A Century of Distant Accommodation: Building Prefabrication in Queensland 1824–c.1920

DON WATSON

In the 125 years after white settlement, prefabrication was probably used as extensively in Queensland as anywhere else in Australia. Appropriately, what is almost certainly the first permanent building in Queensland – the commandant's residence at Redcliffe of 1824 – was prefabricated. Like this residence which was brought from Sydney, most prefabricated houses were of colonial manufacture (New South Wales and later Queensland), and were predominantly of conventional timber construction.

The modest formal and constructional pretensions of these local products contrasted with the innovations of imported examples. In general, however, the imports were feared to be climatically unsuitable for Queensland, were more expensive, and often misjudged specific local requirements. As well, there were often problems with the completeness of the instructions for assembly, and their compatibility with the components supplied. Despite the formal similarities between some of the products of overseas manufacturers such as Francis Morton and Co., (2) and David Rowell and Co. (3), and domestic and other building in Queensland, few such iron buildings reached Queensland. Nor were their catalogues there early enough to explain the derivation of the early Queensland house, though obviously both have aspects and sources in common, as have the Queensland house and the first commandant's residence there, of thirty years earlier (for example, square plan, hipped roof, surrounded by verandas and verandah rooms).

This residence was moved to Brisbane in 1825 where it was probably the house referred to as the engineer's cottage. (4) The later Brisbane commandant's residence may also have been prefabricated in Sydney. Such work was soon being carried out in Brisbane; Andrew Petrie, formerly superintendent of works at the penal settlement from 1837, remained after its closure to establish a major contracting firm. In 1848, the Moreton Bay Courier wrote of new residences for the harbour master and pilots:

Mr. Petrie is busily engaged in fitting the framework of the buildings which are rapidly approaching completion. It is important that no
time should be lost in building and afterwards transporting these house frames to their destination.(5)

Their destination was only a few miles down the river at Doughboy Creek. During this time, prefabricated (commonly termed portable) dwellings were being offered for sale. The following advertisement in 1850 probably came from Sydney:

PORTABLE WOODEN HOUSES
FOR SALE, Two four-roomed Wooden Houses, fitted and ready for erection and containing Hardwood Timber, etc., as per specification viz:- 50 Uprights, 28 Joists, 14 Plates, 6 Heads and Sills, 12 Gable Pieces, 28 Rafters, 100 Inch Boards, 175 Half-Inch Boards, 20 Battens, 2 Ledge Doors, 2 Pair T Hinges, 2 12-Light Window Sashes, 24lbs Batten Nails, 12lbs Flooring Brads.(6)

Following the discovery of gold, it was feared in Brisbane (as in other parts of Australia) that it would be difficult or impossible to obtain materials or labour for building construction. Despite John Dunmore Lang's advice to emigrants to take with them a cottage in frame, few, it seems, did so to Brisbane.(7) British manufacturers and local agents, however, tried to take advantage of the market which Dr. Lang had anticipated. From the 1850's, various advertisements were placed in Brisbane papers, like this one by Charles D. Young.

Fire-proof iron buildings, dwellings and stores of the best construction and handsomest designs, fitted up to order, according to the taste of parties ordering.(8)

A number of Brisbane residents associated with the building industry offered to act for others in buying iron residences, either in person in Britain or from catalogues. The surveyor James Warner offered in 1854:

IRON VILLAS
Plans, elevations, specifications of very gentlemanly residences are to be seen at the office of the undersigned, consisting of FIVE and SIX ROOMED HOUSES with VERANDAHS ALL ROUND. These buildings have been designed expressly for warm climates, the rooms being lofty and capacious.(9)

He was probably unsuccessful although other iron houses did reach Brisbane. The agent Henry Bulgin advertised:

