# STONE AND METAL THE STORY OF TWO PIONEER BUILDERS

# DAVID LENNOX and DAVID LENNOX SMITH

"Every man is a peece of the Continent"

John Donne Meditation XVII

**MARK OLIVER SMITH** 

#### **DEDICATION**

This short tribute to David Lennox, bridge builder, and my eldest son David Lennox Smith, sheet metalworker and builder, has been written to commemorate my son's fiftieth birthday. My son was named in honour of the colonial bridge builder with the hidden expectation that somehow he would achieve a role in society as useful as his namesake. The 'jury is still out' on that expectation but the signs are promising.

It is not possible to compare apples with oranges. The two men appear to have few traits in common even though their names are almost identical. For a start they plied different trades in different eras and worked in entirely different parts of Australia. The bridge-builder worked in stone while the Territory builder worked in metal. We can say that they were both of Scottish heritage and that they both had skills in planar geometry. However, what unites them more than these traits is the fact that **they were both pioneering builders.** 

It is a sad commentary on Australian society that few tradesmen's names make the Honours List. Tradesmen are rarely the recipients of accolades and are more likely to receive journalistic attention for their mistakes than their achievements.

The Bridge Builder made some mistakes and no doubt the Sheetmetalworker did too! However all tradesmen live in the real world, in the world of utility where exigencies of funds, of equipment and lack of skills in workmen have to be reconciled with deadlines and expectations.

It is not the shortcomings of tradesmen that should receive our attention. It is to their achievements that we should look. Both men played an important role in the development of essential services that most of us take for granted.

It would be a fitting tribute to both these men if we could call them heroes. Such an appellation though, is rarely granted to tradesmen even if their workmanship is of high quality. If these men were heroes it was because of their dutiful struggle against the odds of life. They fought a constant battle against the tyranny of the daily grind. Their legacies are the artefacts of bridges, roads, houses and buildings in daily use. Such warriors may not be heroes but they still deserve our admiration.

Mark Smith

#### PREFACE TO REVISED EDITION

This revised edition of *Stone and Metal* provides an enlarged historical introduction to David Lennox – the worker in stone. This introduction, (now Section 1.) is more focussed on the work of the Surveyor-General's Office. This Office had responsibility for roads and bridges among its many other tasks. I have attempted to lead up to David Lennox's bridge-building activities (Section 2) by highlighting the early work of John Oxley, the third Surveyor General, James Meehan, Dr Charles Throsby and Major Thomas Mitchell the fourth Surveyor-General. Dr Throsby explored unknown territory and his early track-making and his cart road to the south provided Major Mitchell with some valuable clues as to where more practicable routes could be found. It was along Mitchell's new line of road that David Lennox built four of his bridges. As David Lennox's superior, Mitchell looms from the pages of colonial history as a towering figure. Like Oxley, his predecessor, Mitchell, had city and country homes. He built 'Carthona' in Sydney and 'Parkhall' at Douglas Park. He commands the respect of historians for his vision, energy and achievements. His discovery and utilisation of David Lennox added a 'touch of class' to the mundane road-building tasks of the Survey Department.

The second and third sections of this revised edition remain almost as they were in the original except for the numbering. I have made a few minor corrections but I have left the text intact. Once again, I would like to stress that *Stone and Metal* is meant to be a tribute to both the Bridgebuilder in stone, David Lennox, and his namesake, David Lennox Smith, the Metalworker.

M.O.S. January, 2011

#### CONTENTS

#### **SECTION 1**

#### HISTORICAL INTRODUCTION TO SOUTHERN DEVELOPMENT

#### Selected Events Prior to the Arrival of David Lennox in 1832

#### Part 1

#### The Road From Parramatta to the Cow Pastures

Cow Pastures and the Camden Area (1795+) Preservation of Grazing Lands Cabramatta, Bringelly and Minto (1808)

Governor Lachlan Macquarie (1810 - 1821)

The Governor's Early Southern Tours

Macquarie's First Visit to the South (7 November 1810)

Liverpool on the Georges River

Minto Farms

Macquarie's Second Visit to the South (16 November 1810)

Mt Hunter, Stonequarry Creek and Menangle Menangle Park, Mt Annan and Bunbury Curran Formation of District of Airds

Campbelltown (1820)

#### Part 2

#### Surveyor-General John Oxley (1812 - 1828)

Appointment (1 January 1812)

Oxley's Naval Background

Land Grants

Oxley's Shipboard Romance with Charlotte Thorpe

Marriage to Emma Norton (October 1821)

Two Sons - John Norton and Henry Molesworth

Office of Surveyor-General

Oxley's Forays and Explorations

Oxley's Private Pastoral Interests

Oxley and Meehan's Visit to Five Islands Area (November 1816)

Oxley's Visit to Jervis Bay (October 1819)

Oxley's Three Inland Expeditions

Oxley's Death

#### Part 3

### Early Ventures Into the Southern Highlands by John Wilson, John Warby, James Meehan and Hamilton Hume

The Fantasies of Irish Convicts

John Wilson's Two Southern Probes (17980

- Past the Nattai to the Wollondilly River
- 2. Cow Pastures, Picton Lakes, Mt Jellore (Mt Wilson), Mt Pleasant (Mt Ginginbullen), Sutton Forest, Paddy's River, Mt Towrang

John Warby (1767? - 1851)

James Meehan (1774 - 1826)

Meehan's Castle (Macquarie Fields)

Hamilton Hume (1797 - 1826)

Toongabbie to Appin

Thirteen Journeys

Eight Memorable Trips

To Bong Bong with brother John (1814)

To Sutton Forest with Dr Throsby (1817)

To Lake Bathurst with James Meehan (1818)

To Jervis Bay with Oxley and Meehan (1819)

To Yass Plains with George Barbour (1821)

To Shoalhaven Heads with J. Kennedy (1821-22)

To Port Phillip Bay with William Hovell (1824)

To Darling River with Charles Sturt (1829)

#### Part 4

#### **Dr Charles Throsby (1771 - 1828)**

Important Contributions to Southern Development

Scope of Explorations

Summary Table of Grazing Ventures

Newcastle (1804 - 1809)

'Glenfield' (Casula – 1809 - 1828)

Port Kembla (Five Islands 1815)

The 'Throsby Track' (Appin to Bulli 1815)

Sutton Forest (Toombong 1817)

Jervis Bay via Kangaroo Valley (1818)

Bathurst via Taralga (1819)

'Throsby Park' established at Moss Vale (1819)

Lake George discovered (1820)

Gundaroo, Duntroon traversed by C. Throsby-Smith (1821)

Location of Murrumbidgee River by Dr Throsby (1821)

Jervis Bay new route by Three Cornstalks (1822)

Into the Monaro (1828)

The Cart Road (Cow Pastures to Tarlo)

Animal Track to Cart Road

#### Part 5

#### Surveyor-General Mitchell's Protégé

Governor Sir Thomas Macdougall Brisbane (1821 - 1825)

The Australian Agricultural Company

**Towards Self-Government** 

Governor Sir Ralph Darling (1825 - 1831)

Establishment of the Nominee Legislative Council

Four Officials

Three Appointed Citizens

Arrival of Major Thomas Livingstone Mitchell

Death of John Oxley

Appointment of Mitchell as 4th Surveyor-General

Mitchell's clashes with Governor Darling

The Upgrading of Roads and Bridges in New South Wales

Captain Charles Sturt of Mittagong

Sturt and Mitchell

Sturt's Three Expeditions

Governor Sir Richard Bourke (1831 - 1837)

Early Roads and Bridges

The Wiseman's Ferry Road to Maitland

Mitchell's Four Journeys of Exploration

Mitchell's Knighthood and Honorary Degree

Mitchell's Parkhall Estate

Mitchell's Protégé

#### **SECTION 2**

#### DAVID LENNOX, THE BRIDGE BUILDER

## Part 1 Early Life in Scotland (1788 - 1832)

Birth

Wife and Children

Association with Thomas Telford

- (a) Thomas Telford
- (b) Over Bridge, Severn River, Gloucester
- (c) Menai Bridge

Death of Wife

## Part 2 Early Life in New South Wales (1832 - 1844)

Arrival in Sydney (1832)

Superintendent of Bridges Under Surveyor-General Thomas Mitchell

Three Well-known Lennox Bridges

Horseshoe Bridge, Lapstone (1833)

Lansdowne Bridge, Prospect (1835)

Parramatta Bridge (1839)

Other Lennox Constructions Around Sydney

#### Horseshoe Bridge, Lapstone (1833)

The Old Bathurst Road

Horseshoe-Shaped in Plan

Convicts Taught Masonry and Carpentry Skills

Governor Bourke's Admiration

A Smith Family Visit

#### The Lansdowne Bridge Over Prospect Creek (1835)

The Conrad Martens Painting

Location

Morton Herman's Account

Geometry of Design

Lennox's Own Assessment

Lennox's Management Skills

Governor Bourke Lays the Foundation Stone

#### The Parramatta River Bridge (1839)

Parramatta

The Parramatta River

Spanning the Parramatta River

The Design of the Bridge

Appointment of Lennox As District Surveyor to the Parramatta Council

Lennox's Association With Parramatta

#### Part 3

## Lennox's Four Lesser Known Bridges On Mitchell's New Line of Road to the South of Mittagong

Berrima and its Antecedents

Bong Bong (later known as Austermere)

Surveyed in 1821

Mitchell's New Line of Road

The Christ Church of Bong Bong

#### Berrima

Established (1831)

Bypassed by Railway (1867)

Four Lennox Bridges on Mitchell's New Line of Road

Three Legs O'Man (Medway Rivulet)

Wingecarribee River (Berrima)

Black Bob's Creek (Sutton Forest)

Towrang Bridge

Mitchell's Re-Alignment of Throsby's Cart Road

#### Three Legs O'Man Bridge

Throsby's Cart Road

Picton to the Cookbundoon Range and Throsby's Ford

Line of the Cart Road through Bong Bong

Two Defects in the Old Line of Road

Mitchell's Correction

The Bridge Over the Medway Rivulet

#### Wingecarribee Bridge at Berrima

Weston (Burradoo)

Villages of Wingecarribee/Burrado/Bowral

The Wingecarribee River

The Wingecarribee Bridge of David Lennox (1836)

Memorial of Lennox's Bridge (Berrima)

#### **Black Bob's Bridge (Sutton Forest)**

Linda Emery's Conservation Plan (1995)

Mitchell's New Line of Road With Its Three New Bridges

Location of Black Bob's Creek Bridge

**Brief Description** 

Modifications of 1860 and 1896

Design

- Western elevation
- North-eastern abutment

Present-day Double Bridge Replacement

The Towrang Bridge (1839)

## Part 4 Later Life in Victoria and NSW (1844 - 1873)

Superintendent of Bridges, Wharves and Ferries (Port Phillip District)

Princes Bridge (Yarra River)

Fifty-three Victorian Bridges

Retirement

Death

Appendix A – Two Memorials to David Lennox

Lennox Crossing Bridge (Canberra)

Lennox Gardens (Canberra)

#### **SECTION 3**

#### DAVID LENNOX SMITH, METALWORKER

Introduction

Biographical Disclaimer

Your Forebears

Your Grandparents

### Part 1 A Name for An Eldest Son

Family Events Prior to Your Birth

Your Mother

Your Father

Parents' Marriage

Our First Home, 31 New Line Road, Pennant Hills

Our Second Home, 52 Western Road, Parramatta

Your Birth

Your Name

## Part 2 The First Fifty Years (a) Early Childhood

Three Years in Canberra

19 Scott Street, Narrabundah, ACT

4 Dakin Place, Hackett, ACT

An Interlude in Sydney

85 Dennis Street, Lakemba, NSW

48 Drummond Road, Oyster Bay, NSW

Appointment to Deniliquin

328 Sloane Street, Deniliquin, NSW

Return to Canberra (2)

32 MacFarlane Crescent, Chifley, ACT

Appointment to Nowra

86 Worrigee Street, Nowra, NSW

Appointment to Wagga Wagga, NSW

Turkey farm, Kooringal Road, Wagga Wagga, NSW

107 MacLeay Street, Wagga Wagga, NSW

4 Edney Street, Kooringal, NSW

Return to Canberra

122 Pennefather Street, Higgins, ACT

Return to Wagga Wagga, NSW

3 Blamey Street, Turvey Park, Wagga Wagga, NSW

100 Coleman Street, Turvey Park, Wagga Wagga, NSW

Appointment to Darwin, NT

3 Lovegrove Street, Ludmilla, NT

23 Driffield Street, Anula, NT

5 Raffles Road, Grey, Palmerston, NT

#### (b) Beyond School

Introduction
An Apprentice Sheetmetal Worker
The Milk Run

#### **Territory Sheetmetal**

Workshed No. 1

Workshed No. 2

Workshed No. 3

Workshed No. 4

#### Part 3

#### Marriage to Nicole Jones

Children

#### Interests

Scouting

Sailing

Football

**Power Lifting** 

Harry Murray V.C., C.M.G., D.S.O. and Bar, D.C.M., Croix de Guerre

Travel

#### **Appendices**

- 1. Portrait Pedigree of Progenitors
- 2. Portrait Pedigree of Mark Oliver Smith
- 3. Family Logo
- 4. Crest
- 5. Meditation XVII (John Donne)

## SECTION 1 HISTORICAL INTRODUCTION TO SOUTHERN DEVELOPMENT

## Part 1 The Road from Parramatta to the Cow Pastures

#### **Cow Pastures and the Camden Area (1795+)**

Six months after their arrival in July 1788 two bulls and four cows brought from the Cape of Good Hope escaped from their shepherds in Sydney. These cattle were not found until shortly after Governor Hunter's arrival in September 1795. Henry Hacking is credited with their discovery. On 18 November 1795 Hunter, Captain Waterhouse, Dr George Bass, Judge Advocate Collins and some convict servants travelled south from Prospect. After crossing the Nepean River they saw the herd which had increased to 61 cattle. In June 1796 Hunter returned to inspect the cattle. He located them at 34'09", 9 miles from Botany Bay. The area became known colloquially as 'The Cow Pastures'.

#### **Preservation of Grazing Lands**

Although Governor Philip King wanted to preserve the valuable cowpastures grazing land he reluctantly obeyed a directive to grant John Macarthur two 5,000 acre parcels of land in that area. This land grant has strengthened the claim that after Sydney, Parramatta and Windsor, Camden was the fourth approved

settlement on the mainland. In October 1806 Bligh visited the district with Marsden. By then the track from Warby's farm at Prospect was well defined. The track to the Cowpastures led from Prospect at the junction of Chandos Road, Horsley Park, down to the present Camden Way.

#### Sketch of Cowpastures area

#### Cabramatta, Bringelly and Minto (1808)

In September 1808 Foveaux had considered settling the Cowpastures. The Hawkesbury floods in the winter of 1809 gave another reason. Paterson decided to encourage cultivation of the forest lands south-west of Parramatta in the districts of Cabramatta, Bringelly and Minto (Glenfield – Campbelltown).

#### **Governor Lachlan Macquarie** (1810 - 1821)

Governor Lachlan Macquarie commenced his appointment twenty-two years after the settlement of the colony had begun. He held office for twelve years and was very active in attending to the affairs of the expanding colony.



He found the colony "impenetrable beyond 40 miles of Sydney". He encouraged the exploration of the region beyond the settlement. Blaxland, Wentworth and Lawson discovered a route across the Blue Mountains in 1813. Oxley, Meehan, Throsby, Hume and others extended the potentially cultivable/ grazing land from 6,250 square kilometres to 250,000 square kilometres. He extended coastal settlement south to the Illawarra region and north to Port Macquarie.

#### The Governor's Early Southern Tours

The Governor was always anxious to visit the newly discovered areas of his expanding domain. He lost little time in paying a visit to the most accessible of the new farms outside the Parramatta district. In the southerly direction these farms had spread down the Cowpastures Road, from Prospect Hill to the Nepean River at Narellan. A/ Governor Paterson had decided to encourage cultivation of the forest lands south-west of Parramatta in the districts of Cabramatta, Bringelly and Minto.

#### Macquarie's First Visit to the South (7 November 1810)

#### Liverpool on the Georges River

In November 1810, Macquarie set out for the Georges River accompanied by his wife, Captain Antill and James Meehan. They crossed the river by boat arriving first at Mr Moore's house and then at Mr Laycock's.

"And having surveyed the ground and found it in every respect eligible and fit for the purpose, I determined to erect a township on it, and named it Liverpool in honour of the Earl of that title, then the Secretary of State of the Colony." (Liston)

"The acting Surveyor, Mr Meehan, was at the same time directed to mark out the ground for the town, with a square in the centre thereof, for the purpose of having a church hereafter erected within it."



Captain Antill

#### Minto Farms

During the next few days Macquarie's party inspected the farms of:

- Guise (Casula)
- Throsby (Glenfield)
- Meehan (Macquarie Fields)
- Lewin (Mount Arden)
- Brooks (Atkins Denham Court)
- Townson (Varraville, Bunbury Curran Hill)
- Thompson's Farm ('St Andrews').



Glenfield Farm House



Macquarie Fields House

Thompson's and Townson's farms were on the best soils and bounded by a brackish creek called 'Bunbury Curran'.

#### Macquarie's Second Visit to the South (16 November 1810)

Macquarie returned to Parramatta and on 16 November 1810 he set out a second time. This time he drove in carriages. At Prospect he was joined by John Warby as guide and Sergeant Whalan with three troopers.

#### Mt Hunter, Stonequarry Creek and Menangle

They travelled from Prospect along the track through the open forest of Cabramatta until they came to the government hut on the Nepean River. This took three and a half hours. They then proceeded to Mt Hunter and Stonequarry Creek where they found the straying cattle. They met up with Mrs Elizabeth Macarthur and visited the Menangle Farms of Walter Davison.

