



BOTANY WOOL

ABSTRACT

Examining the formation, rise and downfall of the wool industry in Botany.

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Cover page Processing the wool at Thomas Elliot and Co.'s Floodvale wool wash
Photo: Bayside Council Library

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Glossary

AWC	Australian Wool Corporation
Basil	A tanned sheepskin, used to manufacture suede, chamois, soft leathers etc
Carbonising	Process to remove plant matter and debris from wool after scouring
Carding	A mechanical process that disentangles, cleans and intermixes fibres to produce a continuous web suitable for subsequent processing
Combing	Use of combs to create parallel wool fibres ready for spinning
Fellmonger	Person who removes hair or wool from hides in preparation for leather making
Fleece	The wool from a single sheep, in the shorn greasy state.
Floor price	The level which triggered the Australian Wool Corporation to buy wool bales
Gilling	The blending of the wool fibres to produce a homogenous wool blend and parallel fibres
Wool grease	Lanolin, sometimes called 'yolk', which is secreted from the sebaceous glands of the sheep skin.
Greasy wool	Wool which has been shorn from the sheep and not yet been cleaned. It still retains lanolin, dirt and vegetable matter
Lanolin	Wool grease, sometimes called 'yolk', which is secreted from the sebaceous glands of the sheep skin. Can be refined for use in ointments and cosmetics.
Noils	Knots and short stands of wool removed during combing
Pelt	The skin of the sheep with wool still attached to the skin.
Pickled pelts	A stage of leather processing where the sheep skin has been pickled in an acidic solution for preservation
Pulled wool	Wool removed from the skins of slaughtered sheep.
Roan	Soft sheep leather used in bookbinding
RPS	Reserve Price Scheme, A buffer stock scheme where a minimum or reserve price triggers buying by the central authority
Scouring	Washing greasy wool to remove impurities
Tops	Cleaned wool which has been combed so that the fibres are parallel. The tops form a thick woollen rope which is wound into a ball ready for spinning
Vegetable matter	Any material of plant origin found in the fleece, such as burrs, chaff and seed heads
WRC	Wool Realisation Commission



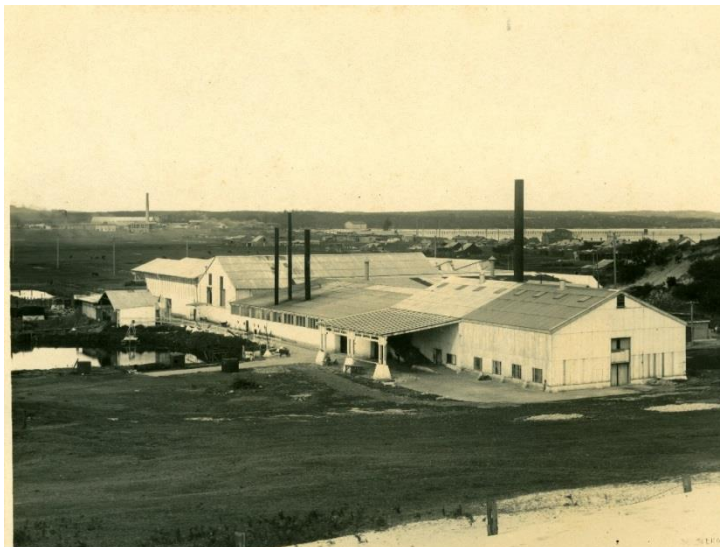
Introduction

The 100th anniversary of World War 1 has prompted many people to collect stories depicting how their ancestors fought in World War 1 or 2. My grandparents did not fight in either war. They were too young for the Great War and worked in protected industries during the Second World War. My maternal grandfather was an ambulance paramedic. My paternal grandfather, James Richard John Bell (1904-1989), worked at Floodvale in Botany, a fellmongering business that was considered vital to the war effort as a primary industry. He followed in the footsteps of his grandfather William Bell (1841-1930) and his father George Robert Bell (1875-1932), both of whom were Botany fellmongers.¹

Fellmongering is the process of scouring, washing and packing wool into bales. The wool is removed from the pelt or skin by treatment with chemicals. This was a smelly job, as the tallow from the wool would be absorbed into the fellmonger's skin, so that the workers always had a 'wool yard' smell about them. One man who was forced to share a tram car with them indignantly complained they were, "wet and evil-smelling from their peculiar work" and called for them to be banned from the trams, without consideration for how they might reach their place of employment.²

The men were shift workers and sometimes their families would not see them for a week at a time, as the fathers arrived home long after their children had been put to bed in the evening. The facility operated seven days per week, scandalizing some in an era when Sundays were considered sacred days of rest.³

George R. Bell's simple weatherboard house, with its corrugated iron roof and woodwork carvings on the front verandah, was located in Botany Road, directly opposite Floodvale. The wool yard itself was not visible, as there was a huge sandhill between the house and the factory, with only the boiler house chimney stack peeking up above the sandhill to indicate the frantic industry taking place only a few metres away. In later years, the sand was removed and used to build the graving dock at Garden Island.



Floodvale Works, Botany Bay. The Long Pier (demolished 1969) can be seen in the background, the sandhill to the right and the roofs of the houses on Botany Road just visible behind the sandhill. Photo: Bayside Council Library

Their back fence faced Botany Bay. It is hard to imagine today that Botany Road formerly ran parallel with the water's edge. The sandy beach was located immediately outside their back gate. The family had a boatshed

with steel rails running into the water, so that the six children were able to run a home-made sailing boat into Botany Bay by means of a trolley system. At Christmas, the king tides would regularly flood the back yard, as the land was only about 60cm above sea level.

Family ties strengthened as the children grew older, married and had children of their own. On the weekends, my grandfather James, his wife Gladys, and his two sons, would visit his parents,

congregating with his three brothers and two sisters, to enjoy a family Sunday roast replete with plenty of delicious spuds cooked in flavoursome lard and smothered in home-made gravy simmered from the pan juices. Afterwards, the youngsters ambled along the beachfront, playing in the sandhills, collecting jellyfish, watching the coal ships unload from the now demolished Long Pier which serviced the Bunnerong Powerhouse, and paddling into the bay in a tin canoe.

James left school at 14, as did most children in this period, and found employment at the wool yards. Fellmongering was a hard, sweaty job. My grandfather walked to work each day from his parents' home in Botany Road, and later cycled from Alfred St Botany, dressed only in a pair of clean but work-stained shorts. No singlet. No shoes. It was too hot to wear any more apparel. Over the years James became skilled in each of the different tasks involved in wool processing.



The men of Floodvale work barefoot handling the sheep basils (skins).

Photo: Bayside Council Library.

In the early 1930s the wool yard was closed for many weeks because of a labour dispute and James took his young son with him to the Mascot and Botany tanneries seeking work; the toddler perched on the handlebars of his father's bicycle. When he was employed, James' wages were about 3 pounds (\$6) per week. Now he was without an income, as unemployment benefits were not introduced in

Australia until 1945. ⁴ The family budget needed to be frugal, as they relied solely on Gladys' paltry income from her work in shoe manufacturing. Women were paid much less than men until wage reform in the 1970s. Their only hope was for James to gain another job as swiftly as possible, or to rely on the vagaries of assistance provided by charitable bodies. ⁵

Despite this grim period, James remained at Floodvale almost his entire working life, until the business closed its doors five years before his retirement and he was thrown out of work, along with hundreds of other men. Like many supposedly 'unskilled' labourers, my grandfather was highly skilled in a tough physical working environment. However, these skills were not readily transferable to other industries.

Current studies of twenty first century retrenchment strategies have shown that in some instances half of retrenched men over the age of 45 are unable to find employment and may unintentionally retire by default. ⁶ Even in the 1960s, employment could potentially prove difficult to find for an elderly man who had only worked for one employer. Fortunately, James' son was able to secure his father a position as a cleaner at Commonwealth Industrial Gases (CIG) in Alexandria, where James earned a comfortable living until retirement at 65.

My grandfather's story prompted an interest in the employer to whom he had devoted so much of his working life. What did a fellmonger do? Was it a dangerous trade? Who owned Floodvale and when did the business start? Why were fellmongers located in this area? How did Floodvale fit into the bigger picture of industrial Botany and the noxious trades? What caused the closure of the Botany fellmongers? The story of Floodvale and the Botany fellmongers is a key part of the saga of Australia's greatest export—wool.

Fellmongers

'Fellmonger' is a term unknown to many modern Australians and the skills of a fellmonger are now largely extinct in this country. A fellmonger is a person who removes hair or wool from hides in preparation for leather making.

Botany fellmongers were key players in the production of fine quality Australian wool. The standard was so high that 'Botany Wool' became known as a term for fine pure merino wool, distinguishing it from the coarser products created from the wool of cross-bred sheep.

There were several stages of preparation required for wool to become the fluffy pure white substance we think of today.

The first was scouring, then carbonising, followed by combing.

The wool scouring process involved removing grease and dirt from the fleece by soaking the wool in warm water and soap before placing it into washing vats, where the agitation of a powerful current of water whisked the dirt from the fleece. Generally, there were a series of these vats, around 1-2 metres in diameter, kept at 48-54 degrees Celsius. As mechanisation of the industry increased in the twentieth century, the fleece could be passed from bowl to bowl using a series of rakes, interspersed with rollers to squeeze out the excess water. The water troughs would be emptied every 6-8 hours, with the relatively clean water from the last bowl recycled into the first bowl. The wool was then re-washed before drying.

Waste water would be processed to remove the lanolin, and the effluent pumped into sludge lagoons to settle for 21 days before being disposed down the local streams or open drains. The streams would become stagnant and smelly and the stream banks polluted by the waste water and the chemicals it contained. To solve this irksome problem, the streams and drains were concreted in the twentieth century to ensure that the filth would proceed rapidly to Botany Bay, where hopefully it would be diluted and dispersed by the tides. There were two main drains in the area; the Floodvale Drain and the Springvale Drain.⁷

In the nineteenth century, the fleeces were laid out on sheets on huge open, grassy paddocks, to dry in the open air. The North-West orientation of the drying yards at Floodvale were considered ideal, and the couch grass grew thick and lush in the sandy soil. If the weather was inclement, the men would roll up the fleeces to protect them from the rain, then re-lay the wool in the paddock once the sun reappeared. The wool had to be regularly shaken and turned to enable even drying and to prevent the fibres from overheating in the intense sunshine, which would ruin the product. Moving into the 20th century, innovative machinery was installed to effectively dry the fleece indoors.

Carbonising was a secondary cleaning stage only used for particularly dirty fleeces containing burrs, seeds and other vegetable matter. The fleeces were soaked in a weak solution of hydrochloric acid or sulphuric acid then baked in an oven to char the vegetable matter. The resulting vegetable dust would subsequently be dislodged when the fleece was crushed between rollers and shaken.

The prepared wool was sent to a textile mill to be combed, to separate the 'longwool' or 'tops' from the short strands and knots known as 'noils'. The term 'tops' refers to cleaned wool which has been combed so that the fibres are parallel. The tops form a thick woollen rope which is wound into a ball ready for spinning.⁸

Combing, to produce 'tops', involves carding and gilling machinery. Carding is a mechanical process that disentangles, cleans and intermixes fibres to produce a continuous woollen web suitable for



subsequent processing. Carding machines were arranged along the full length of the F.W. Hughes Botany factory, in long parallel rows. The carding machinery fed wool into a gilling machine. Gilling is the blending of the wool fibres to produce a homogenous wool blend with parallel fibres. Following this, the wool was passed onto the combs, before proceeding through a second gilling machine. The wool was rewashed and dried ready for the finishing machine. In 1909, F.W. Hughes combing mill, at the Water Reserve in Botany, was reputedly the only one of its type in the Southern Hemisphere. The business was highly successful, operating until the 1980s.^{9 10}

Most people tend to think of wool only as a product of sheep shearing, but fellmongering is also connected closely with the tanning industry. After slaughter, sheep skins would be sweated in a hot and humid shed, the wool pulled from them and then a tanning process undertaken. A tanned sheepskin is known as a basil. Basils are used to manufacture suede, chamois, soft leathers, coloured roans and aniline linings for shoe manufacture, shoes, leather garments, handbags, and protective clothing such as leather gloves and aprons for industrial works. This product was exported to England to supply the glove and boot making trades, as well as saddlery. The Sydney colony did not possess glove making factories of its own, so 'kid gloves' imported from England were generally made of Australian sheepskin.¹¹



J. E. Armitages, Fellmongering Establishment, Bridge End, near Sydney, 1851 R. Turner. Painting held by State Library NSW¹²

Fellmongers worked a 52-hour week in the 1890s, reducing in the twentieth century to 48 hours. In 1935 the Arbitration Court awarded wool scourers and sorters in textile mills a 44-hour week, in line with new provisions for the textile industry, but

workers in the wool scour and carbonising works were considered part of the Wool and Basil Workers Award and consequently required to work the higher number of hours.¹³

Fellmongering could sometimes be a dangerous job or injurious to health. With poor workplace safety laws at this time, machinery operators were at risk of serious injury, such as the young 18-year-old man who died in 1932 from blood loss and shock when his foot was crushed in the cogs of seeding machinery at F.W. Hughes.¹⁴ Poorly stacked equipment could tumble, or a misplaced 200 lb (90Kg) bale of wool could fall, causing crushing injuries or death.^{15 16} Fires were not uncommon in the drying room or storage sheds, or the men could suffer from the painful condition of so-called 'pig-disease'.



Handling the fleece at Floodvale. Photo: Bayside Council Library

Pig-disease was an infection from cuts on the hands or under the nails, often contracted by workers handling skins and wool of dead animals, as they removed damaged wool from debris, in a task known as 'pie-picking'. New workers were more prone to the problem, until their skin hardened and calloused with the work. The hands would swell up like gout, and a blue line of infection progressed up the

arm to the glands in the armpit. Unlike normal blood poisoning there was no pus, but the men would take 7-10 days to recover from the infection. Doctors would recommend 'hot fomentation and rest' (heat packs) until the swelling subsided.¹⁷ Although penicillin had been discovered in 1928, the first patient was not treated until 1942, and the world had to wait until 1944 for its life preserving efficacy, when Pfizer opened the first large scale commercial penicillin production plant in Brooklyn, New York. Consequently, until the second half of the twentieth century, the fellmongers suffered badly from such infections.¹⁸

Botany in the early 1800s

The shores of Botany Bay in the early 1800s were sparsely populated and predominantly occupied by market gardeners, fishermen and lime burners. There were also glue makers, soap boilers and railway men situated in the vicinity. Although located just 9 miles from the city, it was remote due to poor roads for horses and carts.

Lime burners processed the abundant seashells collected from the aboriginal shellfish middens scattered around the bay. The Welsh, English and Scottish fishermen made a good living from the copious fish found both in Botany Bay and along the ocean shores from La Perouse.

The market gardens had been developed from swamp land, which was not affected by the severe droughts which commonly held Sydney and Parramatta in their grip.

In 1838, traveller Majoribanks described the marshes as,

‘uncommonly fertile, producing vegetables, with the exception of potatoes, sufficient to supply the whole town’.¹⁹

Prominent ex-convict, merchant and businessman Simeon Lord (1771-1840), was said to be the first manufacturer of home-grown wool products in Australia. In July 1813 he petitioned the Governor for a land grant. In the spirit of ‘take possession first and ask permission later’, he had already set up the machinery for a woollen mill and water mill beside the stream at Botany, in the area today known as the Mill Pond. The site is listed on the Register of Australian Heritage and is considered to be the first major private manufacturing enterprise in Australia.^{20 21}



The Pumping House Botany, also known as the Botany Water Works, located on the site of Simeon Lord’s textile and flour mills. The chimney was demolished in 1945 to improve sightlines at Sydney Airport. The chimney ruins remain on Ross Smith Avenue near the long-term carpark.²² From 1893 Swinbourne and Stephen’s wool scouring works were also located on the Engine Pond.

Photo: Dixson Library, State Library of New South Wales²³

By the 1850s Buckland and Waterloo Mills were in operation, near what became the Waterloo tram terminus on Botany Road when the tram service began in 1882. The pure spring water supply to the Buckland and Waterloo mills was an overflow from the water supply of Sydney, which in that period was obtained from Centennial Park and the Botany swamps. Waterloo Mill commenced operations as a flour mill and was later converted into use for the wool washing industry. Nearby were Alderson’s woolwash and Johnston’s mills, which obtained their water from Shea’s Creek, which rose in the Carrington Grounds, Surry Hills, and flowed through Bourke Street and Waterloo. Most residents of the area were employed in either the mills, market gardens, watercress farms or milk dairies.

Road access was poor. The first road through Waterloo and Alexandria was constructed in 1813 by public subscription, but only reached Cooks River, in an area known as Mudbank. Bunnerong Road was extended into Botany in 1833. In the 1840s, apart from Botany Road, which was described by

Majoribanks as 'wretched' and a 'cart track', there still very few roads. The route of the current Botany Road was not surveyed until 1863. It remained a toll road until 1884. Various trusts were formed to administer roads, but with lack of coherent and consistent government action, local Botany landowners resorted to creating their own subsidiary toll roads through private property. As the century wore on, bark hut dwellings, houses and businesses clustered along Botany Road, but the surrounding landscape predominantly consisted of swamps, sandhills and scrub.^{24 25}



Old Botany Road, Views of Sydney, 1862-1873, watercolour by Samuel Elyard. The boiler house chimney of a wool scour facility can be seen at right. Photo: State Library NSW ²⁶

The district became part of Redfern Municipality when a council was formed in 1859, chaired by Thomas Hayes, owner of a flour mill which he converted to a wool wash. Waterloo Council broke away from Redfern in 1860 and Botany Council was inaugurated in 1888.

According to the 1862 census, Botany's population consisted of 899 people living in 156 dwellings. Apart from small roadside cottages with gardens, there were some more pretensions structures, such as Mr. Hollinshed's elegant home 'Frogmore', designed in the faux-Elizabethan half-timbered style, 'skirted on the roadside by a bold line of native trees festooned with climbing roses, ivy, and other plants of like habit.'

Community structures included six churches, the Sir Joseph Banks Hotel, a National School and several Sunday schools, a Temperance Hall and tea gardens. A newspaper correspondent, using the nom de plume C.S. described the industrial aspects of the Parish of Botany in 1864,

'There is the large tannery and factory of Mr. Smith, the boiling-down works of Mr. Dogherty, the wool washing establishment of Mr. Bray, and a great many industrial and horticultural establishments of, comparatively, lesser importance; to say nothing of the water-works, and of the fishermen and lime burners in their neighbourhood. Botany is decidedly an industrious quarter.'²⁷

Dogherty's was situated at the northern end of the district, and Bray's wool wash, employing 10 men, was located past the Sir Joseph Banks Hotel, in a cluster of cottages and buildings nestled into the well-wooded sandhills.²⁸ A little further on, Hill and Clissold purchased land for a wool wash by the creek.²⁹ Mr Smith, one of the earliest tanners in Botany, employed thirty men at the nearby Botany Tannery, with 104 soakage and lime pits producing 150 leather hides per week. The business incorporated manufacture of saddlery, boots and shoes on the premises, and was located at the back of the hotel on Bay Street.³⁰ Wool scouring developed in various local factories from 1890, including the Pine Valley Wool Scour operated by Swinbourne and Stephen.³¹



Wool washing estate at Botany, Views of Sydney, 1862-1873, watercolour by Samuel Elyard. Photo: State Library NSW³²

The work was hard, but the labourer's wages were considered quite good at an average of 30 shillings to 2 guineas (42 shillings) per week plus accommodation, while some workers received remuneration for piecework.³³

Related industries thrived in the area including John Walsh's meat preserving works and tallow operation at Bunnerong, where he slaughtered sheep, which were then boiled down for tallow, a foul-smelling operation. Large casks of tallow were rolled out onto the beach during low tide and floated away at high tide to be loaded onto ships. Tallow was used extensively for soap and candle making. In 1878 the Quatrebras Tannery, located on Sir Daniel Cooper's land in Botany, and operated by Walsh and York, was tanning the astounding quantity of 6,720 sheepskins per week. The 21 men employed there slaved away for six and a half days per week, from 6am to 6pm with just two one-hour meal breaks to recover from the hard-physical labour.³⁴

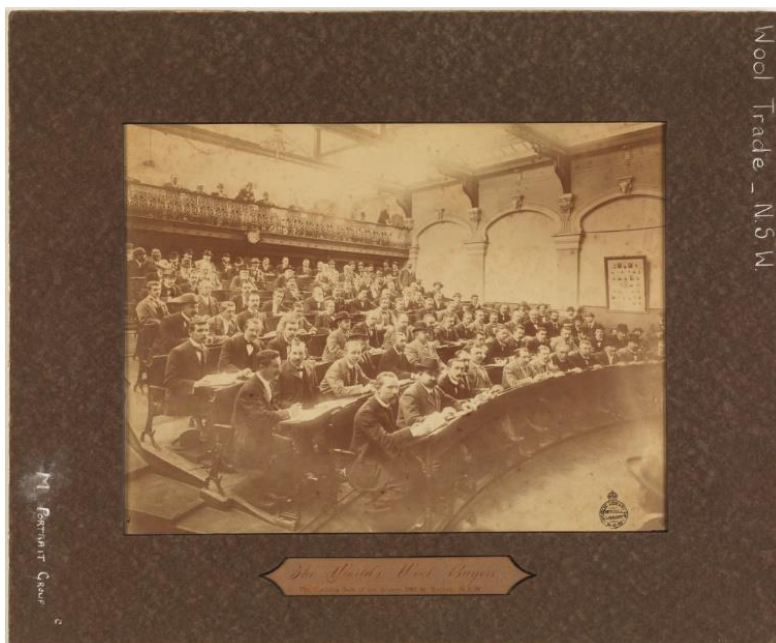
Botany Fellmongers - late 1800s

The Geddes family were key players in the wool industry throughout the second half of the nineteenth century. John Geddes senior was a wool buyer who branched out into wool scouring and carbonising. His business empire, including the Floodvale and Springvale works, was taken over by his sons and expanded until bought out at the end of the century.

John Geddes was born on Christmas Day 1823 in Co. Monaghan, Ireland, the son of farmer Alexander Geddes and Martha Taylor. John immigrated to Australia in his late teens, possibly in 1842.³⁵

John married Rachel Simpson in Sydney in 1850 and they celebrated the birth of James (1851-1906), followed four years later by John Henry Geddes in 1855. Their family was further enlarged with the birth of Thomas S. William (1857-1911), Adelaide Margaret (b.1860), Samuel Robert (1862-1942),³⁶ ³⁷ Emily Jane (1865-1928), Harriett Elizabeth (1867-1941), ³⁸ Henrietta (b.1869),³⁹ and Minnie Rachel (1875-1947).⁴⁰

John (Sen.) entered the bottom rung of the Australian wool business as a fellmonger in Camperdown in the 1850s,⁴¹ but moved into the more commercial aspects in 1865 as a wool buyer for Prince, Ogg and Co.^{42 43} His duties were to purchase wool and sheepskin and conduct the fellmongering business at Botany. Not content to be a mere employee, John Geddes was now ready to form his own company, which Sands Directories list in 1877 s as Geddes Wool-washing Works at Bunnerong Road. He had developed an extensive knowledge of the wool industry, which he astutely applied to his own business and later passed on to his sons. A much-admired businessman, he was described as 'one of the strongest men connected with the trade. a steady-going, hard worker and was wonderfully lucky in his investments'.⁴⁴



The World's Wool buyers, The opening sale of the season Sydney 1897-1898 Photo: Mitchell Library, State Library of NSW⁴⁵

When Waterloo separated from the Redfern Council area in June 1860, John Geddes became an alderman, holding the position of Treasurer, and later Chairman, of the Waterloo Municipality in the newly created Waterloo Council.^{46 47} The position of mayor did not exist at this time.

There was some criticism in its early days of the dithering of the council, when the aldermen voted a number of resolutions at one meeting then rescinded them in the following months. They were also criticised when Geddes proposed plans to lease land for a Town Hall on the corner of Botany Road and Wyndham Street,⁴⁸ which would allegedly be convenient for the ratepayers, but in fact was highly convenient for several councillors who either lived opposite, next door or around the block from the proposed site.⁴⁹

It was claimed in a letter to the Editor of the Sydney Morning Herald that Botany Road was not a suitable location, as it twisted to avoid the hills and swamps, and consequently the writer predicted somewhat erroneously,

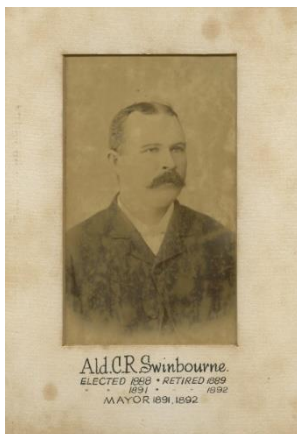
‘The fate of a crooked road after a straight one is made leading to the same point, so that in course of time, long before the expiration of the lease, Botany Road will not be the main road or anywhere like it.’

