



The 'stump-jumpers': national identity and the mythology of Australian industrial design in the period 1930-1975. Simon Jackson. *Design issues* 18(4) 2002: pp. 14-23(10).

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# **The ‘Stump-jumpers’: National identity and the mythology of Australian industrial design in the period 1930-1975**

**Dr Simon Jackson**

## Abstract

Stump-jump ploughs, Victa lawnmowers, Hills hoists...these objects are celebrated by Australians to the point they have become interwoven with the national identity. They have also been promoted by cultural commentators as ‘classic’ examples of Australian design. This raises the following questions: Why are some objects thought to be symbols of what it is to be Australian and not others? Were they really designed here? This article will also explore the ‘mythology of Australian industrial design’, a series of folk stories or myths Australians tell about their design work and ultimately themselves. The conclusion reached is that just as there was long a tradition to mythologise the outback and deride suburbia, so too did we praise outback inventions and lampoon design objects intended for the suburban home. Also, that there is no such thing as ‘Australian industrial design’.

## Keywords

Industrial Design – Australia; Australian National Identity; Braybrook Stump-Jump Plough; Victa Lawnmower; Hills Hoist; Ford Ute; Furphy Water Tank; Coolgardie Safe.

## Biographical note

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# **The ‘Stump-jumpers’: National identity and the mythology of Australian industrial design in the period 1930-1975**

**SIMON JACKSON**

## **Introduction**

Stump-jump ploughs, Sunshine harvesters, Ford and Holden utes, Victa lawnmowers, Hills hoists...even if these objects are unknown to an international audience they are celebrated by Australians to the point they have become interwoven with the national identity. Most visible in the public's recent awareness of Australian design objects has been the 1988 *Bicentennial* and 2000 *Olympic Games* festivals which have used certain design objects as emblems of what it is to be Australian. Smaller events such as the earlier 1996 *Adelaide Festival* also made use of such objects – in this case an image of a Hills hoist rotary clothesline was used in its official publicity poster. Despite this public interest specific books on the activity of industrial design in Australia have been few<sup>1</sup>. While many general art books have included a few pages on the subject of Australian designed objects, a certain pattern has emerged – some design objects are celebrated while others are ignored. This paper asks why. A review of historical and contemporary writings has suggested a list of myths that reveal how Australians have chosen to view themselves and how industrial design has helped define perceptions of the Australian character.

## **The search for a national identity in Australian design objects.**

The deliberate search for a national design sensibility in Australia dates back to the 19th century and may be seen in the flora and fauna decoration adorning examples of early Australian furniture, household objects and architecture. Historian Vane Lindesay has suggested the first deliberate symbol of Australia might be the 1853 coat of arms depicting a kangaroo, emu and rising sun.<sup>2</sup> Later, in the 1930s, (the beginning of this paper's chronology)

there developed in the Australian community a renewed interest in craft activities. This created a demand for hand-made Australian products rather than mass-produced imports. In 1931 William Rupert Dean, inspector of art in Victoria, expressed the desire that ‘originality should be encouraged and that Australian forms, feeling and colouring should be stressed as much as possible.’<sup>iii</sup>

Most historians point to the Australian identification with the bush. John Rickard has reflected that ‘Any discussion of Australian national values seems bound to use (historian) Russel Ward as a starting point.’<sup>iv</sup> Ward located the national character in the figure of the itinerant bushman – ‘a practical man, rough and ready in his manners and quick to decry any appearance of affectation in others. He is a great improviser, ever willing ‘to have a go’ at anything, but willing too to be content with a task done in a way that is ‘near enough’...’<sup>v</sup> Ward’s version of the Australian national identity was male, nationalist, anti-British and socialist politically. A contrasting but also ‘rural’ identity for Australia was put forward by historian John Hirst in the figure of the pioneer. This figure was largely British, was both Australian nationalist and loyal to Empire and often had cultural aspirations. The pioneer was conservative in political outlook and was reverent of the past.<sup>vi</sup> Unlike Ward’s bushman, there was room within this identity for women. It is through such an identity that the ‘Old English half-timbered’ gable motif appeared on the Australian Federation house with no contradiction of the style’s generally nationalist meaning. The pioneer’s experience in Australia, labouring nobly, profiting and building a new society may be described as ‘British dynamism’ at work in a new land.