#### Menangle Park, Mt Annan, Bunbury Curran

Macquarie was anxious to visit St Andrews farm. The owner, Andrew Thompson, had died the month before and had bequeathed one-quarter of his estate to the Governor. The farmhouse was under the care of Joseph Ward and his wife. They supplied the Governor and his party with victuals. The Governor also met Thompson's neighbour, Dr Robert Townson.

#### Macquarie Forms the New District of Airds

After inspecting Bunbury Curran, Macquarie wrote glowingly of 'the finest country I have yet seen in the colony':

"I intend forming this tract of country into a new and separate district for the accommodation of small settlers, and to name it Airds in honour of my good Elizabeth's family." (Carol Liston's *Bicentennial History of Campbelltown*, see p. 10).

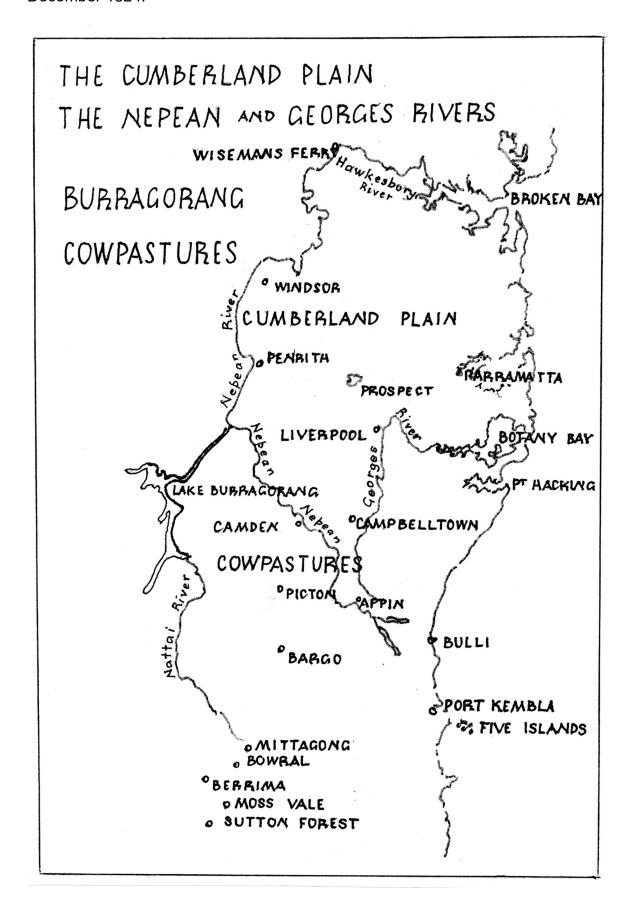
#### Campbelltown (1820)

Although Meehan had reserved a site for a 'Campbelltown' township as early as 1815 (when the road from Liverpool to Appin was surveyed), the formal establishment of the boundaries of Campbelltown were not established until 1 December 1820.

Governor Macquarie, true to his master 'design' for towns, determined the sites for the church, the future school and the cemetery. He named the town after his wife's family – "Campbell" town. In March 1821 Meehan, the Assistant Surveyor-General, was directed to set aside 400 acres for glebe land to support Reverend Reddall's church. It lay to the south of the town between Menangle and Narellan Roads near Mount Annan.

The Anglican Church of St Peter's was the first, and for many years, the only building within the town. Frank Lawless designed and supervised the building of the church. Its Georgian style is similar to St Luke's at Liverpool.

A second church was soon added to St Peter's. This time it was a Roman Catholic chapel to be known as St John's. The new chapel became the second oldest Roman Catholic Chapel in the colony. St Mary's of Sydney had its



#### Part 2 Surveyor-General John Oxley (1812 - 1828)

#### **Appointment**

John Oxley was the third Surveyor-General of New South Wales. Augustus Alt, who had arrived with the First Fleet, was the first to hold the position. The Deputy Surveyor-General to Alt was Charles Grimes. Grimes replaced the aging Alt who was granted a pension. Following his association with key participants in the Rum Rebellion Grimes tendered his resignation in 1808. Grimes' deputy, James Meehan, had been assigned to Grimes in 1800. Meehan was pardoned in 1806 and continued to work in the survey department. Meehan became the Acting Surveyor-General following the resignation of Grimes. There is little doubt that Macquarie would have confirmed Meehan in the substantive position. However, the position had been advertised in England. John Oxley's application was ultimately successful. He was to take up his position effective from 1 January 1812 even though he did not arrive until October 1812.

#### Oxley's Naval Background

John Joseph Molesworth Oxley was born near the little village of Kirkham, close to

Westow in Yorkshire, England, in 1783. He joined the Royal Navy in 1799 as a midshipman. He made his first visit to the colony of New South Wales on 16 October 1802. While in the colony he assisted Lieutenant Charles Robbins in the survey of Western Port in 1804. In 1805 he was promoted to Acting Lieutenant. He sailed in command of the schooner, the *Estramina* to Port Dalrymple in Van Dieman's Land in 1806. He returned to England on the *Buffalo* in 1807 and gained his commission as First Lieutenant.

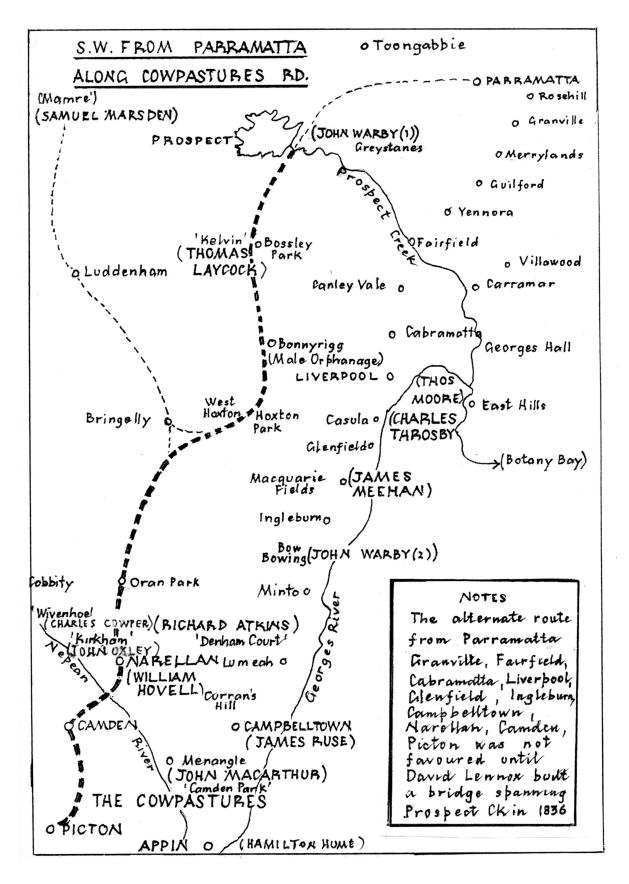


He sailed back to Sydney in 1808 to take up his appointment under Captain John Porteous on *HMS Porpoise*. When Lieutenant-Governor Paterson assumed control he granted 1,000 acres to all officers of the *Porpoise*. In fact, a despatch approving a grant of 600 acres to Oxley on the Nepean River in the Cow Pastures district had already been on Bligh's desk for processing. When Macquarie assumed control in January 1810 he cancelled all land grants made by the interim administration. Fortunately for Oxley, his earlier 600 acre grant was approved before he set sail for England in May 1810. This holding became Oxley's country headquarters and he named it 'Kirkham' after his birthplace. He also had a Sydney home in Macquarie Street.

#### Oxley's Shipboard Romance with Charlotte Thorpe

Oxley sailed back to Sydney in the convict transport, the *Minstrel*, in June 1812 and arrived on 25 October 1812. During this five month period he formed a relationship with **Charlotte Thorpe** who had been sentenced to seven years in the

colony for stealing clothing. She was eighteen years old and 'with child'. Oxley arranged to have her assigned to him. Although she bore him two children



(Jeannette, b. 8 July 1813 and Frances, b. 19 January 1815) he did not breach the social convention by marrying her. On 27 May 1818 Charlotte Thorpe married John Anderson and moved from 'Kirkham' to Sydney. Oxley attended to the rearing and education of his two daughters but they were known as Thorpe not Oxley.

#### Marriage to Emma Norton (October 1821)

Oxley eventually married **Emma Norton** but not before he had an affair with **Elizabeth Marmon** – this liaison resulted in the birth of a third daughter, Louisa Oxley. Oxley and Emma were married on 30 October 1821.

#### Two Sons – John Norton and Henry Molesworth

John and Emma had two children: John and Henry. At the death of Oxley on 26 May 1828 aged 45 years, Emma and her two sons moved from Oxley's debtridden estate ('Kirkham') to live with her brother, Nathaniel, at his property, "Fairlight' at Mulgoa. In 1855 Oxley's sons took up the grant of 5,000 acres Oxley held in the Burradoo district. In 1841 Emma received a land grant of 1,200 acres near Little Hartley next to grants obtained by her brothers.

#### Office of Surveyor-General

John Oxley was a fine sea navigator but he had no specific training as a land surveyor. However, he did have two very experienced assistants in Deputy-Surveyor General, **James Meehan**, and Assistant-Surveyor, **George Evans**. During his entire sixteen years as Surveyor-General he did not personally survey any land grant! On 27 July 1821 Oxley wrote to the Governor recommending the appointment of the services of **William Harper** and **Henry Dangar**. They were both appointed as Assistant Surveyors at six shillings per day. Another Assistant Surveyor, **Robert Hoddle**, was not appointed until 3 September 1824 during the office of Governor Brisbane.

#### Oxley's Investigative Forays and Explorations

Oxley's early years were devoted to marine evaluations of coastal possibilities of development and the consolidation of his own pastoral interest from his 'Kirkham' based property. Following the discovery of a route across the Blue Mountains Oxley was obliged to take a more active involvement in land survey work. Naturally, this placed more focus on roads, bridges, rivers and the search for new opportunities for agriculture and grazing.

#### **Oxley's Private Pastoral Interests**

Oxley attended the quarterly meeting of the Agricultural Society on 2 October 1823 and was pleased to learn that his shepherd, Maurice Roch, had been awarded a prize for having weaned 297 lambs from a flock of 316 ewes. This would have given Oxley great satisfaction. He regarded himself as a member of the 'landed gentry' and he kept the company of the Macarthurs and Marsdens. He had cattle grazing at Five Islands (near Port Kembla) and had formed a business

association with **William Henry Moore** in 1813. Governor Macquarie approved the transfer of 500-600 head of Oxley's cattle from the Cow Pastures to Bargo. These cattle were later transferred from Bargo to Toombong (Moss Vale) where the grass was of better quality. In 1815 Oxley accompanied the governor to the Bathurst district and, with Meehan, had recommended a site for future development.

Although he used assigned convicts and employed John Coghill to manage his affairs at Kirkham, Oxley died leaving considerable debt. He was not very successful as a private pastoralist even though he spent a great deal of time in these pursuits.

### Oxley's Journeys of Exploration With Meehan to the Five Islands District (November 1816)

In 1816 Macquarie sent Oxley and his deputy, James Meehan, to the Illawarra to survey new land grants. Those who were entitled to grants were to meet the surveyors at Dr Charles Throsby's stockman's hut in the Illawarra.

The party left Sydney on 30 November 1816.

'They probably travelled by Kirkham and Appin, before descending the precipitous mountains to the Illawarra coast (or the Five Islands as the area had been known for many years.' (*The Search for the Inland Sea, John Oxley, Explorer, 1783-1818*; Richard Johnson p. 30)

They arrived at Throsby's hut on Monday, 2 December. Oxley and Meehan did the appropriate work to measure the land grants for the five eligible grantees.

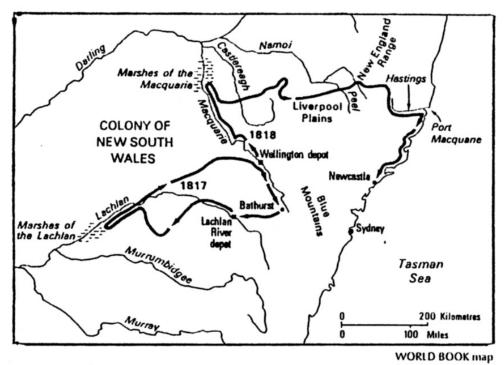
#### Oxley's Visit to Jervis Bay (October 1819)

Oxley visited the south coast with Meehan a second time but on this occasion they travelled separately. While Meehan led an overland party (accompanied by the young bushman, Hamilton Hume), Oxley travelled by the small ship the *Emmeline*. Both parties met on the banks of the Shoalhaven River on 10 October 1819. On 12 October Oxley and Meehan met again at Jervis Bay. They travelled to the northside of the bay and up Currumbene Creek in the boat and examined the country north of the creek by horseback. With the aid of their aboriginal guide, Broughton, they obtained a view of the area from Nowra Hill. Meehan left for the Shoalhaven River to survey its course overland and find his way up the escarpment to the Moss Vale area. He probably retraced Dr Throsby's earlier route through Burrier and up the Meryla Pass. Oxley returned to Jervis Bay and sailed back to Sydney. Oxley reported unfavourably about the Shoalhaven Heads entrance and the quality of soil about the Jervis Bay district. This report contrasted greatly with Dr Throsby's more effusive evaluation.

#### Oxley's Three Inland Expeditions

Oxley made several sea-faring visits along the coastline and three major inland expeditions.

In 1817 Oxley was appointed by Macquarie to further explore the rivers discovered by George Evans beyond Bathurst. Oxley's first expedition in 1817 from Bathurst included George Evans and the botanist, Allan Cunningham. He explored the Lachlan River to its swampy and marshy downstream reaches around Booligal. His second expedition in 1818 traced the Macquarie River from Wellington to its marshy conclusion. He then turned east, crossed the Castlereagh River into the Liverpool Plains and finally followed the Hastings River to its coastal outlet at a place he named Port Macquarie. On a third expedition in 1823 he spent time exploring the Brisbane River and in 1824 he further explored the area about the Brisbane River.



John Oxley explored along the Lachlan River in 1817. In 1818, he led an expedition along the Macquarie River. He named the Liverpool Plains and Port Macquarie.

#### Oxley's Death

Oxley's death in 1828 at the relatively young age of 45 years followed from a life of poor health over a considerable period. He had suffered from scurvy on several occasions both at sea and on inland expeditions. Towards the end of his life **Captain William Dumaresq**, an engineer and inspector of roads and bridges, was recommended for an appointment as Deputy Survey-General to relieve his administrative burden. Perhaps Darling had not informed Oxley that Major Thomas Mitchell was to arrive soon as the newly appointed Deputy Surveyor-General. In fact Mitchell arrived on 27 September 1827. Darling and Oxley greeted Mitchell with great kindness. Oxley's ill health was evident at that time. In January 1828 Oxley requested six months sick leave which was granted by Darling. On 21 May 1828 Major Thomas Mitchell paid his respects to Oxley at Kirkham. Oxley died five days after Mitchell's visit. When news of Oxley's death reached England **George Evans**, one-time an Assistant Surveyor, Explorer and the first Surveyor-General of Van Diemen's Land applied for the Surveyor-

General's position. He did not realise that Major Mitchell had already been appointed Deputy Surveyor-General with the right of succession to the top position.

Oxley was buried in the Devonshire Street Cemetery following the largest funeral procession seen in Sydney. When the cemetery was transferred to Waverley Oxley's tombstone was found in Waverley being used as a doorstep. In 1893 a statue of John Oxley was erected on the Bridge Street side of the New South Wales Lands Department.

## Part 3 Early Ventures Into The Southern Highlands

Journeys Southward by John Wilson, John Warby, James Meehan and Hamilton Hume into Argyle

#### The Fantasies of Irish Convicts

Governor John Hunter was often told of the forlorn plight of Irish convicts who were convinced that a colony of white settlers was living in an edenic paradise some 150-200 miles in the back country. The Governor sought to 'humour' this utopian fantasy and, if possible, even exploit it. To this end he even approved an exploratory expedition consisting of several convicts under guard. The party were to explore beyond the Nepean River at Camden. The party reported back after two days claiming they had sighted many 'whombats', 'cullawines' (koala bears), and 'emews' which they could not catch. Their edenic paradise could only provide 'a rat about the size of a small kitten'.

#### The Convict John Wilson's Two Southern Probes (1798)

John Wilson was also 'a wild Irish convict'. However, he did have some bush-craft skills and knowledge. He had lived among Aborigines and he made two important southern probes into unknown areas.

#### 1. Past the Nattai to the Wollondilly River

Although this journey was only 60 miles he discovered a river 'very near as large as the Hawkesbury River which seemed to run NW to SE.' (see *Earliest Monaro*, p. 76). He returned with a lyre-bird.

This journey may be said to be the first **inland** journey of exploration. It began on 24th January 1798 from Mount Hunter and arrived back at Prospect on 8th February 1798. Although the convicts and soldiers returned after ten days Wilson and his mates (Price and Roe) completed the journey after fifteen days. Wilson covered about 240 miles and managed to live off the land and wore out the boots of his party. He managed to journey to a spot about a mile above the junction of the Nepean and Bargo rivers, then on to the present sites of Bargo Township, Forest or Catherine Hill, Aylmerton, Mittagong and Bowral and the head of Joadja Creek near Bullio. They reached the farthest point on February 1st near the junction of the Wingecarribee and Wollundilly rivers. They arrived back at Prospect via Bong Bong on 8th February. (R.H. Webster – *Currency Lad – The Story of Hamilton Hume And The Explorers*, p. 11).

