

# Pyramids at giza essay sample



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There have been many theories regarding how the pyramids at Giza were constructed. Most experts agree that they were constructed as burial monument for pharaohs, but “ how” these ancient people constructed monuments of such great size without modern machinery is a mystery which is still being debated. The fact that the Egyptians were able to construct a structure shaped like a pyramid, perfectly symmetrical, and aligned to the four cardinal points of a compass in its self is amazing. They were also able to figure out a way to move millions of stone blocks that weighed between 2 and 5 tons up to heights of 479 feet. How were they able to complete this massive task without any of the machinery or technology that we have today? One theory is that the Egyptians used a system that involves tracks and a rope roll to drag the blocks up the side of the pyramid. A second theory that has been suggested is the Egyptians used levers to raise the blocks up each level of the pyramid.

Franz Löhner’s rope roll theory is a good fit for what the Egyptians may have used. Löhner suggests that they placed the blocks on a sledge or a type of sled made of wooden beams. Two or three beams would be laid down with a beam connecting them on each side to make the sledge. They then made tracks that the sledge would run along. The tracks were made of two parallel sets of beams that the sledge sat on. To reduce friction between the beams of the sledge and the tracks they used watery oil to lubricate the way. These tracks could be easily placed from the dig site of the blocks to the base of the pyramid and then up the side of the pyramid. Once at the base of the pyramid the ropes would be walked to the top and placed through a rope roll. The rope roll was made of a simple wooden stand with a copper cylinder

that the rope would roll with when the rope was pulled along it. The wooden rope roll could easily be attached to the side of the pyramid and moved or replaced if needed. Once the rope was through the rope roll it was attached to another long beam.

This beam was then pulled down the side of the pyramid by the Egyptians pulling the sledge and block, up the side of the pyramid. As Löhner states the Egyptians would have had the materials needed to create the rope roll and tracks which makes this theory seem possible. Also, the Egyptians had the knowledge to master the task. We can see this by looking at some of the musical instruments the Egyptians used, such as the harp. The strings for the harp were wrapped around pegs that were twisted to tighten or loose the strings of the harp. This uses the same technique that the rope roll uses.

#### Reference

Lohner, F. (2006). Building The Great Pyramid. Retrieved November 2012, from Concept and Design, English texts: [www.cheops.pyramide.ch/pyramid-building.html](http://www.cheops.pyramide.ch/pyramid-building.html) Lohner, H. I. (1990). Der Bau der Cheops-Pyramide. Mantis Verlag. Sayre, H. M. (2011). The Humanities: Culture, Contunuity, and Change. Pearson Learning Solutions.