Historian Graeme Davison has claimed the mythologising of ‘rural’ identities such as these two was based not on the values of the bush flowing through and shaping the values of Australians (most of whom have always lived in cities) but rather, was the ‘projection onto the outback of values revered by an alienated urban intelligentsia.’<sup>vii</sup> There is no doubt the legacy of early settlement has left a strong stamp on the way Australians have chosen to see themselves, and this has shaped their attitudes to (and the practice of) industrial design. Despite these ‘rural’

identities, census statistics reveal Australians, at least since Federation in 1901, have been more likely to live in a city and work in a factory than on the land.

Yet whenever the subject of Australian design, inventions or manufacturing is discussed (in almost any medium – scholarly or popular) the ‘legacy of pioneering days’ is cited to attest to Australian creativity. Many of Australia’s 19th century design objects are extraordinary, but they should not be used to define the Australian national character over a century later. The 1874 Furphy water tank (for storing water), the 1876 Braybrook stump-jump plough (for ploughing fields) and the Coolgardie meat safe (for keeping meat and dairy foods fresh) of the 1880s all sprang from the needs of men and women on the land and are wonderful examples of Australian creativity. The legacy of these examples of pioneering days has been great, and many of Australia’s industrial design products have become familiar words in the language. For example, the term ‘stump-jumpers’ has derived from the innovative agricultural plough of that name and denotes an innovative person. It has appeared in the title of several books acknowledging dynamic Australians.<sup>viii</sup> But surely more than a handful of such examples are needed to justify the Australian claim that they are uniquely innovative as a people?

The pioneering spirit is popularly believed to have been reborn during the 1930s when so-called ‘depression-era’ design objects were cobbled together. Furniture was constructed from old kerosene-tins, toys were made from jam tins and pieces of wire while musical instruments were crafted from whatever their makers could lay their hands on. Many historians and collectors have chosen to see the Australian national identity somehow revealed in these simple objects created ‘against the odds.’ Certainly these objects were born of resourceful people in the face of hardship, but this paper argues the ability to improvise against adversity is by no means a character trait unique to Australians as some writers would have us believe. The pioneering qualities of ‘improvisation’ and ‘innovation’ have been popular in being presented as Australian themes - witness the successful television program *The Inventors* shown from 1970 onwards and its accompanying book.<sup>ix</sup> While there is no doubt Australia’s national identity has been interwoven with its pioneering past - of bush innovation and innovative agricultural implements - Australians have felt less emotional attachment to 20th century manufactured

objects designed for the home: kitchenware cast in iron, cars, sporting goods, musical instruments, white goods and furnishings. One of the sub-narratives of this paper is therefore the recovery of the 'urban'.

After WWII, the memory of conflict and Australian sporting achievements in tennis and swimming (culminating in the local successes at the 1956 *Olympics*) were dominant in people's minds and helped shape the Australian national identity at that time - one based on sporting prowess. The Associated Chambers of Manufactures of Australia lamented this situation. In the 1952 *Made in Australia Exhibition* (Exhibition Buildings, Melbourne) the following sentiment was expressed.

Great deeds in the realms of war and sport have imbued Australians with a full measure of national pride. We should be no less proud of their industrial history, but unfortunately there are few who appreciate the extent of their achievement in less than 150 years.<sup>x</sup>

The desire to promote manufacturing activity as a national symbol was also evident in the words of the Lord Mayor of Sydney on the occasion of the opening of the 1961 *Sydney Trade Fair*: 'The Australian produced or manufactured articles which will be on display...will demonstrate Australia's potential as a progressive and rapidly developing nation.'<sup>xi</sup> This desire was propagated at other important exhibitions abroad and culminated at the Australian Pavilions at Montreal's *Expo '67* and Osaka's *Expo '70* where attempts to re-define the national identity through displays of industrial design objects, science, technology and modern art must be regarded as very successful. Gone were the days of presenting an agrarian image of Australia to the world at International Exhibitions.

Out of the many writings (in books, journal articles, pictorial essays) on the subject of Australian industrial design has emerged a series of observations which this paper deems the 'mythology of Australian industrial design'. There are many myths about the Australian character, and also about Australian industrial design. From the earliest writings of C. E. W. Bean, to Russel Ward and through to the popular writings inspired by the *Bicentennial* and *Sydney Olympic Games* celebrations, the following supposedly 'Australian' attributes have

been praised: the ability to invent new objects, the ability to ‘battle against the odds’; and a ‘masculine’ pride in not being too ‘fussy’ by distaining fine crafts and good workmanship. There is also a lack of popular acknowledgment of non-British designers. These popularly held character traits have ‘rural’ implications, and many of them are myths without much foundation.

