

# Classic Bricklaying Around the World

**A special feature from bricklayer and author Peter Cartright. It explores magnificent brick structures which have stood for hundreds of years.**

As a practising bricklayer and world traveller I consider myself fortunate to have visited so many beautiful brick constructions throughout the world. I marvel at the sheer effort and the forgotten technology in some of these magnificent bricklaying masterpieces, much of which goes so unnoticed with credit mistakenly given to other trades under the classification of special effects and ornamental brickwork which also carry a lot of structural reliance.

Just look at the building on the right. It's a lovely, aesthetically pleasing, spanning semi circular arch.

Most would say the concreter and the plasterers have done an amazing job and so beautifully presented. But this is where the credit goes to the wrong tradesman, because behind the scenes is a mass of precise brickwork constructed with precision and structural integrity.



This is what it looks like under the plaster, built in days of horse and buggy, skull dragging mortar and bricks up poorly made scaffolding, skilling and working without calculator, computer, or laser level with only pencil and paper. Note the enormity of the arch centre made by hand with hammer and hand saw—another job done by the bricklayer.

Let's have a look behind the plaster on some of these beautiful buildings.

To the right is the outside of the church. The front of the church is still in use and has a beautiful façade. Let's unwrap the facade and go behind for a look.



The corbelling that carry the structures have to be bonded structurally as well as meeting the aesthetic.

Note that bricks constructed into coping and corbelling and capping had to be protruded or recessed to make the effects on the plan.



There is so much lying in this backdrop—just have a look at the weight these corbels have to carry and note the importance in the bonding of the corbels.



Imagine the necessity of staying square, plumb and level around the piers, and also the work in the vaults and the arches constructed with openings to carry through the pinnacles for the roof, and structural magnafolias.



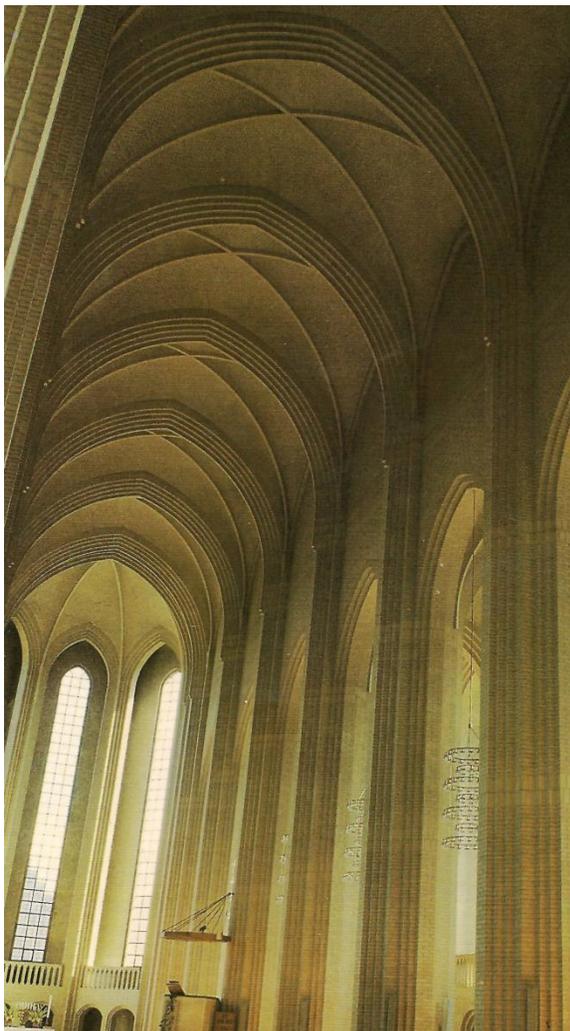
These buildings were built in Guatemala by the Spanish hundreds and hundreds of years ago. They've been through so many natural disasters with the biggest destroyers naturally the earth quakes, yet the fact that so many are still in pristine condition is due to the bricklaying craftsmanship of absolutely fantastic tradesmen.

For those obsessive bricklayers, have a look at this:



The horizontal vaulting made completely of bricks and the piers and the corner buttresses that hold the vaulting and the battered voussoirs.