Curiously. Geddes suggested the half-acre site was expansive enough not only for a Town Hall but also an adjacent pound. The resident further complained;

‘Surely he was joking. No sane man would think of having all the ugliness of a pound, the bleating of kids, goats, and sheep, the bellowing of cattle, grunting of swine, &c, &c, beside the intolerable stench necessarily arising from such a place, adjoining what will be our future town-hall and corporate offices, and perhaps also a public reading-room and library.’⁵⁰

Despite the early problems, John continued in the office throughout the decade, until his resignation in 1869.⁵¹ His high standing in the business community was reflected in his appointment as a magistrate in 1870.⁵²

John Geddes was not the only Botany industrialist to hold office. Many wool wash or tannery owners were aldermen in Botany Council. One can only speculate that the motives of these men were not purely altruistic but were primarily aimed at improving infrastructure for their business enterprises and maintaining the goodwill of the local council and other government authorities.



Ald. C.R. Swinbourne. Photo: Bayside Council Library

Alderman Charles Richard Swinbourne (1853-1940) was born in Christchurch, New Zealand, the son of an Irish immigrant. He held office 1888-1892. In 1898, he moved from local council politics to the state scene, campaigning as a National Federal Party candidate in the Botany electorate. As the turn of the century approached and Australians were preparing to vote on the desirability of uniting the colonies into a Federation of states as part of the British Commonwealth, Charles was agitating in favour of Federation.⁵³ He was an active member of the Botany Protection League, promoting a protectionist trade policy designed to develop the industrial resources of the colony.⁵⁴

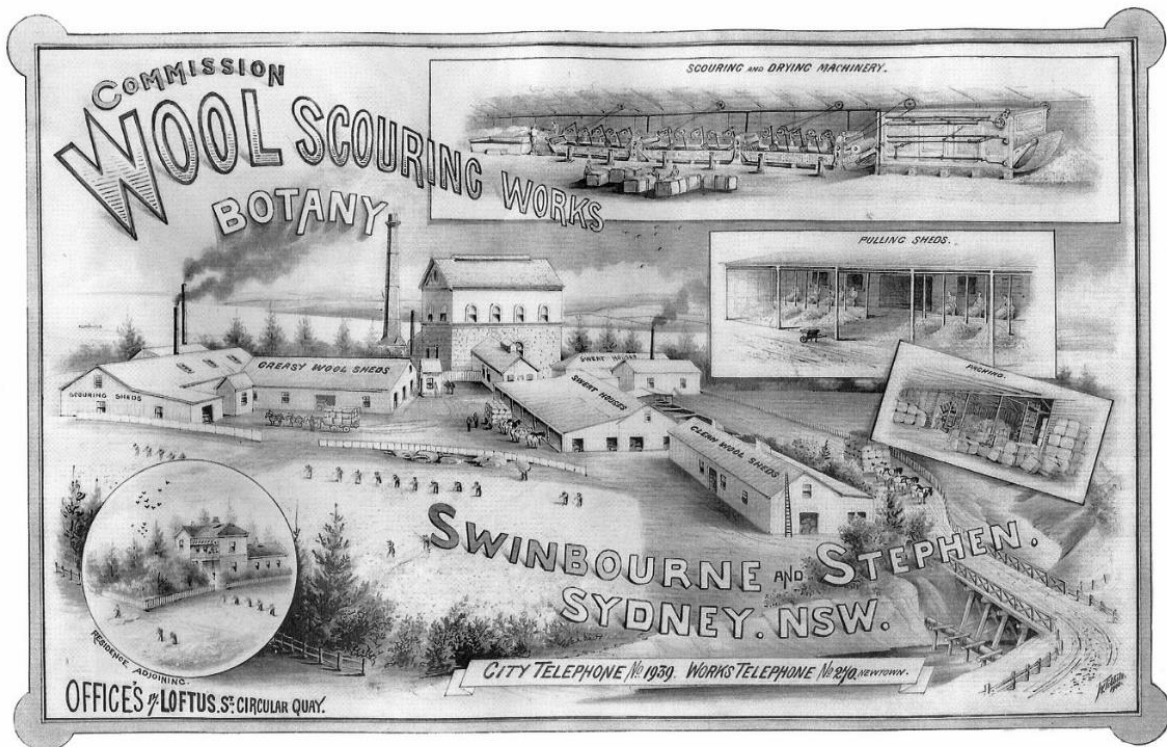
Charles managed Floodvale for Geddes and Co. around 1881 and went on to invest in a Maroubra wool scour works with Sir John Vicar. Swinbourne lobbied hard and successfully for the Water Board to allow a wool wash in the Water Reserve area at Botany. This was an extraordinary move, demonstrating a conflict of interest between his business needs and that of the community, as the Water Reserve was vital to Sydney’s drinking water supply. He opened a wool scour facility on the Engine Pond in 1893 in partnership with Ald. William Stephen⁵⁵ and his son Robert Thomas Stephen, which they named Swinbourne and Stephen Pty. Ltd.⁵⁶

William Stephen originally migrated to Australia in a fruitless search for gold in the 1850s. William became a market gardener in Botany before turning his attention to wool scouring.⁵⁷ William Stephen’s son, Ald. W. D. Stephen, founded the Banksia Wool Scour at Botany.⁵⁸



Charles' younger brother, wool classer and wool scourer John Foster Swinbourne was born in 1856⁵⁹ in Christchurch, New Zealand. His six sons went on to join their father in the wool scouring industry. When John F. Swinbourne died in 1930 aged 74, the list of mourners read like a Who's Who of the wool and tanning industries; T. A. Field, William. D. Stephen, Robert T Stephen, J. Weidemier, John. J. Herford, J. Holloway and P. Pickering (representing major wool exporter Goldsbrough Mort, Ltd.), Edward Fazakerley, J. Bradley (representing Elliot Meat Co.), Horace Whiddon, and Harry Bunce.⁶⁰

Ald. W.D. Stephen founder of Banksia Wool Scour. Photo: Bayside Council Library



Postcard advertising Swinbourne and Stephen's Commission Wool Scouring Works, located a quarter of a mile off Botany Road, on the low-lying flats of the Engine Pond, on the site formerly occupied by the old Water Works.⁶¹ The scouring and greasy wool sheds are at left, the sweating sheds at centre where the skins are hung before the wool is pulled from the skin, and the clean wool shed at right. The inserts show the scouring sheds, pulling sheds where fleece was removed from the skins, wool bales in the packing sheds and an elegant manager's residence. Also of interest is the water pumping station chimney stack, the ruins of which can be seen today at the Mill Ponds near the airport. Photo: Bayside Council Library.

Other wool industry local politicians included Ald. C.F. Etherden (b. Richmond NSW 1862). He was apprenticed to tanners Messrs. Anthony Bros., prior to moving to Botany in 1891 to partner with A. Finnie in a tanning business, until his retirement in 1924. ⁶²

Ald. John Herford ⁶³ opened a Botany tannery in 1902 which lasted until after his death in the 1930s, while Ald. William Hale ⁶⁴ (1858-1926) was a basil tanner at Bunnerong Tannery and the founder of William Hale and Sons.

Despite reputedly working 16-18 hours per day, Frederick James Page (b. Richmond, NSW 1858) found time to stand as a Botany alderman from 1898-1903, and 1924-1928, transitioning to a Member of Parliament for Botany in the intervening years 1907-1913. He learnt the tanning trade at Farrells Tannery, Duck Creek, in Granville and set up Garton's Tannery with J. Colhoun in Botany in 1886. ⁶⁵

It was not necessary to live in the area as a qualification to hold office, but sufficient to own a business there. Although John Geddes was an alderman at Waterloo, with business enterprises in Botany, he did not reside in the district, but lived at 142 Glebe Point Road, Glebe, at a house called Rosebank. A newspaper columnist of 1864 may give a hint as to why he did not choose to live near his factories.

'The extreme badness of the road and the want of a regular and economical mode of conveyance, have prevented men of business in Sydney from seeking dwellings in Botany, as in other suburbs'. ⁶⁶

His highly successful business ventures enabled him to maintain a luxurious home set on a one-acre block with 260 feet frontage, extending 190 feet deep to Hereford Street. The gardens were 'beautifully laid out in lawns, shrubberies etc, flanked with a bed of well-grown ornamental trees'. Constructed of brick set on stone foundations, the gracious house, surrounded by broad verandahs and balconies, featured a grey slate roof, wide tiled entrance hall, drawing room, dining room, sitting room, study, library, four bedrooms featuring grand four-poster beds, and servants' quarters. His home office was situated here. Tasteful mahogany and cedar furnishings displayed his social status and business, as did the oil and watercolour paintings adorning the walls, the lush rugs underfoot, fine bone china and glassware, grand piano and pianoforte. The wool industry and his astute business sense earned him an estate which was valued at £23,889 on his death, enabling John to bequeath every member of his family valuable assets and investments. ^{67 68}

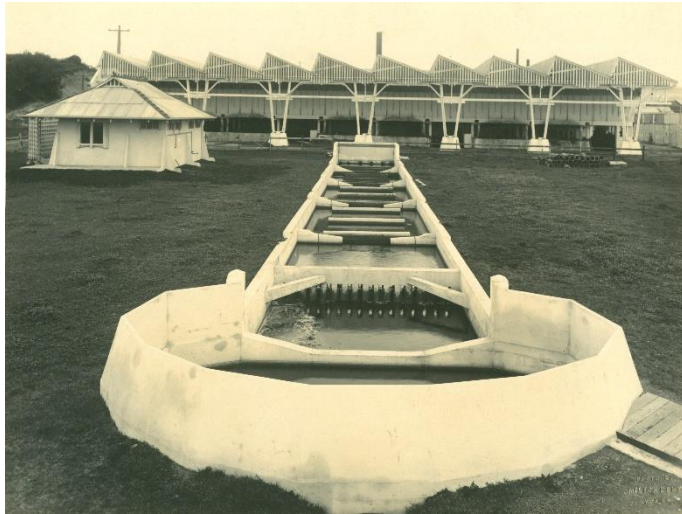


As his business thrived and his wealth increased, John invested in numerous residential properties in Regent Street, Athlone Place, Milton Terrace in Hereford Street, Wyndham Cottage in Glebe Street, and Rosebank Terrace in Glebe, in addition to 28 acres of land in Wentworth Falls and a 3.75-acre waterfront property in Como (on Long View Point in a suburb known today as Illawong) on the Woronora River. ^{69 70}

Wool store, Phillip St Sydney c. 1920. This may be John Geddes wool store, which was located at 19 Phillip St.

Photo: Royal Australian Historical Society Collection. ⁷¹

The business would pass to his sons John Henry, James, Alexander and Thomas late in the century. He purchased offices in 19 Phillip Street, Sydney, on the site of today's AMP building. Here he was close to the hustle and bustle of the business world, the shipping companies, the bond stores and warehouses of major exporting companies, and the wharves where his product was loaded onto sailing ships bound for the UK.



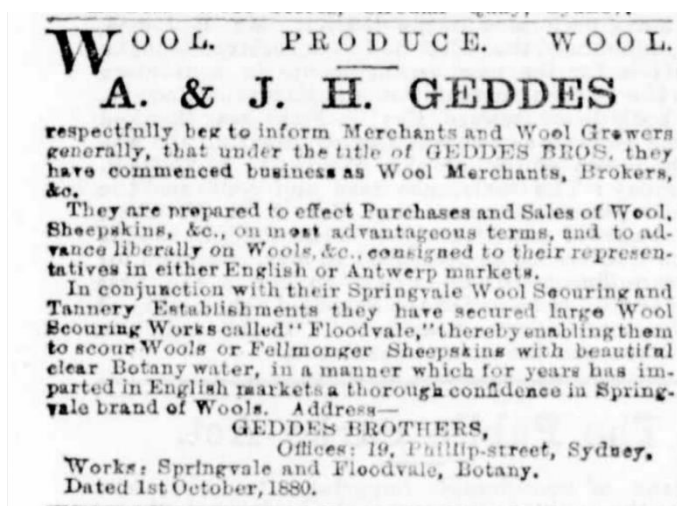
Although the business offices were in the city, the industrial focus of the wool industry centred around the Botany Bay area, a location chosen for its clean water and clear unpolluted air.⁷² It was considered so sweet and pure that in 1885 J.H. Geddes and Co. wrote to the City of Sydney Council offering the use of water from their Floodvale Dam to supplement the scarce drinking water supply in Waterloo and Redfern.⁷³ Ironically, the wool industry would eventually taint the pure waters and become notorious as a noxious industry.

Floodvale. Photo: Bayside Council Library

1880s- Springvale and Floodvale

John Geddes senior passed the day to day business operations to his sons Alexander and John Henry. The city office of J.H. Geddes handled buying, sales and administration, while the main wool washing operations were carried out at Botany Bay. Geddes initial property purchase was 100-acre Springvale, which engaged in wool scouring and tanning processes. Their product was exported to English and Antwerp markets.

Geddes Brothers increased their factory's capacity when they purchased Floodvale wool-scouring works In October 1880. They had a storage capacity of 2,000 bales of wool and were now able to offer 'to scour wool or fellmonger sheepskins with beautiful clear Botany water in a manner which for years has imparted in English markets thorough confidence in Springvale branded wools.' By 1881, trading under the name A & J.H. Geddes, the company employed 100 men and kept 30 horses. It was a thriving business with working expenses of £250 per week.⁷⁴ The company was processing around 80-100 bales of greasy wool per day in a process taking approximately three days.⁷⁵



The Geddes brothers advertise their purchase of Floodvale in October 1880⁷⁶

Wool dried in the city tended to take on a dirty brown smoky tinge due to dirt and soot particulates in the air. Botany was removed from the dust and squalor of Sydney Town, and the fleeces could be laid out to dry in the open air and fresh sea breezes of the Floodvale property without fear of contamination.⁷⁷

The Veteran Swamp was located to the north west of the Springvale wool works. By the late 1880s much of the swamp was under cultivation by the Chinese as market gardens, and there was a meat processing facility nearby.⁷⁸ A dam was built adjacent to the fellmongering facilities, measuring 300 x 150 feet (30m x 15m), with a water depth to 10 feet (3m). This was used initially to wash the wool.

The lagoons provided a source of clear fresh water for washing the wool. Water was pumped by centrifugal force from the lagoons, providing sufficient water pressure to remove the dirt trapped in the fleeces. The supply was ample enough that the dams could be emptied each evening and refilled with fresh water by the following morning, ensuring each new batch of the wool was washed in clean water.⁷⁹

Sheepskins were also tanned, known as 'basil tanning', and by the 1880s there were at least four tanneries located nearby, including John Geddes' operation at Springvale, Frank Lupton at Rosebank Tannery, and Hays wool wash, which had been operating in the area as early as 1860.⁸⁰ As the decade wore on the tannery industry developed until it became the predominant industry of Botany.

Tanning sheepskins involved soaking the skins in water for a few hours to soften them, then removing flesh and fat with a sharp knife. The skins were soaked with lime for 10-12 days, following which the skins were washed and any remaining dirt removed. The hides were placed in a tanning

pit with bark-liquor for 4-10 days. Hides intended for shoe soles were layered and ‘dusted’ with extra strong tanning liquor for six weeks to two months. Other leathers went to the currier who applied techniques of dressing, finishing and colouring to the tanned hide to make it strong, flexible and waterproof. The currier spread the hide over a table and scoured it with water, a brush and stone. The hides were rubbed down with an oily substance called dubbing and hung up to dry. Once dry the hides could be scraped down with a currier’s knife, in a process known as ‘whitening’, then coloured black or brown and finished.⁸¹



Springvale above and Floodvale below in 1881. The men are laying out the fleece in the vast drying yards.⁸²



‘The sight of a field of dried wool shimmering under a blazing sun is something to remember’.⁸³

SPRINGVALE AND FLOODVALE, THE WOOL-WASHING AND FLEECESMENDING ESTABLISHMENTS OF GEDDES BROTHERS, AT BOTANY, NEW SOUTH WALES.

The clean baled wool would be placed on board ship, or in warehouses awaiting shipping to Europe, where the creation of wool fibres for knitting and weaving was carried out. They produced a massive £6 000— £7 000 worth of wool per week.

In addition to the wool production, 8 500 –10 000 sheepskins were tanned each week at the Geddes works, rising to 400 bales of wool and 15 000 sheepskins per week in 1883.⁸⁴ The fleeces were delivered to Sydney by ship or rail, then transferred to Botany for processing. Five horse and cart teams would transport the sheepskins 54 km from the Sydney Meat Preserving Company at Rookwood to Floodvale.

In the 1880s the young Geddes boys purchased new engines and built additional storage sheds to increase the capacity of the factory. They were inventive, installing vats for a process they had invented for cold washing the wool.

The company name changed again to J.H. Geddes & Co. in 1885. John Henry was busy running the family company in Botany, where capacity had risen to 1,000 bales of greasy wool and 25,000 skins per week. The company had expanded to own Buckland Mills and Waterloo Mills in nearby Waterloo, offering their services as Auctioneers and Wool Scourers, Stock, Station, Financial, and General Pastoralists Agents.^{85 86}

The initial boom years of the decade turned to a depression by 1886, although the firm still sold a combined 6,000 bales of wool, scoured 8,000 bales, and processed 500,000 sheepskins through their

three establishments at Buckland Mills, Waterloo Mills, and Floodvale in the 1885-1886 financial year.^{87 88}

The company expanded into the Newcastle district in 1886 with management of the Northern Mills in Hamilton, scouring 300 bales per week, making J.H. Geddes arguably the largest wool scouring business in the world.⁸⁹

They added Springvale basil tannery to their properties in 1888. In September 1890 Thomas Geddes and Sons took over the Floodvale premises in a new business venture, while Geddes and Co. retained Springvale. Thomas purchased the extensive equipment and buildings on a 107-acre plot for £6 000. The occasion was celebrated with a flourish, with two hundred and fifty guests invited to the official opening, including prominent pastoralists, stock dealers and butchers.

Thomas Elliot conducted a tour of the facilities, demonstrating the machinery which pulled the wool from the skins in the pulling sheds. The guests were vastly impressed with the statistics Elliot drew forth; the business employed 250 men and paid a weekly wage bill of £500. In the last quarter alone, they had prepared over half a million sheepskins and slaughtered 7,000 sheep per week at their Glebe sheds. The visitors then indulged in a sumptuous luncheon, replete with numerous goodwill toasts.^{90 91}

Presumably Elliot had a financial stake in the business, as Sands Directories lists the business as Geddes and Elliot from 1890 to 1894. In early 1894⁹² the business passed into the hands of Thomas Elliot, who purchased the Floodvale and Springvale works, while J.H. Geddes and Co. focused on wool brokerage in the city. Elliot also owned a sheep abattoir in Glebe, slaughtering 1,000 sheep per day for consumption and a further 2,000 per day for boiling. He was the largest employer in the wool trade, engaging Alexander Geddes as the Floodvale manager.



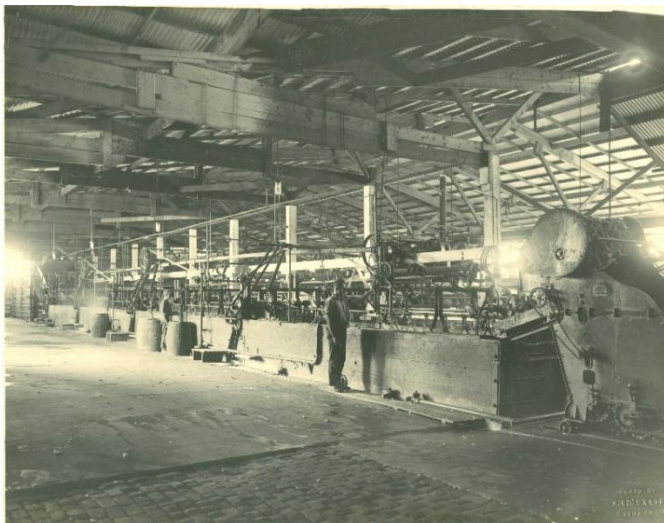
Thomas Elliot and Co. tannery at Springvale and wool scour works at Floodvale c. 1900. Horse teams can be seen delivering wool, and the drying yards are on the left. Photo: Bayside Council Library

By late April 1894 management reported that due to a downturn in the trade, they needed to reduce labour costs if they were to competitively tender for sheepskins at Rookwood. They now employed around 80 men, around 20 less than at the beginning of the decade. The eighteen pullers received £2 to £2 5s per week. The remainder of the workers received £2 5s. The men worked a long 52-hour week; 9 hours per day Monday to Friday plus 6 hours on a Saturday. Any additional Sunday work was paid at time and a half.

The owner, Thomas Elliot, decided that he no longer wished to pay time and a half on Sunday and would therefore reduce wages by 3s per week. Alexander Geddes, the Floodvale manager, placed a notice in the yard to this effect, although Elliot later denied any knowledge of it. The men formed an agitated delegation to speak to the manager, who conceded that wages would stay the same for the moment but implied the situation could change at a moment's notice.

Consternation over potential loss of penalty rates turned to anger when the company informed the men late one Sunday evening, that when they returned the following day, their wages were to be cut by two shillings per week. The company's attitude was dismissive. If they didn't like it then they need not return to work. The men were incensed, calling an immediate stop work meeting. The Wool and Leather Workers Association trade union was notified, and a mass meeting of wool and leather workers was convened at North Botany Town Hall on Monday evening.

Who said what, to whom, and when, became a tangled mess of claim and counterclaim. Elliot claimed the men were making a good living from overtime. Furthermore, they had already worked for a week at the reduced wages. Others said they knew nothing of it. The owner was indignant that it was only a few agitators who had excited the majority of the workers, which the men refuted.



Scouring the wool at Floodvale. Photo: Bayside Council Library.

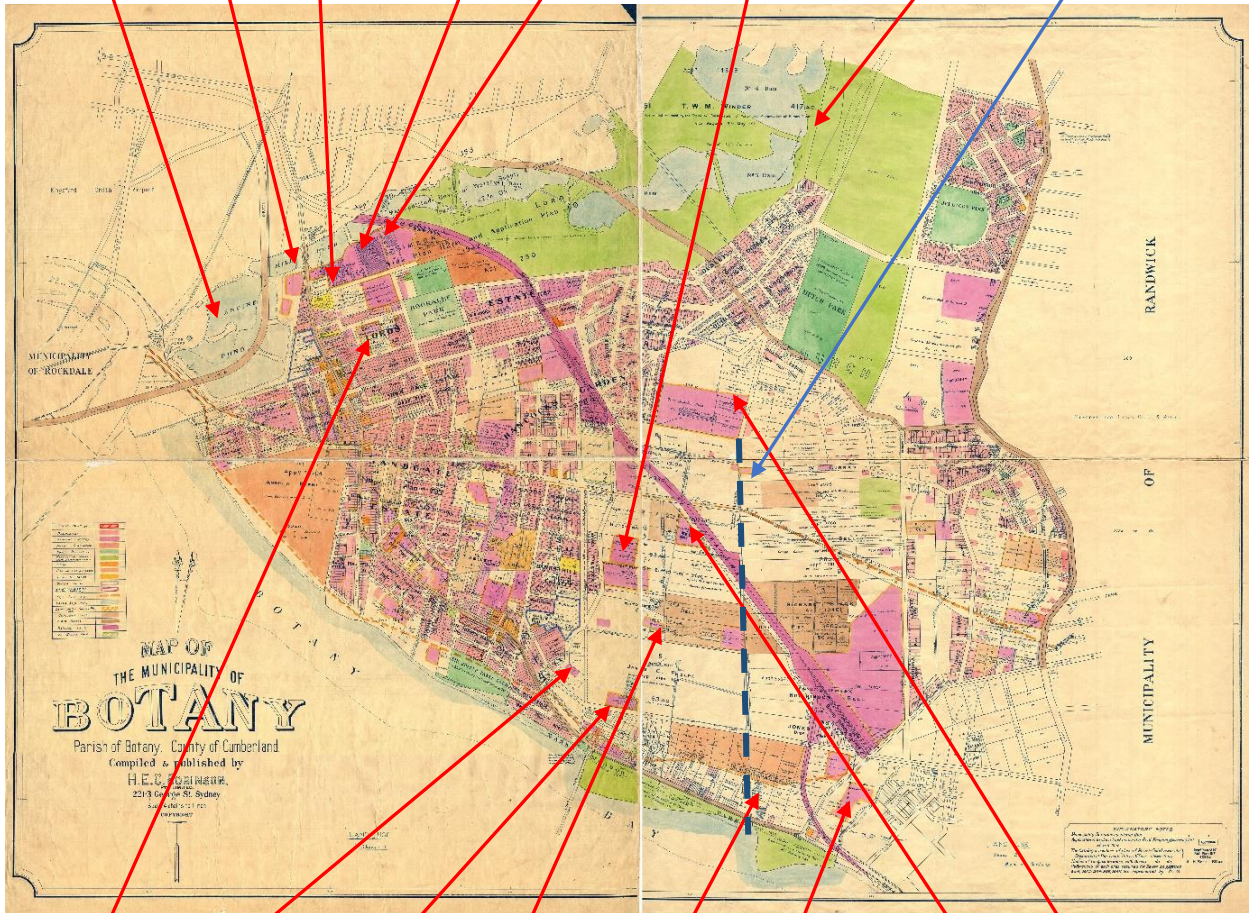
Elliot cried poor and declared that he would now be obliged to sack butchers, tallowmen and yardsmen at his Glebe establishment in consequence of the striker's actions. He blamed the men for driving work from the yards.