It is possible that these myths were formed by the same sort of Australian chauvinistic nationalistic sentiments which, since first white settlement, have shaped the taste for the cult of the bush over the beach, and the bush over the city as a theme for painting and academic discussion generally. In a similar manner, there is a tendency to value Australian-designed ‘rural’ farm implements (stump-jump plough *et. al.*) above those objects intended for the suburban home (various consumer goods), despite the fact few Australians could identify one of these agricultural implements even if they did happen to stumble across one. What other reason could explain why the ‘rural’ 1934 Ford ute, a light pick-up truck, is judged an ‘Aussie icon’ by Australians as their great automotive contribution to the world, when it was really just a restyle of existing American automobiles? Instead of the ute which is so praised by Australian writers, many international voices praise the 1935 Holden-Chevrolet Sloper with its fastback body. Designed and built in Australia, this sleek-looking town car is claimed to have been offered ‘several years before similar cars appeared on the American market.’<sup>xii</sup>

**The mythology of industrial design activity in Australia (or the folk stories or myths we tell ourselves).**

The construction of the Australian national identity as defined by nationalist historians has been shaped by two untruths. Firstly, the refusal of Australians (during the paper’ chronology of 1930-1975 and beyond) to acknowledge their urban, and especially suburban, pattern of living and instead identify with the bush. Secondly, Australians’ reluctance to embrace manufacturing as a national identity when clearly more worked in factories than on the land. The following supposed character traits of Australian national identity and industrial design practice are

entrenched in the folklore of this country and are well represented in various writings. (Several character traits are closely linked while some are seemingly contradictory.)

### **The myth that Australians ‘invent’, they don’t design or style products.**

The historian C. E. W. Bean may well have set this myth in place in 1909 by arguing that the Australian was a great innovator.

It is still a quality of the Australian that he can make something out of nothing...he has had to do without the best things, because they do not exist here. So he has made the next best do; and, even when these are not at hand he has manufactured them out of things which one would have thought it impossible to turn to any use at all. He has done it for so long that it has become much more than an art. It has long since become a part of his character, the most valuable part of it.<sup>xiii</sup>

Later came Russel Ward’s location of the Australian national character in the practical bushman and Manning Clark’s description of Australian traits ‘the bush convention - all that making do, that genius for improvisation of the great army of the deprived in the Australian bush.’<sup>xiv</sup> These important writings have built up a momentum and there have been dozens of followers who have also linked the quality of improvisation with the Australian national character - often in an arrogant manner as if Australians were (and remain) the only people in the world capable of such creativity.

This myth of the pioneer evident in many Australian writings holds that a direct successor to the colonial settler can be found in every Australian suburban home - the inventor tinkering in his backyard shed. While this paper does not wish to denigrate the innovation displayed by a small number of these backyard (largely amateur) inventors working with limited resources, nonetheless the myth of Australian innovation is quite ridiculous. Yes, there have been a handful of innovative industrial design products to emerge from the backyard shed, but does this make Australians uniquely innovative? Two of Australia’s best-loved examples were, in fact, pre-dated by similar American and British models.

‘Invented’ in 1924 in the suburban Melbourne suburb of Murrumbeena by Lance Hill, one might imagine the Hills hoist to have been the only rotary clothes hoist in the world such is

its fame in Australia. However, other Australian and American precursors existed at least a decade earlier.<sup>xv</sup> The Adelaide ironfounders and blacksmiths company A. C. Harley advertised an 'Improved Rotary and Tilting Clothes Drying Rack' in the *Sun Foundry Illustrated Catalogue* in 1914.<sup>xvi</sup> A slightly different looking model was offered for sale in America by an American firm, the Hill Dryer Company, and was also advertised for sale in 1914.<sup>xvii</sup> (Despite its similar name, this American company had no connection with the Australian Hills company.) Another American hoist, holder of US patent 434921 of 26 August 1890, is the earliest known patent for a 'rotary clothes line'. Australian Lance Hill holds the Australian Patent (215772 lodged 22 March 1956) for the crown and pinion winding mechanism only.<sup>xviii</sup> Despite this rather minor addition to an existing American design, the jingoism surrounding the Australian company's version of the hoist is amazing. Quite apart from the Hills Hoist's revered status during the *Bicentennial* fervour of 1988, recent times have seen no challenge to the myth. In 1996 it was claimed by the prominent local journal *Business Review Weekly* the Hills Hoist was still

