,6, on the banks of the Avon near the North Town Reserve.²²

Wood's windmill has often been cited as the first windmill in Canterbury. However research would suggest this was not the case. *The Lyttelton Times* on August 13, 1853 carried an advertisement under the heading "Heathcote Windmill" stating that Mr. Charles Mountfort had erected a windmill at Heathcote and was "...prepared to grind and dress corn at the charge of 1s per bushel."²³ This is further verified by an article in the *The Lyttelton Times* at the time Wood was erecting his windmill which stated:

*This is the second and much improved attempt in this Province to use the power of our regular breezes for grinding purposes.*²⁴

Both the success and fate of Mountfort's mill is unknown. Charles Mountfort, brother of the architect Benjamin Woolfield Mountfort, had built the mill on land (Rural Section 20), owned by his brother. *The Lyttelton Times* of June 18 1853 stated the mill was near the Christchurch Quay which today would place it near the corner of Silvester Street and Richardson Terrace.²⁵ By 1856 Charles Mountfort was working as a surveyor in Otago and there is no further mention of the mill operation.²⁶

Equally there is no extant record as to the reason for the closure of William Wood's windmill suffice to say that to be economical the mill would have had to have operated for 24 hours per day. Given the irregularity of wind conditions in Canterbury, a water powered mill was the obvious alternative. In 1860 Wood leased land and water rights from the Deans Estate and began to build a water powered mill. The windmill, including two acres of land, a dwelling, granary, stables and associated buildings was advertised for sale in *The Lyttelton*

¹⁶ Author in conversation with Simon Wood, June, 1994.

¹⁷ Personal notes made by W.D. Wood II, private collection.

¹⁸ Information from Ian Jonson, Molinologist, Wellington, June, 1994; author in conversation with Simon Wood, August, 1994.

¹⁹ *The Lyttelton Times* July 16, 1856, p.7.

²⁰ *The Lyttelton Times* September 10, 1856

²¹ *The Lyttelton Times* July 16, 1853. p.1.

²² *The Lyttelton Times* January 14, 1854, p.1.

²³ *The Lyttelton Times*, August 1853, p.12.

²⁴ *The Lyttelton Times* July 16, 1856, p.7.

²⁵ Ian Jonson, op.cit.

²⁶ G.R. McDonald *Dictionary of Canterbury Biographies* Canterbury Museum.

Times of 11 December 1861. Though the property was advertised as a going concern the option of selling the mill separately for removal was suggested.

In 1863 the windmill was purchased for £1000 by Mr John Leith for removal to Leithfield 23 miles North of Christchurch. Incredible as it may seem, the windmill, some eight storeys in height

...was laid horizontally on an enormous trolley which was pulled out of Christchurch by twelve horses and accompanied by thirty men and their cart of liquid refreshments.²⁷

Needless to say the journey was an eventful one. The mill arrived at its destination and remained a Leithfield landmark until the 1880s.²⁸



Canterbury Museum

The windmill re-sited at Leithfield

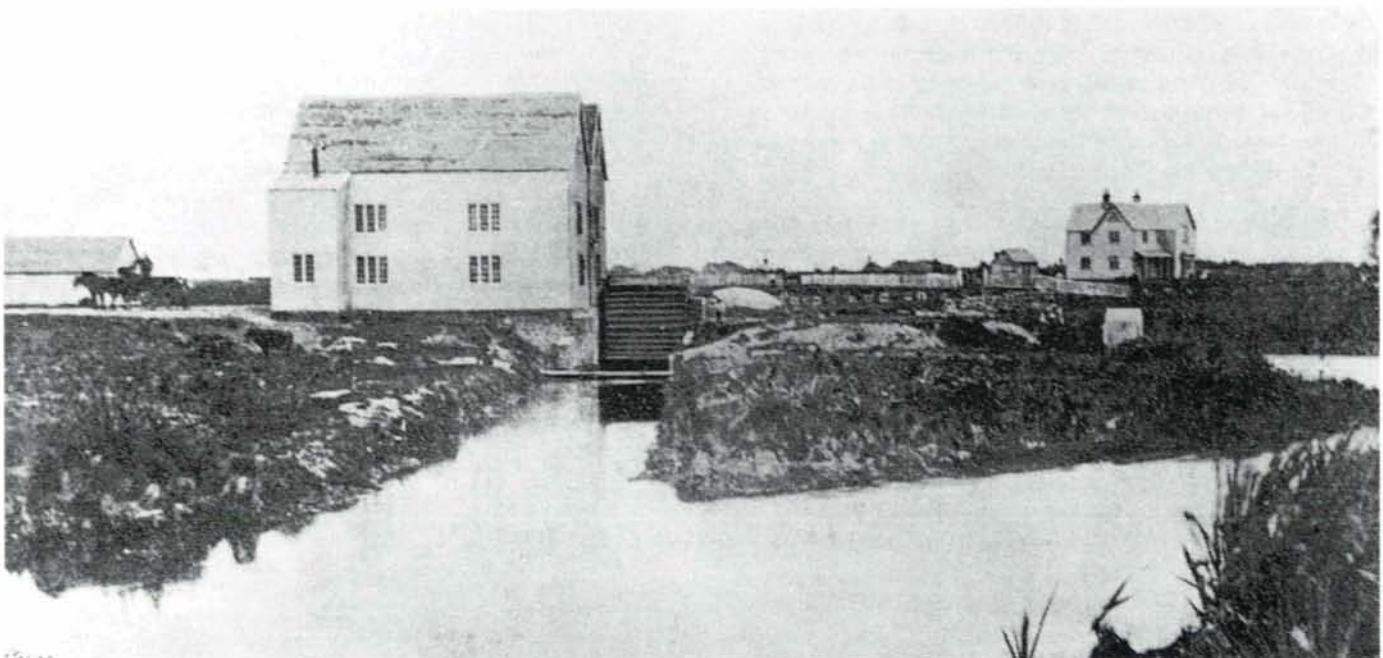
The water powered mill

The Riccarton water mill was sited on approximately six acres immediately adjacent to Mona Vale where the present Christchurch Girls' High School is situated. All that remains today is the weir, built to create the mill pond, which spans the Avon at Mona Vale.

Wood had originally applied in May 1857 to build his water powered mill on land laid aside for Hagley Park. Though interim approval was granted by the Provincial Council, the proposal was turned down at the Provincial Council meeting of June 28.²⁹ It was not until 1860 that the Riccarton site was secured under lease and the construction of the new mill was begun.

The Lyttelton Times, November 3, 1860 carried a full description of the building of the mill:

The new mill in course of erection by W.D. Wood on the Avon, in the Riccarton district, is now approaching completion... The foundation wall is of great thickness and is constructed of stone from Mr Latter's quarry on the Port Hills... The building will be 22ft in the stud, with four floors and will be fitted with all the best improvements in machinery, the whole of which is shortly expected to arrive from England... The cutting will be 10 chains in length, across a small promontory of land formed in a bend in the river, and will afford a fall of 4ft.³⁰



Canterbury Public Library

The water powered mill at Riccarton c.1865

²⁷ Hawkins, D.N. *Beyond the Waimakariri: A Regional History* Christchurch, 1957, p.76.