The concern of the union was that other employers would follow suit if Elliot led the way on wage reduction. After heated discussion, the unionists voted to remain on strike and to support the Springvale and Floodvale workers by paying a levy of 1s 3d per married man per week, to assist the striking labourers during this difficult time. Meanwhile pickets were prepared on site. The strike lasted a month, until Elliot relented and agreed to maintain the old rate of pay.^{93 94}

Meanwhile, the company founder, John Geddes (Sen.) had been suffering from heart disease for the last 18 months. He succumbed to a heart attack 31 May 1894 at Rosebank, his home in Glebe, at the age of 71. He was buried in the Presbyterian section of Rookwood Cemetery.⁹⁵

Map of Botany showing selected wool scourers

Engine Pond
 Mill Pond
 Arlington Mill (leased to Whiddon)
 Colonial Spinning & Weaving (F.W. Hughes)
 John Bunce & Sons Tannery
 Thomas Elliot & Co. (on Stephens Rd)
 Metropolitan Board of Water Supply & Sewerage (green area around ponds)
 Springvale Drain (dashed blue line)



Botany Wool Scouring Co.
 W.D. Stephen wool scour
 Floodvale (Thomas Elliot & Co.)
 George Hensley wool scour
 Springvale (Thomas Elliot & Co.)
 Australian Wool & Produce Co.
 Pine Valley Wool Scour (Swinbourne & Stephen)
 Davis Gelatine

Map published by H.E.C. Robinson. Undated.⁹⁶

Courtesy of Bayside Council Library

John Henry Geddes and the meat export trade

John Geddes' son John Henry was described as inheriting his father's capacity for work,

'...but in addition, was a born organiser. A brilliant man in everything he connected himself with, and his character may be summed up by the remark of one who knew him all his life that he only just missed genius. He was ambitious and enterprising to a very marked degree, and like many more men of marked ability and great capacity, he fretted at having to moderate his pace to that of more slow-going individuals. Personally, he was an ideal comrade, open and generous to a fault, and all through his life he was ever ready to assist any who appealed to him. He gave away vast sums of money without fanfare or seeking recognition in his 'quiet unostentatious manner'.⁹⁷

He was a family man who on 26 November 1885, married Haidee Lone Wilshire, a 20-year-old spinster from Berrima, the granddaughter of Sir John Robertson of Clovelly, and daughter of local police constable Frederick Robertson Wiltshire.⁹⁸ They went on to have two daughters and four sons.⁹⁹

In 1886 John Henry Geddes took over the wool scouring and fellmongering business at Botany under the name of J.H. Geddes and Co., with offices at 19 Phillip Street Sydney, and works at Floodvale, Buckland Mills and Waterloo Mills.¹⁰⁰

Meanwhile, another influential and entrepreneurial businessman was operating in Sydney in associated industries. Thomas Sutcliffe Mort (1816-1878), migrated from Lancashire to Sydney in 1838. As a younger son, he had inherited little from his father, but he harboured an ambition to move up in the world from the humble position of a clerk. He eventually became one of the most influential businessmen in Sydney. In the 1840s Mort auctioned wool, livestock and pastoral properties, later accepting wool by consignment for the London markets. He developed investments in sugar, railways and mining, and in March 1855 built Mort's dry dock at Waterview Bay in Balmain, but some of his most important entrepreneurial ideas related to refrigerated food transport. Initially he saw refrigeration as an opportunity to move milk, butter and cheese from his Bodalla estate, on the NSW south coast, to the more profitable Sydney markets. Between 1866 and 1878 he financed experiments in refrigerated trains, ships and cold storage depots, culminating in the shipment of frozen meat to Britain in the late 1860s. His vast investments did not pay off, but Mort paved the way for John Henry Geddes to capitalise on his pioneering work.¹⁰¹

No evidence exists as to whether Mort and Geddes knew each other, but in the small business world of the Sydney colony it seems most likely they were well acquainted, if not personally, then at least by reputation. Mort was quoted as declaring "there shall be no more waste", and this could just as readily have been John Henry's motto. The wool business was not only about the fleece, but the animal which had been slaughtered to supply the wool and hides. He needed an outlet for sheep carcasses when he was overstocked. Refrigeration, and particularly frozen meat export, would solve his problem and provide a stable income during slower wool trading periods.

Inspired by Mort's work, John Henry undertook a study tour of the frozen meat business in New Zealand, which had moved forward in leaps and bounds in recent years. On his return he became a passionate advocate for this innovative industry, addressing meetings and proselytizing amongst the pastoralists and wool industry key players. Despite initial resistance, he was able to open a wool and frozen meat storage facility at Kirribilli in October 1891, entering the frozen meat export trade in July 1893 with an initial shipment of frozen lamb to the UK.

This venture caused John Henry to float J. H Geddes and Co on the stock market as a limited liability company with himself and seven prominent local gentlemen, graziers, pastoralists and merchants listed as subscribers on the incorporation papers. The business amalgamated with the Pastoral Finance Trust and Agency Co. of Australasia Ltd in 1891, at which point the name morphed into J.H. Geddes and Co., Pastoral Finance Association Ltd. It eventually dropped the first part to become simply The Pastoral Finance Association Limited in December 1894. ^{102 103}

This new entity had ambitious corporate goals, detailed in 28 objectives in its rules of association, including;

‘To carry on in all its branches of Wool Brokers, Stock and Station Agents...freezing, chilling and refrigerating mutton, beef, fish, games, butter, fruit and other commodities’.

They were also interested in pastoral banking and finance; investment in and acquisition of pastoral properties; domestic and international shipping to the UK and the world. The company was on a sound financial footing with half a million pounds in capital raised through 100,000 shares at £5 each. ¹⁰⁴

John Henry was eager to implement the most modern equipment in all aspects of his business. As the owner of pastoral sheep property leases, he had a vested interest in ensuring his sheep were shorn as quickly and efficiently as possible. He took up the cause of Wolseley, the inventor of the sheep shearing machine, who was experiencing difficulties persuading squatters to adopt his pioneering equipment. John Henry toured the countryside promoting, demonstrating and selling the equipment.

John Henry moved away from the wool scouring and fellmongering aspects of the business to concentrate on his passion for the opportunities posed by refrigeration, resigning from the wool business of J.H. Geddes and Co. in 1894 to form a new company J.H. Geddes, Birt and Co. with freezing works in Sydney, Brisbane and New Zealand.

John Henry now saw that the future of the business lay in England, and approached the Queensland Government, to request they appoint him an agent to promote the refrigerated meat industry in London on their behalf. In the late 1870s he became the Managing Director of the London Central Markets Cold Storage Co. Ltd, operating in London, Liverpool and Manchester. He was a man able to motivate businessmen to support his ideas with investment capital. The London cold-stores alone had a storage capacity of a million cubic feet, costing £280,000, fully equipped with the most cutting-edge technology of the day.

John Henry went from strength to strength, investing in the international meat market and heavily involved with representing the UK meat industry abroad. His personal wealth increased, which he invested in artworks. He was well-read, articulate and spoke several languages. His family resided in Victoria St, Westminster, one of the more upmarket districts of central London. The family were sufficiently wealthy to send their sons to expensive private schools. John Henry had been educated in Yarwoods Private School in Sydney. His two eldest sons were educated at prestigious Rugby and Cambridge.

John Henry suffered an attack of appendicitis in 1909. It is possible this operation contributed to the subsequent illness which left him in great pain for an extended period. He retired to Folkestone, Kent, in the hopes that the sea air would reinvigorate him and restore his health but died shortly afterwards. After his untimely death, his sons followed their father's footsteps, working in Imperial Food Supplies Ltd, and General Produce Co. Ltd. In the UK. ¹⁰⁵

Springvale- Thomas Elliot and Co. Ltd.

Thomas Elliot, John Walsh, and Rennie founded Thomas Elliot and Co. Ltd. By the early 1880s they were engaged in boiling down 10, 000 sheep carcasses per week in Bunnerong on their 130-acre property, located just beyond the Sir Joseph Banks Hotel at Botany, reached from La Perouse Road, with the property extending to the bay.

In 1882 they enlarged the operation by opening a new wool washing works at Botany. It was a momentous occasion attended by dignitaries including the Post Master General, city aldermen and politicians from the Legislative Assembly. John Walsh hired buses to bring 400 guests from the city to the bay, to enjoy a festive banquet, games of cricket, and bushwalks amongst the brilliantly flowering native Christmas Bush trees, blooming beside the sparkling waters of Botany Bay on this fine summer's day.

The guests were impressed by the facilities, which included machinery powered by an eight-horse power engine, five digesters with vats, and an innovative wool scouring apparatus. Numerous buildings dotted the property including a private residence for the manager, vast boiling-down and scouring sheds and expansive structures for cleaning, drying, packing, and storing wool. Fresh water was supplied from two dams. The company employed 200 men at Botany.

T. Elliot and Co. had interests in rural properties, which provided a supply chain for their business. Sheep and wool were transported from their Pocketaroo and Oreel sheep stations in NSW, and Toomoo, in the Maranoa district, Queensland. Flocks of sheep would be walked daily from Homebush to Botany to be slaughtered. They additionally operated a large butchering business in Sydney, wool-washing premises at Rose Valley and Quatre Bras, Botany, and were a major exporter of tallow, tanned sheep leather and wool.¹⁰⁶



Wool bales transported by horse-drawn cart

1950. Photo: Royal Australian Historical Society Collection¹⁰⁷

The first load of sheepskins arrived at Springvale Yard 1st January 1886. The horse team was driven by Alfred Ralph, who was still working for the company in 1938. The company became well known for its 16 six-horse teams, at one point rising to 22 teams. They also employed smaller horse-drawn carts.

Shortly afterwards the name changed to Thomas Geddes and Co. but reverted to Thomas Elliot and Co, under Thomas Elliot's sole control.

Unlike today, where the workforce is mobile, changing careers often, in those days it was customary to stay with one employer for many years if you were lucky enough to secure full-time employment. The General Manager James Bradley worked there for over 33 years and Works Manager George Harris for almost 50 years and by 1938 was a major employer in the district, with 150-200 staff.¹⁰⁸

Another employee, tanner Angus Nugent worked for Thomas Elliot at Springvale and Floodvale, but later went into business for himself in 1922, opening Angus Nugent and Sons Pty. Ltd. He died in 1958, but Nugent's company survived until 1970 when many tanneries closed at Botany.¹⁰⁹

Frederick William Hughes

As the Federation loomed and the new century dawned, Frederick William Hughes entered the picture, becoming one of the great wool industry industrialists, acquiring vast wealth and powerful influence.

Frederick William Hughes was the son of Henry Benjamin Hughes (1840-1917) and Sarah McLaren (1847-1924).¹¹⁰ Fred William was born in Brisbane 12 September 1869 during a family trip north, possibly arranged to visit relatives,^{111 112} but his parents delayed his baptism until they returned to Sydney and their family church, St John's Church of England, in Parramatta.^{113 114 115} Fred had eight siblings. The large family lived in Parramatta and would have been well known to the parishioners of St Johns, where their children were baptized.

Henry Benjamin Hughes ran a thriving butchery business in George St Parramatta. His business acumen enabled him to acquire property and eventually retire comfortably in Ryde living on independent means. Young Fred showed an early talent for finances, learning many of his business skills from his father, and maintaining the financial records for the butcher's shop.^{116 117 118}

According to one source, Hughes was educated at Sydney Boys High School and joined J.H. Geddes and Co. when he left school, rising to become an assistant wool valuer, but it also seems likely that Fred may have left the family home to make his own way in the world. Stories in local newspapers hint of his short career in rural industries before he found his vocation in the wool industry. Some said Fred found employment on a south coast farm milking cows, which relatives later denied¹¹⁹ Another source which suggests it was a Northern Rivers property.¹²⁰ Hughes was a man of mystery even to his closest staff members who associated with him for many years. If the stories are true, his practical knowledge of station life, acquired in this period, would prove vital in his later career, leading to the purchase of vast rural properties for his growing business empire.

He married Dinah Matilda Morris (nee Hawthorn) (1867-1933) on 7 September 1898 in St Johns, Parramatta. How much time he spent at home with his new wife is debateable. There seemed to be no time to devote to having a family and the couple remained childless. He was a man who loved his business, working long hours into the evening. Fred threw himself even more passionately into his work after he was widowed.

Fred was now ready to open his own business venture, and like many industrialists of his time, he sought to promote his business and influence local legislation by standing for election as an alderman. He was 26 years old when he took office as an alderman on Waterloo Council in early 1895.¹²¹ He resigned from Waterloo Council two years later in January 1897.^{122 123}

Fred was not terribly interested in joining industry bodies, although at one stage he became Vice-President of the chamber of Manufacturers. Later he briefly joined the Textile Association until he had a disagreement with some of its members, which prompted him to create his own break-away group in opposition.¹²⁴

Hughes acquired the J. H. Geddes company around 1895, renamed it the Sydney Wool Scouring Works, and moved his business to the Mill Pond area of Botany, where he employed 100 men. By this stage Floodvale and Springvale were in the ownership of Thomas Elliot and Co. and did not form part of the acquisition.¹²⁵ Three years later his wool scouring facilities were destroyed by fire, with damage amounting to £3,000, which he claimed on insurance.¹²⁶ A mere fire could not limit the ambitions of a man like Hughes. Within 30 years he had developed it into a 10-acre processing plant with an annual output of wooldrops valued at £6 million.

Initially, the business owned one wool washing machine. By 1938 he had increased the plant to 10 machines, each of which was three times the size of the original machine, and the land holding to 10 acres, with an overall business value of £6 million. He actively engaged in the development of new technology to improve efficiency at his works. He applied for patent number 6537 in 1896, together with Arthur Edward Cutler, for an 'Improved machine for use in the open-air drying of wool.'¹²⁷

Hughes was a workaholic and expected his key staff to do likewise. His secretary Louis 'Willy' Frost recalled that on one occasion Hughes and Frost had worked together all night till 5 am, then Fred sent Frost home in a taxi with the instructions to "try to be a little early for work that day, say 8.30am instead of 9.00am." Hughes loved to write his own legal documents without recourse to lawyers, and thought nothing of battling it out with the Tax Department to gain a tax refund he felt was owed him.¹²⁸

As the business expanded, the staffing levels increased, reaching 1200 by 1938. He also expanded the operations in 1908 to include wool combing.¹²⁹ The new venture was so successful that in 1913 he installed additional combs and three years later constructed a vast new 2,000 square feet mill on the south side of Lord Street, Botany, installed with the latest machinery for textile production. When World War 1 broke out he built a foundry next door to manufacture spare parts, which were unavailable due to wartime restrictions.

The business structure was re-organised when he incorporated the business in 1915, registered as F W. Hughes Pty Ltd, with Hughes naturally elected as Chairman of Directors. Wool textile operations expanded again in 1925 with the opening of The Alexandra Spinning Mills Ltd in Euston Road, Alexandria, of which he was also the Chairman of Directors.^{130 131}



Fred W. Hughes features in 'The Truth' September 1950. He appears giving instructions to jockey George Weate before a race at Randwick in 1946¹³²

A doctor advised him in 1937 to take up horse racing for his health. He bred thoroughbred horses at Kooba Stud in Darlington Point, near Whitton on the fringes of the Riverina, including the brilliant Hiraji, who would win the 1947 Melbourne Cup.

Unfortunately for Hughes, the win occurred in the latter years of his life, when was suffering ill health from arteriosclerosis and old age. He should have been standing in the

owner's enclosure at Flemington cheering Hiraji to victory, and ascending the winner's podium, to hold aloft the magnificent trophy. Instead, on his doctor's advice, he spent a memorable November Tuesday afternoon hunched over a radio in his Sydney apartment, listening in rapt attention to the thrilling race commentator's call, as his beloved horse rounded the bend and galloped down the straight into racing history.^{133 134}

By the time of his death, his company owned or leased over 300 race horses. His initial purchases had not been particularly successful, but failure was not in his vocabulary. In the 13 years he was involved in the racing industry, his horses won 270 races and about £130,000 in stakes. Horses had

been Fred's passion, but obviously not that of the other company directors, as most of them were sold after his death. ¹³⁵ ¹³⁶

Kooba not only bred thoroughbred racehorses, but was primarily a sheep station, whose capacity Hughes increased from 80,000 to 250,000 sheep (by 1950) through the astute use of irrigation on 70,000 acres. He owned half a million acres of prime pastoral land by the late 1930s and was exporting frozen lamb and mutton from his associated enterprises in Homebush Bay and Melbourne. ¹³⁷

The business empire now included carbonizing and combing works, yarn production at Alexandria Spinning Mills Ltd. which was marketed under the Sunbeam brand, and greasy wool exports of 65,000 bales annually to Canada, India, Japan, Italy, Poland, Holland, Europe, Mexico, UK and China. ¹³⁸

Federation years- industrial action

As Federation dawned in 1901 and the Antipodean colonies united to become a nation, London wool reports praised the quality of Springvale wool, although sales overall were disappointing, with Sydney prices better than London's for a clip of wool. Springvale's wool consignment was described as 'about as good as has been offered this series, being cleaner, "smarter," and less twisty than usual. The Floodvale wool was more or less burry, and hardly so sound.'¹³⁹

In September 1911 eight hundred fellmongers went on strike at Elliot and Co.'s Springvale and Floodvale works; Messrs. P. McWilliam of North Botany; Wright and Bruce at Lakeside; and Swinbourne and Stephens at Pinevale, asking for wage increases.¹⁴⁰ F.W. Hughes and H. Widden were paying higher wages than average and excluded from the strike action, but Hughes was quite vocal in his disparaging opinions of strikers.¹⁴¹

Hughes was a shrewd businessman, disinterested in labourer's rights for working men struggling to make ends meet. As a tireless worker whose life was his business, he had no sympathy for the labour movement. In 1913 Fred Hughes was Managing Director of both F.W. Hughes Ltd and the Wholesale Colonial Meat Company. A Royal Commission was held into the Arbitration Act, which it was hoped would reduce or eliminate workers' strike action. Fred proposed a complex scheme to prevent strikes. He advocated docking worker's salaries by 10%, with the money set aside in a special fund. If the men had not gone on strike within an 18-month period, then the money would be reimbursed with interest, minus a month's salary. If the employees participated in a strike, then the money would go to the employer as compensation for loss of business. Not surprisingly, this scheme failed to come to fruition.¹⁴²



Hughes and Co. Botany, February 1912 A wool 'top' can be seen on the floor.

Photo: State Library of NSW.¹⁴³

Botany ablaze

Botany was originally a sparsely populated area on the outskirts of Sydney, but as the city grew, fire became an ever-present threat in its numerous factories. However, it was many years before an adequate fire service was formed. The need for a Fire Brigade was first proposed for Botany in 1894. It was intended that the station would operate a simple hose and reel, but due to funding difficulties and political indifference the Botany Fire Station in Banksia Street was not opened until 1906.

The station was manned by eight volunteer staff and an officer-in-charge. By 1927 it employed three permanent firemen, seven volunteers, and an officer-in-charge. Permanent staff doubled by the outbreak of World War 2. Even by 1970 it was a relatively small outfit for a highly industrialised zone, with one officer and six permanent firemen rostered on duty at any given time. Mascot Fire Station opened in 1912 in Coward Street. With a mere single officer and three permanent firemen per shift by 1970, it was nothing to boast about. As Botany industry swelled, and factory fires were perceived as potentially major disasters, the fire brigade would become an important part of the community.¹⁴⁴



Botany Fire Station 1930. Photo: Bayside Council Library

Bushfires might threaten the works in the sparsely populated early days of Botany,¹⁴⁵ but this was not the main fire threat. The wool industry had long suffered from industrial fire incidents, particularly as mechanisation took over from manual operations in wool washing and scouring. Machinery often overheated and burst into

flame. The timber-framed factory and storage buildings, filled with bales of wool, were flammable hazards. Additionally, there were chemical hazards connected with the carbonising process; wool occasionally spontaneously combusted; and many associated industries, such as tallow or tanning ingredients, had inadequate storage facilities for flammable products. Consequently, fires were a regular occurrence. Many fellmongers repeatedly suffered major losses from fires.

There were major difficulties associated with fighting fires in the wool scouring works and tanneries; the lack of access to water mains, large properties set back many hundreds of metres from main roads, access roads that were little better than dirt cart-tracks, poor communications equipment, and the comparative remoteness from the city fire brigades. Firefighting was often hampered by the distance from the fire stations along rough and badly made roads, which delayed backup in extreme situations. In the early days, fire engines were horse-drawn, so progress towards the incident could be incredibly slow, and the pumps were manually operated, requiring significant manpower.

If the incident occurred in the night, poor visibility compounded the fire brigade's problems, as street lighting was poor or non-existent, reducing visibility for fire crews and leaving them stumbling around in the dark. In 1891 the street gas lamps of Botany were so dim, that often moonlight provided more illumination, and gas companies saved costs by turning them off for 5 days during the full moon. By 1897 there were still only 53 lamps illuminating 11 streets. Finally, electric light arrived in 1912, increasing to 343 street lights by 1937, significantly improving visibility for night-time fire-fighting.¹⁴⁶

Not long after industrial action had rocked the wool industry, disaster struck Springvale in the early hours of the morning on Thursday 28 December 1911. Fire caused extensive damage to the value of £20,000. The inferno broke out in the washhouse, destroying it and sweeping through the engine shed, packing shop, boiler room, engineers shop and the wool loft, which contained a large quantity of wool. Although the watchman alerted authorities swiftly, the fire brigade was miles away in the city and there was a substantial delay before they could reach the scene.

Nearby residents saw the whole of Botany lit up in a spectacular red glow. The scouring works were already doomed by the time the fire brigade arrived. Nevertheless, the firemen engaged in desperate efforts to save the remainder of the tannery and fellmongery facilities, using the auxiliary water supply of the company's small dam. Despite being hampered by low water pressure, they finally extinguished the blaze at 4am. Dawn revealed the desolation of charred timbers, 100 blackened wool bales, three acres of collapsed roofs of the two-story buildings, a pile of twisted iron and irreparable machinery, but the fellmongery, tannery, soap-works and stables remained intact, with all the horses saved.¹⁴⁷ Insurance would cover the rebuilding cost, but the business would struggle to survive the disruption and huge loss of income.^{148 149}

Fire struck again on New Year's Eve 1912. The wool packing department was a long building of 180 feet x 50 feet (54m x 15 m), attached to the wool scouring premises. At 11pm the watchman noticed smoke rising from the structure and alerted the fire brigade. Engines sped from four stations to battle the inferno. The shed was destroyed, but destruction was limited to the wool-packing machinery and 150 bales of wool, with other structures and wool damaged by sooty smoke and heat.¹⁵⁰

Floodvale was not the only wool wash to suffer severe disruption to business due to fire. Fires were a regular occurrence at many wool establishments. In 1893 Walsh's Wool Works suffered extensive damage and the loss of 20 bales of wool when a wool-drying furnace overheated and burnt the building to the ground, causing £2,000 worth of damage. The men were enjoying a lunchbreak when heavy smoke was spied issuing from the drying room just after midday. The fire brigade was summoned immediately, while the workers tried ineffectually to douse the flames with buckets of water. It was feared the fire could spread through the 'creeper' tunnel which connected the washing and drying buildings, so the men cut down part of the 150-foot-long (46m) structure to create a firebreak. Two fire engines drew water from the nearby dam, dousing the flames within half an hour.¹⁵¹

In February 1911 Whiddon's wool scouring works and tannery, at the corner of Hughes and Botany Roads, were destroyed by a fire in the drying room early one damp summer morning. The blaze was discovered around 5 am, while the night shift was having a meal break. Five fire brigade units responded to the call. The sheds were timber framed with iron cladding, and burnt swiftly, despite the rain pelting down on the inferno. The workers were amused when three firemen slipped and fell into a stinking tanning pit, but doubtless the owners were not amused that the tannery, scouring and drying rooms had been destroyed along with valuable machinery.¹⁵²

Lupton's wool wash and tannery was destroyed not once but twice by fire, initially in July 1919. Workers rolled as many wool bales as they could into the paddock, but most of the wool was still smouldering many hours later. Thankfully the horse teams were saved, but the damage was estimated at £14,000.¹⁵³ The second incident occurred in late 1939. In a stroke of bad luck, the yard had just received a large wool delivery the previous day. Spontaneous combustion of wet wool, which had been exposed to the rain, ignited a blaze. Despite the collapse of a brick wall, no-one was injured as the 14 workers fled for their lives. One man was quoted, "We just had time to dash out of



the building. We could not even save our clothes." Presumably, since most 'woolies' wore only a pair of shorts to work, their street clothes were destroyed. They did however manage to save a car and two lorries by enterprisingly crashing them through a fence to safety. The loss of a gutted building, £6,000 of wool and hides and another £6,000 of machinery was compounded by the difficulties of obtaining new equipment during wartime.¹⁵⁴

P.M. Williams wool establishment lost numerous wool bales to a fire on a calm, moonless night in November 1912. Bumping along the pot-holed dirt roads, the fire brigade's horse-drawn engine with its hand operated pump, was slow in arriving. One moment it seemed that the fire was under control, then suddenly a breeze picked up, causing the fire to flare. Desperate phone calls were made seeking help from city stations 12 km away and additional motorised and steam driven vehicles were dispatched. They pumped water from the woolwash dams, to spray in torrents over the doomed buildings. It was slippery underfoot and several firefighters lost their footing, plunging into the deep, dark waters. The flames engulfed the engine rooms, boiler rooms, a couple of brick buildings and a 200 foot (61 m) square two-story drying shed. Dense dark smoke billowed into the air, spectacular orange bursts of flame illuminated the sky, visible for miles around, heralding that it was too late. The buildings and equipment could not be saved, and much stock was destroyed, to the value of £20,000.¹⁵⁵

Sydney Moore's woolwash at the Water Reserve on Botany Road was struck by fire in January 1922 when the woolwash machinery overheated.¹⁵⁶ Two years later, Swinbourne and Stephens wool store and scouring works were destroyed, with a loss estimated at £12,000. The first thought of the men was to save the fleeces, which delayed them calling the fire brigade. That delay was to prove costly. By the time the fire brigade arrived the structure was a furnace from end to end, the flames fanned by a strong breeze. Nauseating smoke billowed from the burning wool bales, pluming hundreds of feet overhead. The soot-blackened firemen braved the dangers of falling timber beams and red-hot sheets of corrugated iron, in a successful attempt to save the adjoining building, which was separated from the fire only by a long, narrow passageway.

