Post and Rail Fences
Derivation, Development, and Demise of Rural Technology in Colonial Australia

JOHN PICKARD

Post and rail fences had a relatively minor role in England in the eighteenth century, primarily to protect young hedges. However, they rapidly became the most advanced form of fences in the new Australian colonies founded in 1788 and later. The key feature is that thinned tenons on the ends of rectangular split rails fit closely into mortises cut in the rectangular split posts. Post and rail fences were widespread but never common because of the high cost, lack of secure land tenure, and ubiquitous use of shepherds to guard against predatory dingoes. With the introduction of cheap iron wire in the mid-1850s, farmers and pastoralists gained many advantages from fencing their boundaries and paddocks. By 1900 post and rail fences were obsolete technologically, although farmers built decreasing numbers up to the 1960s. More recently, many people are relocating old post and rail fences onto peri-urban subdivisions and erecting new ones to create a rustic appearance. Post and rail fence use in advertisements and other media shows that they have achieved a new status as an icon of rural Australia.

When Governor Phillip established the penal colony of New South Wales at Sydney in 1788, he faced the alien environment with only the few examples of English technology he could carry on his crowded ships. He

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had the daunting task of attaining agricultural self-sufficiency with a convict work force that had few farming skills. The landscape bore little resemblance to England: the forests had trees of extremely hard wood, the soils were infertile, the grasses inadequate, and the streams few and impermanent. Somehow, Phillip and his convicts had to adapt English farming technology to develop a system that would provide food and fiber for the new colony. Fences were a necessary component to prevent valuable livestock from straying and to separate stock from crops. Within a decade of settlement, the colonists were using post and rail fences, first recorded in an etching from 1789 (see Figure 1).

Agricultural systems that mix grazing and cultivation, like that in colonial Australia, require good fences to separate stock and crops. Selective breeding and herd improvement require stock-proof pastures to separate male and female animals. English fences in the late eighteenth century provided the technological background to fencing the infant colony. Hedges (live fences), with or without additional ditches, banks, and walls were the major English fences. Where necessary, farmers protected hedges with
posts and rails, but these were only temporary protection until the real fence (the hedge) matured to become stock-proof. Most of this farming technology from England was quite unsuitable for much of the colony. English hedge plants did not grow fast enough, ditches were expensive, and many areas lacked suitable stone for walls. The more easily constructed brush fence had its advocates but was only short-lived, and it seems to have been uncommon. The settlers therefore adapted to the situation and perfected the post and rail fence, which combined most of the criteria for a good fence: it was relatively cheap, stock-proof, used available material, and would last at least twenty years.¹

Previous studies of the history of Australian fences have neglected post and rail fences. A recent survey of Australian agricultural historiography makes no reference to fencing; not an omission of the author, but a reflection of the lack of ongoing interest by historians and geographers in fences. Colonists adapted post and rail fences from the minor position they had occupied in England into a major fencing system in three decades (see Figure 2). They did not abandon them until changing technology allowed the manufacture and use of cheap iron wire later in the nineteenth century. The post and rail fence remained important, however, as a cultural icon of the rural Australian landscape.²

The first fences the colonists built, used split logs or pales set side-by-side vertically in the ground, perhaps attached to a horizontal rail. These originated directly from deer pales (see Figure 3), a form of fence around deer parks used in England since at least the thirteenth century. Deer

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pales themselves derived from earlier palisades recorded from Iron Age settlements and going back to Neolithic times nearly six thousand years ago.3

While easy to make, these palisades were not stable or self-supporting for very long unless large logs were placed vertically in deep trenches. Perhaps from the outset of the colony in Sydney, but certainly within a year, the colonists adopted the English practice of reinforcing the fences by nailing a single horizontal rail to the pales. While somewhat stronger than pales alone, it was not until the pales were nailed to two rails running between posts that the fences became really effective. Using two rails meant that the colonists did not have to embed the pales in the ground, thus increasing their durability. They could also cut thinner pales, allowing more to be split from each log.
These paling fences had multiple uses. From the eighteenth century on, their most common use was around urban and farm houses to define the house yard rather than dividing the farm into a series of paddocks. However, they persisted well into the twentieth century in corrals. They were also used in some boundary and subdivision fences in central New South Wales as late as 1841: “fields [at Boree Station], enclosed as usual with pales, ... and ... the clearing ground beyond was similarly enclosed.” The boundary fences on the border between New South Wales and Queensland in 1900 were made of pales. Nineteenth-century observer, Francis Dutton described “kangaroo fences” from South Australia that were five-foot-high paling fences with a new local name, and farmers also used them in dingo-proof fences in south-eastern Queensland in the 1860s.4

