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Global Iron

Jonathan Charley

From Possil to Rothesay and Calcutta via Wemyss Bay It is said that throughout the world on the retreating shorelines of inland seas and by the sides of disused railway tracks lies the iron of Scottish industry.

For an older generation

the Glasgow Fair and Rothesay, on the island of Bute, have a special significance. As the 'Madeira' of Scotland, Bute along with Arran and Dunoon was one of the main destinations for the Glaswegian during the precious fortnight in July when the yards and factories blew for an intermission. Cheaper Mediterranean waters put paid to the pre-eminence of the seaside town in British life and confined its heyday to alluring black and white photos of polished boots and feathered hats. But along with the other icons of working class leisure such as Scarborough and Blackpool, Rothesay is trying to relaunch itself by rebuilding the promenade and hopefully one day the sensual curves of its Art Deco pavilion. For a seaside town, re-imagining the structures of maritime culture is essential to any rebranding exercise if the full commercial potential of emotional nostalgia is to be exploited. The memory of piers, bandstands, and gardens are an essential part of a tourist itinerary manufactured to remind us of how wonderful life used to be dozing to brass bands in striped deck chairs. Of course no summer's day on Bute would have been complete without huddling from the drizzle in a seafront iron shelter, munching chips as a prelude to an evening's entertainment in the metal ribbed dome of the Winter Gardens. Like its identical twin in Ryde on the Isle of Wight, it occupies pride of place on the water's edge and was one of many elegiac cast iron structures fabricated at MacFarlane's Saracen foundry in Possil, Glasgow.

Immediately outside the glass and iron extravaganza sits a more modest iron ferry stop. From under its canopy families with Vaudeville still ringing in their ears

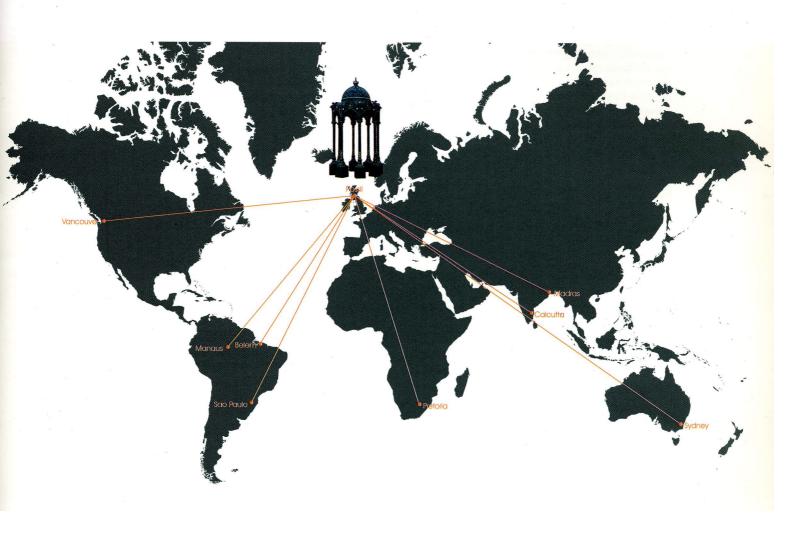
would gather to egg on the ferries racing each other across the Clyde to the landing platform. This was in the days when the civic authorities understood that people needed public toilets, even singing factory workers on their way back to Glasgow. Virtually all of them, that were once recognisable in the urban landscape by their iron signs, have closed. But not the ecclesiastical polished marble and brass at Rothesay that is reputedly the finest public convenience in the world and like many Victorian innovations was a product of an obsession with technology and hygiene.

It is only a short trip across the water from the quayside convenience to Wemyss Bay, but there is always something special about getting on a ferryboat. The 'lifejacket' and 'the bar is now open' announcements create a feverish sense of anticipation. This is a real journey, and when the salt wind whips down the Clyde Riviera and four seasons descend in forty minutes it can be as majestic and otherworldly as traversing the Bosphorous straits.

If you are lucky on a chilly December evening you will miss the train connection from Wernyss Bay to Glasgow Central. This forces the passenger to drink Glenfarclas whisky in the fire lit station bar. From the narrow benches by the hearth you can gaze upwards into a skeletal roof structure that sweeps up from the jetty and then pirouettes above the ticket office at the platforms. It too is a masterpiece of structural engineering, a product of the competitive pride that existed between the foundries.