²⁸ For a full account of the removal of the mill to Leithfield, see Hawkins, *op.cit.*, pp75-77; also, Bloxham, F., "Ferry-mead mill to recapture the spirit of the 1850s" *The Press*, 13 November, 1971.

²⁹ Personal archives of Simon Wood

³⁰ *The Lyttelton Times* November 3, 1860. Also quoted in Lamb, R. *From the Banks of the Avon: The Story of a River* Christchurch, 1981, p.64. See pp.63-66 for discussion on water powered mills on the Avon.

The architects:

J.C. Maddison, F.R.I.B.A.

Joseph Clarkson Maddison was noted for his commercial and industrial architecture yet few of these buildings have survived. Despite holding a virtual monopoly on the design of freezing works, the most notable surviving industrial building is the former Wood Brothers flour mill at Addington which he designed in July 1890.³⁵

Maddison was born in Greenwich, England in 1850. He was educated at private schools and later articulated to George Morris, a London Architect, for five years. Maddison set up professional practice in London for a short period before emigrating to New Zealand. He arrived in Lyttelton in 1872 on the *Gladstone*. An advertisement in *The Lyttelton Times* indicates that he had set up practice in Cashel Street as an architect and building surveyor by 1875 stating:

*Plans and specifications prepared for every description of building or alteration. Estimates furnished. Artificers' work measured and valued. Charges moderate.*³⁶

In 1887 Maddison was elected a Fellow of the Royal Institute of British Architects and by 1905 he was considered to be "...one of the leading architects in New Zealand"³⁷ and had been elected a Fellow of the New Zealand Institute of Architects. The 1879 competition for the Christchurch Municipal Buildings and Town Hall established him as an architect of note. Maddison's designs, which he entered under the non-diplome "Avon" were placed first and second in the competition. The buildings were never erected. Maddison designed buildings for areas throughout New Zealand but his "...most important buildings were all built in Christchurch."³⁸

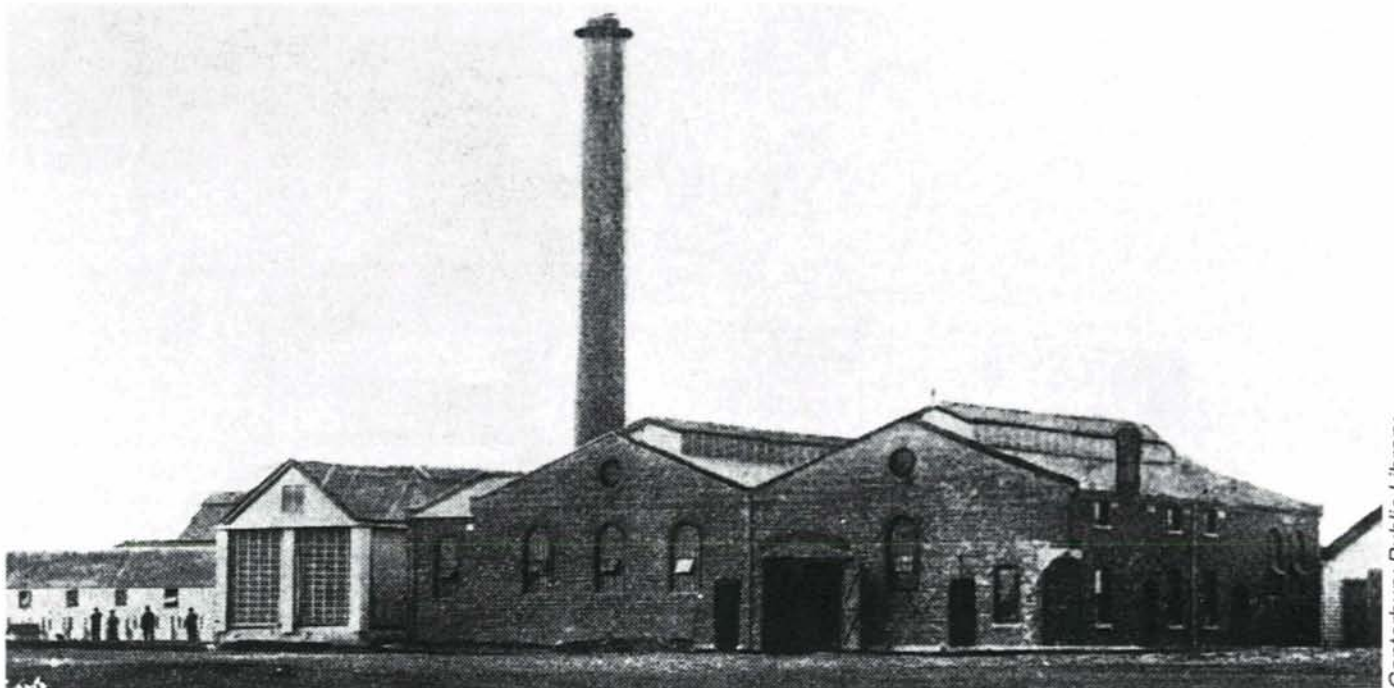
During the 1880s Maddison became a leader in the field of industrial design, developing a specialised skill in a new field of

J.C. Maddison



Canterbury Public Library

design; the freezing works. *The Weekly Press* of 1906 noted that "...from freezing works alone during the last few years, works costing 397,000 pounds have passed through Mr Maddison's hands."³⁹ The first freezing works he designed was the Canterbury Frozen Meat Company's plant at Belfast in 1882-83. His industrial works for the most part were "...designed in variations of the classical manner ... distinguished by a large scale and use of brickwork."⁴⁰ This statement is equally true of his civic and commercial architecture as the Government Building in Cathedral Square and hotels such as the Carlton and Clarendon attest. The latter building, John Wilson suggests "...was about as elaborate as Maddison ever allowed his buildings to become. He never succumbed to the temptations of Edwardian Baroque."⁴¹



The Maddison designed Belfast Freezing Works

Canterbury Public Library

³⁵ Wilson, J. "Canterbury Architects: J.C. Maddison" in *New Zealand Historic Places Trust Canterbury Regional Newsletter* No.50, September, 1987, p.5.

³⁶ *The Lyttelton Times* October 9, 1875, p.1.

³⁷ *The Weekly Press* August 9, 1905, p.44.

³⁸ Wilson, J. "Canterbury Architects: J.C. Maddison" *op.cit.* p.4.

³⁹ *The Weekly Press* January 31, 1906.

⁴⁰ *The Weekly Press* 1905, *op.cit.* p.44

⁴¹ Wilson, J. "Why should we save the Clarendon?" in *The Star* October 21, 1986, p.9.

