WOOD INDUSTRIAL BACKGROUND OF TIMBER ARCHITECTURE IN SOPRON BETWEEN 1850 AND 1914

NÓRA GÉCZY*

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Abstract

The proliferation of wood trade and professional education and the appearance of new technologies and machines in the 19th century brought a new era in Sopron's wood industries, creating an industrial background for the wood construction in the period following the Compromise of 1867. With respect to architectural style, international wood construction trends were dominant, but the advancement of wood processing was an important factor in establishing various styles rapidly. The advanced state of wood industries in Sopron and its neighborhood facilitated the emergence of the city's distinctive wood architecture.

Based on the surveys carried out in the past years more and more pictures may be formed regarding the history of the domestic timber industry. The following question arises in relation to the synthetic studies[1] on the Hungarian woodworking: what changes were brought about by the 19th century in the case of Sopron regarding the local development of timber industry, and in what extent did these changes influence the architecture of the town.

The background of the spectacular timber architecture of the 19th century was established by the modernisation of timber trade and material supply as well as the technological innovations of woodworking. In the last decades of the 20th century it was still a common view that the architectural appearance of Sopron is solely determined by the stone and brick buildings - it may have been realistic in the case of the downtown area, however, the memories of several small buildings, bridges and temporary constructions made of wood were passed down to us - but in the suburb the abundance of wooden buildings and timber architectural elements is obvious. Even nowadays we can find a great number of wooden buildings, and houses with wooden verandas all along streets or quarters in the Downtown and the greenbelt. These areas - primarily the quarters of Virágvölgy and the Lőverek - were built in the second half of the 19th century and at the turn of the century.

During this period the wooden facilities of entertainment, sports and free time activities appeared[2]. New look-out towers, skittle-alleys, swimming pools, music pavilions, riffle ranges, exhibition pavilions, taverns, skating-rink and a race-track (picture 1.) were built all with wooden frames. As a result of the efficient local industry the timber architecture started from the second half of the 19th century.

As of the 1850s Sopron became one of the administrative centres of the country divided into five provinces. The area controlled by the chamber of Sopron comprises almost the complete region of the Trans-Danubian area, and constituted the relatively most populous part of Hungary. This status entailed an increasing construction activity in the town. A great number of German bureaucrats setting up its abodes in the town, and the appearance of the civil servants contributed to the broadening of the market that attracted the investors. However the industry of Sopron did not operate as the reduced scale replica of the national situation, and it would be a mistake to examine it in this manner, whereas the local facilities firmly determined the direction of development.

The population of Sopron was on the one hand stressed by the proximity of the Austrian industry but on the other hand the vicinity of the same had an inspiring effect. The local craftsmen endeavoured

*Géczy, Nóra: Master of Architectural Arts, University of West Hungary.

[1]Tóth, S.: Fafeldolgozás 1945 előtt. Agroinform Kiadóház, Budapest, 1999.

[2]Tóth, I.: A soproni sport kezdetei. - Várhely. 2004. X. évf. 3-4. sz. 121-125.p.

to satisfy the demands of the Viennese clients and even competed with the Austrian craftsmen being in every way in a more favourable situation.

Procurement of Wood

The appearance of railways meant a milestone that facilitated the procurement of the house timber in a sufficient quantity and quality required for the building industry. It is true that the forests of Sopron were rich in timber however the cheap wood deriving from other areas of the country supplied and satisfied the increasing raw timber demand of the town. The railway transportation had a beneficial impact both on the construction and the timber industries, whereas the Croatian, Slavonic, Transylvanian wood, and that of the Felvidék (Upper Hungary) got to the town at an extremely low price and in great volumes[3]. Austrian wood mills regularly supplied products to Sopron, though the majority of the timber-ware originating from Austria was transported to Sopron via the traditional routes by carriages from Vienna and Wiener Neustadt.

The Austrian peasants used to sell wood on the market place of Sopron until the end of the 19th century, and the local merchants used to purchase their stocks from them (in spite of the fact that an official timber-sale and warehouse existed in the town). After the turn of the century timber-vendors used to deliver their goods to houses with their carriages, moreover the town used to purchase from them the timber-ware required for timberwork.

The Crafts

The woodworking and carpentry in the 1850s used to be done in the framework of crafts, and they were mainly of handicraft type[4]. In accordance with the census of 1848, 111 master carpenters worked on the area controlled by the chamber of Sopron, with 21 employees and 29 journeymen carpenters running individual houses, and 40 of them lived in Sopron[5]. The frames of the craft system proved to be tight and obsolete already at the beginning of the 19th century. They gradually lost their importance as the architects not belonging to any craft unions could also receive orders, moreover as of the 60s the brick mason assistants and journeymen carpenters were also granted with rights for individual contract completion. Afterwards the situation of the education of master builders was somewhat confused for a certain period of time. The first Factory Acts (1872) after the Conciliation dissolved the craft unions and announced unlimited industrial freedom. (picture 3.) Following this the state encouraged the establishment of plants, factories and ventures through the granting of industrial subsidies. In the period between 1875 and 1918 there were several, more precisely 29 attempts made for the founding of factories in Sopron. However, the wealthy citizens were disinclined for establishing factories by the three great financial collapses of the era: in 1858, the collapse of the market in Vienna in 1873, and the breakdown of the building bank in 1901.