Our very own: The Yanks have Vegemite, King Gee, Stubbies, Sidchrome tools, and most of Arnott's. The Swiss own Life Savers and the Kiwis have their hands on Tooheys and Castlemaine beer. Are there any Australian icons still in the hands of Australians? Well, yes, the Hills Hoist. Invented by brothers-in-law Lance Hill and Harold Ling, the rotary hoist has been a familiar presence in the nation's backyards. It not only dried clothes, but doubled as a durable piece of playground equipment (and a useful tether for hyperactive youngsters). The clothes line's icon status is being recognised this year in the poster for the next Adelaide Festival. Descendants of the inventors still control Hills Industries. Long may that continue<sup>xix</sup>

All of the words dear to Australians are contained in this quote: 'invented' (not 'designed'), references to backyards, the list of 'Aussie icons' and the resentment towards the 'Yanks' for being more astute businessmen.

Similarly, the Victa Lawn Mower (Australian Patent 8770/55 lodged 2 May 1955), supposedly 'invented' by Mervyn Victor Richardson in 1952, was in fact predated by a British hand-propelled version of the rotary mower. (British Patent 385473 of 29 February 1932).<sup>xx</sup> Richardson's version was merely the world's first powered version of the rotary lawn mower

concept. It does seem to be the case that Australians are in love with the mythology of the backyard inventor. This is evidenced by the recent popularity of the book and television documentary *Blokes in Sheds* which explored all of the many uses to which Australian men put their backyard sheds: as a workshop, as a retreat from the wife and kids, as a place to mend the car, to invent, store junk, and drink beer.<sup>xxi</sup>

In the recently published *Dictionary of Famous Australians*<sup>xxii</sup> many sports people, public figures and artists are celebrated but there is no section devoted to designers. Instead, there is a section called 'Inventors' that lists only practical men: Lawrence Hargrave, Lawrence Hartnett and other makers of useful things such as sheep-dips, agricultural implements and medical technologies. Is the term 'design' a little too cosmopolitan for Australians? They seem to prefer the more workmanlike term of 'inventor' which might be explained by the continuing Australian identification with the 'rural' national identity. Several titles of Australian books suggest this.<sup>xxiii</sup>

### **The myth that true Australians love to 'battle against the odds'.**

While 19th century Australians were indeed forced to innovate new ideas and adapt imported products to 'battle the harsh Australian environment' (as popular histories characterise it), Australians very quickly became the most urbanised of all peoples. That the myth of the 'Aussie battler' is called upon to account for qualities and weaknesses in Australian industrial design in the late 20th century is ridiculous, yet new 'battles', new opportunities for proving Australian mettle have since been created in which Australian innovation 'wins through'. This perhaps culminated in the 'battle' for the 1983 *America's Cup* yacht race that saw Australia win against a giant foe - America. What better example of the 'Australian battler' myth can be cited than naval designer, Ben Lexcen and his famous 'winged keel'? The purple journalistic prose spilled over Lexcen could itself fill a book. He even lent his name to a car, to 'Australianise' Toyota's re-badged version of the Holden Commodore of 1988-94.

And even when they do not 'overcome the odds', Australians have created a kind of national alibi, flattering themselves that they have great ideas which have been stolen or

suppressed. There is even a sort of heroic failure about these abandoned projects which lifts them to mythical status similar to the heroic military failure at Gallipoli. Many examples of this myth can be found in the story of Australian industrial design. One concerns the ill-fated Holden Torana GTR-X, an elegant looking sports car prototype which was never mass-produced. The reasons for this failure were later offered by a former Holden executive: 'It was never formally presented to Detroit to have the necessary Holy water sprinkled on it.'<sup>xxiv</sup> Was this a case of the 'centre' suppressing the 'peripheral' culture? It is hard to say. What is of interest is that Australian car magazines often tend to celebrate these 'ones that got away' even more than actual Australian production cars. Is this a 'Gallipoli' trait? That Australians love to celebrate a heroic failure? If the car had actually gone into production it might well have been a commercial failure. But because it remains 'untested' by the manufacturing process and the market place and by time (there are no rusty ones lining the street) Australians can celebrate its 'pristine' memory and wonder 'if only...'