However, these fences used an exorbitant amount of wood and labor. A paling fence with posts eight feet apart, two rails, and pales nine inches wide, around a square paddock of one acre consumed over one hundred posts, two hundred rails, and 1,110 pales. The material and erection costs, plus an increasing shortage of timber, spurred colonist farmers to seek cheaper fences.

Some alternatives to paling fences were ditch fences and brush fences. The former were rare in the colony. Brush fences, however, did exist. These were by far the easiest fences to make by simply piling limbs and branches from felled trees and shrubs along the boundary line during clearing. Although easily repaired by adding a few more branches, they were very susceptible to recurrent bush fires. The earliest record of brush fences is 1824 in Tasmania: “Those lands that are protected from depredations upon stock are generally surrounded ... with a brush fence.” Early records from other colonies are about a decade later: Western Australia 1832 and Victoria 1835. Given the movement and trade between the colonies, it is likely that brush fences were widespread by the mid-1820s. The lack of reports may well be under-reporting by visiting English observers who would have considered such untidy fences as a mark of poor husbandry. Although colonists built brush fences almost to the end of the century, they regarded them as lesser fences than the technologically more complex post and rail fences.5

There is no extant record of exactly who was responsible for bringing the technology of post and rail fences from England to Australia. Perhaps it was one of the officers who had some farming background or who took
the trouble to bring some of the current farming books with him. Perhaps it was one of the few convicts with farm experience. Within a few years, those farms that had fences used post and rail, so adoption was rapid, but the design remained unchanged until it was supplanted by the newer technology of wire.

The primary feature of a post and rail fence is that the rails are attached to the posts in mortises, they are never nailed or tied on (other than as later repairs). James Atkinson, an experienced English farmer who successfully farmed in New South Wales from May 1820 to February 1825, described the key features:

Posts are cut five feet six inches, and rail nine feet long. The mortices [sic] are cut quite through the posts, about four inches long, and two inches wide; the ends of the rails are sometimes placed one over the other in the mortice [sic], and sometimes one by the side of the other;... The ends are trimmed away so as to overlap each other, and project through the mortice [sic] on both sides; two pannels [sic] are invariably put up per rod, and the posts are always sunk two feet in the ground, which allows the fence to be three feet six inches high.

Rails varied in cross section but were usually in the range two to three inches wide by six to nine inches deep. Consequently, fence workers almost invariably thinned them—using an adze or broad ax—at the ends to form a distinct tenon that fit both rails into the mortise. Both posts and rails were split from hardwood trees (typically a restricted range of species of the genus *Eucalyptus*, known from trial and error to split readily) using mauls and wedges. Posts generally ranged from eight to ten inches wide by three inches thick but occasionally up to twelve inches wide. Workers cut the mortises with a mortising ax, but sometimes used an auger to drill holes to define the size of the mortise that they then chiselled out, leaving telltale round internal corners in the mortise. Such fences were technologically advanced. They required considerable skill and experience to build properly so that the posts lined up and the fence was solid and looked workmanlike.6

The major feature of post and rail fences, the mortise and tenon used to fix the rails in the posts, had been evident in English fences. In 1816 the anonymous “Lincolnshire Grazier” described them in fences to young hedges being established on banks:
It was usual, . . . to provide rough posts for each side of the bank, at distances to be estimated by the length of rails, of equally rough materials; three of which are kept together by mortises in the posts, and thus forming a secure fence against great cattle, the posts being placed at such a distance on each side of the plantations, that the cattle cannot put their necks over to crop them. And when sheep or lambs are put in the ground to feed, &c. furze of loose thorns are drawn into the rails, to prevent them being damaged.