This centre display shows the brickwork with the plaster peeled off. I've seen examples of this vaulting in Mexico and South America. I note the commonality to the Incas and the Maya tribes that built so many of their constructions out of stone and slab with the same design (these tribes migrated and travelled through here) hence the resemblance and the technique used .



I would like to add this photo of Grundtvig's Church, one of the best known churches in Copenhagen, Denmark because of its unusual appearance. The entire church is a massive brick structure from the organ pipes going through the front ceiling of the church to the massive brick vaulted ceiling. It also sports a beautiful brick spiral staircase which is about three storeys high at the back of the church leading up to the viewing and the choir areas. I've used this image on the cover of Bricklaying the Art 2<sup>nd</sup> edition.

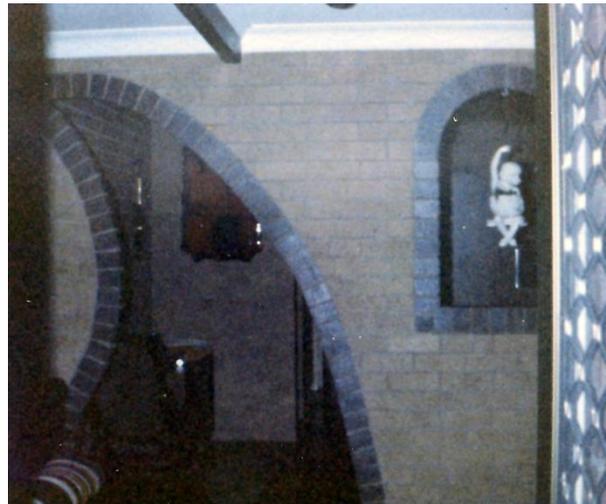
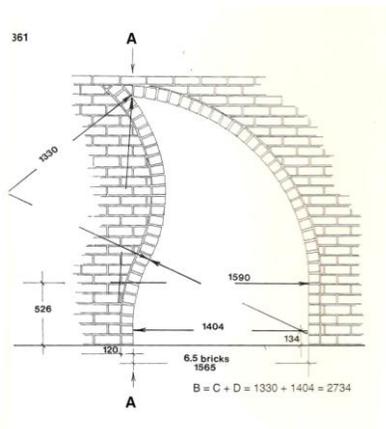
Now have a look at our modern day brickwork and what we can do with bricks. There are no limits to the areas where brick construction can be used. It just takes a little imagination, lots of persistence and good craftsmanship.

Here is a curved fireplace I built in the master bedroom. It's made totally of brick with the side walls constructed to contain theatre, video ,DVD player and television. It has wood and ash boxes that are both accessed from the outside,(no mess).



All it took was a little imagination and lots of persistence and good craftsmanship.

This is a photo of a dorsal fin arch I built in my early 20s when I was just starting to think outside of the cube. It needed to be a viable doorway and as a feature has to be also structurally sound.





Brilliant ideas *don't have a starting age on them*—young bricklayers are in their prime for learning and exploring. This last example is a spiral arch I constructed for the Australasian Masonry Conference in my local area.

I was asked by the university to design and construct something different. Water is pumped up through the middle of the brick pier then it runs over the edge onto the protruding bricks that were placed strategically around the pier.

The water then runs onto the brick that I chased a groove into and filled up the catchment at the bottom. I had to work out the volume of water to make the catchment the exact size. This image appears on the cover of *Bricklaying the Art*.

I want to finish this paper by emphasizing that bricklaying is a wonderful trade with so many promising traits. You have to work hard but the joy and fulfilment you will get out of it to see the finished product is very palatable. It's amazing to think that anything at all—any shape, square, angle, round—can be built out of a solid object 230mmx110mmx76mm. Anything is possible, and no other trades have the versatility to be able to construct anything from a letter box to a multi storey building. Bricklaying has had a following for many thousands of years. The only hold up is your imagination. To all those young people starting out as bricklayers, you have picked such a wonderful trade and all the best to you. How far you go is up to you. You have the opportunity to become one of the most sought after tradespeople around. It's truly an international trade as every country in the world has bricklayers.

Regards

Peter Cartwright