Though Maddison was a prolific and versatile architect, he was much less inclined to be innovative. He followed the first generation of Christchurch architects and was a leading member of the generation who rebuilt the central city in stone replacing the wooden colonial buildings. Unlike the slightly younger architects of his epoch (Clarkson and Ballantyne, the Luttrell Brothers, R.W. England and Collins and Harman), who were experimenting with 'new' styles, he was "...basically a Classical Revival architect of the late 19th century." His work was characterised by "...reserve, restraint and economy of style".⁴²

While the bulk of his practice was commercial and industrial, he also designed a number of houses, including the homestead and lodge at Mona Vale. His ecclesiastical works include Holy Trinity at Amberley, the church at Port Levy and the Seddon Memorial Belfry at St Marys Church, Addington. He also designed the imposing, albeit temporary, 1906-07 International Exhibition buildings in North Hagley Park and the old Nurses home which until the early 1980s stood on the corner of Oxford Terrace and Riccarton Avenue.



International Exhibition Buildings

Luttrell Brothers

In 1924 the Christchurch architects, Sidney and Alfred Luttrell designed a large addition to the back of the Wood Brothers Mill at Addington. This was designed in a plainer but somewhat similar design to the original Maddison building.

In 1913 the tall grain silo, still a landmark on the Addington skyline, was built. Although the silo is thought to have been designed by the English firm of Thomas Robinson and Son who had produced the machinery for it, it is more probable it was designed by the Luttrell Brothers who were conversant with new American methods for the construction of tall buildings. Evidence for this can be deduced from links the Luttrell brothers had in following up initial works of other Maddison buildings which include additions to the Kaipoi Woollen Mills and Mason and Struthers warehouse.⁴³

Alfred (1865-1924) and Sidney (1872-1932) Luttrell established what was to become one of New Zealand's foremost Edwardian architectural practices when they arrived in Christchurch in 1902 from Tasmania. The Luttrell brothers had come to Christchurch after winning the competition for the design of the White Hart Hotel (now demolished), in High Street. The provincial capital of Christchurch at the turn of the century was experiencing economic prosperity and with this a great deal of civic pride.

Maddison's work included a number of buildings throughout other parts of New Zealand. He designed freezing works at Ashburton, Pareora, Waitara, Puki Puki (Hastings) and Ngahauranga in Wellington. He also designed a number of commercial buildings in Cuba and Willis Streets and Lambton Quay, Wellington. In Palmerston North he designed the Grand Hotel, commercial premises for A. Sutherland and a large house 'Merchiston'.

Maddison was a member of the Christchurch Licensing Committee and was six times President of the Christchurch bowling club to which he presented a trophy for competition.

Maddison had married Jane Midmore, the daughter of a Kentish surveyor, in 1873. They had five daughters, of whom three survived. They lived in various areas of Christchurch including Linwood, St Albans and Merivale. Jane died in 1920 and Maddison died in 1923 at a private hospital in Napier. He is buried at Holy Trinity in Avonside, Christchurch.



Mona Vale

The temporary colonial wooden structures in the central city were being replaced with large permanent material structures. Perhaps it was, as Ann McEwan has suggested, the buoyant economic climate of Christchurch rather than the contract for the White Hart Hotel that attracted the Luttrell brothers to emigrate.⁴⁴

Alfred had run a prosperous practice based in Launceston, Tasmania, for nearly 15 years. In 1897 he had taken his younger brother Sidney into partnership with him. The brothers assumed different responsibilities within the firm; Alfred acted as the principal designer and engineer while Sidney co-ordinated building programmes and dealt with clients.

For the most part the Luttrell brothers worked in the Canterbury region. Like Maddison they specialised in commercial buildings but were also renowned for the design and construction of horse racing grandstands and churches and were the unofficial Diocesan architects for the Roman Catholic Church in Christchurch during the second decade of this century. They were instrumental in fostering the use of reinforced concrete and also ran their own contracting firm. The Luttrells made a significant contribution to the Christchurch cityscape and many of their buildings still stand today.⁴⁵

⁴² Wilson, J. "Canterbury Architects: J.C. Maddison" *op.cit.*, p.6.

⁴³ Evidence based on research by Thelma Strongman, 1994.

⁴⁴ A.E. McEwan, "From Cottages to 'Skyscrapers': The Architecture of A. and S. Luttrell in Tasmania and New Zealand" M.A. Thesis (unpublished)

University of Canterbury, 1988, p.57.

⁴⁵ A.E. McEwan, "Shaping a City's Heritage" *Historic Places* March 1993, p.40.

Among their most notable early buildings are the former Lyttelton Times building 1903 in Cathedral Square, the former Royal Exchange building 1904, (now known as the Regent Theatre building), The Theatre Royal 1906-08, and the New Zealand Express Company building 1905-06. The latter building introduced the Chicago skyscraper style to New Zealand. A Christchurch landmark, the King Edward Barracks in Cashel Street was designed by the Luttrell brothers in 1904-5. Acting as the contractors for this project, the Luttrells gained considerable publicity for the innovative steel structure which was erected in just 25 working days.

The perpendicular Gothic Revival Chapel at the St John of God Hospital is the largest of the Luttrell brothers ecclesiastical buildings in New Zealand and is "...the most unusual in plan and decoration..." though stylistically it is similar to the parish churches of New Brighton (1911) and Sumner (1912).⁴⁶ The last church designed by Alfred Luttrell was the Anglican Church of St James on Riccarton Road in 1922-23.