## 2. The Cowpastures, Picton Lakes, Mt Jellore (Mt Wilson), Mt Pleasant (Mt Ginginbullen) Sutton Forest, Paddy's River, Mt Towrang

This journey began on 9th March 1798, i.e. a month after Wilson returned from his first journey. Wilson was made the chief guide, Price rejoined Wilson as scribe and Collins was the third civilian member. The expedition was under the direction of Henry Hacking, quartermaster of the *Sirius*. After they had re-located the salt deposits (found on the first journey) at the Nepean/Bargo crossing, Hacking returned to Prospect. This left Wilson in

command from the 14th March until the party's return to Prospect on 3rd April 1798. On their journey through the Cowpastures they noted that the original four cows and two bulls had bred up to number 178.

Wilson's journey from Jellore brought him to Mandemar and, in order to miss the gullies of Jackey Jackey's Creek, he turned down the Mandemar Range, coming on the Wingecarribee River about six kilometres west of the present site of Berrima. He ascended Gingenbullen and named it Mount Pleasant. This was west of Sutton Forest. He then crossed Black Bob's Creek and Paddy's River and proceeded south-westerly to Mount Towrang. By 23rd March 1798 they were able to climb Mount Towrang, nine and a half kilometres east of today's Goulburn. Price's report on the prospects of the area did not excite interest and the south-westerly route dropped from consideration.

#### John Warby (1767? - 1851)

John Warby, an ex-convict, had been transported for seven years in 1791. He married fellow convict, Sarah Bently, in 1796 and farmed at Prospect. In 1806 Governor Bligh appointed Warby as Constable of the Cowpastures.

Carol Linton reports that 'much of the knowledge of the district came from his friendship with the Dharwal. As stockman in charge of the wild cattle he explored the Cowpastures, west of The Oaks, Burragorang and south to Bargo.' (see p. 15 *Campbelltown, the Bicentennial History*). Warby was given a grant of 260 acres on the flats west of Bow Bowing Creek, along Badgally Road. Liston reports that 'he did not move his family to Airds until his grant was formalised in 1816'.

Warby named his homestead 'Leumeah House' after it was built in 1820. The house was demolished in 1863. Warby turned his hand to the grazing potential of the southern districts. His squatting station at Gundagai was for many years the furthest point of European settlement. He died at Campbelltown in 1851, aged 84, and his wife, Sarah, died in 1869. Some of their fourteen children remained in Campbelltown while others followed the southern migratory pattern.

#### James Meehan (1774-1826)

James Meehan was transported to New South Wales because of his part in the Irish Rebellion of 1798. He arrived in 1800 and was assigned to Acting Surveyor-General, Charles Grimes. He eventually took Grimes' position in 1808. When John Oxley was appointed Surveyor-General in 1812, Meehan was made Deputy Surveyor-General from 1812-1821. Between the years 1803-1820 Meehan engaged in extensive field work and sometimes accompanied Governor Macquarie on his inspections. In 1810 Macquarie directed Meehan to mark out the ground for a town at Liverpool. Meehan also regularised the design of the ramshackle village of Hobart in 1811. Again, at Macquarie's instruction, he reserved a site for Campbelltown township in 1815, even though the boundaries for the town were not established until 1st December 1820. Meehan travelled with both Hume and Throsby to Lake Bathurst and the Goulburn Plains. He also travelled with Oxley and Hume to the Illawarra region. Later he travelled west from Moss Vale, crossing the Lachlan and Macquarie Rivers.

#### 'Meehan's Castle' (Macquarie Fields)

In July 1809 Meehan pegged his own grant of 110 acres in the Bunbury Curran. He was also granted 110 acres by Paterson one month later in the early Campbelltown grants. He made his home on his grant at Macquarie Fields from 1811. His brick house was known as 'Meehan's Castle'. Meehan died at Macquarie Fields on 21st April 1826 aged 52 years. His son, Thomas, was forced to sell the estate in 1831.



Meehan's Castle

#### Hamilton Hume (1797-1873)

#### Toongabbie to Appin

Hamilton Hume was born at Toongabbie in 1797. His father, Andrew, had been appointed as Superintendent of Livestock at the Toongabbie Government Farm in 1789 and had married Elizabeth Kennedy in 1796. After a period of unsatisfactory employment Andrew was given a 100 acre grant from Governor Macquarie. He took up his grant at Appin in November 1812 when his son, Hamilton, was fifteen years old. Mrs Hume's relatives, Elizabeth Broughton and John Kennedy, also lived in this distant farming area.



#### **Thirteen Journeys**

Young Hamilton Hume made no less than thirteen journeys between 1814 and 1821. His contribution to the drive for southward expansion is almost incalculable. Sometimes he was in the company of much older men and he

probably received more credit than his due. He accompanied Dep. Surveyor Meehan, Dr Charles Throsby, John Oxley, Lt. Johnson, Captain William Hovell and Charles Sturt. Notwithstanding his lack of seniority, his bushcraft and his sound relationships with Aborigines were great assets to add to his courage, endurance and commitment to exploration.

A summary list of eight of Hume's journeys is displayed on an information board in the Museum at Cooma Cottage, Hume's Yass homestead. Hume died on 19th April 1873.

#### **Eight Important Hume Trips**

Year		Comment
1.	1814	Hamilton and his brother, John Kennedy Hume, and an Aboriginal guide, Duall, of the Dharawal tribe, discovered good grazing land beyond the Bargo Brush to Bong Bong and Berrimah. Hume made two further trips to Bong Bong.
2.	1817 (Aug)	Hamilton Hume's sister, Isobel, married George Barbour who was a son of Dr Charles Throsby's wife, Jane. Thus when Throsby asked Hamilton to accompany him he was asking a relative. With Throsby, Hume explored land to the west of Sutton Forest.
3.	1818 (March)	Hamilton Hume joined James Meehan in the Meehan and Throsby journey from The Cowpastures through Moss Vale to Bundanoon Creek. Meehan's group discovered Lake Bathurst and the Goulburn Plains.
4.	1819	With James Meehan and John Oxley, Hamilton Hume explored as far as Jervis Bay.
5.	1821	Accompanied by his new brother-in-law, George Barbour (Charles Throsby's stepson) and an Appin neighbour, William Broughton, Hamilton Hume journeyed across the Goulburn Plains and discovered the virtually treeless Yass Plains.
6.	1821 (Nov) to 1822 (Jan)	In November 1821 Hume and Mr J. Kennedy with 'Duall' and 'Cowpasture Jack' went from Lake Bathurst across to the coast and the Shoalhaven River. (Hume returned in January 1822 with merchant Alexander Berry to select Berry's Coolangatta estate).
7.	1824	The Hume and Hovell expedition started from Appin on 2nd October 1824, when Hume set out from his home 'Humewood' in Appin. He was joined by Hovell from Narellan and they made their way to Hamilton's brother's property (John Kennedy Hume) near present day Gunning. One commentator has described this trip:  'The worst equipped, poorest planned major expedition in
		Australia's history with everything apparently against its prospects of success.'
		The journey to Port Phillip Bay and return proved a journey 'of bitter success and mutual self-destruction; their joint achievement over-shadowed by a life-long quarrel over who was leader'.
8.	1829	Hume probably accompanied Surveyor-General Mitchell on surveys of the Great South Road. In 1829 he was second-incommand to Charles Sturt on a four-month expedition which discovered the Darling River. He declined Sturt's invitation to go on a second expedition to journey to the mouth of the Murray River.

## Part 4 Dr Charles Throsby (1771 – 1828)

#### **Important Contribution to Southern Development**

Dr Charles Throsby arrived in the colony in 1802. He is a lesser known but



notable Australian Pioneer. He died tragically in 1828 by his own hand. This was not before he made some very valuable contributions as a Pastoralist, Explorer, Roadbuilder and Magistrate. His years of endeavour spanned the offices of Governors King, Bligh (Johnson Foveaux, Paterson), Macquarie, Brisbane and Darling. Although he died before Lennox's arrival in 1832 he played an important role in southern development and road building before Mitchell defined the Old Southern Road.

#### Scope of Explorations

As a Pastoralist, Dr Throsby was driven by the desire to find new grazing opportunities for his own sheep and cattle. The following summary of grazing and exploratory probes is enough to demonstrate that in pursuing his own interest he was a benefactor to the whole pastoral industry.

#### **Summary of Throsby's Grazing Ventures**

Year	Comments
1802 - 1809 (Newcastle)	As Surgeon and A/ Commandant of the convict settlement at Coal River Throsby imported 400 sheep and 30 cattle at his own expense.
1809 - 1928 (Casula) 1815 (Port Kembla District)	Established 'Glenfield' at a grazing property and for 5 or 6 years managed the grazing interests of Sir John Jamison. In 1815 Throsby's servant, Joe Wild, was appointed Constable of Five Islands to manage Throsby's grazing interests.
1815 Building of the 'Throsby Track' to Illawarra grazing lands	Throsby blazed a 'road' known as the 'Throsby Track' from Appin down the escarpment to Bulli. It was rediscovered by Peter Mooney in 2006. It began a little south of Bulli Pass.
1817 Finding good grazing at Sutton Forest	Throsby enlisted the aid of Hamilton Hume to guide him to good grazing at Toombong (Sutton Forest).
1818 Jervis Bay via Kangaroo Valley	Throsby, Wild and Grimes with two Aboriginal guides – Bundell and Broughton – found their way from Carne (near Bungonia), down the Meryla Pass, Yarrungah Creek, Kangaroo Valley, Burrier, Myola, Jervis Bay.
1819 Discovery of an alternate route to Bathurst	Throsby and his team (Wild, Wait and John Rowley) and Cookoogong and two Gundungurra men (Duall and Bian) travelled from the Cow Pastures, Moss Vale district, west through the Cookundoon Range near Tarlo, Myrtleville, Taralga, Burrah, Burrah Lake, Bummaroo Ford across the Abercrombie River to Porter's Retreat, Black Springs, Mayfield to Apsley (commonly known as The Lagoon) where Lawson's hut was built.
1819 Stocking 'Throsby Park'	Throsby stocked his second property (granted by Macquarie) at Moss Vale.

Year	Comments
1820 Discovery of Lake George	While accompanying Governor Macquarie for a rendezvous with Bigge at Lake Bathurst Throsby scouted around and discovered Lake George.
8 December 1820 First non-aboriginal to traverse ACT (Duntroon area)	Charles Throsby-Smith, a nephew of Dr Charles Throsby, traversed the site of Canberra attempting to find the Murrumbidgee River. This was at the direction of Dr Throsby.
30 March 1821 Murrumbidgee discovered	Dr Throsby became the first non-aboriginal to discover the Murrumbidgee River at Pine Island.
10 February 1822 Alternative land route to Jervis Bay	Under the direction of Dr Throsby the 'Three Cornstalks': William Kearns, Captain Marsh and James Packer found an alternative route to Jervis Bay. They actually only proceeded as far as Monga.
7 June 1823 Into the Monaro	Dr Throsby's faithful servant, Joe Wild, John Mark Currie and Brigade Major Ovens travelled through Isabella Plains into the Monaro. They had successfully gained greater knowledge of good grazing land.

#### The Cart Road

Dr Throsby was responsible for building the 'Throsby Track' from Appin to Bulli and the 'Cart Road' from the Cow Pastures (Picton) through Bargo, Mittagong, Bong Bong, Sutton Forest, Canyonleigh, Arthursleigh, Greenwich Park, Tarlo to Throsby's Ford. Portions of this road became incorporated into Mitchell's New Line of Road or the Great Southern Road. (See also p. 45)

#### From Animal Track to Cart Road

The progression from Animal Track to Cart Road usually incorporates a number of stages.

- Animal Tracks do not normally go in straight lines nor do they follow contours. Animals search for food and water and they leave evidence of their foraging.
- Hunting Trails are developed by natives in tracking animals or for gathering food.
- Herding Tracks are used by shepherds or cattle rustlers.
- The 'Throsby Track' down the Bulli escarpment no doubt followed a hunting trail known by aborigines. Governor Macquarie found it almost impassable.
- **'O'Briens Road'** was a more serviceable road. When Governor Macquarie ascended the Bulli escarpment he termed it a 'good bridle road'.
- A 'Good Bridle Road'. A good bridle road was slightly inferior to a 'Cart Road'.
- A Cart Road provided a carriage way for a bullock dray or horse drawn carriage.

## Part 5 Events Prior To The Arrival Of David Lennox

#### Governor Thomas Macdougall Brisbane (1821 - 1825)

Macquarie was replaced by an entirely different person to himself. Thomas Macdougall Brisbane was in his late forties when he assumed command. He was 'urbane and detached, scarcely interested in the details of daily administration'. He could indulge his interest in astronomy secure in the knowledge that Macquarie had already built an extensive network of roads in Sydney and its outlying towns. Brisbane desired to entrust the government instrumentalities and undertakings to private enterprise.



#### The Australian Agricultural Company

Under Governor Brisbane the dream of John Macarthur's wool consortium took place. The Australian Agricultural Company was established. Although this large-scale commercial venture was intended to be a pastoral enterprise it also acquired rights to mine coal. These rights were granted on condition that the company underwrite the upkeep of 1,400 convicts. These costs were estimated to be 30,000 pounds annually. The Sydney management committee of the Australian Agricultural Company included John Macarthur's son, James, his nephew, Hannibal, and his son-in-law, Dr James Bowman. Among its distinguished commissioners were Philip Parker King, Sir William Edward Parry and Henry Dangar.

#### **Towards Self-Government**

The first tentative step in the direction of self-government for NSW was made in 1823 when the British Government passed the New South Wales Judicature Act. This Act of Parliament (4 Geo. IV, Cap 96) recognised NSW as a British colony and not merely 'the destination of certain individuals sentenced to transportation'. The Act set up a nominee legislative council with some citizen representation. It fell to Brisbane's successor to implement the provisions of the NSW Judicature Act. Brisbane was recalled in 1825.

#### Governor Sir Ralph Darling (1825 - 1831)

The amiable liberal Governor Brisbane was replaced by a man of much sterner command. Sir Ralph Darling, 50, had risen to be the Deputy Adjutant-General of the British Army. He assumed office in December 1825. He had the reputation of



a zealous and efficient administrator. He quickly reversed the laxity and indiscipline that had infected the public service under Brisbane. He introduced a crippling stamp duty to stifle the press. In general, Darling's period of governorship was stormy and socially disruptive. During his office explorations by John Oxlev continued and Charles Sturt named a river in his honour. Darling had the benefit of working with a second-in-command, Lt. Colonel William Stewart, who was a friend and comrade-in-arms. Stewart was sworn in as Lt. Governor and also as a member of the new Legislative Council. The Colonial Secretary, Frederick Goulburn, was replaced by Alexander McLeay. McLeay was a high ranking public servant from London and a loyal Darling supporter.

He was related to the Governor through the marriage of his daughter Christina to William Dumaresq, Sir Ralph's brother-in-law.

#### Establishment of the Nominee Legislative Council

The first Legislative Council was a purely advisory body. It could propose legislation but the Governor retained executive power. It consisted of four officials and three appointed citizens:

#### Four Officials

- The Lieutenant Governor (Lt. Col. William Stewart)
- The Chief Justice (Francis Forbes)
- The Archdeacon (Thomas Hobbes-Scott) and
- The Colonial Secretary (Alexander McLeay)

#### and

#### Three Appointed Citizens who were

- Robert Campbell
- John Macarthur and
- Dr Charles Throsby.

All laws had to receive the assurance of the Chief Justice of New South Wales that the proposed law was consistent with the laws of England. In 1829 the

number of Council members was increased to fifteen and later on to thirty-six, of whom twenty-four were elected on a restricted franchise.

#### **Arrival of Major Thomas Mitchell**

Major Thomas Livingstone Mitchell arrived in Sydney on the afternoon of 27 September 1827 on the *Prince Regent*. Although Oxley was in poor health he made the trip to Sydney from Kirkham and joined Governor Darling the next evening to afford his new deputy an official welcome. At that time Sydney had a population of 10,000 inhabitants. Mitchell did not know that Oxley would die within nine months or that Governor Darling would prove to be very meddlesome in the day-to-day operations of the Survey Department.



#### Death of the 3rd Surveyor-General John Oxley

Mitchell visited Oxley at Kirkham five days before Oxley died. Oxley's body was transported to Sydney. The funeral service was held in St James Church where the Reverend Richard Hill officiated. The procession was led by the Reverends Samuel Marsden, William Cowper and Thomas Hassall. John Oxley's family and friends followed the hearse led by James Norton as chief mourner. Emma (Oxley's wife) and Isabella (Oxley's sister) and his children followed. After a host of naval and military representatives, judicial officers and magistrates came a long line of carriages. His Excellency Governor Ralph Darling led this line. It was the largest funeral procession ever seen in Sydney.

#### Appointment of Mitchell as the 4th Surveyor-General

Two days after Oxley's death Major Thomas Mitchell was appointed as the new Surveyor-General. Mitchell had already recommended a new line of road to the one built by Cox between Mount York and Bathurst. The work on the replacement road had been undertaken under the direction of Major Edmund Lockyer of the Department of Main Roads. However Lockyer's correction was not the same as that proposed by Mitchell. The Governor solved the dispute by handing over Lockyer's responsibilities to Mitchell. Mitchell then became the Surveyor-General and the Chief Commissioner for Crown Lands.

#### Mitchell Clashes with Governor Darling

Following Mitchell's elevation the conflict between Mitchell and the Governor arose over several matters. Theo Barker argues that the disputes between them were clashes of misperceptions of roles rather than arguments of substance. Both had been military men but whereas Mitchell had left the services the Governor had not. Darling expected unquestioning obedience and respect. Mitchell was now a professional surveyor who was a dedicated civil servant who also wanted respect. The Governor accused Mitchell of insubordination while Mitchell accused the Governor of micro-managing and meddling.

