

## FIRES AND ELECTRICITY IN ANCIENT GDANSK

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**Keywords:** history, history of Gdansk

*Saturday, 4<sup>th</sup> May at 8 p.m. – a strong storm started, with thunders and lightnings, yet without wind. It struck the Town Hall of the Right Town right through the tower; severely damaging the roofs over the rooms it shattered the steel chamber of the clock, yet did not damage the mechanism or cause any fire. It also hit the pointed pinnacle on St. Mary's Church [...] over the chapel of St. Jacob's Fraternity, near the lift on the church. It only lit the fire inside, and since inside the copper plates the flame did not have enough air, it much later traveled up to the top and ran like light down to the wall, and not without great threat to the whole church. This unusual phenomenon took place in 1613, yet each storm brought similar threat and often led to fires.*

One should not think, however, that the citizens of those times were helpless in the face of fire. Already in the oldest *Willkürs* (statute) preserved, from about 1440, we can find decisions concerning fire protection and fire fighting, for example: *those running to fight fire are not to carry weapon, only axes, buckets and shovels, under the punishment of one firdung (a quarter of a mark). There should be special people employed by the Town Hall who should run with buckets and shovels to any fire. Those who do not do so should be punished.* There was also a separate regulation concerning demolishing of buildings in danger of fire: *when a house was demolished in the danger of fire, and the fire was stopped thanks to that, the neighbors should help rebuild it and pay for the repairs as assessed by the councilors.*

Those who were fighting with fire received a vat of beer and some money for their efforts. We can find proper records in the books of finances, for example: *5 firdungs for buckets to carry water during fires (1379/80).* In 1463 the people employed received 2 marks, in 1530 – 3 marks each. In 1545 – 143 *people who went to fight fire in Szopy (Mattenbuden)* were paid 8 shillings (1 mark was 60 shillings) each. The expenditure grew with the development of technology. In the 17<sup>th</sup> century the famous



**Figure 1.** Fire at St. Catherine's Church in 1905

engineer Wiebe Adams constructed a fire-engine which could shoot water up to 100 feet high, which was nearly 30 meters. It was a two-wheeled suction and force pump powered by horses. To unburden the city's Treasury a special fire tax was introduced, which was paid on receiving citizenship.

Since the oldest times there were special guards on church towers. To assure people that they were working at night every half-hour they played church melodies on trumpets. Cracow has one bugle-call, Gdansk had four of them, as there were four church towers on which there sat guards. When they noticed fire they sounded an alarm. Series of six strikes on a bell meant fire in the Right Town, of five strikes – in the Old Town, of four – in the Old Suburbs, of three – in Dlugie Ogrody (Long Gardens) and the Lower City, of two – in Nowe Ogrody (New Gardens). When the Granaries were on fire the guards sounded the bells continually. During the day they additionally hanged a red flag on the side on which they noticed fire, and at night – lanterns.

The fire fighting equipment was kept among others in the City Yard (at present the Scouts' House). After the fire in 1605 near Kashubian Market (at the extension of Gnilna Street towards today's Main Railway Station), where 60 houses burnt down, special sheds were constructed in various places of the city to keep the fire fighting equipment. It was also gathered near churches. Ladders were hanged on the walls, and below the roofs special copper tanks were placed that had to be full of water at all times. In 1714 St. John's Church imported a fire engine from the Netherlands. It was so admired that crowds gathered to see it during training in Swietojanska Street. The city borrowed it from church. It often came back damaged, which caused quarrels.

Let's come back to electricity, however. Gdansk scientists, since 1743 gathered in the Experimental Physics Society (also called Nature Society), played an important role in learning about laws governing electric discharge, so also thunders and lightning. The greatest contribution in that field belonged to the founder of the Society – Daniel Gralath, later the mayor of the city, founder of the Great Avenue (of Victory). Some 40 years before Coulomb he measured the forces interacting between electrified bodies. He was the first person in the world to explain the functioning of the so-called Leyden bottle and to assemble a battery of these prototypical condensers. He was also the author of the first *History of Electricity*.

Among other Gdansk scientists working with electricity we should mention one more pioneer of electrotherapy – doctor Christian Sendel, and also Heinrich Jacob De La Motte, who cured painful cramps with the use of electricity.

High level of research in that field and wide contacts with the world caused the fact that many of the discoveries and inventions were introduced in Gdansk much earlier than in other Polish cities. This, among others, concerns protection against thunderbolts. The first lightning rod was installed on the tower of the Right City Town Hall already in 1805.

Later it was installed on other buildings as well. Unfortunately one exception was the tower of St. Catherine's Church, which burnt down after being struck by lightning in the early morning of 3 July 1905, together with the clock and famous carillon from 1738. The bells still managed to play with a quivering sound the chorale *Heart by Heart*, and then hot drops started dripping down. The hardened pieces of bronze were later sold as souvenirs. The fire was depicted in postcards. The tower was reconstructed in its previous shape within 5 years, and the church bells' music returned to it. We should mention two more dates: in 1859 professional firefighting service were introduced in Gdansk. In 1898 the municipal power station on Olowianka-Island started its operation.

*Translation: Anna Kucharska-Raczunas*