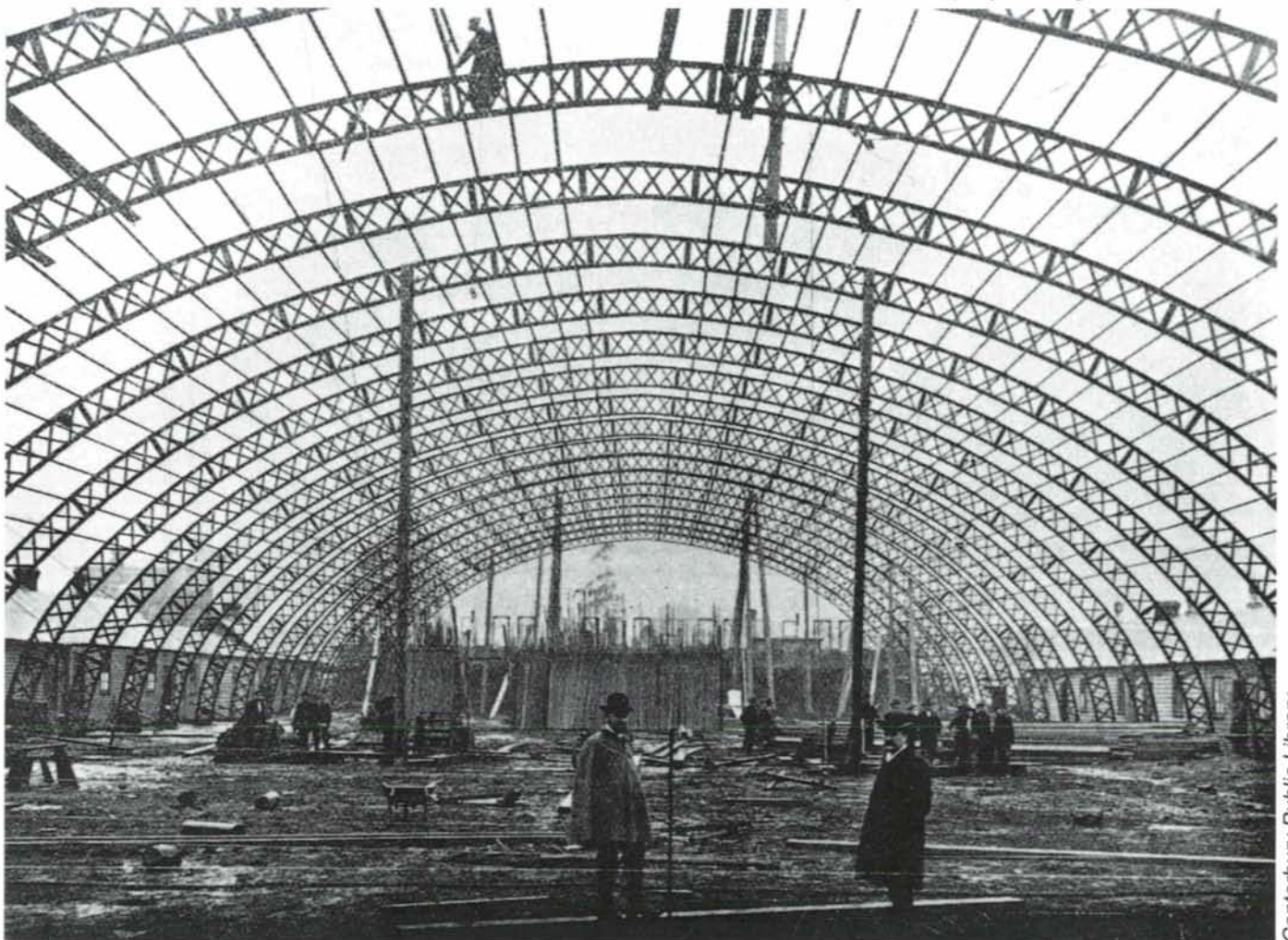
Sidney Luttrell's interest in horse racing no doubt led the brothers into the field of racecourse grandstand design. The public grandstands at Addington (1909-15), Riccarton (1920-23) and Trentham (1919-25) were structures that embraced their knowledge and technical ability in the use of reinforced concrete and steel.

In fewer than thirty years of practice in Christchurch, the Luttrell brothers skill and versatility made an impact on the architecture of Christchurch that remains an important and visible contribution to our architectural heritage.



New Zealand Express Company Building

Canterbury Public Library



Alfred (left) and Sydney Luttrell at the construction of King Edward Barracks, 1905

Canterbury Public Library

⁴⁶ *Ibid.*, p.42.

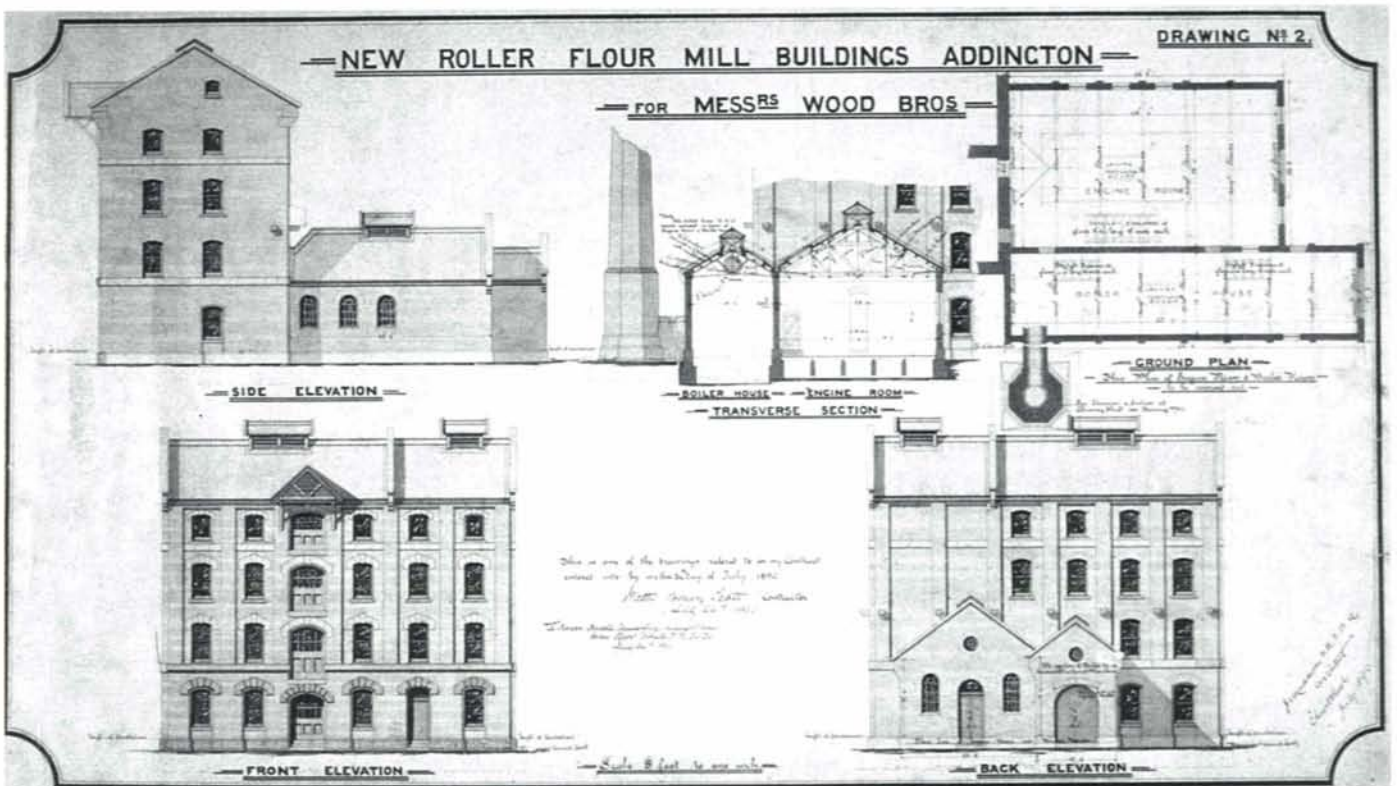
The Addington mill

Plans to expand the business and relocate to the Addington site near the railway line had been considered by the Wood Brothers for some time. The Addington site had been purchased in 1882 but it was not until July 1890 that a design for the new mill was furnished. The design produced by J.C. Maddison was for a four storey six-bay flour mill and an engine room for the steam plant. Despite the solidity of form, the building is of elegant proportions enhanced by its overall symmetry and economy of detail. It is indeed, as was stated of it in 1903, "...a splendid structure."⁴⁷ Maddison was to extend the mill a further two bays in 1896 and despite a number of additions, alterations and changes of function over the past century, the facade of the original Maddison building has survived relatively intact. It is today as much a landmark in the Addington district as it was when it first began operating in 1892.