However, the Lincolnshire grazier did not consider the fences sheep or lamb-proof, offering an insight into colonists’ adaptation of them for their own particular needs.\(^7\)

Another minor, but important, difference between the English and colonial fences was the shape and nature of the tenons on the rails. Geographer Oliver Rackham describes an eighteenth-century English fence as “a park pale of cleft oak stakes: a slightly modernized version of the mediaeval park pale which apparently had only one rail.” He specifically mentions the absence of a separate tenon on the ends of the rails. Instead, they were “cut askew” or obliquely to fit into the mortises. This suggests that the colonists adapted the English-style rails by developing a thinner tenon on the ends of each rail. The only Australian post and rail fences with ends “cut askew” are poorly made modern replicas, bounding rural residential estates.\(^8\)

The Australian colonists further changed the English design when they found that removing the bark and sapwood from posts extended the in-ground life. Fungal and especially termite attack was ubiquitous, even for the very hardest of local hardwoods. Charring was used in England, presumably if other preservatives were not available: “With regard to the gate-post, where timber is used, it ought to be either prepared by tar, pitch, or oil-paint, in that part which is intended to be deposited . . . in the earth, or by charring.”\(^9\)

Other features of post and rail fences varied according to individual preference, such as the number of rails. The first recorded colonial post and rail fence, in 1789, had two rails (see Figure 1). By 1819 colonists built fences with from two to five rails. Some enclosed large areas, requiring considerable labor. Presumably, most farmers built their own fences, if they had any at all, but the wealthy could afford to advertise for contract
fencers. By 1819–20 “the more opulent settlers have begun to fence their estates with strong railing made of the stringy and iron bark trees.” In a fit of extravagance in 1813, the government advertised for contractors to erect a post and six-rail fence around Grose Government Farm, a few miles west of Sydney. Workers completed the fence in 1815, but it was poorly built and was replaced in 1822 with a more conventional post and four-rail fence.10

James Atkinson provided a detailed description of building a post and rail fence. He observed:

Enclosing with post and rail fences of split wood, has been brought to a very considerable degree of perfection in this Colony; and is executed in a style of great neatness and stability. This work is usually performed by free men [c.f. convicts], who have acquired the knowledge of this branch of rural labour since their arrival in the country; very few common labourers from any part of the kingdom being at all acquainted with it.

Atkinson concluded his description of erecting a fence with the observation that “these kinds of fences are perhaps, under all circumstances, the best that can be put up in the present state of the colony; if substantially executed, they will stand 20 years, and with a new set of posts, and few new rails, may be again set up for a further term.” Atkinson’s estimate of a twenty-year initial life has been far exceeded by numerous existing post and rail fences in New South Wales and Victoria, many of which are well over fifty years old and still stock-proof with only minor repair.11

By the 1830s post and rail fences were apparently common in all the southern colonies, and judging from contemporary accounts, they were considered the best fence for most purposes. However, before farmers and pastoralists first erected wire fences in the early 1850s, most properties were unfenced. Fences were expensive, and colonists were unwilling to invest without secure land tenure. Additionally, because of predation by the ubiquitous dingoes, shepherds watched sheep, therefore negating the need for fences. Farmers more often left cattle to their own devices.12

Tasmania had no dingoes, and many landowners used fences rather than shepherds to control their flocks and herds. Consequently, Tasmanian farms appear to have been more extensively fenced than mainland farms
before the 1850s. The landscape paintings of Simpkinson de Wesselow show many post and rail fences in the late 1840s, often stylized and with broken rails. Numerous photographic images in the collection of the State Library of Tasmania show a range of post and rail fences up to the late 1880s.13

Early observers in Victoria found relatively few fences, but when they did, they were apparently worthy of comment. Thus, William Howitt trekking from Melbourne to the Victorian goldfields in October 1852 wrote:

The fields are enclosed by what they call brush fences, that is, simply the trees as they are felled thrown along in long lines, and their branches piled upon them. That is the first rude fencing of a new country, and we passed plenty of it. After these come posts and rails; and finally as cultivation and wealth advance, will planted hedges succeed.”14

Although many of the early Victorian fences were post and rail, many landowners preferred cheaper fences. For example, the Clyde Company property, Golfhill, in southern Victoria had a mix of brush and post and rail fences even though the company was apparently well financed. Further east, in the heavily forested Gippsland region of eastern Victoria, pioneer settlers used log or chock and log fences on the boundaries of their newly cleared farms from the late 1830s to at least the late 1880s. Some, presumably with more capital or time, also erected post and rail fences as late as 1888.15

