History

by Almmeister Dipl.-Ing. Wolfgang Peter

Since the early middle ages the evolution of the city of Salzburg was strongly influenced by the man-made canal „Almkanal“. An impressive sample for the enormous expenses and efforts, that have been made in the last centuries in order to meet the demand and create the luxury of flowing water in the inner city area, is delivered by the history around the „Hofbrunnhaus im Nonntal“.

Archbishop Guidobald Graf v. Thun

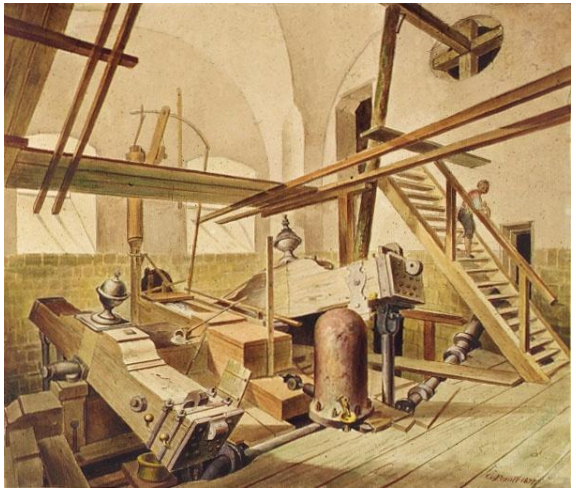
In the period between 1656 and 1661 Archbishop Guidobald von Thun had let build the magnificent fountain „Residenzbrunnen“, whose baroque style is unique northern of the Alps. Until today, the name of the artist who created this masterpiece remains unknown.
However, regarding the technically challenging, thanks to inventive genius finally completed, construction of the water supply pipe, a lot of details were passed on.
In the first place, the fountain was planned to be fed by water of the spring „Fürstenbrunn“ at the Untersberg.

The Residenzbrunnen, Georg Pezolt, 1850

For 30,000 Gulden, the dutch expert on water lines, Andree van der Waldt was charged with the project of the first „Fürstenbrunner Wasserleitung“ water pipe. In 1661, the nine kilometres long pipe line across the swamps was completed and consisting of 3237 larch wood pipes. This pipe system, however, could only withstand the pressure for a short time before breaking, so permanent operation was impossible and maintenance repairs became costly. Thus, the project had to be abandoned by Archbishop Max Gandolf in 1679.

In 1682 – so 21 years after the completion of the „Residenzbrunnen“ – well expert („Brunnenmeister“) Rupert Kraimoser from Salzburg finally managed to establish efficient, functional water supply for the fountain. He let build a pipeline from Hellbrunn’s „Sternweiher“ lake to the „Brunnhaus“, at the southern hillside of the „Festungsberg“ mountain in Nonntal.

The „Brunnhaus“ was constructed in 1664 as a pumping station and the essential centrepiece of the pipeline system. Across the especially built canal „Nonntalarm“, water from the „Almkanal“ was led to the „Brunnhaus“. Therefore, just before the entry of the (back then already 400 years old canal) „Stiftsarm“ into the „Mönchsberg“ mountain, the water stream was separated. The watergate house to regulate the channel flow is still operational today.
In the depths of the 13 metres deep cellar of „Brunnhaus“, the water then drove a giant water wheel that measured five metres in diameter and powered a huge lifting apparatus, whose plunger pumps lifted Hellbrunn’s spring water to a marble pool half way up the „Festungsberg“ mountain. From this surge tank, a pipe went over the „Nonnberg“ mountain to another well house – the line tunnel still exists today. The following steep drop of the heavy-walled lead pipeline, through the district of Kaiviertel to the „Residenzbrunnen“, created such high pressure, that the water of the fountain ascended about 20 metres high.



The water lifting apparatus in Brunnhaus, Georg Pezolt, 1878

Over the years, more and more house wells were connected to the water supply line in Nonntal and Kaiviertel. In dry seasons, when the water would run short, it was mixed (up to one third) with water from the „Almkanal“.

In the 18th and 19th century, more water powered workshops settled at the lower section of the „Nonntalarm“ canal, reaching from „Brunnhaus“ to the opening into „Hellbrunnerbach“ stream. There were factories for fig coffee and boxes, a locksmithery, as well as a clay compacting shop with a glazing mill, alongside some laundry shops.