Typical of Maddison's industrial buildings, the mill is of a plain classical commercial style. This style is reminiscent of the stylistic conventions employed in industrial architecture during the later half of the eighteenth-century in England. As the scale of milling operations increased during this period, buildings of greater dimensions and refined architectural form were required by manufacturers to replace existing small scale workshops. Thus, "...the Palladian schema, suitably muted and modified, became an enduring basis for factory designs."⁴⁸ The symmetry, proportion and economy of detail employed by Maddison in the design of the Addington mill has a precedent in earlier British mills such as Wedgwood and Pickford's 'Etruria' of 1767-73. Built of brick, the principal facade of 'Etruria' features regular recessed fenestration ornamented with contrasting blocks of stone. The central bay culminates in an angled pediment. Both these features, though modified, are employed by Maddison in his design for the Wood Brothers mill. It is probable that Maddison would have been familiar with industrial designs



The opening of the mill, 1891



Maddison's drawings for the Addington Mill

⁴⁷ *Cyclopedia of New Zealand* vol. 3, 1902, p.346.

⁴⁸ Jones, E. *Industrial Architecture in Britain 1750-1939* Oxford, 1985, p.37.

such as 'Etruria' or Samuel Wyatt's Albion steam driven flour mill (1786) in London. The latter being of plain classical proportions, built in brick with internal timber posts and flooring.

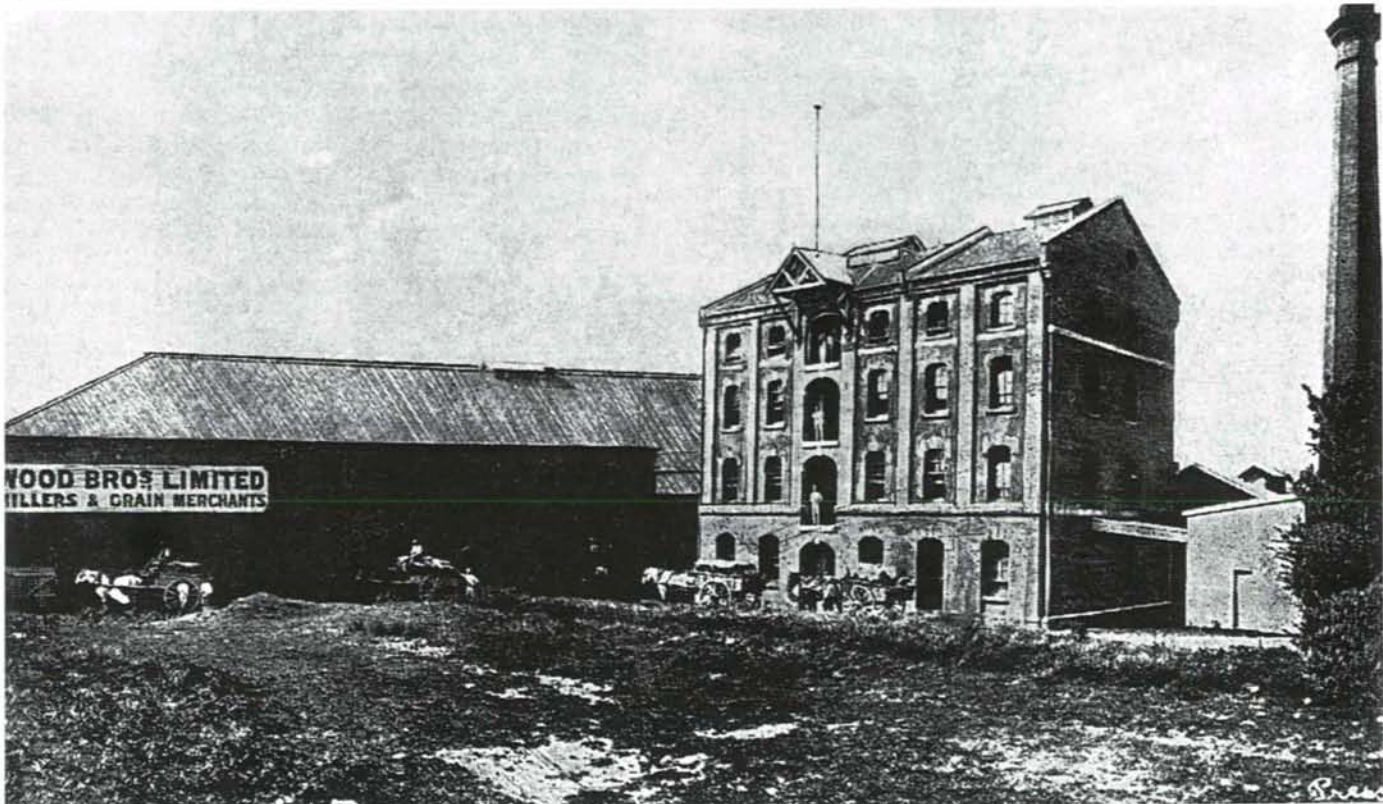
The Addington mill had to be specially strengthened to withstand the weight and vibrations of the machinery it was to house. The weight and stability of the Maddison design alludes to the engineering requirements of the structure. The ground floor is separated from the upper storeys by a heavy string course of ashlar. This motif, in the form of a narrow recessed ashlar string course, is repeated in the separation of the smaller windows of the fourth floor from the larger fenestration of the preceding floors. The recessed windows are detailed on the ground floor by window arches of continuous ashlar. The heaviness of this detail is offset on the other three floors by a somewhat lighter repetition of the motif. Each window is emphasised with blocks of ashlar forming a central keystone and individual corner stones. The exterior walls are triple brick and the central columns of the interior are Australian ironwood, each hand adzed from a single tree. Other internal features include twelve inch square oregon beams and kauri flooring.