#### The Upgrading of Roads and Bridges in New South Wales

During the time of territorial expansion the importance of roads and bridges assumed a greater urgency. The new settlement of The Lagoon near Bathurst could be easily isolated by flooding creeks. Also roads could easily be made impassable by excessive rain and many drownings were reported. Fifteen people had been drowned in the Bathurst district in 1831 and the mail deliveries were often delayed. In the 'New Country' to the south of Camden a working party to construct a 'cart road' was given to Dr Charles Throsby. It was along the Great Western Road that David Lennox built his first bridge for Surveyor-General Mitchell. This was during the governorship of Sir Richard Bourke. When Mitchell re-aligned Throsby's cart road to the south of Sydney he called on David Lennox to provide the new bridges.

#### **Captain Charles Sturt at Mittagong**

Captain Charles Sturt did not have a great deal to do with the south of Sydney in his working life. He had a period working as a grazier on his property on the Old South Road in lower Mittagong after he returned from a visit to England. While in England he had his journals published and he married.



#### Sturt and Mitchell

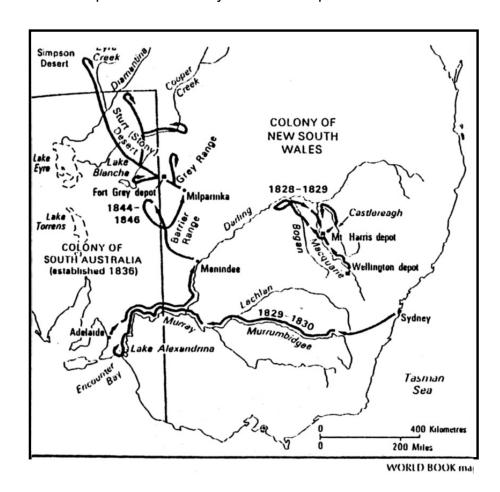
Sturt provides a great contrast to Mitchell. While Mitchell discovered good grazing land Sturt spent a lot of time in desolate areas. Whereas Mitchell was toughminded Sturt was sensitive. They differed publicly on the destination of westward-flowing rivers and Sturt had a 'sovereign contempt' for Mitchell's disbelief in an inland sea.

#### Sturt's Three Expeditions

Charles Sturt chose Hamilton Hume as his 2 IC to trace the course of the Macquarie River in 1828 but was as unsuccessful as Oxley had been in this specific aim. He did, however, trace the Castlereagh River to its junction with a 'noble river' which he named the Darling in honour of the Governor. Sturt's second expedition of 1829 traced the course of the Murrumbidgee River beyond where it joined the Lachlan, the Hume (Murray) and Darling Rivers. He followed

the river to its outlet which he named Lake Alexandrina in honour of the Princess who later became Queen Victoria.

Sturt had a firm conviction that he would find a great inland sea in the heart of Australia and this spurred him on to yet another expedition.



Charles Sturt explored the rivers and deserts of southern Australia, looking for an inland sea. In the 1840s, Sturt was the first explorer to enter the Simpson Desert.

Sturt's third expedition in 1844-46 was from Adelaide and via Menindee. He explored the inhospitable area of the Barrier Range, Milparinka, the Sturt Stony Desert and the Simpson Desert.

#### Governor Sir Richard Bourke (1831 – 1837)

Governor Bourke assumed office in 1831 and held office until October 1837.

Although Bourke had been a Major General he did not possess the martinet style of his predecessor. At a time when the conservatism of England was giving way to a more progressive liberalism Bourke brought a reformist zeal to his governorship. Soon after his arrival he was able to extend the jury system and reduce the magistrate's power to punish convicts. He

freed non-violent convicts of their shackles and his humanity made him sympathetic to the abolitionist cause. Governor Bourke also fought a running battle against the conservative land-owning class who wished to deny freehold rights to ex-convicts. The period of Bourke's administration was characterised by expanding horizons in New South Wales, Tasmania, Western Australia and South Australia. The period also attracted greater numbers of private investors who wanted to exploit the pastoral opportunities discovered by explorers. Bourke's administration continued until December 1837 when he resigned and left the colony. Bourke's successors were Sir George Gipps (February 1838 to July 1846); Sir Charles Fitzroy (August 1846 to 1854); Sir William Denison (January 1855 to January 1861); Sir John Young (January 1861 to December 1867).

#### Early Roads and Bridges

Today's principal highways often bear the names of explorers – Hume, Sturt, Mitchell, Oxley – mainly because they follow approximately the routes of early explorers. Roads have to cross rivers and creeks and they do so by fords or bridges. Sometimes it is necessary to utilise boats or ferries to effect a river crossing. In many cases punts were utilised before bridges were built. Fortunately for Australia, many advances in road making and bridge-building had taken place in eighteenth century England through the resourcefulness of Telford and Macadam. Early Australian bridges were of timber construction and easily damaged by floods.

#### The Wiseman's Ferry Road to Maitland (Putty Road)

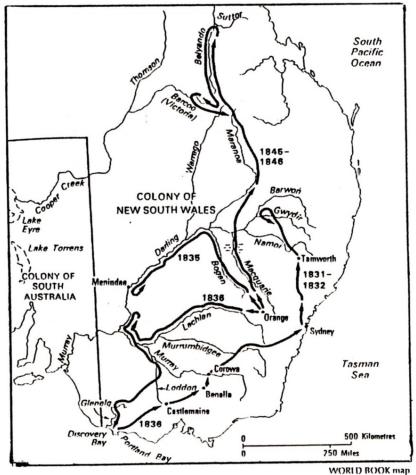
The Coal River settlement at Newcastle was for a long while inaccessible by land. One of Surveyor-General Mitchell's first tasks was to up-grade the existing bridle track to a cart road. This work was completed with the aid of convict gangs in 1829. While it provided access both ways it was the Sydney settlement that benefitted the most commercially. However with the advent of the first steamship to ply Australian waters – *Sophia Jane* – Major Mitchell's first achievement was virtually in disuse by 1855. Indeed, Mitchell's plans and designs for a complete overhaul of roads in the colony was at times agonisingly slow in being implemented. For many years the Great South Road was known as a 'horror' stretch of road.

#### Mitchell's Four Journeys of Exploration

Major Thomas Mitchell, Surveyor-General of New South Wales led four expeditions (1831, 1835, 1836 and 1845). In these expeditions he explored the Namoi and Gwydir Rivers; the Bogan and Darling Rivers; the Lachlan, Loddon and Glenelg Rivers and returned to Sydney via the sites now known as Castlemaine and Benalla. He crossed the Hume River near Corowa and followed Hume's track to Sydney. This track is now known as the Hume Highway. Mitchell's fourth expedition was a highly ambitious attempt to find a route to the Gulf of Carpentaria. He was unsuccessful but, in this year-long expedition, Mitchell did explore a great deal of inland Queensland along the Maranoa, Barcoo and Balyando Rivers.

#### Mitchell's Knighthood and Honorary Degree

Following his third expedition and his glowing reports about 'Australia Felix' in south-western Victoria Mitchell sailed back to England in 1837. He published his report with his own sketches in 'Three Expeditions into the Interior of Eastern



Mitchell led four expeditions in New South Wales in the 1830s and 1840s. He explored the Darling River system and tried to go overland to the Gulf of Carpentaria.

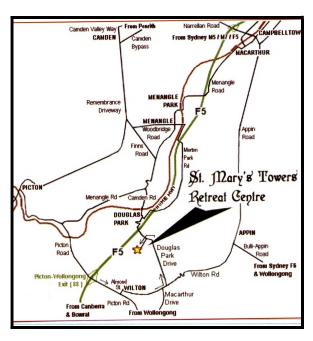
Australia' in 1838. For his work he was honoured with a knighthood and an honorary degree. Mitchell returned to Sydney in 1841.

#### Mitchell's Parkhall Estate

Mitchell had been 'granted 2,560 acres at St Vincent but after surveying the County of Camden he asked for his grant to be exchanged for a similar size grant at 'a parish un-named of East Bargo. Subsequently it was listed as Portion 2, Parish of Wilton, as authorised on 7th May, 1831. So pleased was Mitchell that he quickly purchased 1,250 adjacent acres of Crown Land and a further 750 acres privately. On 16th April 1842, a proud Mitchell laid the foundation stone of his 'Parkhall' estate'. It was named to honour the memory of his father's home in Scotland. Since it was built its name has been changed to 'Nepean Towers' and

currently it is a retreat centre owned by the Missionaries of the Sacred Heart and is known as 'St Mary's Towers' (415 Douglas Park Drive, Douglas Park, NSW). (See Brochure by Missionaries of the Sacred Heart).





Sir Thomas Mitchell's country residence. The Chapel, Cloisters and square tower were added in 1860.

#### Mitchell's Protégé

Morton Herman reflects on Mitchell's road-building activity:

'As Mitchell's roads increased and multiplied, the need for heavy flood-proof bridges became acute, and since it was the golden era of the 1830s there was naturally a man available for the job, the perspicacity of Mitchell soon bringing him from obscurity.

(See The Early Australian Architects and the Work, p. 157)

The man who became known as Australia's first bridge builder was a protégé of Mitchell. His name was David Lennox and he is the subject of Section 2.

## SECTION 2 DAVID LENNOX THE BRIDGE BUILDER

#### Part 1 Early Life in Scotland (1788 - 1832)

#### **Birth**

David Lennox was born in 1788 at Ayr, in Scotland. This was the same year that Governor Arthur Phillip landed the First Fleet of convict settlers at Sydney Cove. The British government had planned to make a colony at Botany Bay but Phillip thought it would be better to find a more sheltered harbour with better soil and more available water. Lennox did not arrive until 1832 when the settlement was 44 years old. This was at a time when Sir Richard Bourke had taken control of the colony from Sir Ralph Darling. Lennox himself was at that time a widower.



David Lennox

#### Wife and Children

Lennox's wife died in 1828 leaving him with two daughters, Mary and Jane. He enlisted the aid of his sister who later married James Dalziel. In 1836 the Dalziels and Lennox's two daughters migrated to the new colony. They arrived in Sydney in *The Wave* in January 1837. The eldest daughter, Mary, married George Urquhart but died in 1841. Jane Lennox married Charles William Rowling. When David Lennox retired, Jane (now a widow), shared his home at 4 Campbell Street, Parramatta (see Map).

#### Association with Thomas Telford – The Colossus of Roads

#### Thomas Telford (1757 - 1834)

Thomas Telford has been called the 'greatest architect' of his day and age. Today he would be regarded as an Engineer. Although he was self-taught and came from humble origins he rose to become a civil engineer of great eminence. Some of his achievements include:

- The Caledonian Canal and the Ellesmere Canal
- One thousand miles of road built
- One thousand bridges built
- Forty harbours
- Gotha Canal
- Katherine's Docks in London
- Menai Bridge, and
- The spectacular Pontcysyllte Aqueduct over the River Dee in the Vale of Llangollen.

In this project, Telford used a new method of construction consisting of troughs made from cast iron plates and fixed in masonry. The aqueduct consists of nineteen arches, each with a span of forty-five feet. The aqueduct rises 126 feet above the valley and is 1000 feet long.

David Lennox had the good fortune to work for Thomas Telford on the Over Bridge and the Menai Bridge.



Thomas Telford

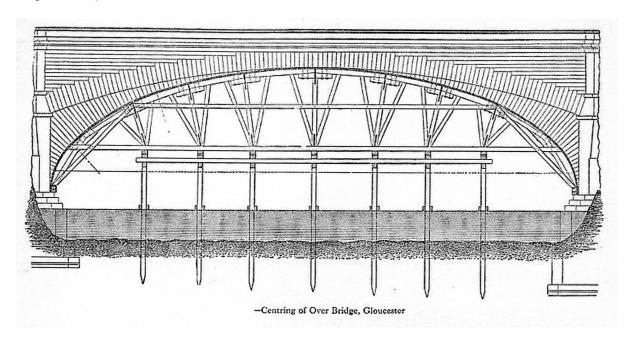
#### The Over Bridge (1825 - 1828)

The Over Bridge spans the Severn River at Gloucester. The bridge that Thomas Telford built between 1825 and 1828 is the oldest large-span masonry road bridge in England. Although it had a fault it remained in use until 1974. Today it is only used for pedestrian traffic and is usually called the Westgate Bridge because Westgate Street runs across the bridge.

Telford based his design on the bridge over the River Seine at Neuilly, near Paris. This design was drawn by the French architect Jean Rudolphe Perronet. The bridge is 150 feet long (46 m) and links Over to Olney. Oddly enough the bridge that David Lennox built over the Yarra River, the Princes Bridge, was also a single-span 150 foot bridge.

The fault in the Over Bridge is the slight dip in the middle. This occurred when the temporary frame used in construction was removed. The crown of the arch sank by two inches and subsided another eight inches due to the settlement of the arch foundations.

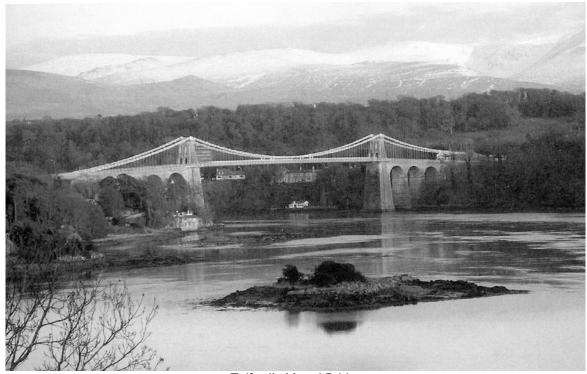
The Over Bridge combines an elliptical profile over most of the soffit with a segmental profile at its faces. This feature is known as a **corne de vache**.



#### The Menai Bridge (1819 - 1826)

'During his later years Telford was responsible for rebuilding sections of the London to Holyhead road'. The road work was supervised by his assistant John MacNeill while David Lennox would have worked as a stonemason on the bridge's approaching arch supports. The Menai Suspension Bridge is in North Wales on the island of Anglesey. The bridge spans the Menai Strait and presented a formidable challenge to Telford. It took seven years to be built and it spanned 580 feet (180 m). 'It was the longest suspension bridge of its time and was considered one of the greatest examples of iron works ever built.' 'Telford used individually

linked 9.5 feet (2.9 m) iron eye bars for the cables.' 'Telford also worked on the North Wales coast road between Chester and Bangor, including another major suspension bridge at Conwy, opened the same year as its Menai counterpart.' (Wikipedia).



Telford's Menai Bridge

#### **Death of Lennox's Wife**

Lennox's wife died at the time the Over Bridge was being completed in 1828. It was a period when there was an over-supply of skilled labour in Great Britain. The colony of distant New South Wales held out the promise of greater opportunity for a man skilled in working stone.

# Part 2 Early Life in New South Wales (1832 - 1844)

#### Arrival in Sydney (1832)

Lennox arrived in Sydney as an unassisted emigrant on the *Florentia* in August 1832. He was first employed on day wages cutting the coping stone for the hospital wall in Macquarie Street. Lennox's workmanship so impressed the Surveyor-General (Sir) Thomas Mitchell that he recommended Lennox to the Governor (Sir) Richard Bourke for employment in the Roads Department on a permanent basis. He received an appointment on 1 October 1832 at a salary of 120 pounds per annum without any forage for a horse. He was appointed as Superintendent of Bridges in June 1833.

#### Superintendent of Bridges Under Surveyor General Thomas Mitchell

Once Mitchell had been relieved of the interfering meddling of the irascible Governor Darling, he was anxious to show Governor Bourke what his new bridge-builder could do.

#### **Three Well-known Lennox Bridges**

The first of Lennox's bridges is still standing and greatly pleased the Surveyor-General and the Governor. It is known as The Horseshoe Bridge, Lapstone. The second was Lennox's Lansdowne Bridge over Prospect Creek. The third of his well-known bridges was the Parramatta Bridge over the Parramatta River.

- Horseshoe Bridge, Lapstone (1833)
- Lansdowne Bridge, Prospect (1835)
- Parramatta Bridge (1838)

#### **Other Lennox Constructions Around Sydney**

While Lennox's name is usually related to bridge building, he also had to attend to other matters such as the Queen's Wharf at Parramatta and the Georges River Dam at Liverpool. Apart from the bridges referred to in this account Lennox prepared designs for another fourteen others which were never built in New South Wales.

#### Horseshoe Bridge, Lapstone

Mitchell's plans for the improvement of the Great Roads of the colony could only find their fulfilment when they were combined with the technical skill of a bridge builder. David Lennox was destined to supply this requirement.

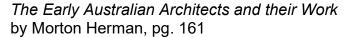
#### The Old Bathurst Road

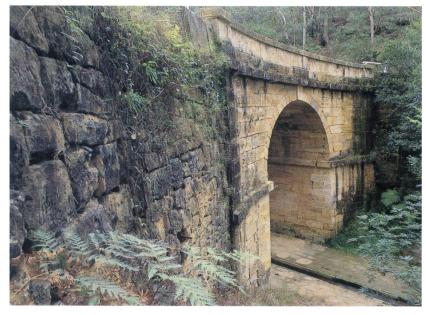
The Old Bathurst Road had a particularly nasty section as it climbed up the eastern slopes of the Blue Mountains from the Emu Plains to Blaxland. This section on Lapstone Hill was re-routed by Mitchell with better gradients. However it was necessary to bridge a deep gully, known as Knapsack Gully and to U-turn the road immediately after crossing the bridge. Lennox rose to the challenge of this unusual assignment and designed his first Australian bridge. This bridge was used until 1963 even though the main road was moved in 1926 to a better gradient by way of Knapsack Gully. Although this historic bridge still stands it sustained damage to its parapets by thoughtless hauliers with long loads.

