

## **SOLVING THE MYSTERY OF THE LABUAN CHIMNEY**

Researched and compiled by Lynette Silver.

Anyone who has ever visited Labuan knows about the island's most famous and historic landmark – a chimney, constructed in about 1900. The chimney itself is unremarkable as far as chimneys go – just a square-shaped brick tower with two arches at the base, and a decorative frieze at the top. But what it is, and why it was built, has puzzled people for decades.

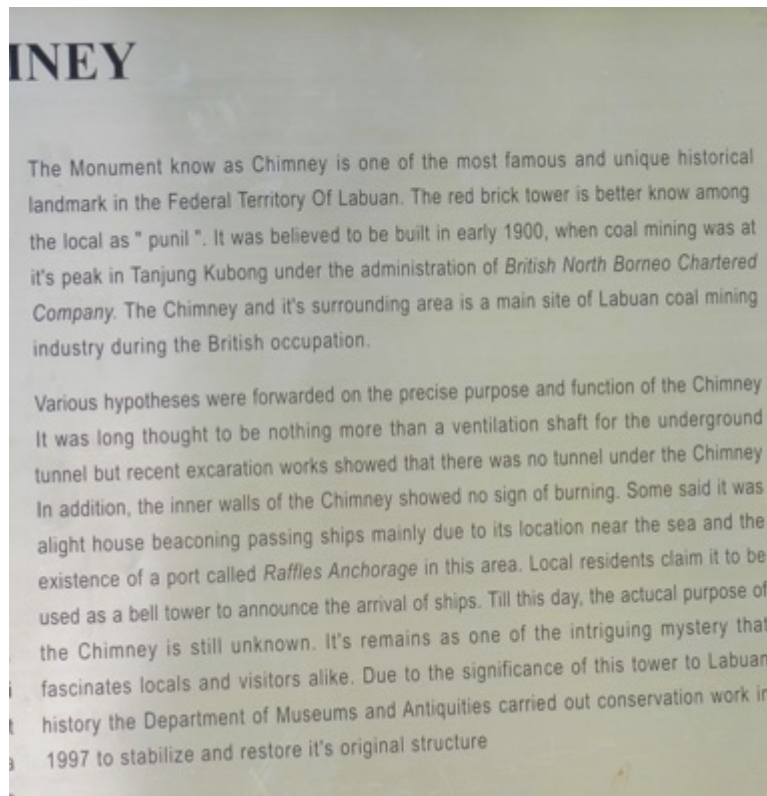


Map showing location of The Chimney



The Labuan Chimney

Theories suggesting it was a ventilation shaft for the nearby coal mines, a beacon, or a shot or bell tower have been examined by experts and dismissed.



The Chimney's story board

However, speculation on The Chimney's origins is not what intrigued me. What I wanted to know was why its origins were such a mystery. It has dominated the landscape for more than a century, yet there is no reference to it, at all, in any archival records or in published accounts of the island.

I had taken only a passing interest in The Chimney on my frequent visits to Labuan until about three years ago, when I drove past one day with my friend and long-time resident Mr Willie Teo. As I glanced up, I again pondered on why its origins were so obscure. Why had no one ever recorded a single word about it?

I then experienced what is described as a light-bulb moment. Could it be that The Chimney was just that – a chimney for some kind of enterprise, an enterprise so commonplace at the time that its very existence had been taken for granted?

I suddenly realised that chimneys similar to the one at Labuan are quite common in Australia. There were two at a brickworks near my childhood home. And there are several others scattered at brickworks around the suburbs of Sydney. Chimneys of similar construction are also found at smelting works all around the country, including one at an iron works established by my great-great-grandfather and his brother, a metallurgist, who pioneered the iron and steel industry in Australia.



A brickworks chimney



A smelting chimney

So, was it possible that the Labuan chimney was built as a smoke stack for brickmaking, or for smelting ore?

And, as a chimney is integral and normal to both processes, was this why its very existence had gone unremarked?

### **The investigation begins**

I began my investigation by taking Mr David Hosking, an experienced Australian metallurgist, to view The Chimney. He agreed that its construction was entirely consistent with chimneys built for brickmaking and the smelting of metallic ores. Furthermore, an examination of the interior revealed that, above the restored base, the interior was lined with glazed fire-bricks – bricks specifically designed to cope with enormous heat.