The large chimney (long since stripped of its elegant cap), reservoir and artesian bore, which are adjacent to the engine room at the back of the building, are associated with the original steam power of the mill and date from the 1890 design. In 1896 Maddison produced a further design for an additional two bays to house a wheat bin and wheat cleaning plant, though these



Jones

Etruria

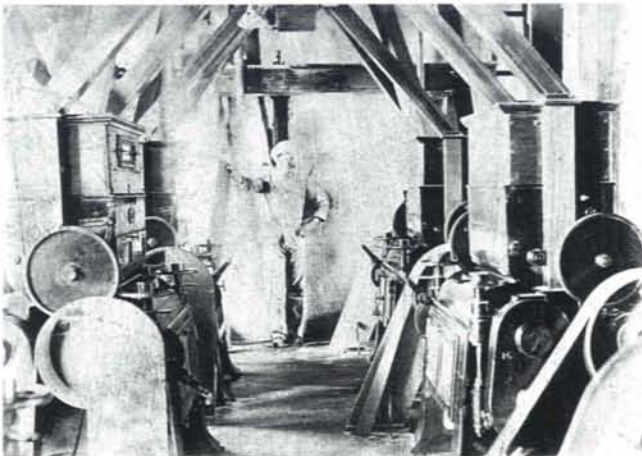


The Addington mill c1892

Canterbury Public Library



Column and beam



The roller plant, c1900



were not completed until 1908. These bays simply replicate the original design but are clearly marked as an addition by the use of a darker brick and plaster detail over the ground floor window and door arches.

The contractor for the 1890 building and the 1896 addition was Walter Boring Scott. Scott, the son of an English minister, was born in Norwich in 1851. He was educated at Enfield College in York and left England for America in 1871. About 1875 he emigrated to Christchurch and established himself as a builder and contractor. In 1902-07 he was in South Africa, later returning to New Zealand. Scott did not return to his former trade but established a motor engineering firm, Scott Motors in Gloucester Street. Like Maddison and William Wood he was a keen bowler and a member of the Christchurch Bowling Club. Scott died at his home on the corner of Park Terrace and Peterborough Streets in 1922.⁴⁹

The machinery to run the roller mill was ordered from Mr. Henry Simon of Manchester who had supplied the equipment for the Riccarton plant in 1885. The mill was powered by a 120hp steam engine which consumed about 60 tons of coal per month. Thus the siting of the mill adjacent to the railway line carried the dual purpose of handling incoming and outgoing freight as well as the regular supply of coal to fuel the mill. The new mill, lit by electricity and powered by steam, was considered to be the most modern mill of its time in New Zealand. As stated of the mill in the *Industries of New Zealand, 1898*:

Of the many improvements which have taken place of late years, flourmilling has probably undergone greater revolutionary changes than any other manufacture, the extent of the changes being almost beyond the realisation of the general public.... [continuing that]... it is satisfactory to note, before grinding is commenced, that every care is taken to remove from the wheat all impurities, such as wire, dust, foreign seeds and all other deliterious matter.⁵⁰

By 1902 the mill's output was 15 sacks of flour per hour, a total of 4656 tons of flour per annum from 217,848 bushels of wheat. This capacity was three times that of the Riccarton Mill. When W.D. Wood died in 1904, he had, in the fifty years he was involved in the milling industry, watched his business grow from the humble beginnings of wind power to the mechanised process of roller milling driven by steam. In that time Wood Brothers 'Imperial' flour and associated products, such as wheatmeals and semolina, had received International and National acclaim in industrial exhibitions from the United States of America to Ireland to Wellington and Christchurch.

The demand for Wood Brothers products ensured the continued success of the business and in 1911 tenders were called for the erection of a silo to handle storage needs and the increase in production. Completed in 1913, the large brick grain silo is still a local land mark in the Addington area. With a holding capacity of 2000 tons of wheat it was capable of receiving wheat at the rate of 35 tons per hour.⁵¹ It is thought that the silo was designed and built by Thomas Robinson and Son of England, however it is more probable that the silo was constructed by S. and A. Luttrell, local architects who were conversant with new American methods for the construction of tall buildings.⁵²

⁴⁹ MacDonald, G.R. *Dictionary of Canterbury Biographies* (Canterbury Museum Library).

⁵⁰ "Wood Brothers Ltd.," in *Industries of New Zealand 1898*, p.127, collection Canterbury Museum Library.

⁵¹ *New Zealand Shipping and Commerce Annual Review 11 August, 1911.*

⁵² See above 'Luttrell Brothers' footnote 43.

In 1916 the steam driven plant was superseded by electricity thus increasing the mill's production rate even further. By the early 1920s the decision was made to reorganize, update and extend the mill. In 1924, S. and A. Luttrell designed a large addition to the back of the mill to house six grain bins and a wheat-cleaning department with a capacity of ten tons per hour. The design is sympathetic to the Maddison building, however it is somewhat plainer and more restrained in detail. The recessed regular fenestration echos that of the Maddison design though there is no arch ornamentation. Each floor is clearly demarcated by a solid string course of concrete. As in the Maddison building the gable ends are pierced by an attic window. The six wooden grain bins placed in this section (each with a capacity of 60 tons), are still, in part, visible today.

The mill closed from January 31 to May 12 1925 to cope with these additions and alterations. In this time the whole plant was reorganised and the mill equipped with a modern roller plant capable of producing thirty 72kg sacks of flour per hour. This was done to the specification of Henry Simon Limited of England and supervised by Mr J.V. Taylor of the Sydney Office.⁵³

During the 1924-25 expansion, the grounds surrounding the mill were laid out in gardens and the front of the mill was sewn in grass for a bowling green. The 'Imperial Bowling Club' as it was aptly named, was formed on August 27 1924 and was affiliated to the Canterbury Bowling Centre. The club was officially opened by Mr and Mrs Henry Wood on October 18 1924. The facilities were originally for the staff of the mill but the club was later opened to local residents and over the years the green was extended to provide five rinks. The bowling club existed until 1971 when it was disbanded following the sale of the mill.⁵⁴

In the March of 1949 fire extensively damaged the grain store causing damage to stock and part of the plant. The mill was operational again, albeit under temporary conditions, within a fortnight but it was more than a year before all repairs and machinery replacements were completed.

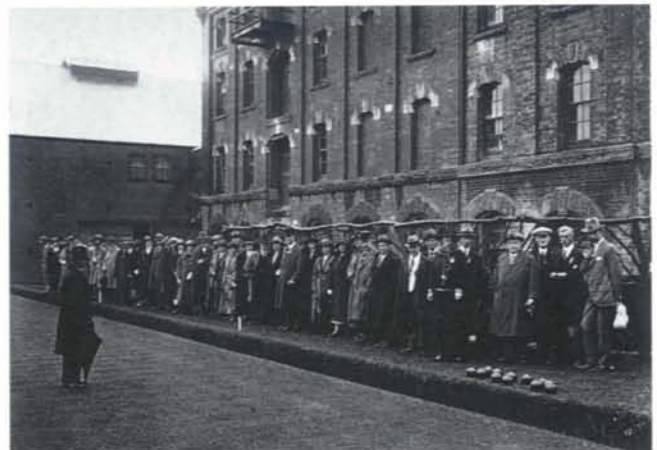
No further alterations, other than regular and routine updating of mill machinery which had increased the mill's output to fifty sacks per hour, were made to the mill buildings until the early 1950s when a brick annex was built between the mill and the grain store.