#### **Horseshoe Shaped in Plan**

The bridge was a graceful single arch of 20 feet (6 m) span and 30 feet (9 m) above water level. 'Technically it has interest in that the road takes a sharp U-turn at the head of the gully, and so the northern side of the bridge takes a sweep that earned it the name of the Horseshoe Bridge.' Herman Morton continues:

'The arch in this curved surface thus curves in plan, section and elevation, and the edge of the arch stones as a result also traces a pure but complicated curve, the whole showing that Lennox had full command of geometry.'





Horseshoe Bridge, Lapstone David Lennox's bridge, completed in July 1833, was the second stone bridge to be built in Australia and a model of permanent settlement.

#### **Convicts Taught Masonry and Carpentry Skills**

The bridge was constructed by a team of convicts who were expertly taught their new skills by Lennox. He had the least trouble with the masons who quarried their material from a nearby site and had most of the stone cut within six weeks. He had most trouble with the carpenters and sawyers, one of whom deserted at the critical time of the arch-centring. The team of twenty included an overseer, a constable and an armed sentry.

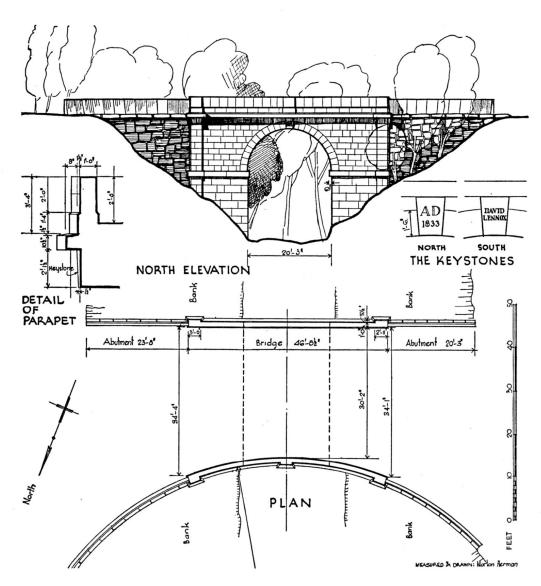
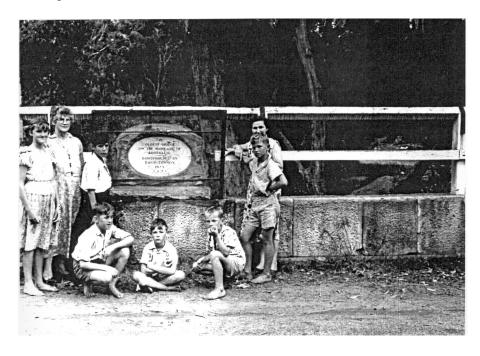


FIG. 84. Lennox Bridge, Lapstone Hill (the Horseshoe Bridge). David Lennox, architect. 1833.

#### Governor Bourke's Admiration

When Governor Bourke inspected the bridge he was 'much gratified with its rural splendour'. The governor directed that it be named 'Lennox Bridge' and the keystones bear the name of its builder and the date 1833. It is the oldest bridge still standing on the mainland of Australia.

#### A Smith Family Visit



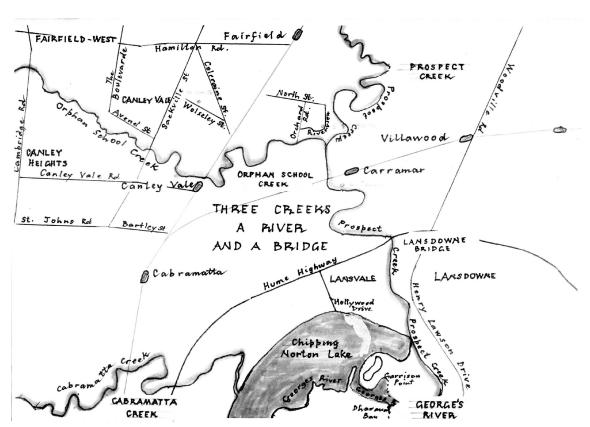
Smith family at the Lennox Bridge site. L-R: Dorothy, G/Mother McGrath, Ian Markwort (friend), Brendan (Crouching), Barry Markwort, Michael, Mum and Keith.

#### The Lansdowne Bridge Over Prospect Creek

#### **The Conrad Martens Painting**

The Conrad Martens water-colour of the Lennox Bridge over Prospect Creek was probably painted between the bridge's commissioning date on the 26th January 1836 and October 1836 when the toll gates were completed. The delay in its use by vehicular traffic of the horse-drawn variety was probably caused by the professional rivalry between the bridge architect and the toll gate architect. Martens' painting also depicts the old, wooden bridge which can be seen in the background under Lennox's splendid stone arch. The southerly traffic on the old wooden bridge was often diverted along the Old Cowpastures road which ran from the Prospect Inn at Greystanes through Bossley Park, Bonnyrigg, Hoxton Park, Oran Park to Narellan. The Old Cowpastures Road had side approaches to Fairfield, Liverpool, Ingleburn, Campbelltown and Menangle and so on. When the toll gates were finally opened, the cost of the new bridge was recovered in less than two years.

#### Location: 'Three Creeks, A River and a Bridge



#### **Morton Herman's Account**

Morton Herman's chapter on David Lennox gives the following account:

'Before the completion of the Horseshoe Bridge, Lennox had transferred his headquarters to Prospect Creek at a spot seven miles north-east of Liverpool. An earlier wooden bridge at this point, which carried a great deal

of traffic to the southern part of the Colony, was falling to pieces, and a sum of £1083 5s. 3d. had been voted for a new one. Apparently Ambrose Hallen had prepared a scheme for the bridge but Lennox, being Superintendent of Bridges, produced his own design. His working drawing, which has come down to us, shows that he had command not only of constructional technique but of draughtsmanship as well. This original design varies but little from the completed bridge.'



Lansdowne Bridge, near Liverpool, New South Wales

'The subsoil on the site being mostly of thin sediment over rocky strata, Lennox founded his abutments on the bedrock and, because of the tendency of Prospect Creek to flood, he spanned the stream with a single arch so that the flow of the stream would not be impeded'.

#### Geometry of Design

'This great arch is unquestionably the most attractive building Lennox ever did. It has a peculiarity in that the curve of the arch proper is five-centred, while the curved line between the buttresses is segmental, that is, struck from one centre. Any description of this bridge must necessarily be technical in character because its success comes from profound geometrical causes, and, as we have seen, Lennox was a geometrician of very great skill. We have seen his minor effort at Lapstone where the elaborate curve of the arch was necessary but at Prospect Creek he could have been activated only by artistic fervour. Although it may look simple on paper the combination of the pseudo-elliptical and the segmental lines is

extremely complicated. The author invites anyone interested to trace out geometrically the extremely peculiar resulting line which forms itself on the soffit of the arch. This effect is most unexpected and the shaping of the stones in the transition area of the curve is a masterly example of solid geometry. This subtlety of line, combined with a thin crown to the arch only 5 feet in thickness, gives the bridge the particular character which has earned its artistic reputation. The radiating arch stones or voussoirs are very large in scale, some of them being nearly 8 feet long, all perfectly worked.'

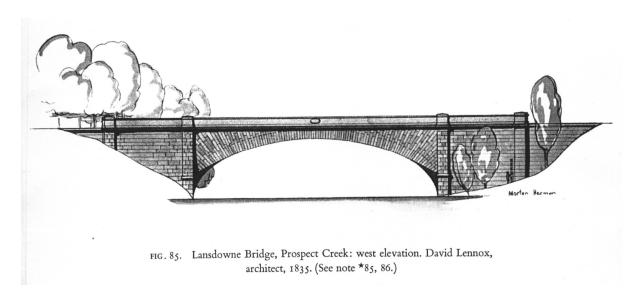
'As the clear span is 110 feet, the wooden centring must have been an achievement in itself, a fact of which Lennox was not unconscious for he embodied his views in a letter:

'If such a bridge as this was to be erected in any part of England there would be from fifty to one hundred mechanics employed at it; if it was in London all the quarries between Cornwall and Aberdeen would have been supplying stone for it; the timber would be prepared for it in Russia and America: here everything is to be done by the men on the sop, and four mechanics are all that can with great difficulty be procured.'

The arch rises to 26 feet above mean water level for Prospect Creek is tidal at this point. Having to allow for the variation of the surface of the stream would have complicated the building operations. The approaches to the bridge are all in dressed stone and sweep up from the ground in subtle but most lovely vertical curves. Since they are curved in plan as well, we see Lennox up to his old geometrical tricks. The parapet is kept clean and simple with the restraint that characterises all his work. It will be noted that the fundamentals of good architecture can be seen throughout this design. Every part of it is not only necessary but beautifully shaped so as to be aesthetically pleasing without the addition of meaningless ornament.

#### **Lennox's Management Skills**

Lennox found his own quarry for the stone for the Prospect Creek bridge. It was brought to the site in punts, sometimes at night if the state of the tide demanded it. He also asked to be allowed to employ some of the men he had trained at Lapstone. He looked after his men, took an interest in their welfare, and often applied for, and got, remissions of sentence for them. He was even able to wheedle extra rations for them from the government stores which was no mean feat. However, when some of the men at the Prospect Creek quarry absconded, became drunk and rioted, he took immediate disciplinary measures. For although he was kindly, Lennox could be strong, which is not surprising since that combination of characteristics would be essential to a man in his position. He could not have succeeded in producing good work from previously unskilled men unless he understood all their needs.



#### Governor Bourke's Laying of Foundation Stone

Governor Bourke laid the foundation stone on 1st January 1834, naming the work Lansdowne Bridge after a politician of the day who was then important to colonial governors. In the reports of the occasion, Mr Lennox was described as the architect. It will be noticed that throughout the records Lennox is referred to as Superintendent of Bridges, architect, engineer, and builder, and, in fact, he was all of those things, but his salary was only £120 a year. Before the completion of Lansdowne Bridge he asked for an increase, but asking and getting proved to be different things, and he had to wait a long time for his merited increase. By December 1834 he was practically in revolt over his expenses, which, he pointed out, were 15s. a day when travelling, whereas his salary was only 8s. 6d. a day. The Deputy Surveyor-General strongly urged a higher reward for the man who was, he said, architect, builder, clerk of works, and superintendent of convicts, and trainer of craftsmen.'

pps. 163-164 Morton Herman

#### The Parramatta River Bridge (1839)

#### **Parramatta**

In the early days of the colony of New South Wales, Parramatta vied with Sydney to be the administrative capital. When Governor Hunter upgraded the small single-storied cottage of Government House (at Parramatta) to a two-storied residence it looked as if Sydney was being replaced by Parramatta. Parramatta was geographically accessible to the western farms and to the southern grazing ventures south from Prospect along the Cowpasture Road to Camden. It is not surprising that both David Lennox and David Lennox Smith's parents lived in Parramatta. What is surprising however is that they lived in the same street!

#### The Parramatta River

The Parramatta River is sometimes mistaken as only a navigable reach of Sydney Harbour. It actually had, at the Parramatta end of the reach, a more abundant supply of fresh water than was available from the Sydney Tank Stream! Governor Phillip held high hopes that the Parramatta district would become the granary of the colony. It was in Parramatta that the first experiments to produce good mills was made. The history of milling in NSW began with small iron hand mills, then human treadmills and horse-drawn mills, then to wind and watermills. These were initially centred in Parramatta. Later, when the Turnpike Road was established, flour mills moved away from the Parramatta River. Much later flour mills were located along the railway line. Names such as Marsden, Howell, Bolger, Proctor, Blanchard and more recently Brunton, McCorquodale and Crago were associated with the flour milling industry.



#### **Spanning the Parramatta River**

In the early days of the colony the rivers were used as roads. To cross a river it was necessary to hire a boatman. Later on ferry services were developed. F.C. Terry (1827 - 1869) sketched a scene of Byrne's Mill and Howell's wind and watermill beside the Parramatta River. It also depicts a small steamship plying its passengers and cargo up the river to Parramatta. Today the river is considerably choked with silt and only ferries with a small draft can negotiate the mangrove infested stream.

As the development of the Parramatta region spread out along the 'road' to Windsor through Castle Hill, Rouse Hill and Green Hills (Windsor) it became necessary to upgrade the decrepit wooden bridge linking Parramatta to these outlying villages. Lennox announced on 22 October 1836 that he was about to start on the construction of a new sandstone bridge to replace the old wooden structure.

#### The Design of the Bridge

The bridge was originally designed as an elliptical arch of 90 feet (27 m) span but after 'much controversy' it was redesigned as a simple arch spanning 80 feet (24 m) and having a width of 39 feet (12 m). The stone came from the Orphan School quarry and lime was purchased at one shilling a bushel. Morton Herman is of the opinion that this bridge is the least satisfactory of Lennox's designs. It took three years to build and 'although the approaches showed all the softly graded curves of his other bridges, the main arch was coarse and heavy'. With the passage of time this bridge has been considerably altered. Morton Herman comments:

'In 1912 it was widened for a tramway, and in 1935, apparently to celebrate its approximate centenary, the Main Roads Board began alterations which, though necessary, were carried out in a way that from the aesthetic point of view could only be called infuriating. A succession of Parramatta councils, without any noticeable reputation for knowledge of historic value or for good taste in a district that used to be rich with both, contributed their share to the desecration of Lennox's work to produce the poor remains.'

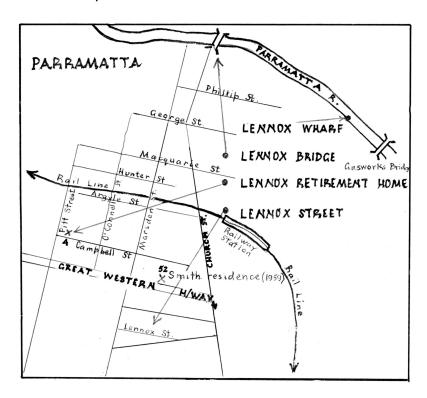
See *The Early Australian Architects* and their Work, by Morton Herman p. 166.

#### **Appointment as District Surveyor to the Parramatta Council**

Lennox's association with Parramatta may well have begun with his building of the bridge over the river but it did not end there. In November 1843 he became District Surveyor to the Parramatta Council but only held the appointment for a year. Lennox's appointment was terminated in the midst of the financial downturn of 1844. However Governor Gipps reappointed him in October 1844 (see below).

#### **Lennox's Association with Parramatta**

Lennox is reputed to have designed the original St Andrew's Presbyterian Church built in Church Street in 1839. The accompanying sketch of the Parramatta Streets indicates the location of the Parramatta Wharf, the Bridge, Lennox's retirement home in Campbell Street and another street named in his honour.



#### Part 3

# Lennox's Four Lesser Known Bridges on Mitchell's New Line of Road to the South of Mittagong

#### Berrima and its Antecedents

#### **Bong Bong**

In a letter directed to Surveyor-General John Oxley on 31st March 1821, Governor Macquarie gave instructions that farms be 'marked' for the future development of a township to be formed on the 'Wingee Carabie'. Mr James Meehan was to site the land for the town. Surveyor Harper recorded that a survey of 'reserved lands for a township' was completed.

#### Surveyed in 1821

Late in 1821 Dr Charles Throsby suggested to the Governor that a police organisation of four constables, one scourge and a magistrate's clerk be established. The Governor acceded to Throsby's request in part only. The first building erected on the village site was a structure for the police. This was followed by huts for a small military detachment. In 1827 William Bowman built an inn which he named *The Argyle Inn*.



'Historic Bong Bong township site: beside the main Moss Vale – Bowral road, near the present Wingecarribee River bridge and nature reserve, a memorial cairn and plaque mark the 'Site of Bong Bong Military Station and First Township Reserve on the Southern Highlands - Surveyed in 1821'. The township, on a site designated by Lachlan Macquarie when he visited in 1820, contained government buildings but was never more than an isolated administrative centre. Subject to flooding, it was abandoned in about 1837 and the post office moved to Berrima. In 1843, the site was bought by Charles Throsby the younger.'

(see Hume Places by Sandy Paine, p. 79)

#### Mitchell's New Line of Road

The siting of Bong Bong saddled the area with two inherent difficulties for future development. The water supply was 'very indifferent', it was scarce in dry times and when it rained there was flooding. Mitchell also wanted to avoid crossing the

Mittagong Range. This meant that the new line of road had to be moved westward away from Bong Bong. When the Bong Bong Christ Church was finally built in 1845 it was not erected on a village site but on land given by Throsby on the southern side of the Wingecarribee River. It was not so much a village church as a district one.

The Christ Church of Bong Bong



The white-painted Christ Church, Bong Bong (Anglican; also known as the Throsby Church), overlooking the nature reserve, has many historic graves, including those of the Throsby and Osborne families and Joseph Wild. This was the first church in the Southern Highlands. Designed by John Verge and financed by subscription from 1837, the project was abandoned in 1839, reportedly through lack of government funding. Later, Charles Throsby the younger completed the building from his own resources. It was dedicated on 31 December 1845.

The church was erected on land given by Charles Throsby (Jnr). 'The site is a beautiful one on a rising eminence commanding a full view of the estates and mansion of Charles Throsby, the generous donor, William Bowman, and H. Hutchison and the whole Illawarra Range' (James Jervis: *A History of the Berrima District*, p. 29). Attached to the church is a burial ground, a parsonage and glebe of 100 acres, all the gift of Mr Throsby. Underneath the church is a vault intended for use by the Throsby family. In the burial ground are the graves of many pioneers of the district and their descendants including Joe Wild and many of the extensive Throsby family. The consecration of the Church was performed on 31st December 1845 by Bishop Broughton.

#### Berrima

#### Berrima Established (1831)

The establishment of Berrima by Governor Darling at Surveyor-General Thomas Mitchell's request is outlined by James Jervis' book: *The Berrima District 1798-1961*, (p. 70-71).