The fire was so immense it could be seen from Randwick and the city, and thousands of enthralled spectators marvelled at its orange fury, as the roaring flames reflected in the mirror-like surface of the adjacent Botany Reservoir. The Chief Officer decided to pump the reservoir water and even utilised the foul waters of the fleece-soak pits, to save draining Sydney's precious drinking water supply. By the end of the night, the vast two-story building was reduced to a smouldering pile of ash and twisted metal, scattered over a third of an acre.¹⁵⁷

Three hundred employees of F.W. Hughes Colonial Wool Spinning and Weaving Company were affected by a temporary partial closure of the business following a fire in 1926, costing the insurers around £15,000 in damages to the roof, machinery and wool.¹⁵⁸

Mr J. Jordan's wool yard was consumed in a 'seething mass of flame' on a rainy night in 1929. The brigade would not easily forget the trials and tribulations of this night. They experienced great difficulty accessing the works, as the wool wash was approached along a treacherous mile-long muddy, narrow, unlit thoroughfare from Stephens Road. Only two engines could be brought into the yard while five others parked in Stephens Road. Most of the firemen were forced to walk to the scene.

Once inside the property, surrounded by low-lying swamp, their problems were only just beginning. The nearest water supply was a quarter of a mile distant (or possibly three-quarters of a mile by some accounts), requiring multiple hose connections to stretch the extended distance. Firefighters

stood waist-deep in stagnant water while manipulating the heavy hoses across the 'forbidding marshes' and soggy soil of the Chinese market gardens. More excitement ensued when 'the excited Orientals threatened to dig pitchforks in the hose when it damaged their vegetable beds'.

Jordan's had been experiencing a lull in business, so the damage was not as severe as it would have been had they been operating at full capacity. Damage to the bales was minimal, and half the main building was saved, but the drying and packing sheds were lost, and much of the wool wash machinery was destroyed or severely damaged.^{159 160 161}

Late 1933 the three-acre building of the Lakeside wool-scouring works owned by Messrs Wright and Bruce, Ltd, in Botany Road were partially destroyed.¹⁶²

Difficult access conditions again hampered efforts to quell the conflagration when Samuel and Charles Allingham's wool wash went up in smoke in 1935. Thirteen hundred feet (400m) of interconnected hose was needed to reach the works, which were located 300m from the nearest roadway. Consequently, the building was destroyed.¹⁶³

F.W. Hughes carbonising works were also fire damaged in 1933. The flames ran up the walls of the building like a thing alive, but firemen were able to remove sheets of the corrugated iron roof to bring it swiftly under control, resulting in damage only to the roof.¹⁶⁴

Hughes again suffered losses at their Lord Street property in 1942. Two fires broke out simultaneously, one in the packing room and the other on the opposite side of the road in the greasy wool store. Workers used in-house fire hoses in a vain attempt to douse the fire, but 500 bales of wool ignited, as flaming beams crashed onto the bales below. The entire building was consumed. One fireman needed hospitalisation when a roof beam fell on him, but there were no further injuries. Fred Hughes was fortunate that his machinery had not been incinerated, as it would have been almost impossible to replace during the war.¹⁶⁵



Colonial Spinning and Weaving, Botany, Hughes and Co. Photo: State Library of NSW.¹⁶⁶

The cause was unknown, and police subsequently conducted an investigation into the suspicious circumstances. The perpetrators were quickly identified, but the young arsonists were much more larrikin than criminal. Ten-year-old Bert Thomas, eleven-year-old Joan Lee and friend Ray Davis were playing in a bomb shelter in the F.W. Hughes paddock. They spied an irresistible open door in an office building. Sneaking into the inviting entrance, they filched some pencils, pencil sharpeners,

erasers, and a box of matches, which Bert and Joan later used to set a grass fire. When interviewed by police Thomas claimed,

"Joan Lee said, 'Here is a bag of paper, come on and we will light it.' I had the matches and I lit the bag. The fire caught on to some bags, and then got big. We ran out of the place just in time before the flames started to spread."

They then crossed the road where, according to Thomas,

"I got some brown paper and pushed it under the bales. I had the matches and I lit the brown paper. We didn't wait to see how big it got."

Joan agreed that she was present, but denied the allegation she had lit the fire, and Ray had already gone home before the incident occurred. The Coroner recommended the children be charged in Children's Court for stealing, but not be pursued for arson due to their age. ¹⁶⁷

F.W. Hughes was hit by fire yet again in 1947. Wool was being dried when the machine overheated, the wool caught fire and flames exploded some nearby jars of highly flammable ammonia, spraying flaming liquid in all directions. The eight workers had a lucky escape. Boiler attendant John Hansen related;

'When we saw the wool well alight, we scooted. The flames ran along the wool, and into the wooden roof like lightning. We knew the ammonia was there and went for our lives. I just managed to get out before I was suffocated.'

Panicked pyjama-clad residents flung buckets of water at the flames, as cinders flew, and spot fires licked the front fence, igniting the weatherboard walls and roofs of their homes. The houses were saved by the residents' sheer tenacity. They relentlessly sprayed the house exteriors with hoses for two hours. Fred Hughes' £75,000 wool store was destroyed, but as luck would have it, his twelve racehorses stabled nearby, valued at £25,000, were safe because the wind was blowing in the opposite direction. ¹⁶⁸

Possibly none of the above could compare with the devastation of September 1969, which saw one of Botany's most extensive fires destroy nine wooden warehouses on a 32-acre site in Hale Street. When a spark from an incinerator set fire to a truck unloading paper rolls, the flames spread swiftly. A number of businesses were storing goods in the old buildings, including the Australian Opera, which lost over a dozen of its theatre sets for the forthcoming season, the Marionette Theatre which lamented the loss of 350 puppets, ¹⁶⁹ British Leyland Motor Corporation, Angco Marketing Pty Ltd whose 350 tons of coffee was roasted, paper manufacturers Holmes and Hendy Freestores, Black and Baer textile waste products, and Unilever. Two wool companies lost massive quantities of stock. Six hundred bales of sheep and lamb skins, stored by Philippe Rives Co. Pty. Ltd., were incinerated, together with 7,000 bales of wool owned by K. Goddard and Co. The inferno was brought under control by 150 firemen manning 20 appliances, assisted by 50 police. However, the burning remains of wool and paper products smouldered for several days.

A vista of utter desolation presented itself to the insurance assessors, resembling a scene from a nuclear holocaust movie. Nothing remained but a few tottering brick foundations, a twisted pile of metal, charred timbers and ash, stretching across a vast acreage. ¹⁷⁰ It was said to be the biggest fire in Sydney for thirty years, with a damage bill of \$3 million. The Australian Wool Board predicted a cost in excess of \$1 million to replace the original 1940s wool storage sheds alone. ^{171 172}

Production during World War 1

In May 1914 the government proposed slaughtering all sheep at the new Homebush Abattoirs and transporting the skins to Botany for fellmongering. The new premises would be fully equipped with modern chilling and boiling down works.

The butchery trade was not entirely happy with moving the slaughter from Botany or Glebe Island abattoirs, and in an age when customers were used to storing meat in a hessian covered meat safe or an insulated box with a brick of dry-ice, customers preferred freshly slaughtered meat to chilled meat.

The idea also caused much consternation from Botany industrialists at the potential for reduced wool and skin quality, particularly in hot weather. The skins were processed within 4-5 hours of slaughter, but the scheme would delay production until 9-10 hours after slaughter. If the skins deteriorated in this extended period of putrefaction, they would be of inferior quality and unsuitable for tanning. Consequently, the wool would be classed as 2nd or 3rd class, with a resulting loss in value.

There was some talk that this could lead to the drying of all skins at Botany, following which they would be exported for fellmongering. Local businesses were worried about the implications for trade and employment opportunities. It was felt that the new abattoir could be a 'killing blow at the fellmongering trade at Botany'.¹⁷³ The crystal ball gazers were not far wrong in this regard, as eventually overseas export for processing transpired in the 1930s, with the cost factor considered the predominant reason for export.

The wool industry fundamentally changed its export sales methods in 1916. The traditional 19th century auctions by wool brokers from the Geddes era were replaced by a scheme in which the British government compulsorily purchased Australia's entire wool production with a guaranteed price. This ensured supply of wool for military uniforms and denied the enemy access to supplies. The wool was appraised and sorted into 800 types or qualities, with the price for each type set to achieve an average price of £15/5-for the entire clip.

In practice, only a fraction of the wool reached England due to shipping shortages, and the remainder was consequently stored in huge warehouses in Australia. The scheme lasted until 1920. An oversupply of wool dumped on the market had the potential to severely depress prices, so that it was necessary after the war to manipulate the price and dispersal of the wool to market, to maintain a reasonable return to graziers and fellmongers. The surplus was eventually disposed of by 1924.¹⁷⁴

Great Depression-industrial turmoil

After the war ended in November 1918, unemployment in general was rising, exacerbated by the returned soldiers, who were considered mostly unfit to return to their former occupations. By early 1919 the wool industry in Botany was under threat from the closure of fellmongers and wool combing or top making works.¹⁷⁵ Botany and South Sydney parliamentarians accused the government of a policy of stagnation and retrogression.

At the end of the Great War there were approximately 2,000 members of the Wool and Basil Workers Union employed in NSW. In the immediate post-war period this dropped to around 1800. By 1925 this number was a mere 250, employed on a week-by-week engagement. It was claimed by the union that only 40% were employed full-time. The tanning trade suffered a similar decrease.

The numbers of employed men increased for a short period in the early 1930s, but the wool industry was in a long slow decline, as Australia spiralled down into the vortex of the economic abyss of the Depression. By 1933/34 the Wool and Basil Workers Union membership stood at 1,103, and the following year that number was further reduced to 1,000 members, of whom around 400 had work, much of it intermittent.^{176 177 178}

This was exacerbated in 1919 by a complex dispute between the Commonwealth Government and the Colonial Combing, Spinning, and Weaving Company over distribution of profits. Hughes had entered into a pre-war licence agreement with the government, where 50% of his profits were payable as a licence fee. Now the government claimed it was owed an additional war-profits tax, severely reducing the profitability of the company.¹⁷⁹

The dispute resulted in 700 textile workers and 200 Botany wool and basil workers losing their jobs with the company, while many others were reduced to part-time hours. The F.W. Hughes factory remained closed for 17 weeks, during which time the government assisted with food handouts, but of course there was no such thing as unemployment benefits in this period.¹⁸⁰ The factory may have reopened, but the resultant High Court case continued for several years.

The government's control of the wool industry continued after the war, with ongoing restrictions on the sale and export of fellmongered wool, which severely impacted the profitability of the fellmongers. Rather than allow the processing of wool tops or cloth in Australia, the Central Wool Committee, led by Sir John Higgins, dictated the export of the bulk of dry sheep skins to the UK, where the British Government sold them at a profit and the wool was processed by English companies. Wool appraisers for the overseas market were paying such inflated prices for skins that Botany fellmongers could not afford to match the price to secure stock.

It was argued that if all wool was washed in Australia and top making and yarn manufacture encouraged in Botany, employment could be found for many returned soldiers, 100,000 jobs created, and £5 million injected into the wage income of local workers. Some called for a ban on exporting skins or alternatively, a duty placed on their export, which would force the processing of the wool in Australia. This did not eventuate.¹⁸¹

David Fell, Chairman of Thomas Elliot and Co. Ltd., while acknowledging that the regulations initially were 'necessitated by the exigencies arising out of war conditions', lamented the 'grievous injustice to the fellmongers of Australia', complaining that they were,

'debarred from a free market owing to the enforced taking over of the wool by the Imperial and Australone Governments at an appraised price.'¹⁸²

These ongoing restrictions led to 1,000 wool and basil workers remaining idle for several weeks in 1922 at a number of Botany works, including P. M. William's Bunnerong Works, Messrs. E. Swinbourne Bros. at the Water Reserve, and J. Jordan of Fern Valley.¹⁸³

Alexander Bruce, Managing Director of fellmongers, pelt curers, and basil tanners, Messrs. Wright and Bruce Ltd., attributed the continuing decline of the fellmongering industry throughout the 1920s to increased competition from overseas, the depreciated currency and cheap labour conditions in European countries. The tanneries were reduced to importing skins for tanning, but their labour force had significantly decreased in size.

Tension between employers and employees continued to simmer under the surface, occasionally breaking out into industrial action. One hundred wool and basil workers at the Australian Wool and Produce Company went on strike in 1922 in protest at a 7% reduction in wages under the new Federal Award.¹⁸⁴

In 1929 the basic wage for a fellmonger was £4/17/- per week. This was substantially reduced to £3/14/6. Wages awards in the fellmonger and tanning industries were further reduced in April 1931 by the Federal Arbitration Court to £3/7/1. Added to this was the problem of intermittency of work, making it very difficult for a working man to feed, house and clothe his family.^{185 186}

Of course, there were always those earning more than the minimum wage. Many employees were pieceworkers who could earn more for hard and fast work. Employers argued that the men were receiving adequate pay because these men averaged £6/10s for wool packers and £8/13/4 for wool pullers, while others worked plenty of overtime and most were shift workers. Many were on a minimum wage, but the average wage was £4/9 for a 40-hour week.¹⁸⁷ Employers sought to make efficiency savings by introducing machinery, desiring to be independent of 'unreliable labour' and their 'exorbitant' demands.¹⁸⁸

In August 1932, around 600 fellmongers from four Botany fellmongeries went on strike, demanding restitution of their pay. The Wool and Basil Workers Union met with employers to discuss their grievances and although the more militant faction advocated calling for a General Strike, the workers returned to work pending arbitration hearings.¹⁸⁹

The court dismissed the application without resolving the issues. The following year the workers again called for strike action, angry that the 10% wage reduction imposed on them had not been rescinded, even though wool prices had doubled in the intervening period. On 22 September 1933, after months of fruitless negotiations, 800 workers walked out at the height of the export season, rendering more than 50,000 perishable skins useless, costing the companies around £25,000.¹⁹⁰

Five Botany companies were affected; F. W. Hughes Pty, Ltd, Whiddon Pty. Ltd., Swinbourne and Stephen, Ltd., Australian Wool and Produce Co., and the Floodvale and Springvale works of Thomas Elliot and Co.¹⁹¹ Large numbers of police were on hand at the wool scours and tanneries to quell any potential disturbance. An impasse was reached as employers closed the factories until 'the men came to their senses'.

In view of the previous year's outcome of the Arbitration Court hearings, the workers naturally had no confidence in the system and refused to resume until meetings had been held to air their grievances.¹⁹² The corollary was that 600 other employees at F.W. Hughes textile mills were stood down because there was no work for them.¹⁹³

The major industry players held a meeting to discuss the possible effects on trade, issuing an indignant, somewhat hysterical, press statement;

‘After hearing the facts, the meeting arrived at the conclusion that the strike was a characteristic manifestation of Communist methods designed upon a plan calculated to inflict the maximum of loss and disorganisation upon the industry and constituted a direct challenge to law and order’.¹⁹⁴

Whiddon refused to pay the men the day and a half’s wages that were owed to them until they returned to work, arguing that they hadn’t given a week’s notice therefore had therefore forfeited a week’s pay.^{195 196} The government threatened that there would be no dole if the men went out on a prolonged strike.¹⁹⁷ The workers considered picketing the sites, while unpaid volunteer workers and office workers defied the union work ban and attempted to save as many skins as possible before they were ruined.¹⁹⁸

On September 26, the employers proposed the men return to work while the matter was heard before the Federal Arbitration Court. They were afraid the strike could escalate and spread to other textile businesses, potentially increasing their losses exponentially.¹⁹⁹ A three-hour union meeting ensued the following day in a Botany picture theatre, where the incensed men refused to return to work, alleging the wages were ‘not adequate to maintain a proper standard of living’.²⁰⁰ No doubt they were buoyed in their optimism for a successful outcome by the sixty-eight telegrams of encouragement from other unions which were read out at the meeting.²⁰¹



By the middle of the week the newspapers were beginning to speculate whether the government would invoke the Crimes Act, under which the Governor General had the discretion to decide that if there existed a serious industrial disturbance prejudicing trade and commerce with other countries. He could proclaim that any person who continued to participate in a strike would be Imprisoned for twelve months or deported if he was not born in Australia. There was also the spectre of the Arbitration Act where the workers could be fined £25 for engaging in an illegal strike.²⁰²

Fred W. Hughes and J.T. Weidemier attend a meeting with the Deputy Industrial Registrar of the Federal Arbitration Court, 29 September 1933. Photo: The Land²⁰³

The strikers refused to be intimidated by such talk, and indeed it strengthened their resolve. On 29 September the Trades and Labour Council recommended that all unions in related industries should join the strike, including Electricians, Amalgamated Engineers, Australian Engineers, Textile Workers, Wool and Basil Workers, Road Transport Workers, and Engine-drivers and Firemen Unions. They would ban volunteer labour and the strike was now called for an indefinite period.²⁰⁴

It is tempting to think that the workers were all united in solidarity. Some did not agree with the union’s actions. Others were not prepared to hold out once they encountered the grim realities of financial difficulty. By the end of the week around 100 men working for six smaller fellmongeries had agreed to return to work, and people hoped this would shortly bring the dispute to an end.²⁰⁵ However, the Enginedrivers and Firemans Union supported their comrades by refusing to carry goods handled by the volunteer strike-breakers.²⁰⁶ One thousand members of the Textile Workers Union employed by F.W. Hughes Pty. Ltd. also joined the strike, although the Newcastle Herald and Miners Advocate reported there were only one hundred workers involved.^{207 208 209}

Support for the strike waned as the dispute dragged on and people struggled to make ends meet.²¹⁰ Strike-breaking unemployed men, desperate for work, were engaged by the fellmongeries at £1 per day, although totally inexperienced.²¹¹ Eventually though, the five wool yards were closed down.

After a fortnight and the loss of £12,000 in wages, a mass meeting resolved to return to work on 11 October.²¹² The employers however were not quite so forgiving. Initially they only re-employed 25 % of the strikers, claiming that others would be engaged as there was demand, but most likely they would all be back by the end of the week. This was an outright lie, as management also threatened vindictively that in many cases they would not be re-employing the men in their previous positions and that work for the strikers would be 'extremely small'.^{213 214}

The industrial strife did not affect Whiddon's reputation as both a businessman and politician, as in 1934 he was elected to the NSW Legislative Council to fill a vacancy created by a resignation. He was sponsored by no less than the Premier of NSW, Bertram Stevens of the United Australia Party, and the Minister for Labour and Industry, J. M. Dunningham. Perhaps Whiddon's handling of the striking fellmongers strengthened his position as a candidate, as interestingly, the seat was allocated after a ballot in the upper and lower houses of parliament, not conducted in a by-election amongst the general populace as you would expect today.²¹⁵

From around the 1830s a small proportion of the Australian wool clip had been exported in the greasy, unwashed state. In 1873 this comprised 18% of the NSW clip, by 1876 it had risen sharply to 49% and at the turn of the century had reached 71%.²¹⁶ The trend continued so that by the mid-1930s, around 2.5 million bales of Australian wool were being exported annually to the UK as greasy wool, where it was scoured in the mills of Bradford, severely reducing the number of fellmongers needed to process the fleeces in Australia.²¹⁷



First load of wool travels from Bourke to Sydney by motor truck January 1927. Photo: Royal Australian Historical Society Collection²¹⁸

Similarly, for many years the majority of sheep skins had been scoured and tanned in Botany and Alexandria before shipping to overseas markets. Only a small quantity were dried and exported for treatment, but this ratio began to change alarmingly.

The 1934 year had seen the men treat 200,000 skins per week at Botany. In 1935 this had dropped dramatically to a mere 38,000 skins.²¹⁹ In mid-February the wool yards laid off an alarming number of workers. Now the threat increased, as more trouble loomed at F. W. Hughes Pty. Ltd., Whiddon Pty Ltd., The Australian Wool and Produce Co., Ltd., and several smaller works.

The major industry players announced on 26 February 1935 that they were retrenching 2,000 workers, many of them members of the Wool and Basil Workers Union. Effectively immediately, all sheep skins would be dried in Botany and sent to France and Belgium to be scoured. The companies claimed that if they were to retain sales to the European market, they needed to send all basils to the Continent for processing. They would retain only a skeleton staff to prepare the sheep skins for export, around 20 million basils annually.

By the following week it was revealed by Mr. J. Hayden, president of the Botany branch of the Australian Labour Party, that men were struggling to survive, as the companies had retained a mere 150 wool basil workers.²²⁰ Botany council was concerned at the loss of employment and industry in the area and petitioned local State Labour MP for Cook Electorate Mr. J. Garden to press parliament for a rebate system to encourage the factories to keep a proportion of the wool scouring in Botany.

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More industrial trouble loomed in October 1939, across the full breadth of the business, when F.W. Hughes sacked 1,000 men with one weeks' notice, in the scouring, carbonising works, fellmongering, tanning and combing departments. They cited the cause as 'the virtual prohibition of normal export trade in wool tops; noils, and carbonised wool. and uncertainty about the government's intention on other points.'²²²

However, it appears that although the agricultural industry was in a ferment arguing the pros and cons of wool export protectionist policies, it seems that the wider community was unaware of the troubles in the wool industry, as there is very little discussion of the issue of retrenchment in the newspapers of the time. Or perhaps they were caught up in the wider troubles of the Great Depression as a whole, and this was just one more instance of hardship, no more remarkable than any other.

1937 Cyclone

The year prior to the end of the Depression, the Municipality of Botany was severely damaged by a ferocious cyclone at 3.55pm on 25 January 1937.

A young lad was struck by a huge pine tree falling across Botany Road, and subsequently died from his injuries. Fortunately, only one other person died in the seven-minute storm, but the damage across the suburb was extensive.

Several brick cottages were almost completely demolished. The local citizens formed a Relief Committee which raised £360 for the victims. The most unlikely casualty of the severe weather was a herd of 98 cattle. They stampeded across a paddock, spooked by the storm. A power main had fallen across the wire fencing, and the cattle were electrocuted in a bizarre incident, their bodies strewn across the paddock in a macabre scene from a nightmare.

Botany Council Engineer J. Baldwin provided an eyewitness report;

“The storm gave little warning of its intensity beyond the appearance of heavy clouds and lightning in the North West...it [the wind] consists of a series of pulses with alternate suction effects which made one feel that the wind paused from time to time in an endeavour to do the utmost damage to its next effort...

On Botany Road near the Town Hall the scene after the storm was one of confusion. Roofs from adjacent properties had been blown across tram or other electric wires and tram traffic was held up for some hours and roadway traffic had to be diverted...

The worst effects of the storm in the Botany Municipality were included in a comparatively narrow area from near the War Memorial to the corner of Beauchamp Road and Botany Road. In this area houses and factories were severely dealt with” .^{223 224}

Springvale and Floodvale were in the path of the storm and suffered extensive damage. Corrugated iron roofs crashed to the ground in twisted shards of metal as the timber beams splintered, and stores of fleeces were exposed to the elements.



Cyclone damage at Floodvale. Photo: Bayside Council Library

World War 2 Protected Industry

As World War 2 commenced, the government saw the need to reserve certain occupations from military service to ensure that supplies for the war effort would be maintained. Initially they drew up a non-mandatory list of occupations, with the primary focus of preventing essential workers from volunteering for military service. As the Japanese invasion of the Pacific heightened tensions in Australia, the manpower needs of the war to meet the 'Japanese menace'²²⁵ increased markedly. By 1942 it was felt that stronger powers were needed to mitigate the growing workforce crisis, as the nation sought to balance the enlistment numbers needed 'in order to rid this country of any enemy that dared set foot on our soil',²²⁶ while still providing sufficient workers for manufacturing and industry. A Manpower Directorate was established, with responsibility for the 'List of reserved occupations', which two months later was replaced by a 'Schedule of reserved occupations and industrial priorities'.²²⁷

The Melbourne Age tried to put a positive spin on the Schedule by asserting;

'Both the schedule and the industrial priorities are provisional and have been drawn up, not to exempt persons from enlistment or call up, but to meet the demands of the armed forces for manpower and supply, retaining to industry only such male labor [sic] of military age as is essential for the adequate supply of foodstuffs, munitions of war and essential services; to the forces, and to meet the essential minimum needs of civilian life.'²²⁸

However, the Director-General of Manpower had sweeping powers under the regulations to control both male and female employment, detailed in a 16-page document. The reserved occupation list covered numerous aspects of the wool industry and allied industries. This would have been good news for a business such as Floodvale, which depended on trade skills throughout a comprehensive supply chain; from paddock to abattoir to fellmonger to finished product.