...that a few IRON HOUSES have been consigned to him for sale, by a gentleman in Sydney, and are daily expected by the 'Brothers'. They are so constructed that by joining two a double house is formed, or by three together, a house with three
rooms. They are packed in Iron Boxes, in which the entire (sic) of a single house is contained, the Box forming the floors...In the present state of the labour market, and the enormous prices of all kinds of building materials, the introduction of Iron Houses into Moreton Bay will doubtless prove a great desideratum, and as the cost will be moderate notwithstanding the great demand and immense prices given in other parts of the Colony, it is hoped to prevent disappointment that parties wishing to secure a home, at once durable and cheap, will lose no time in making immediate application.(10)

Two weeks later, he sought to overcome some reservations:

The IRON HOUSES consigned to Mr. Bulgin have arrived by the 'Brothers'. One of them has been erected and may be seen upon the Commercial Wharf, South Brisbane...The windows or door can be shifted to any part of the house required, and more windows easily made if desired. If placed in a good and airy situation, properly fixed, and one or two coats of WHITE paint given, being lined with felt, not the slightest inconvenience need be apprehended from HEAT, as it is feared by many, but on the contrary, they would be cool and pleasant, proof alike against the shafts of TIME and the ravages of FIRE and WATER. They are easily erected and will be sold much cheaper than at first contemplated.(11)

All seven houses were eventually submitted for sale by auction (without any reserve). A pair of portable houses erected shortly thereafter in the Fortitude Valley was probably from this group. (12)

Another iron house, demolished around 1959, may also have been prefabricated. Tremere was built about 1855 by the collector of customs, W.R. Thornton. In 1930 it was said to be '...of the most unusual construction...being perhaps the first ready-to-erect building set up in Brisbane'. (13) Unfortunately few details were given to support this proposition. Thornton visited Britain in 1854-5 and might well have sought such a house given the concern expressed by Dr. Lang. The construction of the two-storied house built on his return was not unlike that specified for Hemmings Patent Improved Portable Houses. (14) Its timber frame was brick nogged and sheeted on the front and rear elevations with corrugated iron. The sides were rendered. (15) If not prefabricated, it may have been based on one of the many catalogues which must have been the most accessible pattern books of the time.

By the time of separation in 1859 few imported iron houses had been erected in Brisbane. The return of properties assessed within the municipality of the city of Brisbane noted only five iron houses. (16)
In 1858 gold was discovered at Canoona in central Queensland. To provide for the administration of the settlement which resulted, the colonial government sent from Sydney a wide range of buildings, with tradesmen to erect them. These buildings included a large iron customs house, a timber framed building sheeted with corrugated iron for the Queen's warehouse, various houses, a lock-up and a hospital. (17) Coincidentally the Brisbane sawmiller and surveyor, William Pettigrew, sought to satisfy the needs of miners by offering:

**PORTABLE HOUSES**

As several parties may require to put up a house for a short time in a certain place, and yet not wish to have it there permanently, and besides wish to be more comfortable than in a tent, the subscriber begs to intimate to all such persons that he can supply them with a house, twelve feet long by ten feet wide, floored, with four berths, the lower two of which can be used as seats. These houses can be taken down, or put up in about two hours. Price 21 pounds each. (18)

Prefabrication for both official and private accommodation was almost invariably the pattern in new coastal settlements during the next twenty years. An early instance was some twenty-four buildings (barracks for twenty men, hospital, lock-up, customs' and port officers' offices, officers' and surgeons' houses, police magistrate's boat house and about fourteen men's houses, with kitchens etc.) prefabricated in Brisbane in 1863 for the new settlement at Port Albany (Somerset). (19) A number of buildings originally intended for Somerset were erected elsewhere (as a temporary post office for Rockhampton, a customs office for Mackay, an immigration depot for Ipswich and offices in Brisbane). (20) The Queensland Daily Guardian reported:

...these buildings are of wood, and have been got under the superintendence of Mr. J.J. Halpin, whose care in the manner of cutting the various timber may be noticed in the very small amount of cuttings or waste. His mode also of numbering and packing each building is admirable. The studs for front and back are wrapped around tightly with hoop iron, as are also all the other parts, each by itself; and so well is this done, that it is his intention to land them from the ship at Port Albany by forming rafts of the larger timbers, such as joists, then placing the lighter packages thereon, tow the whole to shore. The plans of the various buildings bear each a strong resemblance to the other, and the buildings when erected, will generally resemble the police department offices in George Street, having a verandah all round, and plenty of openings. (21)
The situation for Port Denison (Bowen) was similar. A customs house, barracks and kitchens had been built in 1862. In 1863, tenders were called by the Brisbane architects, Backhouse and Taylor:

To Carpenters:
Wanted a competent tradesman to contract for the erection of a store at Port Denison, passage paid there and back. The store has been fitted and marked here. (22)

The same newspaper reported a few days later:

A large store with galvanised iron roof has been fitted together here and is now being packed for shipment to Port Denison; it is very substantial in its design, and so arranged that on arrival at its destination it can be fixed with the greatest ease in a very short time - as even the nail holes are bored, and the nails and screws fitted therein. It has been found from calculation that the work can be done here and sent up at a less cost than on the spot. (23)

A lock-up and immigration barracks (consisting of seven buildings) was provided by the same means a year or so later. The contractors for these were the Maryborough contractors, Hart and Marshall. The Maryborough Chronicle noted:

We are glad to learn that Messrs. Hart and Marshall, of this town, have commenced a new branch of their trade, which promises to be of importance to the district, and one which will no doubt be more extensively adopted as its advantages become more apparent. The firm have obtained contracts for large blocks of buildings at Broadsound, and others at Bowen, Port Denison. The whole of the material for these buildings will be cut and prepared in Maryborough, so that it will only require to be fitted together on arrival at their destination. (24)

So also were buildings for the Albert River settlement (Burketown, 1866), Townsville (1873) and Cooktown where the post office, pilot and boatman's cottages, boat shed, bonded store and customs house were all constructed in Brisbane in 1874 as were a store (architect: John Hall) and the school (architect: R.G. Suter) before being shipped to the Endeavour River.

During this period several smaller lighthouses were prefabricated in Brisbane. (25) However, the major lighthouses at Bustard Head and Sandy Cape, which were also prefabricated, were imported from Britain in 1867. These cast iron towers were made by Hennett, Spinks & Co., and Kitson and Co. (26) The general features of the tower at
Fig. 1 The proposed railway station at Toowoomba (Builder, 1 June 1867)

Fig. 2 Rockhampton railway station c.1867. Correspondence about defective plant and materials at this imported iron station building was tabled in the Queensland parliament.
Sandy Cape were to be similar to that supplied to the Russian Government for Riga Harbour by Wilson and Co., of 14 Cannon Street. When the next major light was erected, at Lady Elliot Island in 1873, a different strategy was applied:

The lighthouse is of quite a new character from any that has hitherto been erected. The framework is of colonical hardwood, and the outside casing of stout boiler plate. The cost of such a building is much less than would be that of an iron tower of the same size, being only about half the amount, while the solidity and strength appear to be all that could be desired...the Colonial Architect is so fully satisfied with the result that he proposes constructing other lighthouses in contemplation of the same principle.

High costs were only one of the criticisms made of the prefabricated station buildings which had been imported for the Southern and Western Railway a few years earlier than the lighthouses. William Mason, acting engineer-in-chief of the railways of New South Wales, wrote in a report on the railway for the Queensland Government:

Among the numerous and palpable errors which have been committed in the designing and construction of these railways, none stand out more prominently than the station buildings...it will be seen how unnecessarily large and costly is the Ipswich station, and how entirely unjustifiable was the erection of such a building so unsuitable, too, for the colony of Queensland. I was informed by the station master, that in the summer months, himself and family could not remain in the rooms, but were obliged to retire to the verandah, the heat was so intolerable. I consider it one of the worst description of designs that could possible be produced for the climate...The Laidley station is also built of iron upon stone foundations. It is a two-storey building, containing station master's residence and station offices. In design, size, and cost it is quite as unnecessary and objectionable as the Ipswich station...The next station requiring particular notice is that which was designed and intended to be erected at Toowoomba. (Fig.1) The station which is entirely of iron, was ordered and delivered in the Colony, but not erected and is now laid by as useless. Judging from the drawing, it is both in size and appearance more like a palace than an ordinary station building...(29)

Correspondence regarding defective plant and materials for the Rockhampton terminal was also tabled in the Queensland Parliament. (Fig.2) Henry T. Plews, the engineer-in-chief, wrote to the London suppliers, Sir Charles Fox and Son:
...we have still, however, continued to have a good deal of trouble with the fitting together...for instance - the staircase is totally different to the design on the plans sent me - the plan showing winding stairs, and those sent out are straight, with a landing half-way. This, if erected, would have completely closed up the door into the station master's office at the foot, and at the top would have closed up, partially, the passage and side window into balcony of the upper storey...(30)

Although local pre-cut prefabrication was not without its own problems (as for example with the buildings for the Cape York telegraph line constructed from 1886), (31) this was generally an extremely successful building method, being widely used throughout the state. In localities such as parts of the north and west where neither materials nor labour were available, prefabrication was often the only reasonable means of procuring a building.

When in 1883 new police buildings were to be provided for Burketown, where the original buildings had been prefabricated in 1866, the same system was used. In this instance the contractor was J.W. Carey whose sureties for the contract were supplied by the Brisbane building materials supplier, James Campbell.(32) Two years later in 1885, Carey's Newstead Saw Mills were advertising portable cottages in three standard plans,(33) (Fig.3) Carey appears to have remained in business only a few years but in 1903, James Campbell and Sons, whose own sawmill also abutted Breakfast Creek in the neighbouring suburb of Albion, revived the idea. (34) (Fig.4) They also initially offered three standard plans and later claimed to be the originators of the ready-to-erect system for the supply of buildings, perhaps only in comparison with their later rival, Brown and Broad Newstead Homes, who started operations in 1913.(35) (Figs 5,6)

The service offered was similar. Each maintained an architectural department and offered a range of plans from two rooms (as in the Campbell Beerburrum) to large homesteads (as in the Campbell Longreach). (36) Everything necessary to complete the house was supplied, except stumps which could be obtained more cheaply locally (and which left the choice of height to the owner), battening, and paint for the interior. Items could be omitted (such as external cladding) or added (such as plywood panelling which Newstead Homes was strongly recommending towards the end of the 1930's). The materials were packaged and sent complete, by rail (at a special rate), or by ship. Construction could be by the owner or by tradesmen sent with the materials. Campbell's claimed an advantage in that the frame of each of its houses was assembled before despatch. The service was directed primarily to country areas - limits were placed on sales in Brisbane and suburbs and some other districts. The name given to each design, at least initially, was more or less appropriate: Beerburrum was a soldier settlement district;
PORTABLE COTTAGES, from £50 upwards, made and fitted-up on the premises complete, numbered plainly, taken down, and carefully packed in handy parcels for removal.

Three sizes kept in stock—viz.: No. 1—Three Rooms, with 5ft. Verandah.  Size of rooms, 12 x 12, 12 x 8, and 12 x 6.
No. 2—Four Rooms, with 5ft. Verandah.  Size of rooms, One 12 x 12, Two 12 x 8, and One 8 x 8.
No. 3—Four Rooms, with 6ft. Verandah and 3ft. Passage through from front to back. Size of rooms, Two 12 x 12, and Two 12 x 10.

Height from floor to ceiling joist, 9ft. Plates, Bearers, Studs, Sills, and Braces, Hardwood; Walls, Hardwood Weatherboards.
Floors and Partitions, Dressed Pine, tongued and grooved; Roof, Pine Scantling, covered with Galvanised Iron and Ridge-capping.