In 1960 a further increase in milling capacity was found to be necessary. To accommodate this, modifications were made to the roof and a corrugated iron "penthouse" structure, which sits somewhat uncomfortably on the original Maddison building, was built. This originally ran the length of the eight bays but was later shortened to span only five bays. Henry Simon Limited supplied some new roller mills, flour sifters and a low pressure pneumatic air conveying system. All the original wooden bucket elevators were replaced by aluminium verticle pneumatic lifts. The receiving cyclones on the top of the air lifts and all fans were housed in the "penthouse" on top of the mill. This resulted in a mill capacity of seven tonnes of wheat per hour or 80 x 72kg sacks of flour per hour.

Further additions were made during the 1960s. These included a small stock food plant which was built between the grain store



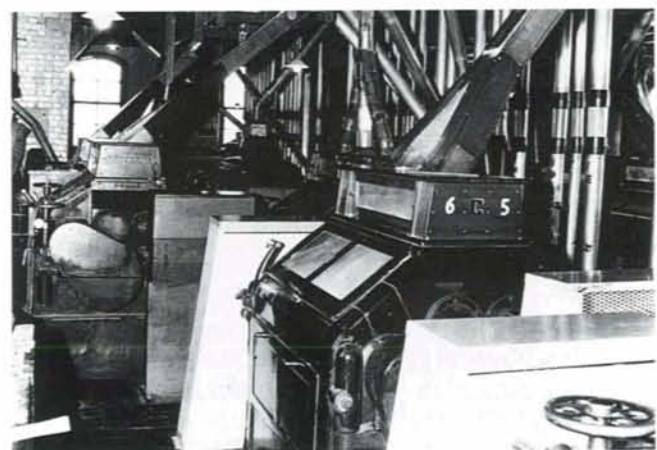
The 1925 addition



Opening of the Imperial Bowling Club, 1924

and the 1924 brick silo and the Wise Street front of the grain store was remodelled to house, for the first time, an on site office. The railway siding storage sheds were also lengthened during this period. The two on site miller's houses, built in 1891 to the west of the mill (visible in the 1950 aerial photograph on the following page), were demolished during this decade.

Wood Brothers owned a number of houses on Lincoln Road, Wise and Clarence Streets. These were purchased with a two-fold purpose. They could be leased to mill staff and most importantly it ensured ownership of land adjacent to the mill should it be needed in time for further expansion.⁵⁵



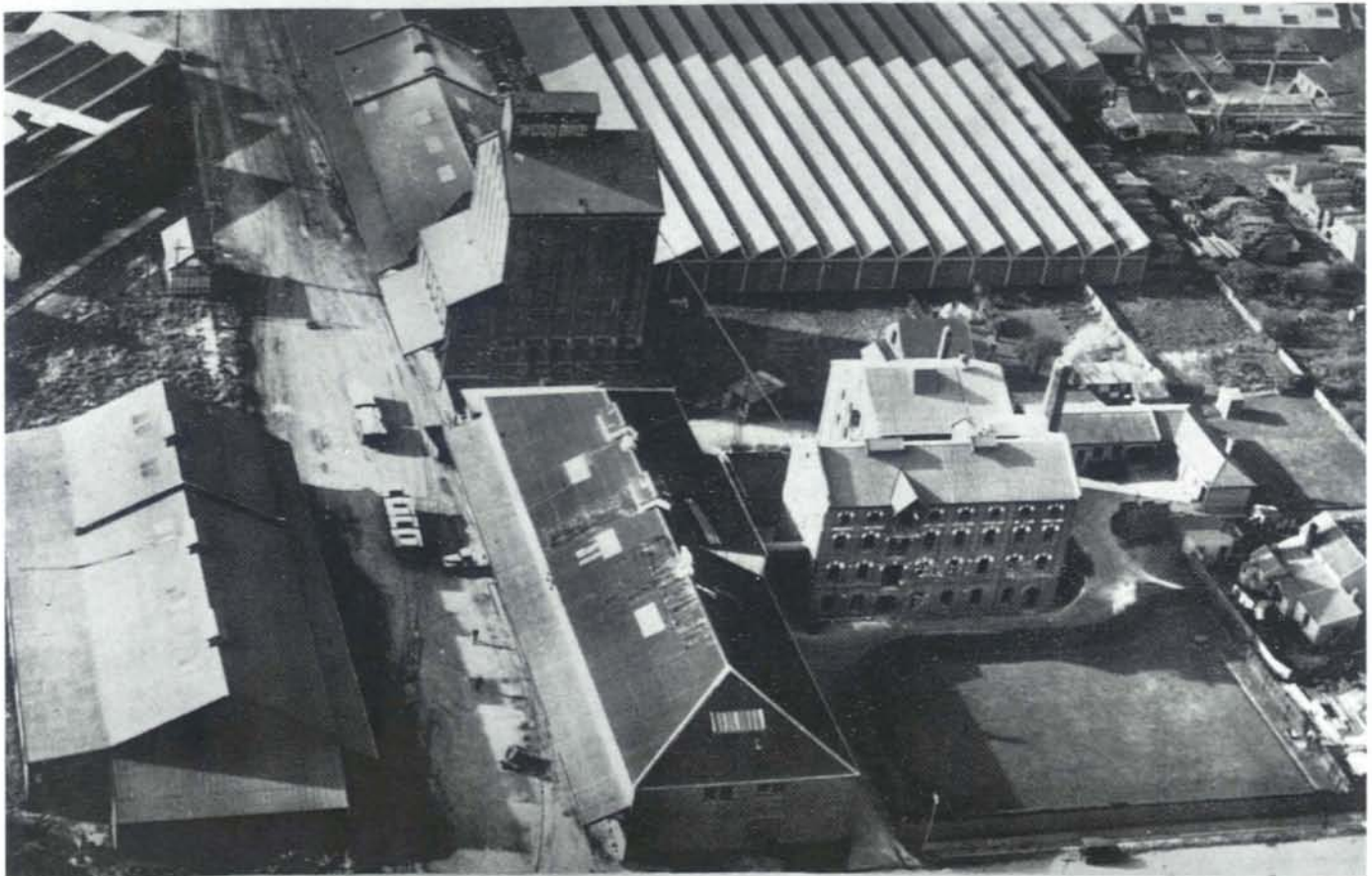
The later roller plant c1969

⁵³ Wood Brothers Limited 1856 - 1950 : Centennial Narrative Christchurch, 1950, p.7. Some time after this Henry Simon Ltd., designed and Wood Brothers built and owned, an office building on Lincoln Road near the Addington Mill. It made sense to have the New Zealand agency of this firm, who had been solely responsible for the mill machinery since 1885, close at hand. (Author in conversation with Simon Wood, August 1994.)