In New South Wales, from the early 1850s after tenure became more secure, settlers used many hundreds of kilometers of post and rail fence to both encircle and subdivide large grazing properties in the Riverina. Illustrator, Frederick Terry’s sketches record a number of post and rail fences near urban areas of Sydney and Maitland (in the Hunter Valley) the early 1850s.16

Post and rail fences appear to have been the standard fence in South Australia from the inception of the colony. Indeed, fencing was such a drain on the forests that many people advocated government regulated forest reserves from the 1840s. Various landscape paintings show post and rail fences from the middle of the nineteenth century—for example, the wonderful paintings by Samuel T. Gill and George F. Angas. Post and rail fences were recorded in Western Australia from 1835, but it is difficult to assess how widespread they were.17
Therefore, colonists built post and rail fences in the areas settled up to about 1860 in New South Wales, Victoria, and South Australia, but there is little evidence to suggest that they were common. Shepherds rather than fences controlled stock until about the 1850s. As early as 1827, Peter Cunningham who traveled widely in the colonies advised against building fences until stock were returning a profit: "Capital expended in building, clearing of land, fencing, and the like, where such are not pressingly wanted, is completely lost to you for a time at least [emphasis in original]."

The legal situation in the new colony also worked against fence construction. The various state land acts reserved ownership of improvements (including fences) to the Crown, but permitted lessees to remove them. Consequently, until squatters received land title, few invested capital in technological improvements with no guarantee of genuine ownership.

Fences were never cheap, and the cost was quite variable over the nineteenth century (see Figure 4). Early fences were particularly labor-intensive and, despite many convicts in the colony, the price of labor was always a source of frustration to the settlers. In 1816 the governor published a table with set prices for various work, including fencing. However, information in advertisements in 1815 and 1819 suggests that the real cost could be 40 percent higher (3s. 0d. versus 5s. 2d. per rod for five-rail fence). Not fencing land, thus represented a rational colonial response to a set of conditions quite different to those in Europe: with high labor costs, shortage of capital, but abundant cheap land.

Extra rails increased the security of fences, but also the cost: by 44–100 percent. By 1867 additional techniques and technology made the choice of an optimal fence more confused. Brush fences were cheapest but had the shortest life. Various log fences ranged from $568 to $1,420 per kilometer. Hybrid fences with a top split rail were very expensive: $1,477–$1,732 per kilometer, and wire fences were $710–$2,324 per kilometer, with most in the range of $1,100–$1,500. Thus, even before the invention of a practical barbed wire in the United States, wire fences using plain wire were cost-competitive in Australia. Imported wire sounded the death knell of colonial post and rail fences in the 1850s, but farmers persisted with the older and familiar technology until the price and convenience of wire were overwhelming. Another reason for the persistence of post and rail fences was that the only cost was time and their own labor, commodities available to even the most cash-strapped farmers.
Despite cost, the amount of fencing in the colony increased in the second half of the nineteenth century. Some early commentators believed that labor shortages caused by the 1850s gold rushes were the primary impetus for building fences. Historian Gordon Buxton rejects this, suggesting that it was simply a result of increased pressure to run more sheep, and a subdivided property could carry about twice the number of sheep as one with shepherds. In any event, the rapidly spreading knowledge of the benefits of fencing coincided with the ready availability of iron wire, effectively precluding any widespread expansion of post and rail fences.22

Some farmers chose to move to a hybrid fencing form, instead of immediately to post and wire. Post and rail fences occur in two distinct hybrids with other fencing materials. The first, and least common, were post and rail fences built on top of low dry stone walls dating from 1850 to 1900—for example, those found in western Victoria. Despite the large numbers of stone walls here, hybrids with post and rail are rare. Presumably, farmers added the posts and rails to low walls to make a more effective fence.23
Figure 5. Hybrid post and rail and wire fences were a technological dead-end and not necessarily part of the transition from post and rail to post and wire fences. This example, with two rails and two wires (now missing) under the lower rail is part of several kilometers of hybrid fences at Mugincoble in central-western New South Wales. Shiny barbed wires are later repairs. Photograph by John Pickard, May 2002.

Far more common and widespread is the second form of hybrid: post and rail and wire. These have one or perhaps two top rails and a variable number (usually three to six) of plain wires (see Figure 5). This hybrid does not represent a form of maintenance where farmers replaced rotten lower rails with wire threaded through the empty mortises. Rather, hybrids were purpose-built with fewer rails and with wires through drilled holes.