The Reserve List included: rural industries— shearers, wool appraisers, wool classers (aged 30 or more); abattoir workers (who slaughtered the sheep which provided the wool pelts to fellmongers); transport (road, motor and horse-drawn vehicles); wool-spinning and weaving and knitted goods manufacture, leather tanning and manufacture; plumbing and boiler-making (vital for maintaining the equipment at the wool scouring facilities); fellmongering (including wool and skin store), including manager, foreman, charge-hand, classer (wool, pelt and hide), combing machine operator, mechanic (aged 25 or more), gang leader, sorter (aged 30 or more), pickler, scourer, storeman (head), tanner, wool greaser (aged 35 or more).²²⁹

As can be seen from the above list, some of the younger workers were not exempt. A few retired men such as Robert George Hanna (1872-1944) returned from retirement to assist in maintaining operations. Known as George, or by his nickname Old Cook, he had worked at Floodvale from 1911 to 1939. George sacrificed his retirement for the war effort, to manage the Floodvale Works for Thomas Elliot and Co. during this period. He never enjoyed the fruits of his labour, dying just before the end of the war.²³⁰

Wool continued to be a key primary export industry for Australia. The 'woolies' of Floodvale and other wool scouring establishments in Botany were now in a protected industry, prohibited from changing employers. On the positive side, the fluctuating employment and financial struggle of the Depression era was over, and the workers were in secure employment for the duration of the war, as their employers could not sack them. Moreover, they were not permitted to enlist in the armed services, and consequently their families were shielded from the sorrows and hardships suffered by those who lost the family breadwinner in the struggle against tyranny.

For the duration of the 1939-1945 conflict, the British government revived the scheme to purchase all Australian wool output for the war effort. In a repeated scenario from the previous war, the conflict ended with a stock surplus which needed to be carefully disposed of in order to maintain prices. This continued until the end of 1950. Thereafter, auctions became the norm until 1967, when government regulation and wool statutory bodies, such as the Australian Wool Board, Australian Wool Commission and later the Australian Wool Corporation, controlled prices in an ill-fated Reserve Price Scheme (RPS) for the next twenty years. However, this new scheme did not affect the Floodvale operation, as the business closed in the late sixties. ²³¹

Post war

Wool industrialist Fred William Hughes died of a heart attack, on 18 August 1950, at Edgecliff, aged 80, and his body was cremated at the Northern Suburbs Crematorium following a private family funeral.^{232 233}

He was reputedly a millionaire, and one of the five wealthiest men in Australia, but his estate was valued at only £83, 852 when probate was declared.^{234 235} Not only the press, but The Minister for Lands, Mr. J. B. Renshaw, was astounded to hear that probate had been declared for a relatively small amount, particularly bearing in mind that the newly formed company of F. W. Hughes Industries Ltd. had a declared capital of £7.5 million. Renshaw declared he would ask the Registrar of Companies, through the Minister of Justice, for details of F.W. Hughes Industries Ltd., and investigate their concerns²³⁶ NSW Premier McGirr and the NSW Legislative Assembly also asked for investigations to be conducted by the Commissioner of Stamp Duties, to ascertain whether the state had been deprived of death duties.²³⁷

Hughes rural stud, Kooba Station, continued to function after his death. Wool prices reached new heights at the end of August 1950, when 1,800 bales of Kooba wool was sold at auction for £270,000.

At the time of his death, Fred W. Hughes had commanded an empire of 15 trading companies, including two wholesale meat companies, 12 sheep stations and the wool scouring and combing properties at Botany.²³⁸ The various business enterprises were transferred to the main Botany firm, which became F.W. Hughes Pty. Ltd. By incorporating the company, the directors could control each of the subsidiary companies. The plant now occupied (in 1950) 20 acres²³⁹

F.W. Hughes Industries Ltd. decided to increase its working capital by offering public shares in November 1951. It is no surprise they were rapidly snapped up. It opened with 4,500 shareholders and a capital investment of £4,150,000. Their prospectus described the company as one of the largest producers of wool, beef and mutton in Australia, with factories not only in Botany, but also Homebush, Alexandria, and a proposed textile mill at Brookvale. The company now controlled seven pastoral companies and four manufacturing, processing and distributing companies. Profits had almost tripled since 1947, from £264,446 to £790,796 in 1951.²⁴⁰

Hughes had always been an innovator, and the new company continued his legacy after his death. Like the Geddes family before him, Hughes' strategy had been vertical and horizontal integration to maximise efficiency and profits.

Horizontal integration involves diversification by purchasing businesses related to your core business; that is, they acquired not only multiple wool processing companies carrying out scouring and carbonising, but also tanneries to produce pickled pelts and tanned sheepskins.

Vertical integration is the business strategy of acquiring multiple companies that will feed your supply chain. F.W. Hughes Pty. Ltd. owned vast pastoral properties in Western NSW and the Riverina, which supplied the sheep used for wool processing and skin tanning. They additionally purchased business that combed wooltops, and factories that produced textiles and knitting wools of the finest quality. In fact, the term 'Botany' became synonymous with fine quality wool products, throughout the early 20th century.

Additional diversification into abattoirs enabled them to slaughter the sheep, while the meat processing plants of the Colonial Wholesale Meat Co. at Homebush Abattoirs, profitably utilised the entire sheep carcass, retailing lamb and mutton carcasses and canned meat.

In 1958 the company profit was £198,217. The following year their fortunes were reversed when they incurred a loss of £159,715 from their pastoral properties, wool processing, hides and meat. The loss was caused by falling wool prices, impacting the station properties and the textile divisions. Wool tops had been selling overseas at below cost.²⁴¹

In 1959 F.W. Hughes Pty. Ltd. was taken over by G. H. Mitchell and Sons Pty. Ltd., a family owned company in Stirling, South Australia, with grazing, scouring and top making investments in South Australia, Western Australia and Victoria. Formed in 1870, today it is one of Australia's largest exporters and processors of Australian wool and leather.^{242 243} They purchased a 71% share offered by the two major shareholders, for £1,381,169.²⁴⁴ The move by the Salkeld family (including Fred W. Hughes' niece) and E.A. Coglan Pty Ltd was controversial, because in theory they only possessed 25% voting rights, but their overwhelming shares trumped the board.²⁴⁵

Meanwhile, the hugely successful Swinbourne wool scour closed in the mid-1940s when Kingsford Smith Airport was expanded, and the government resumed the land around the Mill Pond.²⁴⁶

Environmental Issues

The wool scour and tanning trades of Botany produced pollution in various forms. Chimneys spewed soot particulate and smoke from coal fired boilers, water courses were fouled, untreated industrial filth spewed into Botany Bay, the soils were contaminated with chemicals, and odious smells emanated from the factories and wool scours in the area.

Even as early as the 1860s, the tanneries, wool-washing and fellmongering businesses were considered rather vile smelling and a source of pollution. The stinking residue of the wool process was spread on the ground as a fertiliser and nearby streams were discoloured with the dirty water discarded after the wool washing process. There was also concern about further environmental degradation from erosion, as the trees were cut down for firewood to supply both the Sydney market and local needs.

‘Boiling down and wool-washing establishments...certainly add nothing to the general attractiveness or to the comfort of those who reside in it. It is easy to tell by the polluted appearance of a stream when there is a wool-washing establishment on the banks of it, even although you may see nothing of the buildings or workmen... The sense of smell usually gives warning of the proximity of such a place long before anything is seen of it. At times, when the coppers are emptied the stench is frightful, and, with the wind in its favour will almost suffocate you a quarter of a mile off if you have a sensitive nose.’²⁴⁷

The issue of disgusting odours emanating from the works did not go away. A.J. Finnie wrote in 1922 that,

‘The nuisance is so bad that it prevents us from sleeping at night and eating meals in the day. Another instance on Sunday week smell was so bad that it prevented the people from staying in church’.²⁴⁸

It’s tempting to think of gelatine as a brightly coloured quivering dessert loved by children, but its manufacture is rather more macabre in origin. Gelatine is extracted from the skin, tissue and bones of animals such as cattle and sheep. The bones are degreased and roasted. Acid or alkaline solutions, such as sodium carbonate or caustic lime, are used to extract minerals and bacteria from the animal parts by soaking, and the resulting disgusting mess is boiled to extract the gelatine.²⁴⁹

The abattoirs connected with the wool scours and tanneries of Botany provided Davis Gelatine with a ready supply of raw product. Davis Gelatine (founded 1917) was a serial offender in the pollution stakes. Its boilers rendered down the animal products while exuding a foul smell that residents complained about for decades. Botany Council files are stuffed with letters, damning health inspection reports on distinctive pink paper, and council ultimatums to clean up their act or else legal action would be taken.

Long suffering Botany locals regularly corresponded with council regarding companies such as Kellogg’s, whose Botany plant opened in 1928 (who would think of innocuous cornflakes as air polluters), Sydney Chamois Pty Ltd, Hygienic Feather Mills, McKenzie’s Soap Works, Imperial Chemical Company, Bunnerong Power Station (their emissions were accused of damaging the headstones of Botany Cemetery in 1933) and even the council’s rubbish dump, which was burning refuse. No wonder then, that several wool scourers also became the target of their letter writing.

The 1926 City of Sydney By-law number 623 stated that factories were not allowed to issue forth thick smoke more than three minutes in any given half hour period. Local residents complained to Botany Council about the smell, soot and smoke emissions for years, from Thomas Elliot and Co,

Messrs. Joseph and Edward Fazakerley's Woollscour, and other operators, often without any successful permanent resolution. Sometimes the cleaning of a flue, change of fuel, installation of an automatic stoker, or replacement of an overworked small boiler with larger equipment, would temporarily resolve the issues.²⁵⁰

Fourteen residents of Tenterden, Sir Joseph Banks Street, and Salisbury Streets signed a letter of complaint about Fazakerley's Clevedon Street wool scour in 1940. When the wind blew from the north-east,

'The smell is bad enough of a week night but at weekends it is unbearable. On washing days the women complain of the Black Dust and soot from the chimneys setting on the clothes.'²⁵¹

The council threatened a £10 fine, but the company advised they were changing the fuel from coal to coke in an attempt to rectify the problem.

After several complaints about Floodvale, the Council Health Inspector reported in 1943,

'A complaint has been received from a resident of Botany Road regarding smoke from the wool scouring premises of Thos. Elliot & Co Pty Ltd. This company dumped burr from sheepskins on a paddock in the premises and with a North East wind the suffocating smoke is carried across Botany Road where it is most objectionable to the residents.'²⁵²

Sometimes the fellmongers were simply careless with hygiene and disposal of refuse. In 1944 a Redfern Magistrate fined J. Weidemier and Co. £100 for filthy premises. Botany Council's prosecution witness Captain C. H. Jaede, medical officer in charge at a nearby Army depot, described seeing 'heaps of rotting wool, skins, and refuse, seething with maggots and pupae'.²⁵³

Then there were the tanners such as K. Parson and Co. in Folkestone Parade who burnt leather clippings,²⁵⁴ and Albert Chapman, who incinerated fur clippings. The Health Inspector, who investigated an 'evil smell alleged to arise therefrom through the burning of rubbish or other material' in 1938, was particularly pleased to catch the culprit in the act. Chapman had been accused several times but had never been seen committing the offense.²⁵⁵

The wool scourers and tanneries were incensed at proposed new environmental regulations in 1909. A deputation was sent to visit the Under-Secretary to protest, claiming that the new rules would 'cripple' the industry, be a 'death blow' and cause closure of tanneries. Mr. J. Nobbs, M.L.A., made the remarkable claim that the tanneries, 'were not noxious trades at all but were phenomenally healthy,' and espoused that, 'the local population were perfectly satisfied with local conditions.' The Botany Council Health Inspector might well have disagreed with both statements. The deputation desired the new regulations to be left in abeyance until the sewerage system was established. Tannery owner Alderman F. Luland, and Mr Stephen (of Swinbourne and Stephen) concurred.²⁵⁶

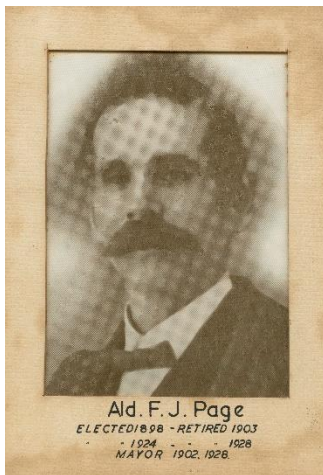
Foul odours were only an indication of the wider problem of poisons and filth entering the ecosystem. By the twentieth century the tanneries and wool scourers were spilling huge amounts of chemical pollutant into the Cooks River and Botany Bay. Dilute sulphuric acid or hydrochloric acid was used in the carbonising process and tanners used lime and chromium, a carcinogenic substance. As early as 1902 there was concern about the death of fish and oysters in Botany Bay by the wool wash and tanneries, who were disposing scouring, carbonising and tanning pits waste water, contaminated with sodium and sulphur, directly into local streams, or into the drains which emptied into Botany Bay.

An inspector from the Fisheries Commission was dispatched to sample the waters. Analysis revealed;

‘an excessive amount of organic matter, sodium, carbonate, sodium-sulphide, and cromium [sic], all in such quantities ns to be detrimental to the fish and oyster life of the bay. ‘

The inspector’s report demanded the factories take steps to treat waste water prior to discharge. ²⁵⁷

A letter to the editor of the Sydney Morning Herald demonstrates the attitude of some to environmental conservation in this period. The writer suggested that if it was a case of deciding whether fish health was more important than local industry, the fish would have to take care of themselves and the government should take care of valuable industries. ²⁵⁸ Not everyone felt this way, of course. The Amateur Fishermen’s Association was not convinced the pollution was caused by the tanneries alone, citing dynamiting of fish and over netting practices as contributing factors, but nevertheless urged the authorities to investigate fish deaths further. ²⁵⁹



The Botany Mayor, Alderman Page, called a meeting of the wool wash and tannery proprietors at the Town Hall. This was not a meeting to thoughtfully discuss improving operational methods and cleaning up their act. After all, woolwash works and tanneries had been in successful operation in Botany for over 80 years and the proprietors saw no valid reason to make changes to the way things had always been done. The assembled crowd of industrialists was in denial, in a boisterous mood, decrying criticism of any shortcomings in their operations. This was a rally of defiance at an attempt at government regulation that threatened both the independence and the bottom line of the wool and tanning industries.

Mayor F.J. Page. Photo: Bayside Council Library.

Outraged tannery owner Alderman Luland addressed the large crowd, categorically refuting the idea that the tanneries were affecting fish life, calling the criticism ‘absurd’, and proposing a motion opposing any interference with the activities of the Botany industries. In evidence, he recounted a conversation with a local fisherman who contended that dead fish were not uncommon and had occurred for many years. It was claimed that intense summer heatwaves caused fish to die in the heated, shallow waters of the bay.



In a spectacular display of conflicting interest, woolwash owner Alderman Etherden appointed himself, fellow fellmonger John Swinbourne and tannery owner Mayor Page, as a committee to ‘watch over the interests of the industries in this matter, and to take such steps as might become necessary to preserve those interests’. The motion passed unanimously. Naturally no action was taken to protect the fisheries. ²⁶⁰

Alderman C.F. Etherden. Photo: Bayside Council Library.

Four years later, a report by the Medical Officer of Health showed that nothing had changed. Although there were many noxious trades and other sources of pollution in the Cooks River which were discharging waste into the Bay, it was felt that wool scourers and tanneries were among the major contributors. Until this time wool scourers, wool washes and tanneries had been excluded from the Noxious Trades Act 1902, so it was proposed to amend the Act to include them under its terms of reference.²⁶¹ These businesses were subsequently registered with Botany Council as noxious trades under the Act, but it would be many decades before efforts would be made to remove the scouring mills and tanneries from Botany.^{262 263}

The following year Botany tanner John Bunce was charged in Redfern Police Court with discharging slops from the hide de-hairing process into the concrete storm water channel which ran through his property.

This channel had been built as an anti-pollution measure at the turn of the century, stretching from the Water Reserve to Botany Bay at the end of Bay Street, along an existing heavily polluted water course. There was no treatment of the waste. The idea was to run it into the Bay so that it would be diluted rather than stagnate in the Botany area.²⁶⁴ Bunce's solicitor argued that the channel was a tannery sewer long before it had been concreted and therefore did not technically come under the definition of storm water channel. The judge dismissed the argument, but still nothing changed.²⁶⁵

The tanneries did not believe that their works were harmful to health, although it was unilaterally acknowledged that the smell was vile. As the President of the Public Works Committee commented when looking into complaints in 1910, "It's not the sort of place to go picnicking to, is it?" The Committee noted that there were 30 tanneries discharging into the storm water drain, a problem which was compounded by the poor sewerage infrastructure in the Botany area.²⁶⁶

By the late 1920s chemical pollution was becoming more serious, with swimmers in Botany Bay experiencing skin irritations. The industries claimed they did not discharge waste into the Bay when people were swimming, but clearly the pollutants were not sufficiently diluted. Generally, though, people felt that the pollution was caused by the inadequate sewerage system, breakdowns in the Long Bay Outfall which was temporarily diverted into Botany Bay, and the consequent discharge of untreated sewerage directly into the Bay.^{267 268}

On one occasion, the leader of the Botany Bay scout group sent the boys home as, 'The smell was so bad that they were vomiting on Sunday morning, and could not eat their breakfast,' and sewerage was said to be inches thick sludge covering the beachers in places.²⁶⁹ Two tons of chloride of lime were being dumped daily into the Bay in a vain attempt to cleanse the waters, which itself was a source of chemical pollution.²⁷⁰ The Minister for Health refused to take the matter seriously. "These waters are as pure to-day as they have ever been," he audaciously claimed to an unimpressed audience.²⁷¹

While the problems of household sewerage were mostly dealt with in the 1920s, the larger problem of industrial waste entering the stormwater system would be deferred until 1939, when the Water and Sewerage Board announced that it would be installing special sewerage drains for trade waste water in Botany, at a cost of £30,000. Furthermore, they had budgeted an additional £1 million on sewerage treatment works at Bondi and Long Bay outfalls.²⁷²

By the mid-seventies the wool scours and tanneries had for the most part closed down and were no longer a key environmental issue. Despite this, Botany's noxious trades and heavy industries were still polluting the Bay, with numerous new projects scheduled.

A public meeting at Rockdale Town Hall in 1975 united trade unionists, local residents, scientists and environmentalists, who jointly decried further industrialisation of the area. They cited the forthcoming construction of a 6,000 tons-per-hour coal loader with the accompanying rumble and screech of coal trains day and night, a new crude oil depot, runway extensions to Kingsford Smith Airport, shipping container terminals dredging the Bay to make it suitable for supertankers, construction of new expressways and the doubling of Kurnell Oil Refinery's capacity, as evidence that the interests and profits of multinationals were taking precedence over the residents and the environment. It was feared the \$20 million the NSW State Government stood to gain from these development projects would win out over environmental degradation caused by airborne coal dust, petro-chemical spills, ship's ballast discharge, noise pollution, traffic congestion and generally increased pollution of the waters of Botany Bay.²⁷³

Dr. Tony Larkum, senior lecturer in biology at Sydney University was of the opinion the ecology of the Bay would be dead within 10 years if industry continued development at the current pace.²⁷⁴ The authorities were still in denial. Commenting on a State Pollution Control Commission Report due for publication early 1977, the Minister for Planning and Environment Sir John Fuller, in a predictable piece of political spin, claimed that "Every avenue of possible pollution of Botany Bay from land resources has been identified and appropriate control measures initiated".²⁷⁵

The control measurers occasionally fail spectacularly. Where Springvale had once stood, near the corner of Botany and Beauchamp Roads, lay the open concreted Springvale Drain, down which thousands of litres of murky water had poured into Botany Bay, the refuse of over a century of wool washing and tanning. Most of the tanneries and scouring works had long ago closed, yet still the Drain was a source of pollution. The toxic industries had diversified and spewed even more potent effluent than the wool industry had generated. Major companies fouled the water and sands of Botany in chemical mishaps in the 1980s and 90s.

Caltex was pumping fuel to the Esso Terminal at Banksmeadow in 1980 when a gasket blew on the pipeline, allowing 100,000 litres of fuel to flow into the Springvale Drain. Firemen then compounded the environmental disaster by pumping vast quantities of polluting foam into the drain to prevent a fire disaster.²⁷⁶ ICI's Botany plant released chemicals into the drain in 1989, which the Sydney Morning Herald tested, reporting that the spillage was considered to be only slightly less toxic than arsenic.²⁷⁷ The Land and Environment Court fined Boral for allowing a vast slurry of concrete to overflow into the Springvale Drain in 1991.²⁷⁸

Throughout the latter half of the 20th century there was a growing awareness of environmental issues as evidenced by the emergence of the Greens political party, and environmental activism by ordinary people incensed at a variety of issues including the damming of Lake Pedder in Tasmania, the destruction of hardwood forests, and uranium mining in the Top End.

Equally the residents of Sydney no longer wanted heavy industry to pollute their backyard and many of the factories have gradually disappeared from Botany Road and Alexandria

State governments began to legislate in favour of preservation of the environment for the safety and wellbeing of both its citizens and the natural world, constraining local and state governments to balance the welfare of its citizens against the benefits of industrialisation. The Environmental Planning and Assessment Act 1979 No. 203 was instituted with the objects;

'1.3 (a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,

1.3 (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment ' 279

The council now had a responsibility to create a Local Environmental Plan (LEP) and Development Control Plans (DCP) to guide development and achieve the objectives of land zoning.²⁸⁰

As a result, the 1980 Draft Development Control Plan no.1 Botany- Code Industrial Development was created to 'improve the quality of industrial development within the Municipality of Botany'. There was a new emphasis on creation of a pleasing urban environment through regulations imposed on sound emission control, landscaping, tree planting, green verges, fencing to screen outdoor storage areas, and 'enhancing the general streetscape of the Municipality of Botany's industrial area'. Future building construction was required to achieve a 'high standard of visual and environmental quality' with 'high aesthetic standards for factory design '

Control of air emissions and appropriate disposal of waste and waste water would be monitored by the council's Health Department for compliance with the Clean Air Act 1961/67 and the Clean Waters Act.

This was a far cry from the heady days of unimpeded development of noxious industries in the previous 100 years or so; when business owners placed their own interests above environmental or residential concerns. The residents of Botany were beginning the slow, but inexorable, process of reclaiming their rights to a pleasant, healthy, and aesthetic neighbourhood.

Changing attitudes to industry are demonstrated in Part 3.17.1 of the Botany Local Environmental Plan 1995, which states that;

'Before granting consent to any development to be carried out on land within Zone No 4 (a) [Industrial], the Council must be satisfied that...(k) any risk to human health, property or the natural environment arising from the operation of the development is minimised.'²⁸¹

Furthermore, the current Botany Bay Local Environmental Plan 2013 only provides zoning for Industrial Zones; IN1 General Industrial, IN2 Light Industrial, specifically prohibiting rural industries. There is no longer any tolerance for the noxious industries of the past such as wool scouring and tanning.²⁸²

Admittedly, development of the airport around the Millpond and construction of the port of Botany on reclaimed land has not entirely removed the environmental threat, but the once pervasive, obnoxious odours and chemical pollution of the area have largely been replaced with heavy transportation traffic and container shipping.

Although Dr Larkin's doomsday scenario for Botany Bay has so far been avoided, industrial pollution from the Port of Botany continues to be an ongoing concern into the twenty-first century, needing constant monitoring.

Floodvale closure

Floodvale passed into new ownership, probably in the 1920s. At an unknown date the Chairman of Thomas Elliot and Co. Ltd., David Fell, and a group of investors, purchased the company, although they retained the historic company name. By 1947, further investment saw the company at Floodvale re-named Elliot and Dreyfus Pty Ltd.,²⁸³ with offices at 247 George Street, Sydney, although the wool scouring facilities were still located at Cook St Botany, now known as McPherson St.²⁸⁴

The build-up of pollution in the area was becoming a major concern and in 1963 Floodvale was under orders from Botany Council to clean up its act. Consequently, the company was investigating the installation of a new effluent disposal process called the De Smet Process. It was projected to take two years to install at the cost of £150,000. The council aldermen agreed to allow them the extra time to install the system, provided the council's Chief Engineer signed off on the scheme.²⁸⁵

The investment in a clean-up operation was wasted, as Floodvale closed just three years later in 1966. The 5-acre, 3 rods and 28 perches, block of land and buildings went under the hammer at auction on Tuesday 30th August at 10.30 am in the Real Estate Institute Rooms, 30 Martin Place. The advertisement in the Saturday Herald read;

'REAL ESTATE AUCTION SALES. BOTANY — Large Factory and Land. 123,000 SQ. FT. BUILDING ON 5A. 3R. 28P. MCPHERSON STREET (AT END EXCELL. ST). UNDER INSTRUCTIONS FROM FLOODVALE PTY. LIMITED. This Large Factory Complex comprises single and 2-storey factory buildings with concrete ground floor and wooden upper floors. TOTAL FLOOR AREA approx. 123.000 sq. ft. Ideal for chemical oil. wool scour, paper Industry. Good offices and amenities. Ample land for future expansion. Fire sprinklers system throughout. LAND: Sa. 3r2Bp.'²⁸⁶

The men were thrown out into the ranks of the unemployed. Although highly skilled in the wool industry, many of them would have found it difficult to find other employment, having worked for the same company or in the wool industry all their lives.