⁵⁴ At the time of closure the Imperial Bowling Club had a membership of 44. The club had been sponsored by Wood Brothers Limited and following the sale to the Wattie Group, Sir James Wattie agreed to pay membership fees for all members for the first year of subscription to whichever club they affiliated to. *The Press* April 24, 1971, p.18.

⁵⁵ Author in conversation with Jeremy Wood, August 1994.

AERIAL VIEW OF ADDINGTON MILL, 1950



Grain Store

Wheat Silo

Flour and Grain Store

Flour Mill

Bowling Green

The principal product of the firm was always flour and wheatmeals. Subsidiary lines developed by Wood Brothers over the decades have included poultry mashes, stockfoods, wheatgerm and semolina which was marketed under the brand name 'Gold Medal'. In the 1960s Wood Brothers also established subsidiary companies producing meat chickens under the trade name of 'Prairie Gold'.

In 1970, the shareholders of Wood Brothers Limited sold the company to the Wattie Group. At the time of closure Wood Brothers employed a permanent staff of 52; 42 in the mill and 10 in the office. A further 20 people were employed on a casual basis during the harvest season. This coincided with University holidays and thus provided holiday work for a number of students.⁵⁶ Automation of the industry meant that many areas could be controlled by one person, however the packing plant remained a labour intensive area and employed 10 people. Other than family members who had long service records both in the plant and as board members (Charles Wood a son of W.D. Wood was still a Board member in 1956 aged 93), many of the mill staff remained with the firm for most of their working lives.

Mr W.E. Couzins who was an accountant with the firm for 20 years, began work at Wood Brothers in 1886 at the Riccarton Mill and was still a director in 1950. A noted cricketer, Mr D. Ashby began work at the Riccarton plant and retired as second miller in 1930 after 55 years employment. Mr F.R. Corson also served the Company at both mills and was a Director at the time of his death in 1927, having worked for Wood Brothers for 48 years. Joe Lee worked as a 'packerman' at the Addington



Packing plant c1970

plant for 40 years and was reputed to be able to sew 85-90 sacks per hour with a sack needle. Charles Clark, who emigrated from Scotland around 1920, served as head miller until 1960, living for many years on site in one of the miller's houses. Mel Baillee, noted as a keen bowler, started work at the mill after W.W.II. At the time of the mill closure in 1970 he was overall mill manager.

The "stop button" at the mill was pushed by Jeremy Wood (great-grandson of W.D. Wood) at 3pm on the last friday of May 1970. Jeremy Wood, the last miller at Wood Brothers, was trained by Henry Simon Ltd in England in 1958.⁵⁷ The closure brought four generations and 114 years of Wood family involvement in this family flour milling business to an end.

⁵⁶ *Ibid.*

⁵⁷ Jeremy Wood worked at the Addington Mill from 1955 until its closure in 1970.

After its closure the mill complex was leased to a number of tenants who operated small businesses as various as a gymnasium, a bakery and an exhibition space. One of the original tenants, Mr Clive Brooker, who established the Regeneration Bakery in 1976, became, in 1985, the owner of the mill. As early as 1982 Mr Brooker had begun a project for a viable reuse of the old mill. The Riccarton Borough Council approved plans to use the building for apartments, small businesses, a theatre and a restaurant. The project aimed to see permanency of occupation and use which would ensure the continued life of the building.⁵⁸

In 1986 Mr Brooker had moved to Hamilton and the mill was placed for sale. By this date six apartments had been created and rented; the theatre vision had been realised and the area sold to the Riccarton Players. However much of the building remained undeveloped. The mill was passed in at auction and later sold to a Christchurch businessman whose intention was "...to carry on with adapting the building for a multitude of new uses"⁵⁹

In 1989 the mill buildings were purchased by Electric Pictures Film Television Ltd with the intention of developing the mill into a film and television production village for the South Island. However the project was not realised. By 1993 owner Anthony McCartney had developed a further 10 apartments but financial problems plagued realisation of the full potential of plans for the mill and the mill has passed into the ownership of a family trust.⁶⁰

Today the development of residential apartments within the original 1890-96 Maddison mill building and the Luttrell Brothers 1924 addition continues. The former storage sheds are owned by a transport firm, Riccarton Players occupy the former grain

stores and the 1913 brick silo, owned by Defiance Flour Mills Ltd., is still used in the flourmilling industry. The former reservoir has been designated as a swimming pool.

Thus the present function of the mill is a very different one from its original architectural inception, yet there are still reminders of the industry it once housed. The sack elevator still extends to the loft and parts of the wooden silos in the 1924 addition remain. Built of oregon, the old silos which extend the depth of the building, either provide unique spaces within individual apartments or simply function as feature walls. With the trend toward inner-city living, revitalising old buildings such as the Addington Mill to house apartments is a pleasing alternative to demolition which is so often the fate of heritage buildings when their original function ceases.



Artists impression of one of the redevelopment proposals



One of the completed apartments

⁵⁸ *The Press* 13 February 1985, p.5;

⁵⁹ see *The Star* 24 February 1986; *The Star* 17 January 1987

⁶⁰ see *The Press* 17 April; *The Press* 21 April 1993, p.51.



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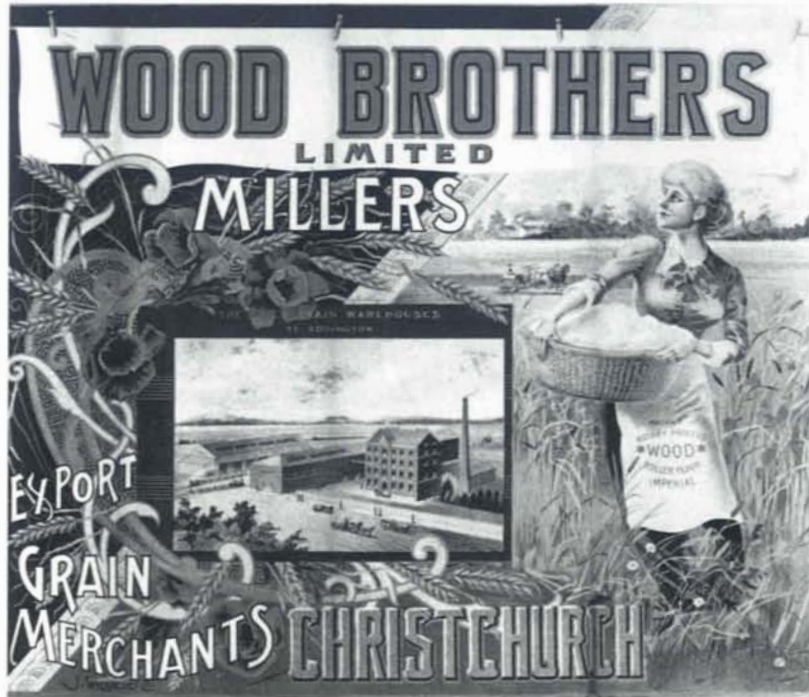
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