Contemporary sources, however, show that most farmers moved immediately to post and wire fences, eschewing rails altogether. Many commentators dismissed hybrids as being pointless or a waste of money. As observer Cuthbert Featherstonehaugh wrote in his memoirs, “The first wire fences I remember in the west [of Victoria] were erected about 1863, and most of them had a top rail. What a lot of money has been wasted in Australia in putting top rails on wire fences, involving having to make short panels and giving a fence with a much shorter life.”

Many extant hybrid post and rail and wire fences survive relatively intact. Farmers have converted others through maintenance into post and
wire fences. The original mortised posts stand, but farmers have removed the rails and replaced them entirely with wire or wire netting. Such maintenance achieves maximum life from a fence for minimum cost and effort. It is similar to the common practice of adding wire netting to an existing plain wire fence to make it rabbit-proof or mesh to make it lamb-proof. An early example was the very successful pastoralist James Tyson, who in 1861 added five wires to a two-rail fence when he converted one of his Riverina properties from cattle to sheep.\textsuperscript{25}

Even after the introduction of plain wire fences into Victoria in the early 1850s, post and rail fences were competitive in price, and farmers continued to build them. In fact, their use initially expanded before rapidly declining (see Figure 3). Pastoralists of western Victoria were apparently the first to recognize, in 1852 or 1853, the advantages of wire fences. Large-scale adoptions in New South Wales started on the Riverine Plains adjoining Victoria. Graziers and pastoralists quickly found that the wire fences revolutionized their grazing management.\textsuperscript{26}

However, the move to wire fencing was not linear. At the end of 1865, P. R. Gordon, a stock inspector, published a series of letters in the \textit{Sydney Mail} extolling the virtues of fencing. He subsequently expanded and published these letters in a booklet intended to “stimulate inquiry into this most important subject.” Gordon offered detailed arguments in favor of fencing, with examples from a number of properties—presumably belonging to well-known graziers of high repute, and thus worth listening to—but he devotes most of his text to brush fences. Gordon’s emphasis is interesting as although brush fences were untidy, burnt readily, and were technologically backward, they had the supreme virtue of cheapness. However, for most, the longer life and better fire resistance of wire fences outweighed the price advantage of brush fences, and they expanded exponentially.\textsuperscript{27}

Post and rail fences also continued to have their promoters, including among the government, well after the introduction of wire. As a service to new-chum—a semi-derogatory term for beginners, usually applied by those who consider themselves infinitely experienced—farmers, in 1900 the New South Wales Department of Agriculture published articles and hints from experienced settlers in the \textit{Agricultural Gazette of New South Wales}. One series included a complete description of fencing a seven-acre “toy farm and orchard” on the central coast of New South Wales. The
construction method outlined for a post and two-rail fence is one James Atkinson would instantly recognize from the 1820s: splitting the logs to form posts and rails and mortising using either a mortising ax or an auger and chisel. Once ready, the final task was to “build a fire and pack the ground ends of the posts in so that they may be charred well. When this is carelessly done, and uncharred patches are left, it affords the white ants [termites] opportunities of attack.” Finally, there was the apparently simple, but skilled and vital task, of erecting the fence and getting it all in line (see Figure 6). The advice suggests that the New South Wales Department of Agriculture was sadly out of touch with current fencing technology, as wire fences, with or without a top rail, were the standard by 1900. They were cheaper, easier to erect, and quite long-lived.28

Despite traditional leanings, even among some colonial governments, wire fences did have a number of advocates early on. Large companies often adopted wire fencing rapidly. Starting in 1863 the English-owned Australian Agricultural Company improved their 249,000-acre property, Warrah, on the Liverpool Plains of New South Wales. “By 1875 the property was enclosed by eighty-six miles of wire fencing, and was criss-crossed by long lines of internal subdividing fence.” There was enough forest on Warrah to provide sufficient timber to build the post and rail fences or log fences that the Australian superintendent wanted to use. But
the English directors wanted wire fences, and they prevailed. The company used a range of fencing contracts involving supply of posts, digging holes, running wire, etc. By 1877 the property was fenced with 386 miles of fence at an average cost of just over forty-five pounds per mile. The company used a few post and rail fences, but only to protect dam walls.29