Glasgow was at the epicentre of the use of iron as a building material and famously boasts some of the most illustrious examples of lightweight cast iron frames, the construction method of choice for transforming warehouses, shops, and market halls into elegant symbols of commercial power. None of this was possible without the iron foundry and the ironworker. The Carron Works, outside of Glasgow, where it is said iron flowed like water was the biggest foundry in Scotland. But there were many others across Northern Britain. The Lion Works at Kirkintilloch made bandstands, urinals and the red telephone box. Isaac Dixon's Windsor foundry in England pre-fabricated offices for Central America, markets for Burma, housing for west Africa and shed roofing for the southern Americas. Situated in Possil, the A+J Main foundry were specialists in the production of fourteen types of roof trusses that were similarly exported from Glasgow to Calcutta. But MacFarlane's Saracen foundry was probably the most revered for their fine craftsmanship. MacFarlane's vision was of a prefabricated iron city resplendent with street lighting, toilets, and fountains in an urban panorama of ornate structures applicable to everything from the most mundane of bodily functions to the most majestic of structures. It was nothing short of a metallic universe that Walter MacFarlane aimed to transport across the world from his foundry in Possil.

The best time to visit this area of Glasgow is in late November on a damp and foggy morning. This is



when the tops of towers and tenements disappear into a grey blanket that slowly crushes the rusted remains of what was once a workshop of the world. At its highpoint in 1900, the Saracen foundry employed 1400 workers and supported a population of ten thousand. But like many working class communities that had developed around a single industry, it felt the full effects of technological innovation and capital relocation when the foundry eventually closed in 1967. It was a story that was to be repeated in mines, factories and foundries throughout the industrial heartland of the British economy. But when the ex-apprentice ironworker turned capitalist entrepreneur Walter MacFarlane opened the Saracen Works in 1872, Possil was an extraordinary place in every sense. The fact that the foundry was an eclectic mixture of an industrial workshop and Indian palace was in itself spectacular, but so was its location in parkland to the North of the city on the old Possil Estate.

The Saracen foundry produced so much ornamental and structural ironwork, which was permanently on display in the foundry's one hundred metre long gallery that it was considered, "one of the most important branches of the Glasgow Iron founding industry and the source of supply of useful and artistic foundings for all parts of the civilised, and we might add, uncivilised world"1. True to this messianic ideal of 'iron civilisation', MacFarlane pre-fabricated the structures for the Pretoria Zoo, Madras Banking Hall, and for buildings all over Brasil including the Sao Paulo Train Station and the Jose Alencar Theatre in Fortaleza. But there are virtually no 'artistic foundings' left in Possil. Apart from the peeling paint of a gable end mural commemorating the foundry whose name adorns the Co-op supermarket, the pub on the corner and a lonely restored fountain. Number 18 from the MacFarlane Castings Catalogue, they used to be all over the city and all over the globe, a fact confirmed by the inscription at the base of its green structure; "Bandstands, fountains, buildings and decorative ironwork were exported from here to ... Australia, Tanzania, India, Vancouver and Brasil."

From Possil to Para and to Manaus, Capital of the State fabricated kit buildings of Amazonia

The appearance of Scottish engineering products and prein remote global outposts and colonised

territories during the course of the nineteenth century was not driven by the mysterious secrets of an alchemist, but by naked economic and political interest. It is a process that famously culminated in the replication of the institutions of the British Imperial state in occupied territories. This included not only the strategically situated railways, docks and banks that were necessary for the process of capital accumulation but buildings like opera houses, theatres and libraries planned to demonstrate the superiority of bourgeois culture.

Although Britain eventually resigned itself to having only a series of political footholds in South America, such as British Guyana, its presence was felt throughout the continent. Adventurer engineers like the Scot David Angus travelled all over Brasil between 1860 and 1910 organising the construction of railways. Itinerant British engineers along with mercenary soldiers, could be encountered in any one of a number of remote locations, including Belem, Capital of the Brasilian State of Para.

There is no right time to visit Belem for a northwest European. It is always hot and humid, the climatic differences over the course of the year being merely a matter of relativity. But for those that do not know this city, it is a revelation. Belem is a bustling port town of former splendour creaking at the mouth of the Amazon in the Baia de Marajo, textbook magic realism in the flesh. There is little that has not passed through Belem. And for a long while it was mainly exotic and profitable, the natural life of the river and forest, alive and dead, turned into potions, food and precious commodities, in particular rubber.