'The village of Berrima is 12 kilometres south-west of Mittagong, on the old Hume Highway, in a horseshoe bend of the Wingecarribee River. It is generally considered the best preserved example of a small Australian town of the 1830s. Today, Berrima is a popular arts, crafts and gourmet-food centre for tourists and travellers. The village's layout is much as it originally was

Berrima was founded by Surveyor-General Sir Thomas Mitchell who had succeeded John Oxley on the latter's death in 1828. When Mitchell camped by the river in 1829 he liked the location. It was the best place for the new road to cross - the crossing at Bong Bong, further upstream, was swampy and difficult for bullock teams. So he recommended to Governor Darling that Berrima should be the administrative centre for the County of Camden and the principal official town between Sydney and the Goulburn plains. In 1830, Surveyor Robert Hoddle had instructions to plan the township. Hoddle's plan was approved by the governor the year Darling left office in 1831.

Hoddle's plan was along the lines of a traditional English village, with a central green. Ambitions for a much larger township were held and an imposing gaol and courthouse were completed in 1838-39. Berrima's location on the Old South Road drew valuable passing trade as the township took over from Bong Bong. The bridge was opened in 1836. By 1843, there were six pubs and substantial churches were built in 1847 and 1851.'

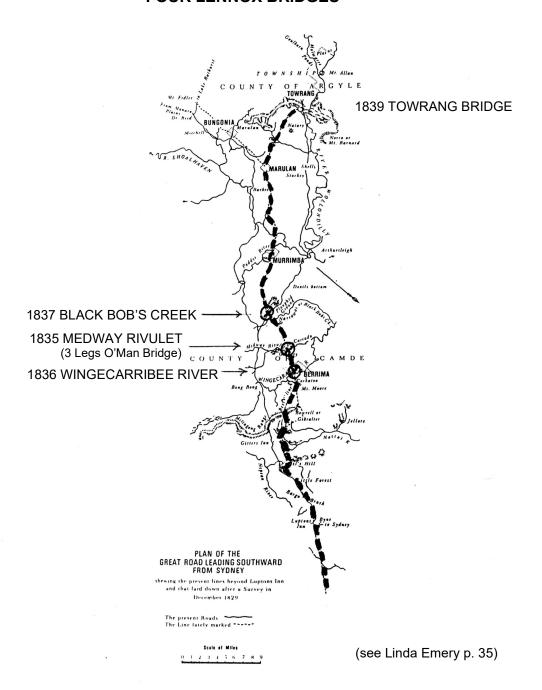
pp. 70-71

#### Berrima Bypassed by Railway

Unfortunately the promise of Berrima as an administrative centre was not fulfilled. In 1860 its most impressive Lennox bridge was destroyed by flood. In 1867 the township was bypassed by the railway for engineering reasons. The dissection of the village green by the Old Hume Highway also destroyed much of the town's cohesion and charm. Today the town is bypassed because of the road realignment and the upgrading of the Hume Highway into a Freeway.

Despite these set-backs, or perhaps as a result of them, Berrima has preserved many fine, early sandstone buildings and is a magnet for tourists seeking to catch a glimpse of village life in the 1830s - 1860s.

# MAP OF MITCHELL'S NEW LINE OF ROAD AND FOUR LENNOX BRIDGES



#### Mitchell's Re-Alignment of Throsby's Cart Road

The Map of Mitchell's Line of Road beyond Lupton's Inn at Bargo is reproduced above. The Map is copied from Linda Emery's *Conservation Plan for The Bridge Over Black Bob's Creek* (June 1995). Mitchell's plans for the new alignment also called for the erection of a number of bridges. David Lennox was called upon to provide for bridges crossing the Medway Rivulet, the Wingecarribee River and the proposed new town of Berrima and for the crossing of Black Bob's Creek further south of Berrima.

#### The Bridge Over Medway Rivulet known as Three Legs O'Man Bridge

#### Throsby's Cart Road

Governor Macquarie informed Commissary-General Drennan in September 1819 that he had ordered a working party under the direction of Dr Throsby to construct a cart road through the newly discovered country. As the men had to work all day each was to be given an extra ration of wheat.

At first Robert Sills was to Superintend the project but he was replaced by Throsby's faithful servant Joe (Joshua) Wild when it was realised that the Aborigines were hostile to him.

#### Picton to the Cookbundoon Range and Throsby's Ford

James Jervis in his History of Berrima District 1798 - 1961 records:

The work was commenced at Stonequarry Creek (Picton), to which a road of sorts was already in use, on 9th October 1819, and completed over the Cookbundoon Range on 8th November 1820.

The party consisted of an overseer, a guard, one clerk, one bullock driver and eleven labourers. No work was done on Saturdays and Sundays and the actual working time was 231 days. Alterations and improvements to the road occupied the men until 13th January 1821 and the erection of bridges was done later and completed early in February. The length of the road was seventy-five miles and its average breadth was thirty-three feet. The cost of operations was £280/3/8, which included the erection of six bridges.

The gang, of course, consisted of convicts and each man was supplied with one blanket, one jacket, two pairs of trousers, two shirts and five pairs of shoes. Joe Wild, the overseer, was not overpaid at the rate of £20 per

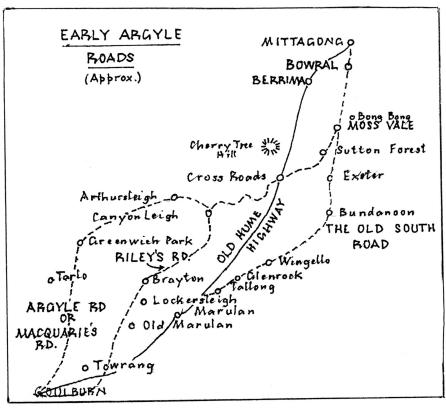


Three Legs O'Man Bridge
Present-day bridge spanning Medway Rivulet, 4.8 kms south of Berrima (2009)

annum; he also received a ration of twelve pounds of wheat and seven pounds of beef per week. The men received the same ration, which they seem to have varied by shooting an occasional kangaroo, the skins of which were sold to provide tea and sugar.

#### **Line of the Cart Road through Bong Bong**

While the road was in course of construction natives frequently came to watch its progress but did not interfere with the men. Joe Wild traced the line of road which probably followed the track made by the explorers as far as the Bong Bong district. It crossed the Bargo River at the point where the present line passes over the stream by a bridge, thence it ran to the Mittagong Range over which it crossed. The road ran across the Wingecarribee below the present bridge, passed through what are now Moss Vale and Sutton Forest, beyond which it bore westward, crossed Paddy's River by means of a low-level bridge, and a short distance farther on the line passed the Wollondilly. The line then ran onward through the grazing station occupied by Hannibal Macarthur known as "Arthursleigh", thence to Greenwich Park and the Cookbundoon Range over which it passed; it then continued onward to the Wollondilly which it crossed at a point called Throsby's Ford.



Based on a sketch map of Richard Harding, RTA Goulburn on p. 15 of Chrissy Fletcher's Arthursleigh.

#### Two Defects in the Old Line of Road

The line was badly chosen in more than one part. Bong Bong was susceptible to flooding and the Mittagong Range was difficult to negotiate, and there were some heavy grades near Paddy's River, the Wollondilly and

the Cookbundoon. There seems to have been some intention of carrying the road onward to Bathurst, and this explains why the route bore away from the Goulburn Plains. The original South Road is still used for a large section of its length; the portion running west beyond the Hume Highway at the Cross Roads is in very bad condition, but it is proposed to put it into trafficable order.

In October 1820 Governor Macquarie travelled over the road and named the ascent and descent over the Cookbundoon Range "Wild's Pass" after Joe Wild, the overseer of the road party which constructed it.

> James Jervis pps. 59-60.

#### Mitchell's Correction

With Mitchell's re-routing of Throsby's Old Cart Road the importance of Bong Bong receded. Berrima developed as the new administrative hub and the road to the south skirted the Mittagong Range and moved to the west of Bong Bong – Moss Vale to Berrima.

#### The Bridge over the Medway Rivulet

The Lennox Bridge built by David Lennox over the Medway Rivulet only survived 25 years. It was built in 1835 and washed away by floods in 1860. The photograph shown earlier is of the existing re-inforced concrete bridge (2009). It can be found 4.8 kms south of Berrima. Lennox's bridge was a timber structure one supported on three masonry piers twenty feet apart (6 m). The site was fixed in January 1834 and work was completed early in 1835.

see *Bridge Building in NSW* 1788-1938 Dept. Main Roads, Vol. XVI, No. 2

#### LENNOX'S BRIDGE AT BERRIMA

#### WINGECARRIBEE RIVER

O MITTAGONG



#### Weston (Burradoo)

The present day location of Burradoo is about half-way between Moss Vale and Bowral and to the east of Berrima. In 1823 John Oxley received a grant of 2400 acres which was called *Weston*. He was also authorised to purchase 5000 acres at the rate of five shillings per acre in the area known today as Bowral. Oxley made a down payment of £125 before he died. Eventually his two sons H.M. and J.N. Oxley received the 5000 acres in two portions: one of 4200 acres in the Parish of Mittagong and the other of 800 acres in the Parish of Berrima. The deposit was refunded and the land was a free gift to honour the service of the Surveyor-General.

#### Villages of Wingecarribee/Burradoo/Bowral

The 3200 acre grant to the Oxley holdings became the sole holding of J.N. Oxley in 1858. He sub-divided 200 acres of his holding. This sub-division extended from the corner of Bong Bong Street and Bowral Streets to the Imperial Hotel corner and from what are now the railway gates at Bowral Street. The area was called the Village of Wingecarribee, then the Village of Burradoo and finally in 1867, the Village of Bowral.

#### The Wingecarribee River

The Wingecarribee River branches off the Wollondilly River in the area of the Wombeyan Caves. The Wollondilly extends its northern extremities into the

Burragorang and its southern reaches to Crookwell. The Wingecarribee flows south of Joadja, Medway, Berrima, Bong Bong, Glenquarry into the Wingecarribee Reservoir north of Burrawang.

#### The Wingecarribee Bridge of David Lennox (1836)

The Wingecarribee Bridge was constructed in 1836. This was at a time when the focus of administrative power in the southern highlands was being transferred from Bong Bong to Berrima. The post office at Bong Bong was actually relocated at Berrima in 1837. It was envisaged that 'Berrima would become the administrative, commercial and manufacturing centre of the County where the wool of Argyle and Camden might be made into cloth and the hide into leather'. (*Berrima NSW*, Council Publication, 2nd reprint, with an original foreword by R.F. Stokes).

Major Mitchell, the Surveyor-General was a man of many parts and accomplishments. He has been called a 'difficult yet thorough man'. An aspect of his thoroughness was his skill in drawing and painting. His water-colour painting of David Lennox's Wingecarribee Bridge is a gem of great artistic merit. A copy of Mitchell's painting is held in the NSW State Library and is reproduced in the following picture. Morton Herman judged it to have been a handsome structure.



Wingecarribee Bridge, Berrima

#### The Floods of the Wingecarribee River of 1858 and 1860

Unfortunately, David Lennox had underestimated the effects of floods in the Wingecarribee River. In 1858 flood waters broke the arch and temporary repairs

were apparently made. These lasted till 1860, when a new flood 'swept the whole bridge away' (p. 164-165). It was one of Lennox's few failures.

#### Memorial of Lennox's Bridge (Berrima)



Memorial in Berrima to the remains of the Lennox Bridge over the Wingecarribee River.

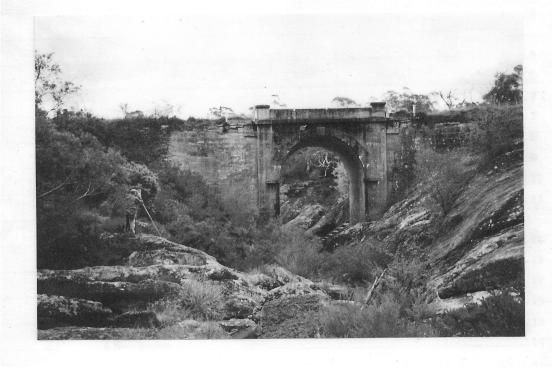
#### Black Bob's Bridge (Sutton Forest)

#### **Linda Emery's Conservation Plan**

The information in this section has been obtained from Linda Emery's submission to the Wingecarribee Council about the Conservation Plan to preserve the bridge (June 1995). A copy of this proposal can be found in the library of the Berrima District Historical and Family History Society Inc. in Mittagong, NSW.

# THE BRIDGE OVER BLACK BOB'S CREEK SUTTON FOREST NSW

#### **CONSERVATION PLAN**



Prepared for: Wingecarribee Council Elizabeth Street Moss Vale NSW

by: Linda Emery "Araluen" Patchway Place BURRADOO NSW 2576

June, 1995

#### Mitchell's New Line of Road With Its Three New Bridges

Surveyor-General Mitchell's New Line of Road for the Great South Road from Lapton's Inn, 16 km south of Picton to Goulburn, necessitated the building of three bridges. The Wingecarribee Bridge at Berrima was the most substantial. The Medway Rivulet Bridge and the Black Bob's Creek Bridge were less so. Of the three bridges only the one over Black Bob's Creek remains and of those remains only little evidence of Lennox's work is intact.

#### Location of Black Bob's Creek Bridge

The bridge is located in the County of Camden, Parish of Belanglo, on a side road just east of the Hume Highway, approximately 130 km south of Sydney and 12 km south of Berrima.

#### Brief Description of the Place

The bridge traverses a deep, rocky gorge thorugh which Black Bob's Creek runs. The gorge is approximately 10 metres deep and widens into a string of deep waterholes, a reliable water source for early users of the Great South Road. Three distinct components make up the structure as it now stands; the sandstone abutments, the concrete arch and the retaining walls of the embankments leading onto the bridge. The abutments of the bridge stand on solid rock on the north and south banks of the creek.

#### Modifications of 1860 and 1896

The first bridge, a timber beam structure supported by sandstone abutments, was constructed by convict road gangs between 1835 and 1836. The timber span was replaced, first in 1860 by another timber bridge and again in 1896 by a concrete arch (Selkirk 1920, 224-225). The present bridge consists of the original 1830s sandstone abutments and associated retaining walls on the embankments, and the 1896 concrete arch.'

(Linda Emery - Section 1-2)

#### 'Design

Comparison with two other Lennox Bridges demonstrates the unique character of each of the structures. Lennox's first bridge, the Lennox Bridge at Lapstone, was somewhat experimental and whilst aesthetically more appealing than Black Bob's Bridge, the stonework on the abutments is not as well executed as that at Black Bob's Creek. However, neither of these bridges is in any way comparable to the Lansdowne Bridge, either in design or quality of work. Lennox was based at Lansdowne and personally supervised the construction of this, the most ambitious and important of his projects at that time. Whilst not the only example of Lennox's work, the bridge at Black Bob's Creek is the only extant representative of the smaller bridges Lennox designed. These smaller bridges were, with the exception of occasional site inspection by Lennox, left to his deputies to execute. Black Bob's Bridge is the only bridge of the five survivors of Lennox's work which was designed as a timber beam bridge.'

(Linda Emery - Section 4.2)



Present day double bridge replacement over Black Bob's Creek, 12 kms south of Berrima on the Old Hume Highway.

#### The Towrang Bridge

The following excerpt is taken from Sandy Paine's *Hume Places*. It refers to a charming sandstone bridge 'widely regarded as the work of the colonial stonemason and engineer David Lennox.'

'Derrick VC rest area is 10 kilometres east of Goulburn and 17 kilometres south-west of Marulan, at the bottom of a long incline on the highway. It is immediately south of the road, on the left if you are driving towards Goulburn. Nearby is a small, convict-built bridge (1839), of dressed sandstone, spanning Towrang Creek. This gem of a bridge, which is well preserved, is widely regarded as the work of the colonial stonemason and engineer, David Lennox. Nearby are several elaborate, convict-built stone culverts, equally well preserved. Such relics of the ancient road are very rare because of the long series of subsequent road works.

On the other side of the highway are the remains of the Towrang Stockade or penal settlement (1833-43) that accommodated convict iron gangs working on Sir Thomas Mitchell's Great South Road. These relics are now in a privately owned paddock, without ready access.

Towrang mainly housed the 'Marulan gang' - hardened convicts reconvicted for repeat offences. Until its disbandment in 1843 the Towrang Stockade was the biggest penal settlement in southern NSW. Up to 250 convicts were accommodated, sleeping on bare boards, each with a single blanket.

Nearby to the south is Mount Towrang, 868 metres above sea level.'





# Part 4 Later Life in Victoria and NSW (1844 - 1873)

### Appointment as Superintendent of Bridges, Wharves and Ferries (Port Phillip District)

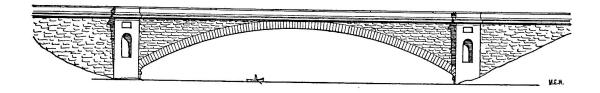
In October 1844 Governor Gipps appointed Lennox to the position of Superintendent of Bridges in the Port Phillip district of Victoria. He sailed from Sydney in November 1844. He remained in this position for nine years and was in charge of all roads and bridges, wharves and ferries.

#### Prince's Bridge (Yarra River)

Lennox's most notable achievement during his years of service in Victoria was the construction of the first Prince's Bridge over the Yarra in Melbourne.

'The bridge was a stone arch with 150 foot (46 m) span. It was the largest bridge built by Lennox; it was completed in 1850 and lasted until replaced some thirty-five years later because of the necessity to provide for more traffic.'

Australian Dictionary of Biography - J.M. Antill



The original Prince's Bridge, Melbourne, 1846 (demolished 1884).

David Lennox, architect.