Publications, too, promoted wire fencing. The well-known Australian novelist Rolf Boldrewood wrote a substantial guide for graziers, published in 1879 by a major farm supply firm. Although he described post and rail fences for cattle, he favored post and wire fences for both cattle and sheep.30

The guide carried a number of advertisements of fencing products sold by the publisher S.W. Silver & Co. These included plain and barbed wire (in both black and galvanized finishes) and iron fences. The advertisements for barbed wire show how quickly this improved technology was imported into the colony, as an effective barbed wire was first patented in the United States in 1874, just a few years before publication. The iron fences were robust structures with solid posts and rods rather than wire. These would have been more suited to well-developed farms of England (or to estates of wealthy squatters) than the paddocks of most farmers or pastoralists in the colony, but they show the range of fences available to colonial agriculturalists at the time.31

Another magazine that promoted wire fencing was the national Australasian Pastoralists’ Review, established in 1891 for colonial farmers and graziers. In its early years, the editors published three major collections of hints submitted by experienced farmers and printed in the magazine. Most of the descriptions of fencing in the first two editions were devoted to various combinations of wire and netting fences. By this time, feral rabbits were a major pest, and farmers used netting to control them. The magazine essentially dismissed post and rail fences: “Except for yards and small paddocks, this class of fence is hardly ever used.” Hybrid post and rail and wire fences were “not recommended for erection under any but exceptional circumstance” in the first and second editions and are not even mentioned in the third. Clearly then the “practical men” who contributed to the Pastoral Review had adopted the new technology of wire fences and were no longer interested in post and rail or hybrid fences. The transition from post and rail fences started in the 1850s, essentially peaked by 1900, and finally ended between 1914 and 1920.32
The New South Wales Department of Agriculture conducted a series of fencing trials at the Cowra Experimental Farm early in the twentieth century to find the cheapest effective fence. The scientists did not include post and rail fences in the trial because "for boundaries and general subdivision work the rail fence has been superseded by the wire fence." However, "for some purposes, such as yards, approaches to gates, bridges, &c., [they are] still required." More specifically, "erection of [three-rail fences] is gradually becoming rarer and rarer. It is quite unusual now for a new one to be erected. The two-rail fence, with one or two wires underneath the bottom rail, and between the rails is effectively taking its place." Hybrid post, rail and three-, four-, or five-wire fences are "very suitable, and [are] very popular in some districts for enclosing town and suburban allotments. . . [They] are now being used in many situations and for purposes which, formerly, only a two or three-rail fence would have been considered suitable." Although specifications for post and one-, two-, or three-rail fences were given, it is clear from the emphasis on wire fences, that the post and rail fence was regarded as obsolete for farms.33

Despite this, even as late as 1931 the New South Wales Department of Agriculture published a collection of hints for farmers including notes on fences across the state. Paradoxically, although farmers did not use post and rail fences anywhere, the book reprinted verbatim the 1914 material on them. For those rare occasions when a post and rail fence was still appropriate in 1931, then the design perfected over a century earlier was still the best.34

Even as late as the 1960s, some farmers erected post and two-rail fences on the floodplain of the Shoalhaven River, east of Nowra. Today, this dairying area one hundred kilometers south of Sydney is notable for the number of intact post and rail fences that survive in essentially stock-proof condition (see Figure 7). Although some are more recent, most pre-date the 1950s. The dairy farmers favored post and rail fences because the material was cheap and close at hand, steel posts rusted quickly in the acidic soils, and the farmers did not like using barbed wire with their dairy cattle. At least one fence was built in the 1960s and many hundreds of meters survive. This quite remarkable concentration of post and rail fences has been formally recognized with heritage listing.35

The heritage listing of the Shoalhaven River post and rail fences reflects a complete change in their status. By the time of the Australian
Bicentennial in 1988, post and rail fences had moved from obsolete and abandoned rural technology to become rural icons.

As heritage items either in working farm landscapes or as relics in a changed cultural landscape, fences present the usual problems of management. All fences have a finite life and will eventually succumb to fungal attack, fires, and termites. Repairing post and rail fences to extend their life while simultaneously retaining their form is rare and most often is superficial in important details of construction. Workers saw rather than split replacement posts; they make holes with chainsaws rather than mortising them with a mortising ax or auger and chisel. Rails lack adzed tenons, they are cut by chainsaw and rarely of the traditional shape.