Some time later the works at Floodvale and Springvale were leased to T.A. Field and Co. Ltd., a Sydney based meat wholesaler founded by Thomas Field in 1883. Today no trace of their existence can be seen, although the area continues to be highly industrial in nature.^{287 288}



Thomas Elliot and Co.'s Floodvale works.
Photo: Bayside Council Libraries.

Wool scourers and tanners in the 1970s

In 1938 Botany had boasted 21 tanneries each averaging around 40 employees. Some of these tanneries were processing cow hide, others produced sheep basils. Post war, as the 20th century progressed, the tanneries were a bustling picture of industrial success. In the early 1960s the leather trade was booming, with 36 tanneries in Botany. By 1970, there were numerous types of business in Botany associated with the leather trade, including leather dressers, grinders, tanners, furriers, and dyers. Others manufactured roans (soft sheepskin leather used in bookbinding), wool dusters, sheepskin rugs, protective industrial clothing such as leather gloves and aprons, boots and shoes, saddlery, suitcases, handbags, gloves and travel goods. Yet more firms were occupied with the sale and export of these products.

J. Bayley and Sons Ltd, formed in 1902 on a 7-acre Botany property, were innovators, successfully pioneering chrome-tanning of sheep skins. John Bunce and Son Pty Ltd (founded 1887) was still going strong with 25 workers producing 700 tanned hides per week, and numerous other businesses with roots in the 19th century continued to achieve success until at least 1970. Bayley was exporting sheep basils to the UK, Europe, Asia, North America and South Africa. With the UK initially holding out on joining the European Common Market (today the European Union), the export trade foretold great prospects for international trade with the 'mother country.'

The founder of Angus Nugent and Sons tannery had learnt the trade in John Bayley's tannery, and Thomas Elliot and Co.'s Floodvale and Springvale works. His three sons joined the business, which their father had commenced in 1922. Angus senior died in 1958, and son George died during World War 2, but Allan and Angus junior were conducting a thriving tanning and leather manufacturing enterprise in the 1970s, utilising both sheep basils and calfskin.

Hensley Brothers Pty. Ltd. were still scouring wool after 70 years or so of operation. Whiddon Pty. Ltd. (founded 1900) continued to produce wool tops, pickled sheep pelts and scoured wool. Adelaide firm G.H. Mitchell had taken over Whiddon in 1959, retaining the name. The wool combing operation ceased due to aging machinery and a reluctance to invest in new plant, but the wool fellmongering continued until 1985.^{289 290} Mitchell Australia also controlled the business of F.W. Hughes Pty. Ltd., producing processed wool, dyed tops and lanoline for Europe, Asia and America, with modernised equipment located in their Lord Street premises.

The official 1970 History of Botany paints a rosy picture, but in comparison, the local Rotary Club had produced an interesting series of booklets a few years earlier in 1965-1966 to assist job seekers, listing industrial businesses and the type of work available for job seekers. The 1965 booklet itemised fellmongers and wool scourers Whiddon Pty. Ltd. and F.W. Hughes Pty. Ltd. together with tanners J. Herbert Yates and Horton Bros. Pty. Ltd.- tanning and leather dressers. The 1966 booklet listing was sparse; leather manufacturers Yates, and in the wool industry, F.W. Hughes in Lord St, Botany – were catalogued as wool combers, wool scourers, carbonising operations and fellmongers. No other wool scourers were mentioned.²⁹¹ The Rotary Club did not accurately detail every manufacturer in Botany, but clearly employment prospects in the wool industry were already in decline. The number of tanneries halved during the 1970s, and wool scourers dwindled rapidly until only two remained at the end of the decade.

Wool was an international commodity and the fellmongers and tanners of Botany were affected by more than simply local issues. Charles Massy, in his comprehensive examination of wool politics 'Breaking the Sheep's Back', reveals that in 1950 the Menzies government rejected a secret offer by the American Government to purchase the entire wool clip to clothe their Korean War troops, preferring to cling to the traditional ties with England. Consequently, America, and indeed the world,

turned to the development of new synthetic fabrics and innovations in cotton manufacturing, thus reducing the demand for wool. Prices dropped by 50% from the 1953-54 financial year to 1958, and again by another 50% by 1970 and were at a rock-bottom \$27.49 per pound by 1971.

The wool industry had been in a war of ideologies for several decades. There were those who felt that the government should run a Reserve Price Scheme (RPS), while others vociferously argued against any kind of protectionism, claiming that only a free market would benefit the industry. The wool industry held two referendums to garner opinion on this idea in 1951 and 1965. Both rejected subsidies.

Despite this, the government intervened in 1970. The Australian Wool Commission would buy a portion of the wool clip when demand was weak, selling their stockpile during times of stronger demand, maintaining a flexible reserve or floor price. They would thus control supply globally, setting the price, and marketing Australian Wool as a generic commodity. Massy quotes Primary Industries Minister Doug Anthony as stating that the purpose of an RPS was to 'help reduce the instability of auction prices.'²⁹²

Initially the Commission spent \$40 million in purchasing 6-8% of the annual wool clip on offer at auction and placing it in storage for later release to buyers at the most opportune time and at a more favourable price. However, plummeting wool prices and a global recession forced a re-think and in July 1974 this became a fixed floor price set at 250c per clean kilogram of wool. The floor price would be re-evaluated each year, and thereafter set annually.²⁹³

The Australian Wool Corporation (AWC) was formed in 1973 after the dissolution of the Wool Commission. Its role was to market wool internationally, conduct research, administer the RPS and set the floor price on the advice of the Wool Council, which ostensibly represented all wool growers, but in fact represented the larger wool producers and graziers.

It is not my purpose in this work to delve into the tangled skein of wool politics so ably and comprehensively documented by Massy, however the broader picture of the wool industry in Australia most certainly affected the Botany industries and led to their demise, probably even more than the issue of noxious trades in Botany Bay.

The RPS policy backfired, prompting the global textile market to turn to alternative fibres. It would also eventually lead to overproduction of Australian wool, a sense of entitlement that the Australian Government should pay however many billions it took to prop up the industry, and a myopic view of the free market economy.

Additionally, as we have seen previously, since 1935 the major wool scourers had pursued a business strategy of shipping most of the woolclip overseas for scouring, as a cost-saving measure. These combined factors caused significant job losses and business closures in the wool textile industry, fellmongering and tanning works throughout the country in general, and the Botany Bay area in particular.

At the beginning of the 70s there were still around 18 tanneries in Botany, processing both sheep and calf hide, including Angus Nugent and Sons. This was reduced to 12 by 1979, including C.F. Etherden and John Bunce, but Angus Nugent had relocated to Wingham in Queensland.



Bunce's Tannery c. 1920

Photo: Bayside Council Library.

In the early part of the decade, only three wool scourers remained in operation in the Botany area; Hensley Bros. in Stephens Road, Whiddon Pty. Ltd. in Lord Street, and Wool Processors Pty. Ltd. at the corner of Beauchamp Road and McPherson Street, Matraville.
294 295

By the end of the decade there were only two scourers clinging on for dear life; Whiddon Pty. Ltd. (owned by Mitchell Australia) and Wool Processors Pty. Ltd. However worse was yet to come on the national and global wool scene, which would sound the death knell of the Botany wool industry.²⁹⁶

1980s—1990s Boom and bust

The December 1983 float of the Australian dollar by the Paul Keating government saw a new era in the Australian economy that would severely impact the wool industry and consequently the fate of the fellmongering industries of Botany.

The Australian Wool Corporation spectacularly failed to see the fundamental change to the export market and the implications of the volatility of a flexible foreign exchange rate on its interventionist policies, as Australia moved from an insular trade system to engage with the world economy. By 1981 the floor price of Australian wool had increased to 410c per clean kilo. The AWC, funded by an 8 % tax levy on wool growers, was purchasing large quantities of wool to stabilise the market price, and this trend would continue throughout the eighties.²⁹⁷

During the 'greed is good' period of the 1980s bull market, the wool industry became infected by a speculative mania fuelled by skyrocketing wool prices and an irrational conviction that the price of wool could not fall. The AWC was increasingly engaged in market manipulation, while confidently predicting a continuing escalation of wool price to unprecedented levels. Inevitably the bubble had to burst. Ultimately, the Wool Corporation's actions and the government's wool industry policies would decimate many businesses in the industry and contribute to the closure of Botany's few remaining fellmongers in a climate of general industry decline.²⁹⁸

By the end of 1989 the Australian dollar had increased strongly against foreign currencies, making wool an expensive purchase, and contributing to a diminishing demand for the Australian product. The Chinese and Russian markets unexpectedly cancelled orders in the belief that the current price was inflated, and the floor price would fall. This was a massive blow, as these two markets had formerly purchased 20-40% of the Australian wool clip. Moreover, Japanese demand for wool had substantially decreased.

The national stockpile of wool bales, which the AWC had purchased in an attempt to stabilise market prices, was increasing to monumental size and was both a costly and risky exercise that would eventually backfire. The stockpile reached 2 million by February 1990. The market price was not far above the floor reserve price, which itself was far too high.

The Corporation's funds of \$1.8 million were exhausted, so they borrowed \$300 million in offshore loans at 18% interest.²⁹⁹ They had now reached the limits of their statutory spending powers. The 1987 Wool Marketing Act section 53 required the Corporation seek ministerial approval for any further borrowing, which was duly granted by Minister for Primary Industry and Energy John Kerin.

Over the previous year several prominent economists had warned the Australian Wool Corporation, Wool Council (which advised the AWC on the floor price), and the Minister, of impending disaster, but there was considerable political pressure from colleagues, industry customers and graziers to retain a high floor price. The AWC refused to face economic realities, and the Minister was reluctant to make the wool industry an election issue, with Federal elections impending in May 1990.

Wool Council member Phillip Davis, frustrated at the total refusal to consider the issue realistically, finally in desperation took his concerns to the press.³⁰⁰ The resulting newspaper revelations, of the entrenched position of the Wool Council and AWC relating to the floor price and the mountain of wool bales, resulted in vigorous discussion in business and financial circles and the wool industry during December 1989 and January 1990.

The AWC refused to budge and proposed increasing the wool growers' tax to a crippling 25 % while maintaining the unrealistic 870 cents per kilo floor price, more than triple the initial floor price of

1974. The government refused to curtail the actions of the AWC, fearing a voter backlash in the forthcoming election. Instead, the Minister astoundingly increased AWC's borrowing ceiling to \$ 2.5 billion just prior to the election.³⁰¹

With the wool stockpile predicted to rise to 4.8 million bales within 12 months, at a cost of an additional \$2.3 million, Kerin finally acted in May 1990, signalling his intention to use his ministerial powers to drop the floor price, controversially stating, "We really do face a different level of stock-building than we ever have before...There is a limit on how much an industry can tax itself to buy its own wool."³⁰²

The global wool industry, enraged at the write down in the value of their wool stocks, was like a stirred hornet's nest, attacking the Minister's decision and laying blame for their troubles at his feet. The AWC increased the wool tax on growers to 18 % and tried unsuccessfully to claim restitution from the government for their losses.³⁰³

And still the wool stockpile grew—to 3.7 million bales and rising. The sales demand continued its downward slide and the AWC persuaded the government to increase their borrowing limit to \$3 million.

In November 1990 Alan Mitchell of the Sydney Morning Herald commented

'For most agricultural economists, the surprise is not that the marketing system is in crisis, with the Wool Corporation sitting on 4 million bales of unsold wool — it's that the crisis took so long to happen. Economists have been predicting the collapse of the floor-price scheme since it was introduced 20 years ago.'³⁰⁴

In late 1990 and early 1991, as the AWC and the government concocted ever more outlandish schemes to resolve the issue at mind-boggling cost, a groundswell emerged of growers voicing opinion that the RPS had to go.³⁰⁵

It was clear that the game was over, and the only viable option was to abandon the Reserve Price Scheme with its unrealistic floor price and mountain of wool bales, despite the almost certain disaster which would follow. The alternative would be even worse, not only for the wool industry but for all Australians, as it could potentially bankrupt the nation.

Wool auctions were suspended by Kerin on 1 February 1991. The stockpile stood at an incredible 4.77 million bales, costing over a million dollars per day to store. Accrued debts were \$2,800 million. The AWC was bankrupt and the government was about to cut its losses.³⁰⁶

Finally, in May 1991 Minister Kerin announced the scrapping of the Reserve Price Scheme and the formation of a Wool Realisation Commission (WRC) to sell the stockpiled wool within seven years. The nation's \$2.9 billion debt would be funded by assets sales of wool warehouses, sale proceeds and a wool grower's tax of 15%, later implemented by the new Minister for Primary Industries Simon Crean at 12% despite significant opposition in parliament.^{307 308}

It took longer than first predicted to pay off the debt. It was not until June 2000 that the enormous wool stockpile loans were finally laid to rest, with the last bale of wool finally auctioned off in August 2001, in a pitiful end to a terrible saga of mismanagement.³⁰⁹

The Brisbane Courier Mail commented on 4 February 1991,

‘Once we rode proud-and rich on the sheep’s back. Now the sheep is rather clearly dead and on its back. Somehow, we must extricate ourselves from beneath the carcass.’³¹⁰

During this time of uncertainty and turbulence, the Australian wool scouring industry, which for many years had been only a shadow of its former self, finally crashed. Both Whiddon Pty. Ltd. and Wool Processors Pty. Ltd., the last wool scourers in the area, closed their Botany works in 1985.³¹¹ The Lord Street factory of one of Botany’s largest and most successful wool businesses, top maker F.W. Hughes Pty Ltd., was closed permanently by owners Mitchell Australia, and the property bought for the Lakes Business Park redevelopment in 1989. Mitchell was (and is) one of Australia’s oldest and most experienced wool suppliers. Perhaps they saw the writing on the wall as the wool prices dropped, wool demand dwindled, stockpiles expanded exponentially, international debt compounded with astronomical interest rates, and the optimistic grazing industry oversupplied the market.³¹²

John Bunce and C.F. Etherden closed in 1987. Several bovine leather tanneries still operated in the area until the early 1990s, some diverging into the more exotic skins of emu, crocodile, snake and ostrich. A couple produced sheep skins for Ugg boots and lambswool products. The late nineties saw the Botany tanneries reduced to 9, then a mere 4 in 2004. Harris Lambswool was the last remaining tannery in 2009. Today there are none.

By the time the RPS collapsed and normal market practices resumed, it was all too late for the wool scourers and sheep basil tanners of Botany. The once booming wool industry of Botany had disappeared forever.³¹³

Conclusion

Fellmongers washed and prepared fleeces and sheepskins for export around the world, primarily to the UK. The work of a fellmonger was arduous and reasonably hazardous but probably no more so than the hazards endured by the average working man employed in industry in this period.

Wool was one of the earliest and most significant Australian industries, both in the colony, and in the Botany region. Botany was chosen as the perfect site for the wool industry partly due to the clean waters of the Bay which were used to wash the fleece, but also for its remoteness and the scarcity of its population in the early days. This smelly and noxious industry was not desirable in the dense housing of the inner city. The local fishing and farming industries gradually moved further afield, releasing the land for industrial development, but Botany remained out of sight and out of mind for most Sydneysiders until the city began to expand in the early 20th century. Despite the increase in urbanisation, wool remained one of the most enduring industries in the area until the late seventies and early eighties.

Floodvale was a part of a major wool enterprise, formed by key industry pioneers of the Geddes family and later owned by Thomas Elliot, an astute businessman, who built up a chain of horizontally integrated wool enterprises. The company became a major employer in the region, until cost cutting measures saw much of the work carried out in Britain, resulting in the gradual decrease in employment opportunities in the wool scours.

However, the fate of the Botany industry was not dictated purely by local factors. The fellmongers of Botany were part of a larger picture encompassing not only Australian agri-politics, but the international wool markets. It is not surprising that Botany wool scourers and tanneries ceased to exist, when one considers how the machinations of the Australian Wool Corporation and the fallout from the Reserve Price Scheme's demise sent businesses bankrupt across the globe.

Currently the Australian wool scouring industry is almost defunct. A scant 0.03% of Australian wool is processed domestically,³¹⁴ by a scattering of boutique processors and several large companies such as Mitchell Australia in Adelaide and Victorian Wool Processors,³¹⁵ which has operated since 1990 and owns a state of the art facility in North Laverton, Victoria. The last remaining functional, traditional wool scour works in operation is located in Blackall, Queensland. It opened in 1908 until commercial closure in 1978. This historic industrial treasure was restored to working order thirty years ago, by local enthusiasts who saw its' potential as a tourist attraction^{316 317}

Ultimately the demise of the Botany wool scourers and tanneries was caused by a combination of factors including; disastrous decisions by key political players in the wool industry who championed protectionism rather than innovation and change; reduced worldwide demand for expensive wool products in preference to new synthetic fibres; offshore processing of greasy wool in a bid to save production costs; changing attitudes to chemical and air pollution and a public mood desiring to effect change to preserve the natural environment; the introduction of environmental legislation; the reclamation of the Mill Pond area for an expanded Kingsford Smith Airport; and the expansion of Sydney so that Botany was no longer a sparsely populated industrial area on the city outskirts, but an inner city suburb where residents demanded a quality living environment.

Despite the obvious problems of industrial pollution around the Botany Bay area for over 100 years, the wool scourers and tanners of Botany played an important role in Australia's economy and export trade. It is often said the Australia 'rode on the sheep's back'. Establishments such as F.W. Hughes, Whiddon, Swinbourne and Stephen, Springvale and Floodvale contributed to an industry which was our leading export trade from the nineteenth century until 1970, substantially contributing to the

growth and wealth of Australia. While we may rejoice in the absence of noxious industries around the Botany area as it morphs into a new phase of development, we can at the same time recognize the benefits that the industry brought to the Australian economy and our current way of life and be proud of that historic contribution to the national prosperity.

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Bibliography

ABC News, Blackall wool scour - last of its kind, 19 May 2014

A brief history of unemployment and sickness benefits in Australia, Parliament of Australia, https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/SSPaymentsUnemployment#_Toc342384826

American Chemical Society, Discovery and Development of Penicillin, <https://www.acs.org/content/acs/en/education/whatischemistry/landmarks/flemingpenicillin.html>

A narrative of wool scouring and fellmongering at Thomas Elliot and Company Botany NSW, 2011, Robert Hanna

Australian Dictionary of Biography, Thomas Sutcliffe Mort, by Alan Barnard. <http://adb.anu.edu.au/biography/mort-thomas-sutcliffe-4258>

Australian Government Department of Environment and Energy, Australian Heritage Database

Australian Town and Country Journal

born in 1867, which conflicts with the QLD government's register of births.

Blackall-Tambo Regional Council, <http://www.blackalltambotourism.com.au/blackall-woolscour>

Botany Council Health Inspection Reports and complaint correspondence, Botany Council correspondence file, Smoke nuisance, soot and emissions, series 9, item 81, box 22 1926-1948.

Botany Council Minutes, 14 and 21 February 196,3 item 147/148

Botany Local Environmental Plan 1995

Botany Bay Local Environmental Plan 2013

Botany Industries and Employment Opportunities, Rotary Club Botany, 1965-1966

Breaking the Sheep's Back, Charles Massy, University of Queensland Press, Brisbane 2011

City of Sydney, Discover Sydney's Aldermen, <http://www.sydneyaldermen.com.au/alderman/frederick-hughes/>

Colonial Secretary's Papers 1788-1856, 14 July 1813

Co-operator, Wool and Basil Workers' Association of New South Wales, 7 October 1912, Sydney

Daily Telegraph

Dictionary of Sydney, Botany, <https://dictionaryofsydney.org/entry/botany#ref-uuid=18d68a9b-e821-263a-c8c0-e7864a240bd3>

Draft Development Control Plan no.1 Botany- Code Industrial Development, Botany Municipal Council, 1980

Electoral roll, Ryde, NSW, 1913

Environmental Planning and Assessment Act 1973 No. 203

Evening News, Sydney



Floodvale files, Mascot Local History Library, Bayside Libraries

Fred William Hughes Death Certificate, NSW Registry of Births Deaths and Marriages, Index # 1950/15264

Freeman's Journal, Sydney

F.W. Hughes file, Mascot Local History Library, Bayside Council Libraries

History of Botany 1788-1970, Frederick A. Larcombe, publ. Council of the Municipality of Botany, 1970

Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938

Industry restructuring and job loss: helping older workers get back into employment, Victor J Callan and Kaye Bowman

Jim's Story: How things were different when I was growing up, James Bell memoir, 2005

John Geddes, Death certificate, NSW BDM Index # 5212/1894.

John Geddes Deceased Estate, container 21/101, date of death 31/05/1894, NSW State Archives and Records

John Geddes Probate packet, series 13660, container no. 50000292, series 4, item 7060, date of death 31/05/1894, NSW State Archives and Records

Labour Daily

Marriage Certificate George Robert Bell and Mary Ann Hobson, NSW BDM Index no.1897/004292

Memorandum and articles of association of J H Geddes and Company, The Pastoral Finance Association Limited, NSW State Archives, series 13022, item no. 267

Mitchell Australia, <http://mitchellwool.com>

Mitchell Australia file, Mascot Local History Library, Bayside Council Libraries

Newcastle Morning Herald and Miners' Advocate

New Zealand, Birth Index, 1840–1950

NSW Telephone Directory, Sydney Pink Pages, 1973-74

NSW Telephone Directory, Sydney, Commercial and Individual, 1974-75

NSW Telephone Directory, Sydney, Yellow Pages, 1979-2009

Paddock to Ply, <http://paddocktoply.com.au>

Report on Archives Held by Industries in Botany, Maie Barrow, 1977, Mascot Local History Library, Bayside Libraries

Sands Directories

Singleton Argus

St Johns Church, Parramatta, Parish Baptismal Records

Sydney Commercial Directory for the Year 1851, Ford

The Sydney Stock and Station Journal

The Australian Star

The Australian Wool Market 1840-1900, Alan Barnard, publ. Victoria 1958, pp7-8

The Cumberland Argus and Fruitgrowers Advocate

The Daily Telegraph, Sydney

The District and Bay of Botany, six-part series, by C. S. The Sydney Morning Herald 1864, August 5, 10, 20, 25, September 2, 10

The Maitland Mercury and Hunter River General Advertiser

The Northern Star, Lismore

The Sydney Morning Herald

The Woolmark Company, Top-making,

<https://www.woolmark.com/knowledge/manufacturing/worsted-system/topmaking/>

Too Big to Fail: Explaining the Timing and Nature of Intervention in the Australian Wool Market, 1916-1991. Simon Ville and David Merrett, Australian Journal of Politics & History, Sep 01, 2016; Vol. 62, No. 3, p. 337-352,

Victorian Wool Processors. <http://www.vwp.com.au>



Notes

- ¹ Marriage Certificate George Robert Bell and Mary Ann Hobson, NSW BDM Index no.1897/004292
- ² A SUNDAY SCANDAL. (1889, May 29). *The Australian Star* (Sydney, NSW : 1887 - 1909), p. 2. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article227310943>
- ³ A SUNDAY SCANDAL. (1889, May 29). *The Australian Star* (Sydney, NSW : 1887 - 1909), p. 2. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article227310943>
- ⁴ A brief history of unemployment and sickness benefits in Australia, Parliament of Australia, Retrieved 25 February 2018 from, https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/SSPaymentsUnemployment#_Toc342384826
- ⁵ Jim's Story: How things were different when I was growing up, James Bell memoir, 2005
- ⁶ Presentation at NCVER No Frills Conference 2015, Industry restructuring and job loss: helping older workers get back into employment, Victor J Callan & Kaye Bowman.
- ⁷ Robert Hanna, A narrative of wool scouring and fellmongering at Thomas Elliot and Company Botany NSW, 2011. Document held by Mascot Local History Library, Bayside Libraries. His father George Robert Hanna (1872-1944) managed Elliot's wool scouring works for many years.
- ⁸ WOOL TOP-MAKING. (1907, December 4). *The Maitland Daily Mercury* (NSW : 1894 - 1939), p. 3. Retrieved February 23, 2018, from <http://nla.gov.au/nla.news-article124430418>
- ⁹ DEVELOPMENT OF THE WOOL INDUSTRY. (1909, June 1). *The Sydney Stock and Station Journal* (NSW : 1896 - 1924), p. 5. Retrieved February 23, 2018, from <http://nla.gov.au/nla.news-article125762158>
- ¹⁰ The Woolmark Company, Top-making, Retrieved 23 February 2018 from, <https://www.woolmark.com/knowledge/manufacturing/worsted-system/topmaking/>
- ¹¹ Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970. Pp.202-203
- ¹² J. E. Armitages Fellmongering Establishment, Bridge End, near Sydney N.S. Wales, 1851 R. Turner, State Library NSW , call no. DG V1A / 45, file no, FL3262695, Retrieved 5 February 2018 from, http://digital.sl.nsw.gov.au/delivery/DeliveryManagerServlet?dps_pid=FL3262695&embedded=true&toolbar=false
- ¹³ TEXTILE MILLS. (1935, November 28). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 12. Retrieved February 17, 2018, from <http://nla.gov.au/nla.news-article17212273>
- ¹⁴ BLED TO DEATH (1932, June 10). *Northern Star* (Lismore, NSW : 1876 - 1954), p. 7. Retrieved February 17, 2018, from <http://nla.gov.au/nla.news-article94287566>
- ¹⁵ FALL OF PIPES IN MILL (1935, November 29). *The Labor Daily* (Sydney, NSW : 1924 - 1938), p. 8. Retrieved February 17, 2018, from <http://nla.gov.au/nla.news-article237727931>
- ¹⁶ CITY CORONER'S COURT. (1909, September 2). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 5. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article15097231>
- ¹⁷ INSURANCE COMPANIES SLUGGED AGAIN FROM WOOL-STORE FIRE (1935, November 9). *Smith's Weekly* (Sydney, NSW : 1919 - 1950), p. 7. Retrieved February 17, 2018, from <http://nla.gov.au/nla.news-article234614911>
- ¹⁸ American Chemical Society, Discovery and Development of Penicillin. Retrieved 17 February 2018 from, <https://www.acs.org/content/acs/en/education/whatischemistry/landmarks/flemingpenicillin.html>
- ¹⁹ Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970. pp. 12-14
- ²⁰ Colonial Secretary's Papers 1788-1856, 14 July 1813, Series: NRS 899; Reel or Fiche Numbers: Fiche 3001-3162, Retrieved 9 February 2018 from, www.ancestry.com.au. Held by NSW State Archives and Records.
- ²¹ Australian Government Department of Environment and Energy, Australian Heritage Database, Sydney (Kingsford Smith) Airport Group, Retrieved 24 April 2018 from, http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=town%3Dbotany%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=102669
- ²² Ibid.
- ²³ The Pumping House Botany, photo no 133, Dixson Library, State Library of New South Wales Call no DL PX 148, Retrieved 1 March 2018 from, http://digital.sl.nsw.gov.au/delivery/DeliveryManagerServlet?dps_pid=FL1105117&embedded=true&toolbar=false