Between 1890 and 1910, Belem was the capital of the global rubber trade, before that is, an English botanical thief smuggled the precious pods out of the Amazon. After carefully nurturing them in Kew Gardens, they were replanted in Asia, an act that crucially undermined the economic basis of what had been an extraordinarily rapid period of urban expansion, Belem's population had doubled in a twenty-year rubber bonanza that resulted in it possessing the most advanced system of public infrastructure of any Brasilian city. New mains, plant and iron street furniture were grafted onto the remains of an old French city plan, resplendent with eclectic houses, boulevards, squares and law courts. And it was an Edinburgh based engineering firm, the Para Gas Company that won the contract in 1893 to enlighten the city with street lamps and clean water. Subcontracting its ironwork to foundries all over Scotland and northern England, in 1901 their brief was extended at a banquet with the state governor to provide the whole of Para with light and gas. It gave the firm carte blanche to build whatever they deemed necessary, including their own small industrial village, and to "purchase or by other means acquire, any freehold, leasehold, or other property and buildings" essential to the illumination and sanitation of rubber land.

With an eye on making Belem a tourist Mecca, the city authorities are trying to lure the great-grandchildren of earlier colonial explorers back. After all it is from here that the boats go down the famous river. So the old docks have been reborn as the Estacao das Docas, part of a global programme of historical gentrification for paying customers only. In environmentally sealed industrial containers, ice cream sells at exorbitant prices in front of framed views of the river. It is an experience designed to divert and protect the affluent tourist from the uncontrollable fusion of Catholicism, Africa, indigenous Guarani and Tupi that inhabit the 'other' city.

The redevelopment is creeping along the waterfront and restoring churches and historic buildings. It is even rebuilding the Ver e Peso market, an Infamous centre for all things sellable. Protruding from the middle of the panorama of tented stalls is an imported blue and white metal building plucked from a catalogue. A civilian adaptation of shipbuilding, the pre-fabricated cast iron shed is crammed with inconceivably shaped fish, and stands opposite an iron and glass meat market. This is not the sort of place to be on a hot equatorial day. Insect laden air encrusted with stale blood vapour weeping from indescribable cuts of flesh can make such places inhospitable, even to carnivores. But they are worth a visit, especially if it turns out to be an elegant if dilapidated fragment of Victoriana. One of MacFarlane's kit buildings, the market hall is a composite design in which it appears as if a pavilion, botanic garden and warehouse have been woven into one structure. Thinly fluted cast iron columns organised into stalls with decorative fretwork support a balcony and glazed roof light that together create an atrium space at the centre of which spirals an ornate circular staircase. And there stamped in iron relief at the foot of the balustrade are the words, "MacFarlanes Saracen Foundry", the signature trademark that confirms the presence of Possil in tropical Brasil.

What little infrastructure there is now in the north of Brasil was absent a century ago. Getting to Belem was an achievement, surpassed only by the mythological tale of Manaus. One hundred years ago a smoke-belching barge heaving with Glaswegian iron must have seemed as exotic to the descendents of the rebel Cabanos peering out from the foliage and huts as the idealised natives must have appeared to the adventurer engineer from Europe. Nowadays, you can avoid the fierce Amazonian currents by flying there from Belem, but the search for authenticity demands that you sling a hammock on the deck of an old steamer and chug for five days up stream, saturated by a million shades of green. One and a half thousand kilometres of grey dolphin river and you arrive at the quayside in Manaus in front of a yellow stone Customs House, shipped in its entirety from London over a century ago.

Similar to St Petersburg or Brasilia, Manaus defies conventional geographical and climatic restrictions on urban construction. Surrounded by an inhabited 'wilderness' in which the river is omnipresent, it owed much of its prosperity to rubber. So determined were the Brasilian elite to carve a piece of Europe in a jungle, deemed to be devoid of God and material culture, that they endeavoured to create a civic world in which they could cocoon themselves. Essential to this self-imposed space-time dislocation was the construction of familiar comforts such as a public library and theatre. Built at the height of the rubber boom a magnificent Saracen foundry staircase dominates the entrance hall of the library, whilst up the road towers the green and yellow roof of the Teatro Amazonas, a Franco-Scottish cacophony of cherubs,

red velvet and gold, hanging from iron columns. It is a place rich in the absurd where merchants and landowners could indulge in a taste of Europe, acoustically, thermally and socially removed from the ruthless exploitation of human labour and natural resources. It is another chapter in a tale of iron and accumulated labour time that connects Brasil. Africa and Europe in a geographically immense circuit of capital. Timber felled locally was shipped back to France for finishing. Clothes and textiles, vital for a theatrical experience, were sent to London for tailoring and pressing. And the hands of Possil ironworkers and Amazonian rubber tappers can be found at each stage of the journey, a trail that begins with the smelting of iron and terminates on the bicycle tyres of workers, wheeling their way to the Saracen foundry.



Winter Gardens in Brasil

¹ Glasgow and Its Environs: A literary, commercial and social Review Past and Present; with a description of it's leading mercantile houses and commercial enterprises, Stratten and Stratten Publishers, London, 1891,

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