Verandah Post and Floor, Hardwood.

Doors, Sashes, Facia-boards, Beads, Stops for Sashes and Doors, including, Locks, Hinges, Lead-headed and other Nails, &c.; every article necessary to complete.

Every Order sent includes a Lithographic Plan, numbered to correspond, so that any handy man can easily see how to reconstruct.

Cottages and Houses built on the same principle to Plans and Specifications supplied by Customers.

J. W. CAREY
Has much pleasure in introducing notice of the above to Squatters, Selectors, Land Agents, Farmers, and the public generally.

Lithographic Plans and all particulars supplied on application per post or otherwise.

All kinds of House and Office Furniture & Fittings made to order.

Upholstery and Cabinet Work of every description; also, Turnery, Band-saw Work, Fretwork, Moulding, &c., &c.

Doors, Sashes, French-lights, Fan-lights, Mantlepieces, &c., &c.

N.B.—Venetian Blinds made very superior in finish at moderate prices. Minimum price, 12s. 6d.

Town Agents—Messrs. BROOKES & NOBLE, 111, Queen Street, Brisbane.
The BEERBURRUM

This is the simplest home possible. It consists of two rooms and a verandah. Yet the same care is taken in preparing the materials for it as in taken with the larger and more costly designs. We sell many of these homes for small farms, both for the "first home" and for men's quarters.

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The WYANDRA

Many a Queensland family is comfortable today in a home of this design. Two bedrooms with a living room and kitchen combined complete the house. The verandah runs the full length of the house and is wide enough for "sleeping out." In this, as in all the Campbell Redcut designs, thrift is watched to make a cheap price. Our first thought is to give the utmost value for the money paid.

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<td>Verandah Coral Plank</td>
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Fig. 4 Two small 'redcut' houses from the firm of James Campbell and Sons, whose products ranged up to very large homesteads, and included prefabricated non-residential buildings.
Fig. 5 A 'Newstead Home' during erection at the Brisbane Exhibition (Queenslander, 25 August 1917, p 30)

Fig. 6 The Newstead Homes 'Maranoa', later but identical in plan to the 1917 house.

The "Maranoa"

The "Maranoa" featured here is an excellent Queensland home—a home of which we have sold hundreds—a home that gives the greatest satisfaction to its purchaser.

It is a very comfortable and fine looking family home, and wonderful value at the price.

Nothing in its planning has been overlooked, nothing stinted. The side verandah, wide and comfortably cool, makes a delightful sleep-out.

There are also three fine bedrooms, a hallway with the sitting and living rooms connected by an arch—the most modern way, and when Plywood is used for interior walls, the comfort and general appearance of this home is considerably added to.

BROWN & BROAD NEWSTEAD HOMES LTD.,
Breakfast Creek Road, Newstead, Brisbane.
Longreach a wealthy grazing district.

Over some twenty-five years, Newstead Homes built more than 2,000 ready-to-erect buildings including most of the town of Mt. Isa, where offices, stores, bank, staff quarters, hospital and club were supplied and erected by this firm. (Figs. 5, 6) Most other buildings there were supplied by Campbell's.

In north and central Queensland, other manufacturers also prefabricated buildings. In Townsville, Rooney Brothers, previously associated with pre-cut building in Maryborough, offered a similar service to that of James Campbell and Sons and Brown and Broad, advertising from c1908 that they manufactured portable wood and iron huts. In 1879, the Rockhampton architect, Sidney Williams, whose name was later to be closely associated with prefabrication, established his firm of engineers, ironmongers and railway contractors. By 1920, this firm had works in Townsville, Brisbane and Sydney as well as Rockhampton. By this time, even the Queensland Railway Department, which had been so unsuccessful with the terminal buildings it imported in the 1860's, was using a system of prefabricated concrete construction for station buildings in southern Queensland.

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