The glazed interior fire-bricks

The iron bands placed at intervals on the exterior also confirm that the stack was constructed to withstand high temperatures. These bands not only strengthen the brickwork, but also expand and contract when the chimney heats up.



Top and iron bands on a brickworks chimney



Top and iron bands on The Chimney

### **Could The Chimney be part of a brickworks?**

With published histories and other archival material failing to mention any brickworks on Labuan, it was widely believed that no brickmaking had ever been undertaken on the island. However, this didn't mean that such evidence did not exist, merely that no one had found it. The question was, where might such evidence be? In newspaper files, perhaps?

As I knew from previous historical investigations that the Singapore press reported Labuan news, I began a search of the Singapore Library archives.

I immediately hit pay dirt. Bricks had definitely been made in Labuan, near the coal mine, and for at least 40 years.

### **Brickmaking in Labuan**

In 1870, the press reported that convicts from the Victoria Gaol were making bricks in considerable quantity for use at the coal mine, opened up in 1847 on the northern tip of the island.

Brick making was a common occupation for prisoners in British colonies. In Labuan this work was performed at Coal Point, where there was a large deposit of suitable clay and an almost inexhaustible supply of coal to fuel the kiln. The kiln - almost certainly a small bottle-shaped or beehive kiln with a small inbuilt flue - was situated behind the coal store, not far from the coal company's jetty.





A bottle kiln



A simple beehive kiln

Buildings under construction at Coal Point that required bricks included a small settlement known as Edwardes Town just to the south of the mine; houses for workers and management; stores; offices; sheds; a dispensary; a police station and even a well-stocked library.

Encouraged by these discoveries, I extended my search to other newspapers, in UK, Australia and Sabah. What a bonanza! Reports revealed that, over the next four decades, the mine closed several times, as one company after another ran

into financial difficulties. However, after each revival there was a new spate of building activity, all of which required bricks.

### **The development of the mine at Coal Point**

Improvements at Coal Point in 1875 included the construction of about a dozen buildings in Edwardes Town, a spacious manager's house on the cliffs above the bay, a blacksmith's forge, engineer's house, two miners' houses, an office, a powder magazine, coolies quarters, a coal store near a new jetty and a huge cattle shed, to house the buffalos hauling wagons of coal along the tramway to the jetty for shipment. The line of a railway, to link Victoria with Coal Point, had also been surveyed.



A glass negative of the tramway leading to the mine, taken by Gov Edwardes, c 1875

But it was not to last. Blighted by years of insufficient capital, mismanagement, labour shortages, a disastrous boiler explosion and lack of pumping equipment for a mine that was situated in an area receiving three metres of rain a year, the colliery stood idle, along with the brick kiln, from 1878 until 1889. The beehive brick kiln would have collapsed, as the fire-bricks crumble if allowed to go cold

By 1881, thousands of pounds worth of machinery was rusting and decaying, with weeds and vegetation rampant. Tens of thousands of pounds of equipment, much of it brand new, was stored in large sheds, along with a new locomotive, proudly gilded with its name - 'Labuan No 1'. The manager's house overlooking the water was in ruins and the fine jetty in a perilous state.

In 1886, when it was made clear to the Labuan government that that the coal syndicate had no intention of re-opening operations at the mine, much of the

plant and machinery was put up for sale or auction. However three years later a new owner reopened the works with a start-up capital of 300,000 pounds sterling.

For the next 18 months the mine was under the management of Edmund Lloyd-Owen, a 40-year-old entrepreneurial British mining and civil engineer. The energetic Mr Lloyd-Owen instituted some ambitious expansion projects involving a new wharf and facilities in town, the sinking of a new shaft, the repair of machinery and plant, and the construction of an 11-mile railway line connecting Victoria to the mine. However, while high-grade coal was recovered from the expanded workings, Lloyd-Owen's spending spree, which included the railway line built at an exorbitant cost of 2500 pounds sterling per mile, landed the company in difficulties and in 1894 work once more came to a standstill.



