

Leaning Tower of Nevyansk

Moshkov Kirill

Form: 10 B School № 67

Yekaterinburg, 2014

History

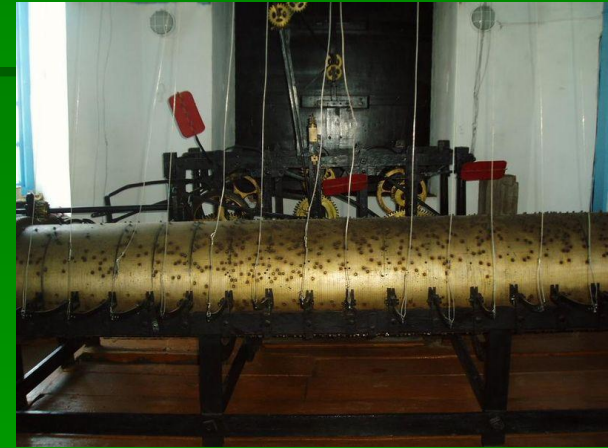
- **The Leaning Tower of Nevyansk** is a tower in the town of Nevyansk in Sverdlovsk Oblast, Russia, built in the 18th century. Its construction was funded by Peter the Great's associate and a famous Russian manufacturer Akinfiy Demidov, which was a son of the rich Russian industrialist Nikita Demidov.



- The height of the tower is 57.5 meters (189 ft) from the ground and the base is 9.5 meters (31 ft) square. According to recent measurements, the deviation of the top part of the tower from a right angle is currently 2.20 meters (7 ft 3 in). There is still no evidence to this day as to when exactly the Nevyansk Tower was constructed (1725-1732).

The purpose of the tower

- There are many versions. Some historians say that Demidov used it as a "bank safe", others believe it was either a watchtower, or a belltower, or a prison, or even a laboratory for conducting chemical experiments and producing counterfeit money. Some historians think that the tower was supposed to embody the might of the Demidov family and serve as some sort of an architectural symbol of their dynasty.
- During the restoration works in the tower, archaeologists were able to determine the purpose of some of the rooms. It appears that the first floor of the tower was used for conducting some sort of "secret work". The second floor may have been Demidov's "office". The third floor housed a kind of laboratory. Most likely, the tower was used for smelting the top layers of ore-bearing deposits. The seventh and the eighth floors house a unique clock with bell music. The clock has three dials, ten music bells weighing about four tons, and one alarm bell. The last ninth floor was probably used as an observation post.



**Nevjansk
tower bell
machine**

- Archaeologists dubbed it the "acoustic room". It is a 20 square meters (220 sq ft) room, located between the fourth and the fifth floors. If a person stands in one corner of this room, he or she can whisper words to another person in the opposite corner and they will be perfectly audible. Scientists still do not know whether the room was built like this on purpose or not. It could be that Demidov used this acoustic room for gathering "intelligence" on his high-ranking guests.



The purpose of inclination

- One of the legends has it that the inclination of the tower was an idea of some talented architect. They say that the tower was purposely inclined to face southwest in the direction of Tula, Demidov's birthplace. Supposedly, this is how Akinfiy wanted to demonstrate his affection for his former home. Another legend claims that right after the end of the construction of the edifice Akinfiy Demidov and the architect went on top of the tower. There, Demidov asked him whether he could build anything better than the Nevyansk Tower. The architect answered "yes", and Demidov ordered him thrown down from the top of the building. The next morning the locals supposedly noticed that the tower had leaned forward a bit and water had started trickling down the walls as if the tower were "crying". Interestingly enough, one can still see some water constantly dripping down the southwest wall of the tower to this day. However, there are a number of natural explanations for this phenomenon.



- The restorers say that there is no evidence to even assume that the Nevyansk Tower was purposely built inclined. The current surveying data shows that the defect had to be obvious during the construction. It appears that drifting grounds were to blame for the inclination of the tower from the very beginning. Scientists believe that an uneven subsidence took place when the tower had already been partially built. Most likely, the construction workers stopped building the tower on seeing the defect, but later on they decided to go on with their work. This can be proven by the color of mortar between the bricks, the composition of which changed as the architects worked their way up. Current measurements indicate that there is a 3-degree deviation of the base part from the axis, the middle part is already straightened, and the inclination of the tower equals only one degree.

Welcome to the Urals!