-
- ²⁴ PROGRESS OF THE SUBURBS. (1914, March 7). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved February 12, 2018, from <http://nla.gov.au/nla.news-article15494825>
- ²⁵ Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970. Pp.16-18
- ²⁶ Views of Sydney 1862-1873 / Samuel Elyard, State Library NSW, Call no. DGD 5, Retrieved 1 March 2018 from, http://digital.sl.nsw.gov.au/delivery/DeliveryManagerServlet?dps_pid=FL650480&embedded=true&toolbar=false
- ²⁷ THE DISTRICT AND BAY OF BOTANY. (1864, August 5). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13110010>
- ²⁸ THE DISTRICT AND BAY OF BOTANY. (1864, September 2). The Sydney Morning Herald (NSW : 1842 - 1954), p. 5. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13112251>
- ²⁹ THE DISTRICT AND BAY OF BOTANY. (1864, September 10). The Sydney Morning Herald (NSW : 1842 - 1954), p. 6. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13107436>
- ³⁰ THE DISTRICT AND BAY OF BOTANY. (1864, August 25). The Sydney Morning Herald (NSW : 1842 - 1954), p. 5. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13112449>
- ³¹ Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970. p.15
- ³² Views of Sydney 1862-1873 / Samuel Elyard, State Library NSW, Call no. DGD 5, Retrieved 1 March 2018 from, http://digital.sl.nsw.gov.au/delivery/DeliveryManagerServlet?dps_pid=FL650480&embedded=true&toolbar=false
- ³³ THE DISTRICT AND BAY OF BOTANY. (1864, September 10). The Sydney Morning Herald (NSW : 1842 - 1954), p. 6. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13107436>
- ³⁴ The Industries of New South Wales. (1878, April 6). Australian Town and Country Journal (Sydney, NSW : 1870 - 1907), p. 24. Retrieved March 13, 2018, from <http://nla.gov.au/nla.news-article70615520>
- ³⁵ There is a possible immigration record for an unmarried man John Gaddis on 12 February 1842, New South Wales, Australia, Assisted Immigrant Passenger Lists, 1828-1896
- ³⁶ Family Notices (1862, February 19). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 7. Retrieved July 28, 2017, from <http://nla.gov.au/nla.news-article28624290>
- ³⁷ NSW Births Deaths and Marriages, Death index # 14374/1942
- ³⁸ Family Notices (1867, March 23). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 7. Retrieved July 28, 2017, from <http://nla.gov.au/nla.news-article13140774>
- ³⁹ Family Notices (1869, December 3). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 6. Retrieved July 28, 2017, from <http://nla.gov.au/nla.news-article13196309>
- ⁴⁰ NSW BDM Birth Index.
- ⁴¹ John Geddis [sic] is listed as a fellmonger in Camperdown in Ford's Sydney Commercial Directory for the Year 1851.
- ⁴² Advertising (1865, May 25). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article13113452>
- ⁴³ The business had been established four years earlier as Messrs. Prince, Bray and Ogg.
- ⁴⁴ DEATH OF MR. J. H. GEDDES. (1909, April 2). *The Sydney Wool and Stock Journal (NSW : 1899 - 1917)*, p. 10. Retrieved September 20, 2017, from <http://nla.gov.au/nla.news-article106906538>
- ⁴⁵ The World's Wool Buyers - The Opening Sale of the Season 1897-98, Sydney, N.S.W., 1897. Mitchell Library, State Library of NSW CALL NO. MPG/183. Retrieved 5 November 2017 from http://digital.sl.nsw.gov.au/delivery/DeliveryManagerServlet?dps_pid=FL618907&embedded=true&toolbar=false
- ⁴⁶ THE CANOBOLAS COPPER MINE. (1860, June 30). The Sydney Morning Herald (NSW : 1842 - 1954), p. 5. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article28625470>
- ⁴⁷ MEMBERS OF PARLIAMENT AT PUBLIC MEETINGS. (1862, June 19). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article13230367>
- ⁴⁸ MUNICIPAL MEETINGS. (1860, August 31). The Sydney Morning Herald (NSW : 1842 - 1954), p. 3. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article13045160>
- ⁴⁹ WATERLOO MUNICIPALITY. (1860, October 2). The Sydney Morning Herald (NSW : 1842 - 1954), p. 3. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article13046604>
- ⁵⁰ WATERLOO MUNICIPALITY. (1860, October 2). The Sydney Morning Herald (NSW : 1842 - 1954), p. 3. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article13046604>

-
- ⁵¹ BOROUGH COUNCILS. (1869, February 17). The Sydney Morning Herald (NSW : 1842 - 1954), p. 6. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article13191851>
- ⁵² LATEST NEWS. (1870, April 9). The Maitland Mercury and Hunter River General Advertiser (NSW : 1843 - 1893), p. 3. Retrieved January 27, 2018, from <http://nla.gov.au/nla.news-article18744553>
- ⁵³ BOTANY. (1898, July 14). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article14130373>
- ⁵⁴ BOTANY PROTECTION LEAGUE. (1898, March 21). The Sydney Morning Herald (NSW : 1842 - 1954), p. 5. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article14167411>
- ⁵⁵ Botany Alderman 1896-1907, 1911-1913, Mayor 1901
- ⁵⁶ Botany Alderman 1911-1913
- ⁵⁷ Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938
- ⁵⁸ Botany Alderman 1907-1931, Mayor 1914-1918, 1921-1922
- ⁵⁹ New Zealand, Birth Index, 1840–1950. Microfiche. Retrieved 18 March 2018 from, <http://www.ancestry.com.au>. The New Zealand government Births Deaths and Marriages Online index does not list this birth.
- ⁶⁰ MR. J. F. SWINBOURNE. (1930, November 11). The Sydney Morning Herald (NSW : 1842 - 1954), p. 13. Retrieved March 18, 2018, from <http://nla.gov.au/nla.news-article16729813>
- ⁶¹ BOTANY FIRE. (1924, October 17). The Sydney Morning Herald (NSW : 1842 - 1954), p. 9. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article16168440>
- ⁶² Botany Alderman 1900-1908, Mayor 1905-1908
- ⁶³ Botany Alderman 1903-1910, Mayor 1910
- ⁶⁴ Botany Alderman 1901-1902, 1909-1913, 1915-1916, Mayor 1911-1912
- ⁶⁵ Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938, p 139-150
- ⁶⁶ THE DISTRICT AND BAY OF BOTANY. (1864, August 5). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13110010>
- ⁶⁷ John Geddes Deceased Estate, container 21/101, date of death 31/05/1894, NSW State Archives and Records
- ⁶⁸ John Geddes Probate packet, series 13660, container no. 50000292, series 4, item 7060, date of death 31/05/1894, NSW State Archives and Records
- ⁶⁹ John Geddes Deceased Estate, container 21/101, date of death 31/05/1894, NSW State Archives and Records
- ⁷⁰ John Geddes Probate packet, series 13660, container no. 50000292, series 4, item 7060, date of death 31/05/1894, NSW State Archives and Records
- ⁷¹ Royal Australian Historical Society Collection. Call no, 021031 Wool Store - west side of Phillip Street, Sydney - Wool store was built 1867 and demolished in 1922. Used with permission.
- ⁷² Advertising (1883, June 26). *The Armidale Express and New England General Advertiser* (NSW : 1856 - 1861; 1863 - 1889; 1891 - 1954), p. 1. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article192716838>
- ⁷³ Letter J.H. Geddes and Co to City of Sydney, 19 May 1885, City of Sydney Archives, Records series 26. Retrieved 30 January 2018, from, http://cdn.archives.cityofsydney.nsw.gov.au/series/26/CSA085426/26_204_811.pdf
- ⁷⁴ The Wool Season. (1881, December 3). *Australian Town and Country Journal* (Sydney, NSW : 1870 - 1907), p. 19. Retrieved July 22, 2017, from <http://nla.gov.au/nla.news-article70962825>
- ⁷⁵ Advertising (1881, June 4). *Australian Town and Country Journal* (Sydney, NSW : 1870 - 1907), p. 5. Retrieved July 22, 2017, from <http://nla.gov.au/nla.news-article70956327>
- ⁷⁶ Advertising (1881, June 4). *Australian Town and Country Journal* (Sydney, NSW : 1870 - 1907), p. 5. Retrieved July 22, 2017, from <http://nla.gov.au/nla.news-article70956327>
- ⁷⁷ Supplementary Water Supply for Sydney. (1885, June 6). *The Maitland Mercury and Hunter River General Advertiser* (NSW : 1843 - 1893), p. 17 (Second sheet to the Maitland Mercury). Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article18885787>
- ⁷⁸ Supplementary Water Supply for Sydney. (1885, June 6). *The Maitland Mercury and Hunter River General Advertiser* (NSW : 1843 - 1893), p. 17 (Second sheet to the Maitland Mercury). Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article18885787>
- ⁷⁹ Advertising (1881, June 4). *Australian Town and Country Journal* (Sydney, NSW : 1870 - 1907), p. 5. Retrieved July 22, 2017, from <http://nla.gov.au/nla.news-article70956327>
- ⁸⁰ Advertising (1860, June 23). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13042220>

-
- ⁸¹ THE DISTRICT AND BAY OF BOTANY. (1864, August 25). The Sydney Morning Herald (NSW : 1842 - 1954), p. 5. Retrieved March 13, 2018, from <http://nla.gov.au/nla.news-article13112449>
- ⁸² SPRINGVALE AND FLOODVALE THE WOOL-WASHING AND FELLMONGERING ESTABLISHMENTS OF GEDDES BROTHERS, AT BOTANY, (1881, December 3). *Australian Town and Country Journal* (Sydney, NSW : 1870 - 1907), p. 24. Retrieved July 22, 2017, from <http://nla.gov.au/nla.news-article70963012>
- ⁸³ OUR INDUSTRIES. (1905, January 18). The Sydney Morning Herald (NSW : 1842 - 1954), p. 9. Retrieved February 15, 2018, from <http://nla.gov.au/nla.news-article28240540>
- ⁸⁴ Advertising (1883, October 20). *Australian Town and Country Journal* (Sydney, NSW : 1870 - 1907), p. 6. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article71004738>
- ⁸⁵ Advertising (1885, April 11). *Newcastle Morning Herald and Miners' Advocate* (NSW : 1876 - 1954), p. 12. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article139070536>
- ⁸⁶ Advertising (1885, June 20). *Freeman's Journal* (Sydney, NSW : 1850 - 1932), p. 2. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article115467079>
- ⁸⁷ Advertising (1886, August 7). *Freeman's Journal* (Sydney, NSW : 1850 - 1932), p. 2. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article119447148>
- ⁸⁸ Sands Directories 1886-1889
- ⁸⁹ Northern Wool Scouring mills. (1886, December 7). *The Maitland Mercury and Hunter River General Advertiser* (NSW : 1843 - 1893), p. 6. Retrieved October 17, 2017, from <http://nla.gov.au/nla.news-article18888121>
- ⁹⁰ Trade Affairs. (1890, September 4). *Evening News* (Sydney, NSW : 1869 - 1931), p. 6. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article113337601>
- ⁹¹ GENERAL NEWS. (1890, September 5). *The Daily Telegraph* (Sydney, NSW : 1883 - 1923), p. 4. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article235790095>
- ⁹² Newspaper reports state that Elliot owned Floodvale and Springvale in May 1894. Presumably the Sands Directory for that year had gone into publication before the sale was complete. Strike of Wool Scourers. (1894, May 1). *Evening News* (Sydney, NSW : 1869 - 1931), p. 6. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article114081754>
- ⁹³ Ibid.
- ⁹⁴ Wool and Basil Workers' Association of New South Wales. (1912, October 7). *Co-operator* (Sydney, NSW : 1910 - 1917), p. 20. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article238817133>
- ⁹⁵ NSW Death certificate, John Geddes, # 5212/1894 .
- ⁹⁶ Map is undated however several reserves are dated as being declared in 1932. Swinbourne and Stephen's Water Reserve property is not shown at the Mill Pond, so the map was most likely drawn in late 1940s.
- ⁹⁷ DEATH OF MR. J. H. GEDDES. (1909, April 2). *The Sydney Wool and Stock Journal* (NSW : 1899 - 1917), p. 10. Retrieved September 20, 2017, from <http://nla.gov.au/nla.news-article106906538>
- ⁹⁸ NSW BDM Marriage index # 4386/1885. The grooms name is incorrectly entered as George H Geddes.
- ⁹⁹ 1901 England Census.
- ¹⁰⁰ Sands Directories 1886-1889
- ¹⁰¹ Australian Dictionary of Biography, Thomas Sutcliffe Mort, by Alan Barnard. Retrieved 28 September 2017 from <http://adb.anu.edu.au/biography/mort-thomas-sutcliffe-4258>
- ¹⁰² Memorandum and articles of association of J H Geddes and Company, The Pastoral Finance Association Limited, NSW State Archives, series 13022, item no. 267
- ¹⁰³ DEATH OF MR. J. H. GEDDES. (1909, April 2). *The Sydney Wool and Stock Journal* (NSW : 1899 - 1917), p. 10. Retrieved September 20, 2017, from <http://nla.gov.au/nla.news-article106906538>
- ¹⁰⁴ Memorandum and articles of association of J H Geddes and Company, The Pastoral Finance Association Limited, NSW State Archives, series 13022, item no. 267
- ¹⁰⁵ DEATH OF MR. J. H. GEDDES. (1909, April 2). *The Sydney Wool and Stock Journal* (NSW : 1899 - 1917), p. 10. Retrieved September 20, 2017, from <http://nla.gov.au/nla.news-article106906538>
- ¹⁰⁶ NEW WOOL-WASHING ESTABLISHMENT. (1882, January 12). The Sydney Morning Herald (NSW : 1842 - 1954), p. 6. Retrieved December 26, 2017, from <http://nla.gov.au/nla.news-article13502886>
- ¹⁰⁷ ROYAL AUSTRALIAN HISTORICAL SOCIETY Collection. Call no. 21780051 Team of horses and cart with wool bales and drivers 1950. Used with permission.
- ¹⁰⁸ Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938, Ch. 8, p.375
- ¹⁰⁹ Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970. pp, 203-205
- ¹¹⁰ <https://findagrave.com>. Sarah and Henry are buried at Mays Hill Cemetery.

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- ¹¹¹ Queensland Registry of Births Deaths and Marriages. Birth index # 1869/B10342
- ¹¹² Henry Benjamin Hughes was a Brisbane resident at the time of his marriage to Sarah McLaren. St John's Parramatta, Parish Marriage records, 1865
- ¹¹³ Fred William Hughes Death certificate #1950/15264
- ¹¹⁴ The Australian Cemetery Index
- ¹¹⁵ The City of Sydney's website, Discover Sydney's Aldermen, erroneously suggests he was born in 1867, which conflicts with the QLD government's register of births.
- ¹¹⁶ Electoral roll Ryde 1913.
- ¹¹⁷ From Paddock to Punter (1950, November 22). *The Cumberland Argus (Parramatta, NSW : 1950 - 1962)*, p. 16. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article110013995>
- ¹¹⁸ St Johns Church, Parramatta, Parish Baptismal Records 1840
- ¹¹⁹ From Paddock to Punter (1950, August 23). *The Cumberland Argus (Parramatta, NSW : 1950 - 1962)*, p. 7. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article110012579>
- ¹²⁰ Man of Millions (1950, September 3). *Truth (Sydney, NSW : 1894 - 1954)*, p. 19. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article167980241>
- ¹²¹ Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938, p 375 claims he was 22 but this is inconsistent with his birth records held at QLD Birth Registry Office.
- ¹²² THE NOMINATIONS. (1897, January 26). *The Daily Telegraph (Sydney, NSW : 1883 - 1923)*, p. 6. Retrieved February 12, 2018, from <http://nla.gov.au/nla.news-article238413890>
- ¹²³ Advertising (1895, January 30). *The Daily Telegraph (Sydney, NSW : 1883 - 1923)*, p. 3. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article236005842>
- ¹²⁴ Man of Millions (1950, September 3). *Truth (Sydney, NSW : 1894 - 1954)*, p. 19. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article167980241>
- ¹²⁵ BREVITIES (1895, September 21). *The Cumberland Argus and Fruitgrowers Advocate (Parramatta, NSW : 1888 - 1950)*, p. 1. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article85651304>
- ¹²⁶ Chips. (1898, August 24). *The Cumberland Argus and Fruitgrowers Advocate (Parramatta, NSW : 1888 - 1950)*, p. 8. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article85839227>
- ¹²⁷ Patents and Inventions. (1896, May 5). *Evening News (Sydney, NSW : 1869 - 1931)*, p. 3. Retrieved February 12, 2018, from <http://nla.gov.au/nla.news-article108774172>
- ¹²⁸ Ibid.
- ¹²⁹ Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938, p 375
- ¹³⁰ F.W. Hughes file held by Mascot Local History Library, Bayside Council Libraries.
- ¹³¹ City of Sydney, Discover Sydney's Aldermen, Retrieved 1 February 2018 from, <http://www.sydneyaldermen.com.au/alderman/frederick-hughes/>. Original source Sydney Morning Herald, February 6, 1895, p. 9.
- ¹³² Man of Millions (1950, September 3). *Truth (Sydney, NSW : 1894 - 1954)*, p. 19. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article167980241>
- ¹³³ FAMOUS BREEDER LEFT ESTATE OF £83,852 (1950, November 17). *Daily Advertiser (Wagga Wagga, NSW : 1911 - 1954)*, p. 3. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article145587632>
- ¹³⁴ OWNER HEARD CUP WIN ON RADIO (1947, November 5). *The Courier-Mail (Brisbane, Qld. : 1933 - 1954)*, p. 7. Retrieved April 16, 2018, from <http://nla.gov.au/nla.news-article49641068>
- ¹³⁵ WILL SELL 300 HORSES (1950, December 19). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 12. Retrieved October 10, 2017, from <http://nla.gov.au/nla.news-article18192198>
- ¹³⁶ Stud Plans Of Dead Owner To Proceed (1950, August 21). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 6. Retrieved October 10, 2017, from <http://nla.gov.au/nla.news-article18171960>
- ¹³⁷ Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938, p 375
- ¹³⁸ Ibid.
- ¹³⁹ London Wool Letter. (1901, March 16). *Australian Town and Country Journal (Sydney, NSW : 1870 - 1907)*, p. 19. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article71464753>
- ¹⁴⁰ WOOLSCOURERS COME OUT. (1911, November 12). *Sunday Times (Sydney, NSW : 1895 - 1930)*, p. 9. Retrieved October 17, 2017, from <http://nla.gov.au/nla.news-article120689775>
- ¹⁴¹ EIGHT HUNDRED FELLMONGERS STRIKE. (1911, November 13). *The Border Morning Mail and Riverina Times (Albury, NSW : 1903 - 1920)*, p. 2. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article109038959>
- ¹⁴² TO PREVENT STRIKES (1913, July 23). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 8. Retrieved October 10, 2017, from <http://nla.gov.au/nla.news-article15437718>

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- ¹⁴³ State Library of NSW, February 1912. The catalogue suggests this is a wool scour but obviously it is part of the top-making works., Call number Government Printing Office Government Printing Office, 1 – 34924, Retrieved 27 October 2017 from http://digital.sl.nsw.gov.au/delivery/DeliveryManagerServlet?dps_pid=FL1947385&embedded=true&toolbar=false
- ¹⁴⁴ Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970. pp, 109-111
- ¹⁴⁵ BUSH FIRES IN METROPOLITAN AREA (1935, August 5). Singleton Argus (NSW : 1880 - 1954), p. 2. Retrieved February 17, 2018, from <http://nla.gov.au/nla.news-article81710680>
- ¹⁴⁶ Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970.
- ¹⁴⁷ WOOLWASHING WORKS DESTROYED. (1912, January 5). Albury Banner and Wodonga Express (NSW : 1896 - 1938), p. 32. Retrieved December 26, 2017, from <http://nla.gov.au/nla.news-article101190857>
- ¹⁴⁸ WOOL WORKS BURNT. (1911, December 30). *The Tamworth Daily Observer* (NSW : 1910 - 1916), p. 2. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article112481947>
- ¹⁴⁹ WOOLWASHING WORKS DESTROYED. (1912, January 5). *Albury Banner and Wodonga Express* (NSW : 1896 - 1938), p. 32. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article101190857>
- ¹⁵⁰ FIRE AT BOTANY. (1913, January 1). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 9. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article28128148>
- ¹⁵¹ FIRE AT A BOTANY WOOLSCOURING WORKS. (1893, October 14). The Daily Telegraph (Sydney, NSW : 1883 - 1923), p. 10. Retrieved February 13, 2018, from <http://nla.gov.au/nla.news-article236132110>
- ¹⁵² Fires. (1911, February 7). Evening News (Sydney, NSW : 1869 - 1931), p. 6. Retrieved February 13, 2018, from <http://nla.gov.au/nla.news-article113939563>
- ¹⁵³ FIRE AT BOTANY. (1919, July 12). Daily Examiner (Grafton, NSW : 1915 - 1954), p. 5. Retrieved February 13, 2018, from <http://nla.gov.au/nla.news-article195322898>
- ¹⁵⁴ BOTANY FIRE (1939, November 22). Newcastle Morning Herald and Miners' Advocate (NSW : 1876 - 1954), p. 7. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article135462281>
- ¹⁵⁵ BIG FIRE AT BOTANY. (1912, November 28). The Maitland Daily Mercury (NSW : 1894 - 1939), p. 5. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article121284395>
- ¹⁵⁶ FIRE AT BOTANY. (1922, January 4). The Sydney Morning Herald (NSW : 1842 - 1954), p. 10. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article15981034>
- ¹⁵⁷ BOTANY FIRE. (1924, October 17). The Sydney Morning Herald (NSW : 1842 - 1954), p. 9. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article16168440>
- ¹⁵⁸ FIRE AT BOTANY. (1926, October 20). The Maitland Daily Mercury (NSW : 1894 - 1939), p. 5. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article128014906>
- ¹⁵⁹ BOTANY FIRE (1929, March 20). Northern Star (Lismore, NSW : 1876 - 1954), p. 10. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article94065268>
- ¹⁶⁰ FIRE AT BOTANY. (1929, March 20). The Sydney Morning Herald (NSW : 1842 - 1954), p. 18. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article16539626>
- ¹⁶¹ MILE OF HOSE TO FIGHT FIRE (1929, March 20). The Labor Daily (Sydney, NSW : 1924 - 1938), p. 5. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article239968222>
- ¹⁶² FIRE AT BOTANY. (1933, December 9). The Sydney Morning Herald (NSW : 1842 - 1954), p. 19. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article17031017>
- ¹⁶³ FIRE AT BOTANY (1935, October 3). Newcastle Morning Herald and Miners' Advocate (NSW : 1876 - 1954), p. 14. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article139791794>
- ¹⁶⁴ FIRE AT BOTANY. (1933, June 29). The Sydney Morning Herald (NSW : 1842 - 1954), p. 10. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article16963543>
- ¹⁶⁵ TWO FIRES START (1942, May 25). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 5. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article17807532>
- ¹⁶⁶ This is listed as Wool Scouring in the catalogue but is clearly photographed at the spinning mill. State Library of NSW, Call number Government Printing Office 1 – 34922, February 1912, Retrieved 27 October 2017, from http://digital.sl.nsw.gov.au/delivery/DeliveryManagerServlet?dps_pid=FL1932951&embedded=true&toolbar=false
- ¹⁶⁷ Coroner Finds:-- (1942, June 29). The Sun (Sydney, NSW : 1910 - 1954), p. 3 (LATE FINAL EXTRA). Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article231780950>
- ¹⁶⁸ £75,000 FIRE DAMAGE (1947, September 26). National Advocate (Bathurst, NSW : 1889 - 1954), p. 2. Retrieved February 14, 2018, from <http://nla.gov.au/nla.news-article161318368>
- ¹⁶⁹ THEATRE TRUST SUFFERS A MAJPOR LOSS, Sydney Morning Herald, Wednesday, October 01, 1969