Fig 88, p. 166, The Early Australian Architects, Morton Herman

#### Morton Herman describes the Prince's Bridge:

'It was very like Parramatta Bridge in appearance but more than twice as large and of much more elegant proportions. The immediate abutments of the arch had wide, smoothly dressed stone piers, with semi-circular niches, contrasting with the rusticated stonework of the main portion of the bridge. The turning of the arch was not nearly as graceful as in Lennox's other bridges, the voussoirs in particular being very awkwardly radiated at the abutments.'



View of the Yarra with Old Prince's Bridge unsigned oil on canvas

#### Fifty-three Victorian Bridges

Lennox superintended the building of fifty-three bridges in Victoria and was very active in their construction.

#### Retirement

#### Morton Herman records:

'Lennox finally retired in 1853, the Victorian Government having voted him a gratuity of £3000, which would have recompensed him somewhat for his six years at £250 per year, with increases to £300 in 1852 and to the more appropriate sum of £600 in 1853. He had been in charge of roads, bridges, and wharfs, but full details of his Victorian work have not so far been made available.

He returned to Sydney in 1855, a firm and dour-looking old Scot, complete with chin whiskers, to live again at Parramatta, where he built himself a house in Campbell Street. He also designed the house Rose Vale near Little Hartley, west of the Blue Mountains, and this small building shows a harkening back to an earlier period, for its architecture has more excellence of 1830 than the decadence of 1855.'

The Early Australian Architects Morton Herman, p. 167

#### Death

'David Lennox died in Parramatta in 1873 at the age of 85, and, as with Greenway, his burial place is unknown. A very small proportion of his extensive work has come down to us, but some of it is in such a condition that we can readily appreciate the skill in design and construction of this first real bridge builder of Australia.'

Ibid, p. 167

### Appendix A Two Memorials to David Lennox

The following two memorials to David Lennox are in their own way tributes to the bridge-builder. Though they bear his name it is unlikely he had any direct relationship to them.

#### The 'Lennox Crossing' of the Molonglo River (Canberra)

This crossing of the Molonglo River is shown in the painting below. The bridge provided access to the Acton peninsula from the south of Canberra over the river to the Motor Registry Office and the Old Canberra Hospital.



Lennox Crossing, Canberra, ACT

The photograph below shows the Lennox Crossing and the old Acton Offices.	
Lennox Crossing, Acton, ACT, Flooding c. 1925	

Lennox Crossing, Acton, ACT, Flooding c. 1925

#### **Lennox Gardens**



Now that the Molonglo River has been dammed to form Lake Burley Griffin, the Lennox Crossing has disappeared. In its place the Memorial Lennox Gardens has been established behind the Canberra Hyatt Hotel (the Old Canberra Hotel).

#### **BIBLIOGRAPHY**

The information on David Lennox has been reliant on secondary sources - especially Morton Herman's book and Linda Emery's submission to conserve Black Bob's bridge. Morton Herman acknowledges his own indebtedness to Henry Selkirk:

'Henry Selkirk did considerable research on David Lennox. He collected and collated a great number of relevant documents in the Mitchell Library, Sydney which collection I have examined. In 1920 Selkirk published a paper, "David Lennox, the Bridge Builder and his Work" (RAHS, 6), which has been used as a guide.'

See *The Early Australian Architects and their Work* by Morton Herman pp. 235-236

- 1. Herman, Morton; *The Early Australian Architects and their Work*; Angus and Robertson; Sydney; 1954.
- 2. Jervis, James; *A History of the Berrima District 1798 1961*; The Berrima County Council. Printed by the Halstead Press; Sydney; 1962.
- 3. Paine, Sandy; *Hume Places A Guide to their history and attractions*; Ginninderra Press; 2005.
- 4. Fletcher, Chrissy; *Arthursleigh A History of the property 1819 to 1979*; University of Sydney; 2002.
- 5. Barker, Theo; *A History of Bathurst, Vol. 1. The Early Settlement to 1862*; Crawford House Press; Bathurst; 1992.
- 6. Jensen, Jo and Barrett, Peta; *Australian Explorers, John Oxley*; Future Horizons Publishing; 1996.
- 7. Cox, Karin and Parish, Steve; *Early Explorers*; Steve Parish Publishing.
- 8. Cannon, Michael; *Australia Spirit of a Nation A Bicentenary Album;* Currey O'Neil; 1985.
- 9. Younger, R.M.; Australia, Australia, The Pioneer Years; Rigby; 1975.
- 10. Swain, Victor; Australia: Moments in History; Griffin Press; 2003.
- 11. Johnson, Richard; *The Search For The Inland Sea John Oxley, Explorer,* 1783 1828; Melbourne University Press; 2001
- 12. Clark, Manning; *A Short History of Australia;* Penguin Books; 4th Revised Edition; 2006.
- 13. Ellis, M.H.; *Lachlan Macquarie*; Angus and Robertson; Sydney, 1978 Ed.

#### **Articles**

- 1. Emery, Linda; Conservation Plan for the Preservation of Black Bob's Creek Bridge at Sutton Forest; June, 1995. Prepared for the Wingecarribee Council, Elizabeth Street, Moss Vale.
- 2. Australian Dictionary of Biography Online Edition: Lennox, David (1788 1873). Author J.M. Antill, http://www.adb.online.anu.au/biogs/A020093b.htm

# **Select Biography**

Herman, Morton, *The Early Australian Architects and their Work* (Syd, 1954); H. Selkirk, 'David Lennox, the Bridge Builder, and His Work', *Journal and Proceedings* (Royal Australian Historical Society), vol 6, part 5, 1920, pp 201-43; W.L. Havard, 'Mitchell's Pass, near Emu Plains', *Journal and Proceedings* (Royal Australian Historical Society), vol 19, part 6, 1934, pp 352-63; manuscript catalogue under David Lennox (State Library of New South Wales). More on the resources.

- 3. Thomas Telford: Wikipedia, the free encyclopaedia, http://en.wikipedia.org/wiki/Thomas\_Telford Sir Thomas Mitchell; Wikipedia.
- 4. About.com *Inventors, The History of Roads and Asphalt* by Mary Belis, About com Guide, http://inventors.about.com/od/tstartinventors/a/Thomas-Telford.htm?p+1.
- 5. Bridge building in NSW 1788 1938, Sydney Department of Main Roads, ND, Vol. XVI, No. 2 "Three Legs O'Man Bridge".
- 6. Carthona Wikipedia (Incl. The Mitchell Family).

#### **BIBLIOGRAPHY OF LINDA EMERY'S SUBMISSION**

#### **Published Sources**

- Australia ICOMOS. 1987. The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter). Australia ICOMOS Inc.
- Byrne, M. 1976. Ross Bridge, Tasmania, Studies in Historical Archaeology No. 3, Australian Society of Historical Archaeology, Sydney.
- Department of Main Roads, 1976. *The Roadmakers: A History of Main roads in New South Wales*. Department of Main Roads, Sydney.
- Department of Main Roads. 1970. *All About Bridges*. Department of Main Roads, Sydney.

- Fraser, J.J. 1985. *Early Reinforced Concrete in New South Wales (1895 1915).* The Institution of Engineers Australia, Sydney.
- Herman, M. 1970. *The Early Australian Architects and their Work*. Angus and Robertson, Sydney.
- Historical Records of Australia. Series 1.
- JRC Planning Services. 1994. Wingecarribee Heritage Study. Sydney.
- Karskens, G. 1986. 'Defiance, Deference and Diligence: Three Views of Convicts in New South Wales Road Gangs', *Australian Historical Archaeology*, 4, 17-28.
- Kerr, J.S. 1985. The Conservation Plan: A Guide to the Preparation of Conservation Plans for Places of European Cultural Significance, National Trust of Australia (NSW), Sydney.
- Newell, H.H. 1938. 'Road Engineering and its development in Australia, 1788-1938', *Institute of Engineers Australia Journal*, 10, 41-70.
- NSW Government Gazette, 1860 and 1896.
- NSW Legislative Assembly, Votes and Proceedings, Department of Public Works Annual Statements, 1895-6 and 1896-7.
- O'Connor, C. 1983. *Register of Australian Historic Bridges*, Institution of Engineers, Australia and The Australian Heritage Commission, Canberra.
- O'Connor, C. 1985. *Spanning Two Centuries: Historic Bridges of Australia*, University of Queensland Press, St. Lucia.
- Pike, D. (Ed.). 1966. *Australian Dictionary of Biography*, Melbourne University Press, Melbourne.
- Selkirk, H. 1920. 'David Lennox, the Bridge Builder and His Work', *Journal of the Royal Australian Historical Society*, 6, Part 5, Sydney.
- The Institution of Engineers, Australia. 1992. *Engineering Heritage and Conservation Guidelines*, Institution of Engineers, Australia, Barton, ACT.

#### **Unpublished Sources**

# 1. Manuscripts held by the Archives Office of New South Wales

## **Department of Public Works**

Specifications, tenders and contracts for the Construction of Bridges in NSW, c. 1885-98, (3/840-84 and 3/887)

Contracts, specifications, tenders and plans for bridges and other public works, c. 1890-1925 (7/5873-77)

Contracts and specifications, 1892-1913, (2/3, 2/919-30, 8/2241)

Correspondence relating to roads, 1871-1906 (20/13407, 3/13415)

Correspondence relating to bridges, c. 1907-1935, (20/13475-544)

Correspondence relating to roads and bridges, 1913-21 (20/13614-26)

# Surveyor General

Copies of letters to Colonial Secretary, 1828-1835

Copies of letters to private persons and officials, 1828-36

Letters from private individuals and officials, 1822-36

Register of Letters Received from Individuals, 1833-36, 2/1417, Reel 2804

# 2. Manuscripts held at the Mitchell Library, Sydney Lennox Papers: MS CY516

3. Files held at the Roads and Traffic Authority Archives, Auburn, NSW Black Bob's Creek Bridge, File SC 2/495.155
Black Bob's Creek: Concrete Culvert - Plan Registration No. 0002/495/BC0000.

# SECTION 2 DAVID LENNOX SMITH METAL-WORKER



# SECTION 3 DAVID LENNOX SMITH – METALWORKER

#### INTRODUCTION

# **Biographical Disclaimer**

The following notes only provide a very slender scaffolding to cover the exterior of your life. They do not constitute a biography and they were never intended to do more than provide you with some prompts for a story you will have to write for yourself.

#### **Your Forebears**

You are an eighth generation Australian on two of your 128 lines. You have at least nine convict ancestors on your father's line. Your origins are basically British. Half of your social genes are Scottish from your mother's side and slightly more than a quarter come from Southern Ireland and the remainder is from England and Wales. However your looks suggest that you have a pronounced Saxon and Nordic element in your make-up. The Vikings captured Dublin in 1000 AD and settled Ireland around the River Liffey. You may have inherited your genes from that invasion!

# **Your Grandparents**

You met your four grandparents and you also met your Great Grandfather, Sydney Patrick Smith, while you were very young. Your paternal grandfather was a very personable, artistic person who had a creative mind. Your paternal grandmother was an Irish dancing teacher who possessed an Irish temperament of sympathy for the underprivileged and love of Irish music. Your mother's father, Ganky, was a school teacher who became a Minister of Religion. He was a kind and broadminded man who had skills in woodworking and human relations. Your maternal grandmother, Nanny, was an extremely hard worker and a no-nonsense type of person who had a good singing voice and musical skills.

# Part 1 A Name for An Eldest Son

# **Family Events Prior to Your Birth**

#### Your Mother

I married your mother on the 28<sup>th</sup> March 1958. As you know she had been married before to Guy Parkes McIlroy and had become a widow after two years of married life. She had spent some time living with her parents at Cooma with her young child, Alison, before she undertook training at Sydney Teacher's College. I met her at the college. In fact she was the first person I met when I made my initial visit to the college! While she trained at the college she lived with 'Gracie' in a residence at Windsor Road outside Parramatta. Her sister-in-law, Madeline ('Mads') McIlroy, looked after Alison while she attended the college. While we knew each other at the college we did not become close companions until after our college course was completed. Our courtship took place between the time we completed our training and the time of our appointment to our first school. Incidentally, your mother graduated with five distinctions and six credits and two passes and was appointed to Carlingford District Rural School. I was appointed to Liverpool Boys High.

## Your Father

I undertook my compulsory three months full-time National Service at the beginning of 1957. As a result of this training I was five weeks late in joining the 212A teacher training unit at Sydney Teachers' College. During my year of training I had to continue with my National Service obligation. This required attendance with my corps for at least thirty days per year for three years. In point of fact I stayed for six years. While in attendance at teachers' college I secretly enrolled in Government I at Sydney University as an evening student.

#### Parents Marriage

Your mother and I were married in Saint Andrew's Presbyterian Church at Fairfield. The church once stood on the corner of Ware and Kenyon Streets. This site is now occupied by a 'Bing Lee' shop. Mary's father, Rev. W. Kinmont, officiated. My local minister, Rev. Andrew Soos, assisted him. Unfortunately we have no photographs of the wedding. Mary's daughter, Alison, was in attendance. She had just turned three years old. After the ceremony we had light refreshments at my parents' home in 1 Helena Street, Auburn.

#### **Our First Home**

We had rented a small two-bedroom home through Sloane's Parramatta Real Estate Agency. The house was at 31 New Line Road, West Pennant Hills. It was on a quarter-acre block and had a tough Kikuyu grass lawn to mow. It was the only house available and while it was reasonably convenient to your mother's Carlingford School it was not convenient for me. I continued with my university studies by evening and to go to my school and the university on four nights a

week. This involved a round trip of sixty miles a day. In addition, I had to continue with my National Service obligation every second weekend. This was at Watson's Bay and it involved even further travel. Mum and I had a belated 'honeymoon' during the September school break. During that time I wrote two university essays. We stayed at Nelson-Heather's fine home at Collaroy as caretakers for the two weeks. At the end of the year we had to vacate the West Pennant Hills home.

#### **Our Second Home**

Our second home was organised through the same real estate agency. On this occasion its location was more suitable. It was half a large house with separate facilities and was located at 52 Western Road (Western Highway) Parramatta. It was owned by Clyde Hillsdon who had a Holden agency – 'Hillsdon's for Holdens' on the corner of the highway and Church Street, Parramatta. The other half of the house was rented by Ron and Audrey Turl. Ron was employed by Clyde as a Spare Parts storeman.

During the first year at this home (1959) I completed my university degree and your sister, Amanda Mary, was born. During the year I also renewed acquaintance with my Junior High School mate, Laurie Tolmie. We graduated together in 1960 although we had gone down different pathways. Laurie also lived in Parramatta, at that stage. He drove me to many historic homes and churches around Parramatta and on the Cumberland Plain. In 1960 I became the Best Man at his marriage to Margaret Edwards but by that time we had moved to our third home.

In 1960 we had purchased a block of land at Glenfield. It was a nice corner block in English Street. It was probably, at one time, part of Dr. Charles Throsby's estate. After travelling through Canberra on our way to Cooma we altered our plans. We decided to sell the block at Glenfield and put a deposit on a home in 19 Scott Street, Narrabundah. I applied for a transfer to the new Narrabundah High School. We took possession of our new home in November 1960 and Mary (with the two girls) settled into the new home while I remained waiting for news of my appointment. I actually resided with my sister at Blacktown. Mary was advanced in a new pregnancy and was now consulting with a doctor in Canberra named Dr. Harrington. In due course my appointment to the nearby high school was received.

### Your Birth

You were born in the old Canberra Hospital on Acton Point on the twenty-third of December 1960 at about 3.00 pm. This hospital has now been demolished. Access to this hospital from the southern side of the Molonglo River could be attained by turning left near the Albert Hall before crossing the old wooden bridge. This access road was over 'Lennox Crossing' where once stood a low concrete bridge with the roadway supported by five or six concrete walls turned end-wise into the Molonglo River. This allowed the water to run between them. A 'handrailing' was on either side. I think this concrete bridge may have been a replacement of an earlier wooden bridge damaged by the 1925 flooding. I think

the bridge was named to honour the memory of Australia's first trained bridgebuilder. At the time of your birth my youngest brother was visiting us. Mary was amazed to discover him peeping through a window at her while she was in labour!

#### Dave

#### Your Name

You were named David Lennox for philosophical reasons. I had been having a difference of opinion with my long standing boyhood friend Laurie Tolmie. It was about whether man had to stand alone and face a life which had no meaning with courage and defiance OR face life with the help of a bridge that crossed the gap that separates the visible world from the invisible world. Laurie chose the former position while I chose the latter. He rested his argument on the philosophy expressed by the Australian poet Professor A.D. Hope in his poem about Australia. Hope proclaimed the dictum:

'You cannot build bridges between the wandering islands'.

On the other hand I had my rejoinder in a meditative poem by the metaphysical poet John Donne:

'No man is an island, intire of it selfe: every man is a peece of the Continent, a part of the maine'.

Meditation XVII (see Appendix 5).

In addition to this philosophical reason there were also reasons of a secondary nature.

- I was familiar with the Lennox Hotel in Parramatta where I had been living before moving to Canberra.
- I had visited David Lennox's bridges at Lapstone, Parramatta and I crossed his Lansdowne bridge almost daily on my way to work at Liverpool.
- The Liverpool High School where I worked as a teacher was in the Lennox zone for inter-school sporting competitions.

I also had a brother named David. The fact that the road over which I used to go to the hospital was called 'Lennox Crossing' was the final 'clincher'. My son's name had to be David Lennox Smith!

