

The Gateway Arch in the US state of Missouri is very similar to parabola, but it isn't a parabola. It is a catenary. The curve formed by the dangling chain is called the catenary and this curve is very similar to the parabola.

The rope stretched to two sides to build a bridge initially creates a catenary only when it is exposed to its own weight. Then, when the bridge is built, the rope turns into parabola. Because the weight of the bridge has now overlapped the rope and reduced the weight of the rope to a negligible level.