-
- ¹⁷⁰ Fire in a factory-warehouse, Hale Street, Botany, 1 October 1969, photograph, State Library of NSW Call no. Australian Photographic Agency - 45557
- ¹⁷¹ THE RUINS COOL OFF, Sydney Morning Herald, Thursday, October 02, 1969
- ¹⁷² PROPERTY LOSSES SAID TO EXCEED \$3m, Sydney Morning Herald, Wednesday, October 01, 1969
- ¹⁷³ HOMEBUSH ABATTOIRS. (1914, May 19). The Sydney Morning Herald (NSW : 1842 - 1954), p. 12. Retrieved March 14, 2018, from <http://nla.gov.au/nla.news-article15509029>
- ¹⁷⁴ Too Big to Fail: Explaining the Timing and Nature of Intervention in the Australian Wool Market, 1916-1991. Simon Ville and David Merrett, Australian Journal of Politics & History, Sep 01, 2016; Vol. 62, No. 3, p. 337-352, Retrieved 11 March 2018, from, https://www.researchgate.net/publication/308387909_Too_Big_to_Fail_Explaining_the_Timing_and_Nature_of_Intervention_in_the_Australian_Wool_Market_1916-1991
- ¹⁷⁵ TELEGRAMS (1919, March 20). Tweed Daily (Murwillumbah, NSW : 1914 - 1949), p. 3. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article192265610>
- ¹⁷⁶ WOOL AND BASIL WORKERS (1935, February 28). The Labor Daily (Sydney, NSW : 1924 - 1938), p. 4. Retrieved February 10, 2018, from <http://nla.gov.au/nla.news-article236509496>
- ¹⁷⁷ FELLMONGERY INDUSTRY. (1935, March 29). The Muswellbrook Chronicle (NSW : 1898 - 1955), p. 2. Retrieved February 10, 2018, from <http://nla.gov.au/nla.news-article107670170>
- ¹⁷⁸ SHEEPSKINS. (1925, February 19). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article16183550>
- ¹⁷⁹ WOOL TOPS CASE. (1922, May 27). The Sydney Morning Herald (NSW : 1842 - 1954), p. 9. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article16004772>
- ¹⁸⁰ TEXTILE WORKERS. (1919, May 21). The Sydney Morning Herald (NSW : 1842 - 1954), p. 11. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article15839688>
- ¹⁸¹ TREATING OUR WOOL (1919, March 18). The Sun (Sydney, NSW : 1910 - 1954), p. 7. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article222636892>
- ¹⁸² THE CASE FOR SKIN WOOL OWNERS. (1922, December 21). The Sydney Morning Herald (NSW : 1842 - 1954), p. 11. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article28077939>
- ¹⁸³ FELLMONGERS. (1921, May 28). The Sydney Morning Herald (NSW : 1842 - 1954), p. 14. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article15931339>
- ¹⁸⁴ WOOLWORKERS. (1922, October 9). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article16029668>
- ¹⁸⁵ FELLMONGERS ON STRIKE. (1933, September 27). *The Australian Worker (Sydney, NSW : 1913 - 1950)*, p. 18. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article146001889>
- ¹⁸⁶ Fellmongers Strike (1933, September 25). *Singleton Argus (NSW : 1880 - 1954)*, p. 2. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article81686965>
- ¹⁸⁷ FELLMONGERS. (1933, October 5). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 13. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article17012760>
- ¹⁸⁸ Ibid.
- ¹⁸⁹ FELLMONGERS STRIKE. (1932, August 15). *The Argus (Melbourne, Vic. : 1848 - 1957)*, p. 7. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article4468384>
- ¹⁹⁰ FELLMONGERS STRIKE (1933, September 28). *The Uralla Times (NSW : 1923 - 1954)*, p. 2. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article176007576>
- ¹⁹¹ Fellmongers' Strike Assumes Serious Aspect (1933, September 23). *Glen Innes Examiner (NSW : 1908 - 1954)*, p. 1. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article183565391>
- ¹⁹² DEADLOCK (1933, September 25). *Goulburn Evening Penny Post (NSW : 1881 - 1940)*, p. 3 (DAILY and EVENING). Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article102855394>
- ¹⁹³ FELLMONGERS' STRIKE; 600 OTHERS PUT OFF (1933, September 23). *Barrier Miner (Broken Hill, NSW : 1888 - 1954)*, p. 1 (HOME EDITION). Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article48444276>
- ¹⁹⁴ FELLMONGERS (1933, September 25). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 9. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article17009544>
- ¹⁹⁵ FELLMONGERS' STRIKE (1933, September 27). *Goulburn Evening Penny Post (NSW : 1881 - 1940)*, p. 2 (DAILY and EVENING). Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article102864577>
- ¹⁹⁶ FELLMONGERS. (1933, September 27). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 13. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article17010429>
- ¹⁹⁷ FELLMONGERS' STRIKE (1933, September 25). *The North Western Courier (Narrabri, NSW : 1913 - 1955)*, p. 1. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article136342758>

-
- ¹⁹⁸ Fellmongers Strike (1933, September 25). *Singleton Argus (NSW : 1880 - 1954)* , p. 2. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article81686965>
- ¹⁹⁹ FELLMONGERS. (1933, September 26). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 12. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article17010084>
- ²⁰⁰ FELLMONGERS (1933, September 27). *Daily Examiner (Grafton, NSW : 1915 - 1954)*, p. 5. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article195631507>
- ²⁰¹ Rising Wave of Strike Struggles (1933, September 29). *The Workers' Weekly (Sydney, NSW : 1923 - 1939)*, p. 4. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article209423388>
- ²⁰² FELLMONGERS. (1933, September 27). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 13. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article17010429>
- ²⁰³ Fellmongers' Strike (1933, September 29). *The Land (Sydney, NSW : 1911 - 1954)*, p. 10. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article104244608>
- ²⁰⁴ FELLMONGERS' STRIKE (1933, September 29). *Barrier Miner (Broken Hill, NSW : 1888 - 1954)*, p. 1 (HOME EDITION). Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article48444828>
- ²⁰⁵ MAY COLLAPSE (1933, September 29). *The Armidale Express and New England General Advertiser (NSW : 1856 - 1861; 1863 - 1889; 1891 - 1954)*, p. 1. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article194346600>
- ²⁰⁶ FELLMONGERS (1933, September 30). *Daily Advertiser (Wagga Wagga, NSW : 1911 - 1954)*, p. 6. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article143456353>
- ²⁰⁷ FELLMONGERS. (1933, September 29). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 11. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article17011126>
- ²⁰⁸ JOINED STRIKERS (1933, September 28). *Daily Examiner (Grafton, NSW : 1915 - 1954)*, p. 5. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article195628121>
- ²⁰⁹ MORE ON STRIKE (1933, September 28). *Newcastle Morning Herald and Miners' Advocate (NSW : 1876 - 1954)* , p. 7. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article136695827>
- ²¹⁰ FELLMONGERS. (1933, October 10). *The Sydney Morning Herald (NSW : 1842 - 1954)*, p. 9. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article17014175>
- ²¹¹ NEW GUARD (1933, October 3). *Daily Examiner (Grafton, NSW : 1915 - 1954)*, p. 5. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article195413270>
- ²¹² FELLMONGERS' STRIKE ENDED (1933, October 11). *The Armidale Express and New England General Advertiser (NSW : 1856 - 1861; 1863 - 1889; 1891 - 1954)*, p. 8. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article193030004>
- ²¹³ FELLMONGERS' STRIKE (1933, October 12). *Daily Examiner (Grafton, NSW : 1915 - 1954)*, p. 5. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article195414523>
- ²¹⁴ TEXTILE WORKERS (1933, October 4). *Newcastle Morning Herald and Miners' Advocate (NSW : 1876 - 1954)* , p. 7. Retrieved October 12, 2017, from <http://nla.gov.au/nla.news-article136676796>
- ²¹⁵ UPPER HOUSE (1934, September 28). *Newcastle Morning Herald and Miners' Advocate (NSW : 1876 - 1954)*, p. 11. Retrieved March 5, 2018, from <http://nla.gov.au/nla.news-article134808930>
- ²¹⁶ The Australian Wool Market 1840-1900, Alan Barnard, publ. Victoria 1958, pp7-8
- ²¹⁷ EMPLOY THOUSANDS AND RETAIN WEALTH (1935, August 18). *Truth (Sydney, NSW : 1894 - 1954)*, p. 18. Retrieved February 17, 2018, from <http://nla.gov.au/nla.news-article169347587>
- ²¹⁸ Royal Australian Historical Society Collection. first load of wool Bourke to Sydney by motor truck Jan 1927. Used with permission.
- ²¹⁹ FELLMONGERY INDUSTRY. (1935, March 29). *The Muswellbrook Chronicle (NSW : 1898 - 1955)*, p. 2. Retrieved February 10, 2018, from <http://nla.gov.au/nla.news-article107670170>
- ²²⁰ WOOL WORKERS (1935, March 7). *The Sun (Sydney, NSW : 1910 - 1954)*, p. 26 (FINAL EXTRA). Retrieved February 10, 2018, from <http://nla.gov.au/nla.news-article230280461>
- ²²¹ 1935 'OUR WOOL SCOURING OVERSEAS', *The Labor Daily (Sydney, NSW : 1924 - 1938)*, 26 February, p. 6. , viewed 07 Feb 2018, <http://nla.gov.au/nla.news-article236517879>
- ²²² 1000 MEN LOSE JOBS (1939, October 19). *Goulburn Evening Penny Post (NSW : 1881 - 1940)*, p. 3 (Daily). Retrieved February 17, 2018, from <http://nla.gov.au/nla.news-article103163416>
- ²²³ Frederick A. Larcombe, *History of Botany 1788-1970*, publ. Council of the Municipality of Botany, 1970. p.71
- ²²⁴ *Historic Botany*, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938, p. 286
- ²²⁵ NEW MANPOWER LIST (1942, March 14). *The Age (Melbourne, Vic. : 1854 - 1954)*, p. 3. Retrieved January 30, 2018, from <http://nla.gov.au/nla.news-article205280920>
- ²²⁶ Quote from Minister of the Army, Mr Forde, NEW MANPOWER LIST (1942, March 14). *The Age (Melbourne, Vic. : 1854 - 1954)*, p. 3. Retrieved January 30, 2018, from <http://nla.gov.au/nla.news-article205280920>

-
- ²²⁷ Australian War Memorial, Reserved occupations, Second World War. Retrieved 30 January 2018, from, https://www.awm.gov.au/articles/encyclopedia/homefront/reserved_occupations
- ²²⁸ NEW MANPOWER LIST (1942, March 14). *The Age* (Melbourne, Vic. : 1854 - 1954), p. 3. Retrieved January 30, 2018, from <http://nla.gov.au/nla.news-article205280920>
- ²²⁹ RESERVED LISTS (1942, March 14). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 13. Retrieved January 30, 2018, from <http://nla.gov.au/nla.news-article17792455>
- ²³⁰ Floodvale files held by Mascot Library
- ²³¹ Too Big to Fail: Explaining the Timing and Nature of Intervention in the Australian Wool Market, 1916-1991. Simon Ville and David Merrett, *Australian Journal of Politics & History*, Sep 01, 2016; Vol. 62, No. 3, p. 337-352, Retrieved 11 March 2018, from, https://www.researchgate.net/publication/308387909_Too_Big_to_Fail_Explaining_the_Timing_and_Nature_of_Intervention_in_the_Australian_Wool_Market_1916-1991
- ²³² Family Notices (1950, August 21). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 14. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article18171908>
- ²³³ Fred William Hughes Death Certificate # 1950/15264
- ²³⁴ F. W. HUGHES LEFT £83,000 (1950, November 17). *National Advocate* (Bathurst, NSW : 1889 - 1954), p. 3. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article161396805>
- ²³⁵ FAMOUS BREEDER LEFT ESTATE OF £83,852 (1950, November 17). *Daily Advertiser* (Wagga Wagga, NSW : 1911 - 1954), p. 3. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article145587632>
- ²³⁶ Minister To Examine New Company (1951, October 29). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 5. Retrieved October 10, 2017, from <http://nla.gov.au/nla.news-article18236940>
- ²³⁷ INQUIRIES INTO BIG ESTATE (1951, November 7). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 5. Retrieved October 10, 2017, from <http://nla.gov.au/nla.news-article18238217>
- ²³⁸ Man of Millions (1950, September 3). *Truth* (Sydney, NSW : 1894 - 1954), p. 19. Retrieved October 9, 2017, from <http://nla.gov.au/nla.news-article167980241>
- ²³⁹ Frederick A. Larcombe, *History of Botany 1788-1970*, publ. Council of the Municipality of Botany, 1970. pp, 203-205
- ²⁴⁰ F.W.HUGHES ISSUE £1¼mil. at Par (1951, November 17). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 6. Retrieved October 10, 2017, from <http://nla.gov.au/nla.news-article18239837>
- ²⁴¹ F.W. HUGHES MAY AVOID LOSS FOR CURRENT YEAR, *Sydney Morning Herald*, Tuesday, December 02, 1958
- ²⁴² Frederick A. Larcombe, *History of Botany 1788-1970*, publ. Council of the Municipality of Botany, 1970. pp, 203-205
- ²⁴³ Family Business Australia, S.A. Chapter Hall of Fame. Retrieved 16 February 2018 from, <https://web.archive.org/web/20120317075446/http://fbasa-hall-of-fame.com.au/businesses/michell.html>
- ²⁴⁴ F.W. HUGHES MOVE TO SELL COMPANYS CAPITAL, *Sydney Morning Herald*, Thursday, April 02, 1959
- ²⁴⁵ THE WRITING DOWN OF F.W. HUGHES, *Sydney Morning Herald*, Thursday, April 02, 1959
- ²⁴⁶ Report on Archives Held by Industries in Botany, Maie Barrow, 1977. Document held by Mascot Local History Library, Bayside Libraries
- ²⁴⁷ THE DISTRICT AND BAY OF BOTANY. (1864, September 2). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 5. Retrieved February 4, 2018, from <http://nla.gov.au/nla.news-article13112251>
- ²⁴⁸ Mascot Local History Library files, Bayside Council Libraries
- ²⁴⁹ How products are made- gelatin, Retrieved 18 March 2018 from, <http://www.madehow.com/Volume-5/Gelatin.html>
- ²⁵⁰ Botany Council correspondence, series 9, box 22, 1926-1948, held by Bayside Council Libraries.
- ²⁵¹ Residents' complaint 14 November 1940, Health Inspectors reports 25 November 1940 and 18 March 1941 Botany Council correspondence, series 9, box 22, 1926-1948, held by Bayside Council Libraries.
- ²⁵² Health Inspection Report, 28 November 1943, Botany Council correspondence file, Smoke nuisance, soot and emissions, series 9, item 81, box 22 1926-1948.
- ²⁵³ Fine of £100 for Filth (1944, April 19). *The Sun* (Sydney, NSW : 1910 - 1954), p. 3 (LATE FINAL EXTRA). Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article231834597>
- ²⁵⁴ Health Inspectors Report 23 April 1946, Botany Council correspondence, series 9, box 22, 1926-1948, held by Bayside Council Libraries.
- ²⁵⁵ Health Inspectors Report 27 April 1938. Botany Council correspondence, series 9, box 22, 1926-1948, held by Bayside Council Libraries.
- ²⁵⁶ TANNERS' TROUBLES. (1909, September 4). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 18. Retrieved March 20, 2018, from <http://nla.gov.au/nla.news-article15108605>

-
- ²⁵⁷ POLLUTION OF BOTANY BAY. (1902, February 13). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved February 19, 2018, from <http://nla.gov.au/nla.news-article14464271>
- ²⁵⁸ POLLUTION OF BOTANY BAY. (1902, February 18). The Sydney Morning Herald (NSW : 1842 - 1954), p. 3. Retrieved February 19, 2018, from <http://nla.gov.au/nla.news-article14459104>
- ²⁵⁹ POLLUTION OF BOTANY BAY. (1902, February 15). The Sydney Morning Herald (NSW : 1842 - 1954), p. 6. Retrieved February 19, 2018, from <http://nla.gov.au/nla.news-article14453865>
- ²⁶⁰ POLLUTION OF BOTANY BAY. (1902, February 13). The Sydney Morning Herald (NSW : 1842 - 1954), p. 8. Retrieved February 19, 2018, from <http://nla.gov.au/nla.news-article14464271>
- ²⁶¹ POLLUTION OF COOK'S RIVER. (1906, November 20). Evening News (Sydney, NSW : 1869 - 1931), p. 6. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article115679066>
- ²⁶² Frederick A. Larcombe, History of Botany 1788-1970, publ. Council of the Municipality of Botany, 1970. P.200
- ²⁶³ Dictionary of Sydney, Retrieved 8 September 2017, from <https://dictionaryofsydney.org/entry/botany#ref-uuid=18d68a9b-e821-263a-c8c0-e7864a240bd3>
- ²⁶⁴ THE DRAINAGE OF BOTANY. (1900, April 7). The Daily Telegraph (Sydney, NSW : 1883 - 1954), p. 5. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article237153550>
- ²⁶⁵ The Botany Tanneries. (1907, October 11). Evening News (Sydney, NSW : 1869 - 1931), p. 8. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article113899583>
- ²⁶⁶ INSANITARY SUBURBS. (1910, July 29). The Daily Telegraph (Sydney, NSW : 1883 - 1954), p. 9. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article238006447>
- ²⁶⁷ "IT IS POLLUTED" (1929, March 28). The Sun (Sydney, NSW : 1910 - 1954), p. 9. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article222699832>
- ²⁶⁸ BOTANY BAY POLLUTION. (1931, December 4). The Propeller (Hurstville, NSW : 1911 - 1954), p. 4. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article235040764>
- ²⁶⁹ EPIDEMIC DANGER (1931, November 24). The Sun (Sydney, NSW : 1910 - 1954), p. 9 (FINAL EXTRA). Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article224290718>
- ²⁷⁰ STIFLING (1931, November 28). The Sun (Sydney, NSW : 1910 - 1954), p. 6 (LAST RACE HORSES). Retrieved February 21, 2018, from <http://nla.gov.au/nla.news-article224283798>
- ²⁷¹ NO POLLUTION (1932, January 26). The Sydney Morning Herald (NSW : 1842 - 1954), p. 6. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article16836618>
- ²⁷² POLLUTION OF BOTANY BAY. (1939, February 23). The Propeller (Hurstville, NSW : 1911 - 1954), p. 8. Retrieved February 20, 2018, from <http://nla.gov.au/nla.news-article235588344>
- ²⁷³ MEETING CALLS FOR MORATORIUM TO STOP BOTANY BAY POLLUTION (1975, November 5). Tribune (Sydney, NSW : 1939 - 1976), p. 12. Retrieved February 21, 2018, from <http://nla.gov.au/nla.news-article236920614>
- ²⁷⁴ PUBLIC MEETING CALLED TO KEEP BOTANY IN BAY (1975, June 24). Tribune (Sydney, NSW : 1939 - 1976), p. 12. Retrieved February 21, 2018, from <http://nla.gov.au/nla.news-article236922913>
- ²⁷⁵ BOTANY Bay Water Study, Joe Glascott, Sydney Morning Herald, Saturday, January 03, 1976
- ²⁷⁶ BOTANY PETROL LEAK RAISES SAFETY DOUBTS, Sydney Morning Herald, Friday, October 03, 1980
- ²⁷⁷ OLD WATER SUPPLY NOW CONTAINS DEADLY TOXIN, Sydney Morning Herald, Saturday, August 26, 1989
- ²⁷⁸ BORAL FINED \$30,000, Sydney Morning Herald, Thursday, May 30, 1991
- ²⁷⁹ Environmental Planning and Assessment Act 1979 No. 203, Section 1.3 Objects of Act, NSW Government, NSW Legislation, Retrieved 17 April 2018 from, <https://www.legislation.nsw.gov.au/#/view/act/1979/203/part1/sec1.3>
- ²⁸⁰ Ibid. sections 3.6 and 3.4
- ²⁸¹ Botany Local Environmental Plan 1995, NSW Government, NSW Legislation, Retrieved 17 April 2018 from, <https://www.legislation.nsw.gov.au/#/view/EPI/1995/274/part3/cl17>
- ²⁸² Botany Bay Local Environmental Plan 2013, NSW Government, NSW Legislation, Retrieved 17 April 2018 from, <https://legislation.nsw.gov.au/#/view/EPI/2013/313/part2/cl2.1>
- ²⁸³ Advertising (1947, August 9). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 33. Retrieved July 26, 2017, from <http://nla.gov.au/nla.news-article27894745>
- ²⁸⁴ Advertising (1947, August 20). *The Sydney Morning Herald* (NSW : 1842 - 1954), p. 22. Retrieved January 21, 2018, from <http://nla.gov.au/nla.news-article18038455>
- ²⁸⁵ Botany Council Minutes, 14 and 21 February 1963 item 147/148
- ²⁸⁶ REAL ESTATE AUCTION SALES. *Sydney Morning Herald*, Saturday, August 13, 1966
- ²⁸⁷ Historic Botany, ed. James Jarvis and Leo Flack, publ. Council of the Municipality of Botany, 1938, p 374
- ²⁸⁸ T.A. FIELD ESTATES PTY LTD, Sydney Morning Herald, Sunday, October 12, 1986

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- ²⁸⁹ ROUNDUP, the journal of G H Mitchell and Sons, Jan/Feb 1974. Document held by Mascot Local History Library, Bayside Libraries.
- ²⁹⁰ Sydney Telephone Directory, Yellow Pages 1988-2009.
- ²⁹¹ Botany Industries and Employment Opportunities, Rotary Club Botany, 1965-1966. Documents held by Mascot Local History Library, Bayside Libraries.
- ²⁹² Charles Massy, *Breaking the Sheep's Back*, University of Queensland Press, , Brisbane 2011, p77. Primary Industries Minister Doug Anthony, quoted by Massy.
- ²⁹³ Ibid. pp 78-80, 90-94
- ²⁹⁴ NSW Telephone Directory, Sydney Pink Pages 1973-74 pp 1029, 1468.
- ²⁹⁵ NSW Telephone Directory, Commercial and Individual, 1974-75
- ²⁹⁶ NSW Telephone Directory, Yellow Pages 1979, p. 1698
- ²⁹⁷ Charles Massy, *Breaking the Sheep's Back*, University of Queensland Press, , Brisbane 2011, p. 101.
- ²⁹⁸ Ibid. ch. 11
- ²⁹⁹ Ibid. p.189.
- ³⁰⁰ Ibid. p. 108
- ³⁰¹ Ibid. Ch. 20
- ³⁰² WOOL ROW, by Paul Cleary, Sydney Morning Herald, Tuesday, May 22, 1990; Front page
- ³⁰³ WOOL EXPORTERS FEAR NEW LOSSES, by Peter Hughes, Sydney Morning Herald, Thursday, June 07, 1990, p.8
- ³⁰⁴ PULLING THE WOLL OVER YOUR EYES, By Alan Mitchell, Sydney Morning Herald, Thursday 29 November 1990, p. 14
- ³⁰⁵ Charles Massy, *Breaking the Sheep's Back*, University of Queensland Press, Brisbane 2011 Ch. 29
- ³⁰⁶ Ibid. p. 342
- ³⁰⁷ PROMOTION FUNDING VUT TO REDUCE WOOL STOCKPILE DEBT, Sydney Morning Herald, Sunday, June 30, 1991, p.166
- ³⁰⁸ NEW PLAN FLOORS THE WOOL INDUSTRY, by Paul Chamberlin, Sydney Morning Herald, Sydney Morning Herald, Wednesday, May 01, 1991, p.3
- ³⁰⁹ Charles Massy, *Breaking the Sheep's Back*, University of Queensland Press, Brisbane 2011, Ch. 31, p. 306,
- ³¹⁰ Ibid. Massy quotes the Brisbane Courier Mail, 4 February 1991. . Ch. 30, p.343
- ³¹¹ 1985 is the last year that Wool Scourers and Carbonisers are listed in the Sydney Telephone Directory, Yellow Pages.
- ³¹² Email from G.H. Mitchell Archivist to Mascot Library, with list of archival material held by Mitchell Australia, 2002. Held by Mascot Local History Library, Bayside Libraries. Mitchell no longer have an archive or archivist. Their archival documents are now held by the State Library of South Australia.
- ³¹³ Sydney Telephone Directory, Yellow Pages 1988-2009.
- ³¹⁴ Paddock to Ply, Retrieved 16 April 2018, from, <http://paddocktoply.com.au>
- ³¹⁵ Victorian Wool Processors. Retrieved 16 April 2018 from, <http://www.vwp.com.au>
- ³¹⁶ Blackall-Tambo Regional Council, Retrieved 16 April 2018 from, <http://www.blackalltambotourism.com.au/blackall-woolscour>
- ³¹⁷ ABC News, Blackall wool scour last of its kind, 19 May 2014, retrieved 17 April 2018 from, <http://www.abc.net.au/news/rural/2014-05-19/wool-scour/5462132>