Similarly, new post and rail fences, built on rural subdivisions, are all made with contemporary tools (see Figure 8). Workers cut mortises and tenons with chainsaws rather than mortising axes and adzes. They saw rails tangentially, close to the outside of logs, and keep the round back on the rail, usually facing outwards. The most extreme examples are made of cast concrete complete with imitation wood grain texture on the surface. Thus, contemporary Australians both retain post and rail fences and build them anew as icons of a bygone age.
This iconography of post and rail fences extends to media portrayal. Many advertisements in the *Pastoral Review* in the late 1940s used post and rail fences to establish a rural setting. Typically, the advertisements were line drawings of a rural scene, and the fences are post and rail, apparently to convince the reader—a potential buyer of the product—that the product really is relevant to his farm.

A single example out of many shows the paradox of mixing old and new in these advertisements. Dalgetys (a nation-wide company offering a complete range of services to farmers: finance, equipment, stock and station agents, running produce auctions, etc.) project in their advertisement a modern post-World War II image with the farm hand helping the farmer wearing a tweed coat and hat to unload the (almost new?) American pickup truck (see Figure 9). The farmer's wife and daughter watch from the door of the glassed-in veranda of the homestead. In the background, a post and two-rail fence rises up the hill. The ultra-modernity of the house, the clothes of his wife and daughter, and the pickup, are in marked contrast to the obsolete fence.

More recently, an American television cartoon series demonstrated
that post and rail fences have attained international icon status. An episode of the long-running and successful television series, *The Simpsons*, featured a post and rail fence in an Australian rural scene. Some icons are instantly recognized internationally: kangaroos and Australia, Mounties and Canada, etc. but it is difficult to explain why the writers of an American TV series would chose a post and rail fence to convince viewers that the scene really was set in Australia.36

Despite their lack of cultural association outside Australia, post and rail fences do effectively represent much of rural Australia. Visually, they have remained largely unchanged since early colonial times. Atkinson’s 1826 description of post and rail fences is echoed in instructions on post and rail fences in 1900 and 1931 and can be seen in fences built in the 1960s. Post and rail fence built in 2002 around peri-urban subdivisions vary only in the tools being used.
Today, the innovative post and rail fences of the eighteenth century, cleverly adapted from English farm technology to meet colonial needs, are valued heritage. Even the derelict examples provide information on the history of rural land use. The iconic status of post and rail fences is the final closure of their story: obsolete technology that is instantly recognized as a symbol of rural Australia.

NOTES


I have used original units of length, area, and costs throughout this paper to avoid numerous conversions in parentheses in the text. I have converted currency where necessary to 1990 Australian dollars using inflation index in Graeme D. Snooks, Portrait of the Family within the Total Economy: A Study in Longrun Dynamics, Australia, 1788–1990 (Sydney: Cambridge University Press, 1994), Table 7.10.

For distances: one mile equals 1.61 kilometers and one rod equals 5.5 yards or 5.03 meters. Up to about the 1860s, contemporary sources invariably quote fencing costs per rod, subsequently costs were quoted per mile. The change reflects the introduction of iron wire, and the consequent move from fencing small paddocks to enclosing and subdividing large pastoral holdings where fences ran for miles.

Modern names are used for colonies before separation from New South Wales.


10. Pickard, “Trespass”; “Stringy and ironbark trees” are a range of species of Eucalyptus that provided excellent timber for posts and rails. See, W. H. Clarke, “The City Agriculturalist,” Agricultural Gazette of New South Wales II (1900), 482–92; Bigge, Report, 14, 24; Sydney Gazette and New South Wales Advertiser, June 12, 1813, 2.


20. Pickard, “First Fences,” Table 2.


31. The first commercially successful barbed wire was US Patent number 157,124 *Improvements in Wire-fences* granted to and the Colonies on Nov. 24, 1874 to Joseph F. Glidden for his application dated Oct. 27, 1873. For examples of fence material available in England from the mid-1850s, see, Charles D. Young and Company, *Description (with Illustrations) of Iron and Wire Fences, Gates, etc. etc. adapted specially for Australia . . .* (London: Charles D. Young and Company, 1851).


35. I thank Geoff Herne, who has retained many post and rail fences on his dairy farm, Boscawen, for sharing his knowledge with me.