When they do succeed, Australians love a nonchalant hero, like the cricketer Don Bradman who 'licks the world' in an unassuming manner. (Bradman also lent his name to a special edition Holden-bodied car in the 1930s.) Perhaps the most spectacular example of this in Australia's industrial design history was the Repco-Brabham Formula 1 racing car designed and driven by triple World Champion Jack Brabham. While there were no other racing cars at this level of sophistication being designed in Australia, this locally designed and manufactured car beat the world's best. Brabham remains the only driver ever to have won a world championship in a car of his own design. Recent examples of the nonchalant design hero include the designers of the Cochlear 'bionic ear' implant and the Sarich Orbital engine which have attracted interest from all over the world. While Australians should celebrate such achievements, they should not delude themselves they have been more innovative than the people of any other comparable nation.

**The myth that Australia lacks a crafts or design tradition.**

The argument ‘that Australia has no crafts or design tradition’ is linked to that other myth ‘that Australian culture is only 200 years old’ and both are flawed. Certainly the visible signs of the European culture in this land (buildings, paintings and design objects made locally) are no older than 1788, but the European laws, language and culture of this country are as old as those of the cultures from which the first immigrants came. In his novel, *Kangaroo*, D. H. Lawrence claimed ‘A colony is no younger than the parent country’. This paper subscribes to this idea and rejects the notion, so often expressed, that Australian industrial design got off to a bad start because ‘Australian lacked a crafts tradition’. How could this be true when the country has had a long and diverse history of immigration, and that all of these people brought some aspect of their cultures’ crafts and design traditions with them? Histories of Australia’s architectural vernacular have placed great emphasis on the specific traditions, materials and technologies introduced in particular by the English, Scots and Germans to buildings (and their furnishings) erected in the early to mid-19th century.<sup>xxv</sup>

Despite this rich crafts legacy, the myth ‘that Australia lacks a crafts or design tradition’ persisted. That this myth could be used as an excuse for any deficiencies in late 20th century Australian industrial design and manufacturing is a nonsense.

### **The myth that Australian designers are of British origin only.**

Why is there little recognition of 19th century non-British inventors and designers in the popular constructions of Australian history? Australia has always benefited from the skills brought by new immigrants. Historian Morton Herman noted this as early as 1956.<sup>xxvi</sup> Despite this, many Australian historians have claimed American technical influence began with WWII, while technical and craft contributions from European cultures were only supposed to have occurred after the 1950s immigration schemes. The reason why these immigrants and their manufactures are not enshrined within the Australian national identity (during the paper span of years, 1930-75) is surely because many Australians tended to identify themselves, as J. S. MacDonald suggested, as ‘the last of the Aryans’. Designers of British descent tended to design implements for farming the land (where many British investments in Australia were

located) and so the linking of stump-jump ploughs and Sunshine harvesters with ‘practical men rough and ready in manner’ was made. American and European designers, by contrast, seem to have been more active in the field of consumer products - an area where Australians have had ambivalent feelings.

### **Conclusions.**

It is one of the findings of this paper that Australians’ reactions to ‘rural’ design objects (the stump-jump plough, the Furphy water tank, the Coolgardie meat safe, the Ford ute *et. al.*) have been very different from their reactions to ‘urban’ or, more specifically, ‘suburban’ design objects (chairs, whitegoods, passenger cars). Where rural objects are deemed heroic, suburban design objects are largely forgotten or are celebrated only in irony. Clear examples of this irony were the Hills hoists held as heraldic torches on the 1996 *Adelaide Arts Festival* official poster and Victa lawnmowing formation marches during the *Sydney Olympic Games* opening and closing ceremonies. There is seemingly no national interest in the kitchenware cast in iron, passenger cars (including the influential 1935 Holden-Chevrolet Sloper), sporting goods, musical instruments, white goods, home furnishings or other necessary urban design objects designed and manufactured in Australia. This is in stark contrast to many other design cultures (Italy, Scandinavia, Japan to name prominent examples) which have based their economies and aspects of their own national identities on such urban objects. Tellingly, the pioneering days of these countries are more distant than Australia’s and they seem more comfortable to project an urban self-image to the world than is Australia.

