

# Bridging the gap

Posted on



Close up of the intricate construction of the nine arches forming the bridge

**One of the many wonders of the railway journey between Ella and Badulla through the hill country of south-central Sri Lanka is crossing the gaping gorge at Demodara via the Nine Arches Bridge, a stone viaduct constructed in the 1920s.**

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P K Appuhami, the labour contractor who took over the building of the bridge

You can lean out of the train's windows as it crosses the viaduct and marvel at this monumental construction between Ella and Demodara stations, but to fully appreciate the magnificence of the Nine Arches Bridge, you have to stand beside the track and watch a train trundle over it. It's a fitting reward for the effort of finding the way to the bridge through the jungle.

I began by driving to Demodara railway station to ask for directions. They couldn't help - the bridge was too far. So I retraced my steps to the A16 road that links Bandarawela with Badulla. At the 28km marker, a sign with a painting of a train crossing a viaduct, bearing the legend "5.5km to 9 Arch Bridge" points down a narrow road.

I followed it until I reached a small temple, at which point the road became too potholed for my van to proceed. What can one do? Luckily a tuk-tuk drove into view. The driver, Chaminda, was willing to show me how to get to the bridge, something he does every day for people who trek into the wilderness to find it.

I'm glad I didn't hike because the road became very steep, but Chaminda knew the route and, revving up the tuk-tuk, roared up to the summit and down the other side, negotiating the mud until he, too, could go no further.

Following Chaminda on foot down a narrow trail through the trees, I plunged into the undergrowth. I almost fell flat on my face when the path became a narrow ridge with a valley on one side and squelching mud on the other, but was rescued from a nasty tumble by Chaminda. "I used to be in the navy," he said, reassuringly.

I looked up and down the single broad-gauge railway line winding through the jungle and wondered which way to go. Chaminda pointed to the entrance to a tunnel, number 40, where another notice advised that, "Walking on the railway tracks is prohibited". The tunnel was dark, with only the sunlight at the far end to guide me as I strode from one wooden sleeper to another, defying the warning and hoping that I wouldn't be interrupted by a train.

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I emerged from the tunnel to be greeted with a magnificent view of the arches of the bridge, and several groups of students taking up positions to photograph the next train to come past.

When British engineers were engaged in construction nearly 100 years ago, they were confronted with steep terrain and deep valleys. The engineers were particularly stymied by the quagmire at the bottom of this chasm since they had no steel with which to anchor the columns of the bridge to the valley floor. The metal that had been allocated for the project had been seized for the war effort in 1918.

Construction came to a standstill on the Ella side of the gap as the engineers pondered what to do. This is where a local man who was supplying labour to the British contractors and had secured the trust of the engineers, offered to help.

P K Appuhami had never built a bridge before, but in desperation the contractors handed over the project. Appuhami rounded up villagers and all his labourers to help, while the British engineers looked on with trepidation.



Passengers watch in awe as a train crosses the bridge

He began by getting his men to gather large rocks from the surrounding wilderness and topple them into the ravine until they filled up the bottom. He then followed the engineer's designs, supervising the building of stone columns and arches on the rocky bed. He completed the work in little more than a year and the cost of construction was so low that the engineers were doubtful about the structural integrity of the bridge.

Appuhami was so confident that the bridge would be safe, however, that he promised to lie under it on the first trial run of a train across the viaduct. He kept to his word, the bridge

proved secure, the railway engineers were satisfied, and Appuhami was paid the full contract price.

The viaduct, built with blocks of stone and cement without any reinforcing steel or concrete, was commissioned in 1921. At 944 metres above sea level, this 30-metre tall construction curving its way across the gorge is called Ahas Namaye Palama (Nine Skies Bridge) in Sinhala.

It's amazing to see what local ingenuity achieved, especially as the viaduct continues in good service nearly a century later. Although access from the road is difficult, and the bridge is isolated, there is a small café on site, where I sat under pine trees and watched a sleek, blue Chinese-made train drive smoothly over the arches.



A modern passenger train follows the curves of the bridge