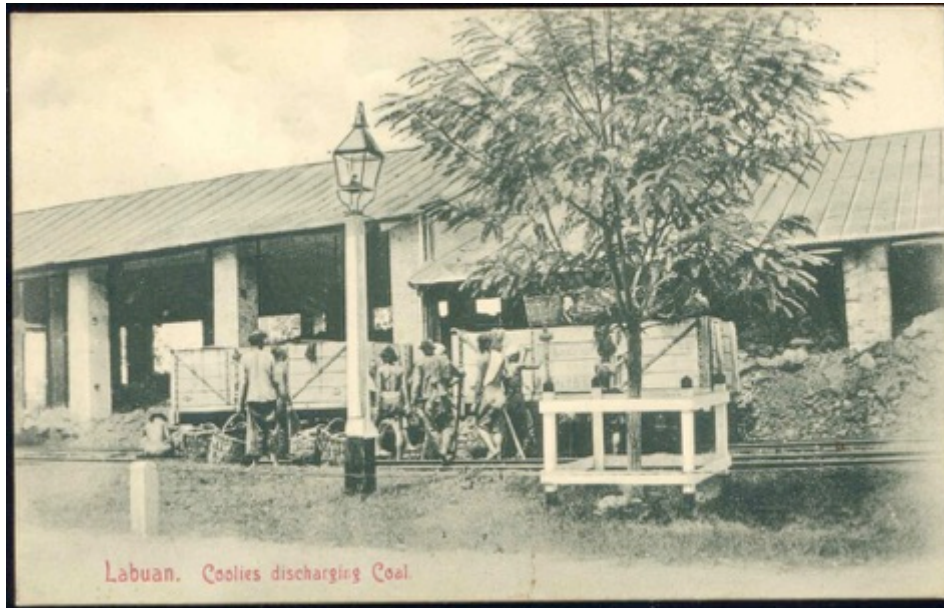
The rail line linking Coal Point with Victoria, c 1910

A new company was formed, and the mine reopened. With the kiln out of action, bricks for construction were obtained from the old Victoria Gaol, recently demolished to make way for a new prison. The recycled bricks were loaded onto lighters and transported by sea to Coal Point. However, the supply was finite, and by 1898 bricks were once more being made on site at the coal mine, using the nearby clay deposits.

This period of growth heralded further expansion at the mine, with a 'splendid' new wharf in town and the construction of a large, red-roofed depot that could be seen out to sea for many miles. In 1902 coal production was being carried out by the Labuan Coal Company Limited. Using its substantial capital its the aim was to carry out the business of 'coal and general mining, colliery proprietors, oil refiners, smelters, manufacturers of patent fuel, briquettes, gas, tar and other coal products'.

A new coal field was also opened. It had three inclined tunnels, all of which were lined with bricks – thousands of them. Brickmaking was in great demand, with the production line turning out bricks stamped with 'L C C L'.





Chinese coolies discharging coal



The railway line and coaling pier at Victoria.

In 1909 there was a further big upgrade at the mine, involving huge expenditure. The number of bricks required for the many new buildings that were planned, including 250 homes for an increased labour force, was substantial. With the large building program and the lining of the inclines with bricks, the number of bricks required between 1898 and 1909 was huge. Large enough to warrant the construction of a large brick kiln that required a smoke stack.





Circular brick kilns and chimneys



Rectangular kiln and chimney

While small beehive or conical kilns can cope with a moderate number of bricks, the kind of large-scale brick making required for the mine's expansion demands a large kiln and a stack, the siting of which was important.

The Chimney was not only adjacent to an unlimited supply of coal and extensive clay deposits, it was also on the island's highest point, where prevailing winds

could blow smoke and noxious fumes away from the town. As there are two flue archways in the base of the chimney, there were two kilns.

Tests carried out by the Labuan Museum concluded that there are no soot deposits in The Chimney. However, as David Hosking points out, this does not mean that the chimney was not used for brickmaking. The quality of coal mined at Labuan was claimed to be of a very high quality, burning cleanly and with little sooty residue. Furthermore, in the past century more than 1000 feet of heavy tropical rain has cascaded across the non-porous, shiny surfaces of the interior glazed bricks, flushing away any residual soot.

The construction boom at the turn of the century, with the massive increase in demand for bricks, fits neatly into the time frame that experts say the chimney was built. There is no mention of any chimney in any of the historical accounts of visits to Labuan in the late 1880s, nor does a chimney feature in any of the sketches or historic photos made of Coal Point up until that time, supporting the experts' opinion.

The construction of The Chimney, in a community where the coal mine was constantly in the news, and every trivial event was reported by the local and Singaporean press, excited not the slightest interest. Not a single solitary newspaper report on activities at the mine mentioned that a massive brick chimney was towering over the landscape. No reports or documents related to the Labuan coal mine make any mention of a chimney, either.