What of the imagined ‘pioneering’ character traits Australians hold so dear? This paper does not conclude that no innovation occurred in this country. Rather, that all design cultures, especially during their ‘pioneering’ stage of industrial and social development, were similarly innovative. The reason that Australians tend to celebrate the mythology of bush innovation is that their pioneering days are so recent. And that in its search for a national identity different than the parent (Britain), this young country used the outback landscape with its distinctive

flora and fauna, isolation and hardship as a uniquely Australian signifier. And so rural design objects have always been praised.

In this respect the construction of design myths in Australia is consistent with the construction of design myths in other countries. All cultures have sought to emphasise their national uniqueness – it is hard to think of a national design myth which does not draw upon the cliché's of its history. For example it is popularly believed that the sensual nature of Italian design is a direct legacy of Italy's proud sculptural tradition.<sup>xxvii</sup> It is also argued that the finesse of Scandinavian domestic design objects is a direct result of the long winter months designers and craftspeople spend indoors in that part of the world.<sup>xxviii</sup>

To most people at home and abroad Australia *is* its unique landscape and animals, its sun and surf, its kangaroos and koalas. And working on this land are the pioneers – practical white men battling against a harsh environment and improvising with simple handtools. This is still how many Australians regard themselves. It is therefore not surprising that the design objects that respond to this rural series of values have become interwoven into the national psyche, even though they contradict the current reality which sees Australia as a long established urban and multicultural society. Australia's self-identification with the bush over the city (and more especially over the dreaded suburb) continues today as is evidenced by the recent writings and festivals surveyed.

Another finding of this paper is that many of the design objects which are popularly celebrated as examples of Australian innovation were found to be mere adaptations of established international designs (Hills hoists, Victa lawn mowers and Ford utes to name prominent examples). Finally, the phrase 'Australian industrial design' with its notions of cannon and school is found to be misleading. The expression 'design activity in Australia' is a more accurate description of the situation in which international design ideas were adapted to suit local needs. Not enough examples of products designed and made in this country, and which show a distinctive Australian character, can be cobbled together into anything like the schools of older international design cultures.

## NOTES

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- i Tony Fry's *Design History Australia* (Sydney: Hale & Iremonger, 1988), and Michael Bogle's *Design in Australia 1788-1970* (North Ryde, NSW: Craftsman House, 1998) are the only specific surveys of industrial design history in this country.
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- iv John Rickard, 'National Character and the 'Typical Australian': an Alternative to Russel Ward.' *Journal of Australian Studies* , No.4 June (1979). p.12.
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- viii Neil Lawrence and Steve Bank, *The Stump-jumpers: A New Breed of Australians* ( Sydney: Hale & Iremonger, 1985). Similarly, G. A. Rattigan entitled his 'Opening address' to the *Australian Academy of Science, Science and Industry Forum* (held in Canberra in 1977) *From Stump-Jump Plough to Interscan*.
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- xiv Manning Clark, quoted in Anne Moyal, 'Invention and Innovation in Australia: the Historian's Lens.' *Prometheus* Vol.5 No.1 June (1987). p.93.
- xv I am indebted to Dr Miles Lewis, University of Melbourne, for alerting me to these earlier hoists.
- xvi *Sun Foundry Illustrated Catalogue* (Adelaide: Vardon & Sons Ltd., 1914).
- xvii Advertisement, 'Hill's Champion Clothes Dryer.' *Country Life in America*, August (1914). p.101.
- xviii Rotary Clothes Hoist Patent: Lance Hill - Australian Patent 215772 Lodged 22 March 1956. [Canberra]: Intellectual Property Australia, [http://www.ipaustralia.gov.au/fun/patents/05/fun\\_hill.htm](http://www.ipaustralia.gov.au/fun/patents/05/fun_hill.htm) (23 April 1998).
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xxv See Philip Cox and Clive Lucas, *Australian Colonial Architecture* (Melbourne: Georgian House, 1974) and Miles Lewis, *Victorian Primitive* (Melbourne: Greenhouse, 1979), passim.

xxvi Morton Herman, *The Early Australian Architects and their Work* (Sydney: Angus & Robertson, 1956).

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xxviii Hal Missingham 'Introduction' p.8. in *Design in Scandinavia* (Stockholm: Victor Pettersons Bokindustri 1968).