# Part 2 The First Fifty Years

# (a) Early Childhood

Three Years in Canberra

19 Scott Street, Narrabundah

Your first three years in Canberra were concerned with growing up at 19 Scott Street, Narrabundah and for three months at 4 Dakin Place, Hackett. For a year you shared a bedroom with a state ward, Gary Fagerlund. Your two sisters, Alison and Amanda, also kept you company. You probably do not remember that we attended Saint Aidan's Presbyterian Church at Red Hill. Our friends included Fay and Stuart McMillan and Hart and Lorlie Retter. During our time at Narrabundah your mother's parents transferred from their manse in Cooma to their new retirement home in Fisher Street, Ainslie. At the end of 1963 I received news of my appointment to the Counsellor Training Course at North Sydney and we moved to Sydney for the 1964 year course. At that time you were three.

## 85 Dennis Street, Lakemba

During 1964 I attended training at North Sydney. We rented accommodation at 85 Dennis Street, Lakemba. Alison and Amanda became friendly with our neighbours over the road, the Healeys. Alison and Amanda attended the Belmore South Public School while you and Hermione stayed at home with your mother. We attended the Bankstown Ward on Sundays.

We had to vacate Lakemba when Mr and Mrs Cope returned from Scotland in August. With the assistance of the welfare section of the Department of Education

we found a house at 48 Drummond Road, Oyster Bay. In December I received notice of my appointment to the Deniliquin Inspectorate of Schools.

# 328 Sloane Street, Deniliquin



When we arrived at Deniliquin you had just turned four. You stayed at home with your mother and sister Hermione. In September another sister was born. At the end of the year we travelled to Sydney and from there we travelled to New Zealand for a holiday. You commenced school in 1966. You were enrolled in Deniliquin South Primary School which was next door to our home. In September 1966 I was appointed to Canberra where I joined Louis Posthumus in the Educational Clinic. Our new government home was at Chifley.

# 32 MacFarlane Crescent, Chifley

When you were enrolled in the nearby Chifley Primary School you met up with one of your early childhood teachers from Deniliquin. We were active in the Church but had to travel to Lyneham. In 1968 Louis Posthumus resigned and I transferred to Nowra on the 11 June 1968.

# 86 Worrigee Street, Nowra

You were enrolled in the Nowra Primary School and I worked in the twenty-eight schools of my district from my base at the Nowra High School. Our sojourn at Nowra was short-lived. At the end of the year I was appointed as a Lecturer in Education at the Wagga Wagga Teachers' College.

# The Turkey Farm Kooringal Road (1) and 107 MacLeay Street, Wagga Wagga (2) and 4 Edney Street, Kooringal (3)

During 1969 we lived in three homes. You attended Kooringal and Turvey Park Primary Schools. I left the College at the end of 1969.

# 122 Pennefather Street, Higgins, ACT

In 1970 I returned to Canberra and worked for six months for the AMP Society with Arthur Mumford. You were enrolled in the Page Primary School. During my time in Canberra I negotiated a return to my position as Lecturer at the Wagga Wagga Teachers' College with a salary increase which put me over the barrier for a Class 1 Lecturer. I returned to the College in July 1970 and arranged the purchase of 3 Blamey Street with Mrs Barbara Gowanloch. You did not leave Canberra until 1971.

# 3 Blamey Street, Wagga Wagga

When you returned to Wagga we moved into the Gowanloch's old house at 3 Blamey Street, Wagga Wagga. Lloyd and Lyris Turner lived at No. 5 and Dr Goldsmith and his wife lived on the other side. The Browns lived over the road and the Du Plessis's lived over the road further down the hill, near the Botanical Gardens. You were enrolled in the Turvey Park Demonstration School with Amanda and Helen. Alison was enrolled at the Mount Austin High School. It was to be the last year of the old Wagga Wagga Teacher's College. You joined the Cub Scouts and began to accumulate all of the proficiency badges. When the Teacher's College was converted to a College of Advanced Education I chose to rejoin the Counselling service of the NSW Department of Education. During 1972 I was allocated schools outside Wagga and some within Wagga. Those outside Wagga included Temora, Cootamundra, Gundagai and Junee. Within Wagga I provided Clinic services from the Regional Directorate and to Kooringal Primary School. My association with Junee High School and the Principal Jim Dean, led to the formulation of the 'Junee Plan'. I was made Co-ordinator of the 'Plan' during 1973. In the evening I had been conducting lectures for the new Riverina College of Education in the Teacher Education Programme. This assisted me in my later application to become a Lecturer in the Education Faculty in 1974. During 1973 your mother had transferred to Mt Erin High School as Sportsmistress. During the year (1973) we both received invitations to a luncheon for the Duke of Edinburgh. He displayed some interest in the way the 'Junee Plan' had managed to provide time for aspects of the Duke of Edinburgh Scheme.

# 100 Coleman Street, Wagga Wagga (1974)

During the year 1974 we purchased the home of Mr and Mrs Warren Crane. Its five-bedrooms provided ample family space and I am sure you enjoyed the above-ground swimming pool and the apricot and mulberry trees. Mrs Eather looked after Rohan while Milton attended the Turvey Park Primary School.

During 1974 you had continued your studies at Mount Austin High School where your mother had once been teaching. You had, by now, become a Boy Scout and had been to a Jamboree. Your lawn mowing earnings helped to pay for this Jamboree experience. Unknown to you, I applied to join the Commonwealth Teaching Service during 1974 in Darwin. By the time I received my appointment (effective from 13 January 1975) Darwin had been blown away by Cyclone Tracy. I fulfilled my appointment notice while you remained in Wagga with the family.

You will remember that your cousin, Rod, was holidaying with us when his home was blown away by Cyclone Tracy. After I left to take up my appointment Lindy Griffiths came to board with the family. The family did not move to Brisbane until 8 May 1975. I had returned home and drove our car to Brisbane. You and Alison accompanied me. We stayed overnight at Dubbo and joined the rest of the family in a Brisbane Hotel.

#### 55 Capitol Drive, Jindalee

On the 9th May 1975 the family regrouped in our home in Jindalee. The Curriculum Branch of the NT Department of Education had been relocated to Brisbane. I was expected to return to Darwin every alternate month. You became the man of the family while I was absent. While I was away you re-landscaped the backyard with its terracing. You attended Oxley State High School and gained

some familiarity with the Queensland Secondary School system. You attended the Brisbane Show with Les and Bev Pilton and when Nannie came to visit you had an excursion to Stradbroke Island. When I was eventually allocated a house in 3 Lovegrove Street, Fanny Bay on the 13 January 1976 you and Rick flew to Darwin a month before the others came.

# 3 Lovegrove Street, Fanny Bay

Our allocated house had virtually survived the cyclone intact and had been occupied by two single women while its occupant was on leave in Adelaide. It was a three-bedroom home on stilts with a laundry underneath. The house was supplemented by a caravan which was sited in the front of the house. You were enrolled in Casuarina High School and Rick was enrolled in Parap Primary. You will remember that many of the Darwin Schools were still closed at that stage. Our neighbours included the Bakker's, the Williams', the de Busch's and Konrad Winkler. We stayed in our house until November of 1976. During that time you became associated with the 1st Darwin Scout Group and the Trailer Boat Club. You met Gordon Millar, Stuart Duncan, Lesley Duncan, Smokey Donnelly and Robert Bromwich. It was during this time that you built your first catamaran and sailed it in Fanny Bay.

## 23 Driffield Street, Anula

At the end of 1976 I was allocated a new four-bedroomed Grollo home. We lived in this home until 1992. We watched while the street filled up with new residents. Our neighbours included the Picketts, the Tomlinsons, the Greens and the

Coopers. You retained your interest in scouting and along with 'Big Bird' you were the first to obtain a Venturer's Scouting Award in the Northern Territory. You kept up your interest in sailing and received several trophies in sailing competitions. During early 1977 you commenced your first year as an apprentice sheetmetal worker. Your 'block-release' training programme was undertaken under the auspices of the Queensland Technical Colleges in Brisbane. Your employer at that stage was Brian Brent. Not long after you completed your training you obtained a milk vending business. You built another catamaran and sailed with Robert Bromwich across to Mandorah. With the scouts you ventured into the wilds of Mount Brockman. You seemed to be competing with 'Big Bird' about the number of boils and hospital visits you could accumulate.

# Territory Sheet Metal (TSM) Shed No. 1

You and Robbie Kollman teamed up to begin your journey into the sheetmetal industry as partners in 1986 (approximately). You had sold the milk run and gone back into the industry with Arthur Webb at DEMAR. It did not take long for you to gain your first employee when Eric Steed joined the new firm. At that stage your equipment was primitive and you only had the 'front part' of the shed. Within twelve months the staff had increased to seven.

#### Workshed No. 2

During your occupation of Workshed No. 2 you branched into house-building and produced your own brochure - "Grow with your House". It was during this time you parted company with Robbie Kollman and decided to seek new premises. In this phase Teddy became a partner and the application of computers to the sheetmetal process grew apace.

## Workshed No. 3



The site of Workshed No. 3 provided sufficient room for the construction of modular homes. The metal framing for these homes could be assembled in the grounds and transported by sections. On site the sections could be lowered onto piers and bolted together. The whole process meant housing construction could be made a continuous process and not subject to the vagaries of weather. Unfortunately during this phase you were introduced to Lionel and you formed an additional company LTD to attract capital. This is a story only you can tell!

#### Workshed No. 4



In Workshed No. 4 you perfected the production line for tank making and took out several patents for your inventions. I cannot comment on the events which led to Lionel's trial for embezzlement and the collapse of the company. That story could become a best seller in the hands of a John Grisham.



The Smith Family with David in his 'Territory Sheet Metal' Tshirt.

# Part 3

# Marriage and Children



Your marriage to Nicole K. Jones on 9 June 1992 was held on the Esplanade Park, Darwin, and was a memorable occasion. It enabled our family to assemble from different parts of Australia to participate in the joyous occasion. Marriages are much more than the union of two people. They are a societal investment in the possibilities of the future. This type of investment is not without its risks and for it to succeed it requires both commitment and continuous maintenance. Individuals change and develop and so do societies. Couples who wish to remain together must negotiate these changes.

Your two children, Savannah and Lachlan, will have absorbed your values by osmosis. They do not have to do so consciously. I have every confidence they have much to live up to if they conduct their lives as you have done.



Savannah and Lachlan

#### Interests

# 1. Scouting

In many respects the scouting movement played as large a part in your education as the schooling system did. It is not widely understood that schooling and education are not identical in their aims or outcomes. You had certain deficiencies and difficulties in reading skills. We chose to de-emphasise the importance of these and concentrate on your strengths. This is where cubbing and scouting complemented the schooling process. In scouting you achieved practical successes and goal achievements across a wide range of activities. These achievements cultivated the values of goal-setting, goal pursuit through persistence and endurance, daring to venture into new tasks and working harmoniously with others. It is these qualities which have stood you in good stead.

#### 2. Sailing

Your association with sailing has not only been an interest but also an activity which has developed important character traits. Sailing is a venture towards a goal which can only be attained by adjusting your sail and direction according to the changes in unforeseen circumstances. In sailing everything is in process. The boat moves, the wind blows and changes direction, the current alters and the equipment breaks down! It requires courage, nerve, flexibility in response and some calculated risks! It pictures business life in many respects!

# David with a sailing trophy

# 3. Football

You played in two rugby league teams of 'A' Grade level: Nightcliff and Brothers. They both won the Darwin competition when you were in the teams! I think it was well known that in both teams you probably did the most work - especially in the tackle count - Your trophies attest to the esteem in which the club held you.

# 4. Power-Lifting



At Play

Your performance and success in power-lifting enabled you to represent your country in overseas tournaments. Your successes in Body-Weight Championships, and more latterly in Age Championships, have become legendary. They have done much to inspire your brother, Rohan, and your two children, all of whom have sought to emulate your achievements.

# 5. Harry Murray VC

Although you did not join the defence forces you have always had respect for those who uphold our territorial rights and our value system. Your uncles and cousins have an outstanding record of service for their country. When you became aware of our relationship to Harry Murray VC you sought out his son, Doug, and his grandson, Don, in the remote back-blocks of Queensland. You prepared a ply-wood silhouette for national display. This display honoured 100 of Australia's heroes. Your collection of Harry Murray memorabilia and the inspiration you have received from his gallant but modest life, have sustained you through many trying ordeals.

#### 6. Travel

Fortunately, through your many trials and tribulations you have still managed to travel widely. Indeed you and Nicole have made a world trip. You have been to many places through sport including Finland, the Philippines and Germany. These visits are often remembered by small incidents such as when you found the headstone of William Gorrie Kinmont in Edinburgh or when you represented your country in Helsinki. Your travels in Australia have also been extensive and your trips to East and West Timor have added local colour.

## **End Thoughts**

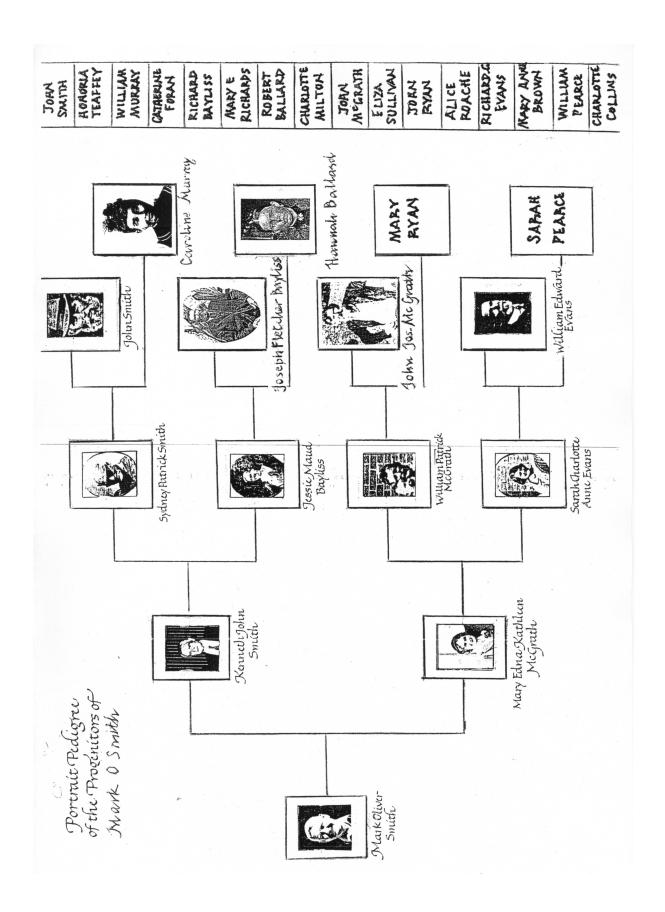
Your first fifty years have been tough, adventurous, exciting and challenging. They have also been creative and innovative. Along with your namesake, David Lennox, you have been a pioneer builder. Whereas he built with stone you have built in metal. We salute you both!

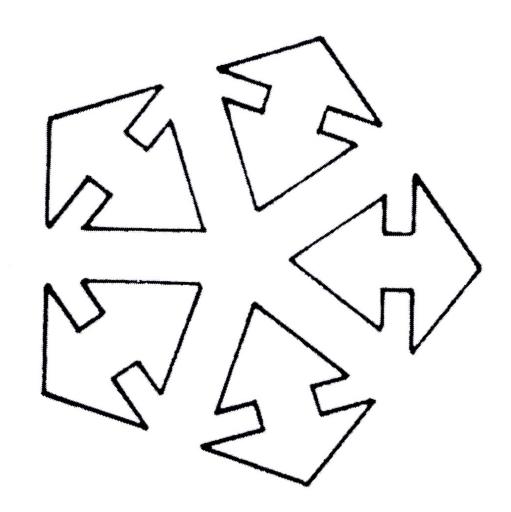


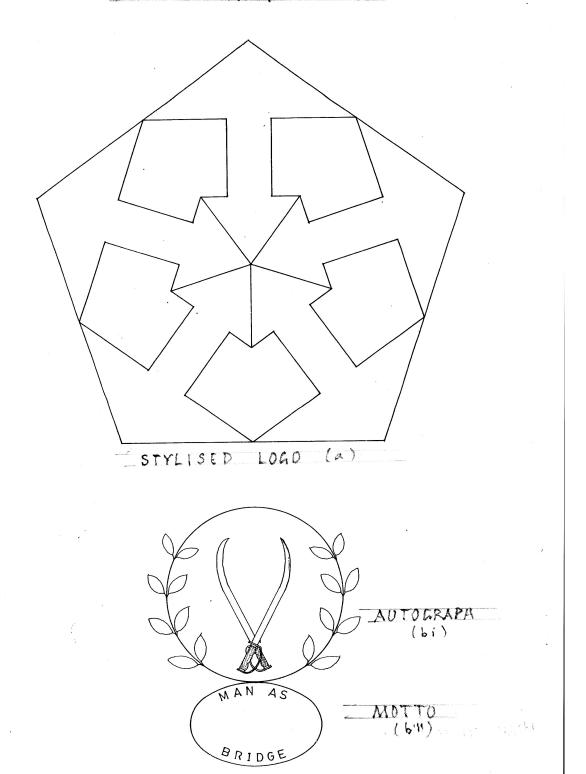
Kinmont cousins

# **APPENDICES**

- 1. Portrait Pedigree of the Progenitors of David Lennox Smith
- 2. Portrait Pedigree of the Progenitors of Mark Oliver Smith
- 3. Family Logo
- 4. Crest (a) Stylised Logo
  - (b) Autograph (i) of Mark Smith
    - (ii) and Motto
- 5. Meditation XVII (John Donne)







# Meditation XVII

o man is an Iland, intire of it selfe; every man is a peece of the Continent, a part of the maine; if a

by the Sea, Europe is the Tesse, as well as if a Promontorie were, as well as if a Manor of thy friends or of thine owne were: any mans death diminishes me, because I am involved in Mankinde; And therefore never send to know for whom the bell tolls: It tolls for thee.

John Donne (1572-1631)