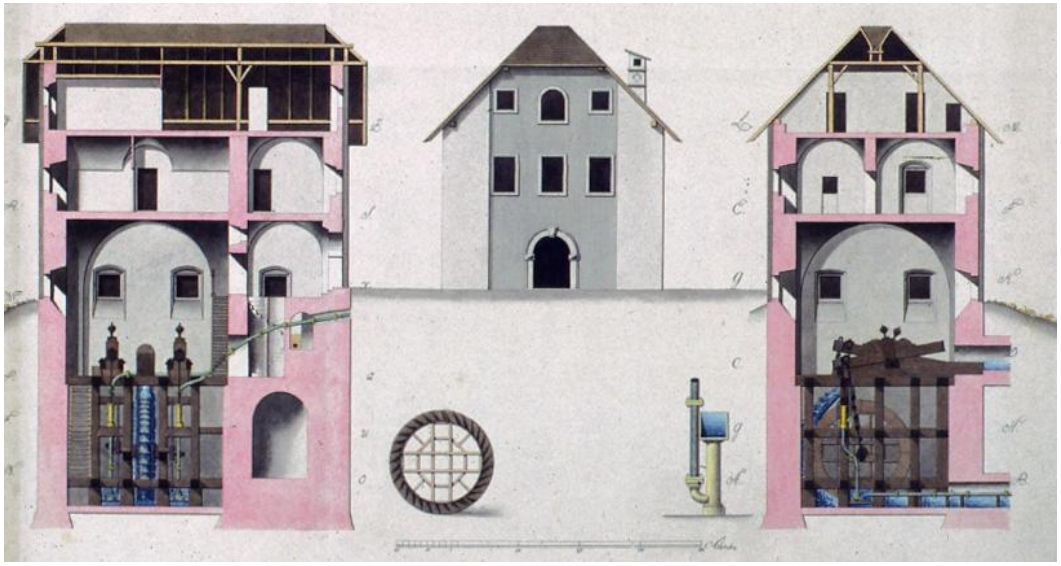
The decreasing run-out of the springs in Hellbrunn as well as the rising pollution of the added water from „Almkanal“, despite expensive filter technology, led to problems with huge growth of algae. Therefore, the desolate „Brunnhausleitung“ pipe was shut down and the „Residenzbrunnen“ fountain got a circulation pump connected to the city‘s public water supply in 1962. In 1977, all water rights of the pumping system were erased and parts of the pipeline, as well as the small building of the surge tank were removed. The line tunnel between „Brunnhaus“ and the demolished surge tank, however, was taken over by neighbours and sustained.

In 1991, the old turbine unit was rebuilt and adapted to power generation. The electric power excess left after own usage is fed to the public grid and covers a years demand for electricity of about 20 households.

In 1993, the state of Austria sold „Brunnhaus“ to the cooperative society „Wasserwerksgenossen-schaft Almhauptkanal“, who made it their place of management and official residence.

Chronology

1661 Completion of Residenzbrunnen
1664 Construction of Brunnhaus and Nonntalarm
1682 Water supply of the fountain with water from Hellbrunn
1816 The whole complex is given to the state following the secularisation
1877 Modernisation of the pumping station with iron sub-construction
1951 The water wheel is replaced with a Francis turbine, the plunger pump is replaced with a radial pump
1962 Pumping system out of operation
1977 Deletion of the water rights and removal of the surge tank at the Festungsberg
1991 Reactivation of the turbine for power generation
1993 Wasserwerksgenossenschaft-Almhauptkanal buys Brunnhaus from Republik Österreich



The archiepiscopal Brunnhaus, Nikolaus Höss, 1811

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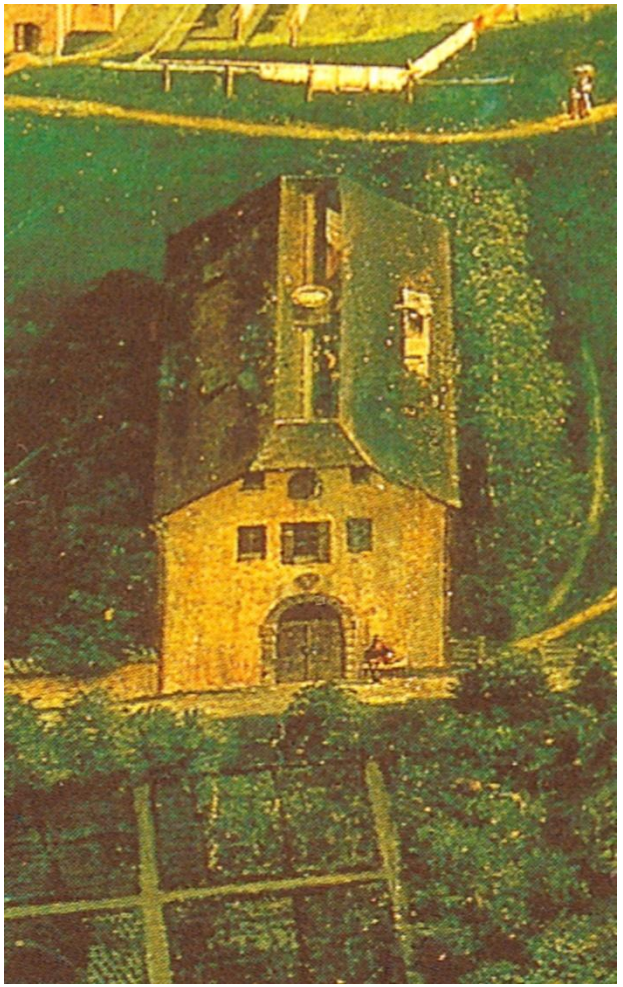

The Brunnhaus in Nonntal