There is a very compelling and logical explanation as to why this is so.

Bricks had been made at Coal Point since 1870. It was common knowledge in the early 1900s that bricks were being made there in large quantities, a fact widely reported in the press. So the erection of a chimney stack for the greatly expanded brickworks would have gone completely unremarked, as it is a normal and expected part of the brick-making process.

### **But, was the chimney ever use to smelt ore?**

An existing brickworks can easily be converted to smelt ore and The Chimney is certainly of a high enough standard to be used for this purpose. Furthermore, smelting was certainly on the Labuan Coal Company's agenda.

The first mention of smelting at Coal Point was in 1902, when the L C C L listed 'smelters' among its proposed new enterprises. However, smelting ore requires an exhaust stack capable of withstanding high temperatures, the construction of which requires a considerable financial outlay. With a chimney suitable for smelting already built for the expanded brickworks, was it possible that the new owners now looked to the future?

They certainly had plenty of high-grade coal fuel on hand to fire a smelter; ready-built, easily convertible facilities; and a heavy gauge rail line to carry the final product to the port facilities in Victoria.





The nearest copper smelter to Cloncurry in 1909 was at Wallaroo in South Australia, thousands of miles away, involving haulage of ore from the mines by horse-drawn wagons to the Gulf of Carpentaria, where it began the long voyage to the far south coast of the continent.



The idea to export copper ore to Labuan, which was closer to the Cloncurry mines than Wallaroo, appears to be part of a proposed joint enterprise between the two groups of wealthy British backers who had invested in Australian copper and Labuan coal, with Australian interests supplying the ore and the Labuan Coalfields Company carrying out the smelting.

Interestingly, Mr Lloyd-Owen, the manager responsible for considerable expansion at the Labuan colliery, had taken over the lease of a copper mine in outback Queensland. It is not known if he had any input into the smelting proposal but, given his entrepreneurial streak and his knowledge of Labuan, it is a possibility to seriously consider. Irrespective of who was responsible for promoting the project, The Chimney, lined with glazed bricks to withstand the high temperatures required, was perfect for this joint smelting enterprise.

However, during the next twelve months, things did not go well at Coal Point. In spite of the great improvements and new shafts being opened, with a resultant upturn in coal production, the Coal Company suffered major setbacks in the latter half of 1910.

Despite the increased output, the mine was simply not prospering, and in August the General Manager sailed for England to confer with the company's directors. In early January 1911 it was announced that the mines would be closed by the end of the month. It was hoped that another company would come forward to restart operations but the prospects of this actually occurring were not promising: the current owners were the seventh to go out of business, since the mine was opened in 1847.

In an attempt to keep some form of production going, pumping continued until the end of February to prevent the works flooding and a small amount of coal was recovered on a daily basis. However, by mid-March the mines had closed down completely, never to re-open.

In December 1913, all brick buildings and workshops were demolished and the hundreds of thousands of bricks removed by train to Victoria, where they were bought by an entrepreneurial local, who had great hopes of making his fortune.

The railway line from Cloncurry to the Gulf of Carpentaria, on which such high hopes were placed, was never constructed. Whether this had any bearing on the closure of the Labuan mine is not known. Neither is it possible to establish if the closure of the coal mine was the reason why the rail project was abandoned.

What is clear is that the expansion of the mines at Coal Point to include ore smelting and the push to construct the railway line were inextricably linked, and that both enterprises failed at the same time.

The Chimney was never used for smelting, not even a test run. With the Museum's permission, I had samples of the interior bricks tested for cobalt, copper, lead, nickel and zinc by a mining laboratory in Australia. Scientific analysis showed that the trace elements present were of a very low concentration, consistent with levels expected to be found in the clay from which the bricks were made.



Willie Teo and Lynette Silver, obtaining samples for analysis



Museum employee obtaining samples

More than 100 years later, almost every trace of the settlement at Coal Point has disappeared, along with the brickworks, the memory of which has been lost in the mists of time.

It is ironic that something as throw away as a newspaper held the key to establishing the origins of a landmark that has lasted for more than a century. It is also ironic that The Chimney, so everyday and ordinary at the turn of last century, is not only the sole tangible reminder that such an ambitious enterprise ever existed: it has also survived to become Labuan's most famous, and intriguing, landmark.

Lynette Silver  
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