Mechanisation

The great change was brought forth in the timber industry by the industrial freedom. This sphere of industry anyway started its development with the general spreading of steam, steam-engines and steam saw-mills. The saw is an indispensable tool in woodworking. The mechanisation of sawing in the field of woodworking took place in the 13th and 14th centuries. The major saw-mills of that era were located at streams and rivers and were driven by water-power. The steam being the new type of resource made the saw-mills free by facilitating a free choice of location. On the area under the control of the chamber of Sopron 175 saw-mills were functioning at the middle of the 1860s and were producing timber-ware for the market in the volume satisfying local demands. The boards, laths, and planks were chosen by the carpenters from the supply brought to the weekly markets. Joiners used to purchase the stocks of wood-warehouses offering products being more expensive but of higher quality standards. (picture 2-4.) There was only one steam driven section cutting saw-mill - in the near Léka - but it used to produce its goods mainly to the Viennese market. In 1865 there were 34 master-builders, 341 master brick-masons and 230 master carpenters registered on the area under the chamber's control. Two master carpenters of Sopron received the most significant orders, József Heiss and Antal Ullein. The number of saw-mills in 1869 on the area under the chamber's control dropped to 69, but three of them worked with modern steam driven machines. Ullein, being a clever entrepreneur, established a steam driven saw-mill in Sopron. The state started to establish saw-mills in the country from the seventies, but on the area controlled by the

[3]Reports of the Chamber of Sopron's Industry. 1875. 48-49.p.
[4]Szála, E.: Sopron tudomány- és technikatörténetéből. Soproni Egyetem, Sopron,1997
[5]Winkler, G.: Sopron építészete a 19. században. Akadémiai Kiadó, Budapest, 1988.

chamber of industry of Sopron already in 1869 there were such plants functioning first in the country. Most saw-mills produced cut boards, laths and planks of inferior quality, but *"The goods produced by Mr. Ullein with steam saw-mills formed an honourable exception, as he managed to conclude significant contracts for the supply of big plank volumes for big Viennese contractors"* - according to the reports of 1866-69 by the Chamber of Industry.

At the end of the seventies joiners' societies were established in Sopron and Pécs that ran common furniture warehouses, and such societies *"proved to be practical and profitable"*. In Ó-Perint, next to Szombathely, Sándor Tóth established his own steam driven furniture factory, with an individual warehouse in the town.

The woodworking activities further developed on the area controlled by the Chamber of Industry of Sopron. In 1880, 105 saw-mills were functioning and 90 of them were driven by water power, while 15 were driven by steam power. (picture 5.) Besides timber: wood sections were produced in the largest volume in the near Léka, Kőszeg and Pécs. In Német-Újvár, in Vas County, Countess Batthyányi-Wocher produced annually 20000 m^3 matched floor-boards valuing Ft 30000 in her factory furnished with steam driven equipment. Plank boards were produced in Léka and Pécs in the largest volume, 15000 m^3 a year, valuing Ft 50000.

The upsurge of the timber industry increased the inclination for building as well, whereas large volumes of timber of good quality were marketed, that made the building from wood cheaper. New opportunities were opened for the careful completion of more complex carpentry and building joinery, and the construction of larger buildings became possible from wood, even for less wealthy citizens. In this era the vivid domestic timber industry with was successfully mixed with the spreading of the West-European trends of timber constructions. (picture 6.)

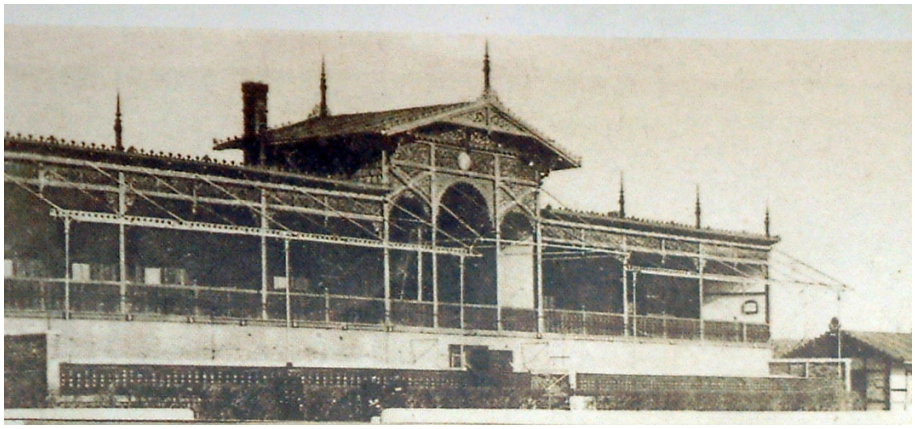
In the middle of the 19th century a process started as an influence of which the construction from wood became recognised, moreover it became the measure of wealth and style. Following foreign and mainly German patterns in the western corner of the country the timber building regained its prestige. German and Austrian architects as well as the domestic architects who had foreign experiences adapted the fashion of timber building in an irregular manner and at a high quality standard.

One of the most popular new timber construction trends was the one referred to as the *"Swiss style"*, that appeared not only on dwelling houses and the chalets but on larger constructions, halls and public buildings. The most typical public buildings constructed in Swiss style were the hotels, thermal baths, taverns and pavilions, but this trend influenced the style of railway stations and racetracks as well. In Sopron, the cottage-tavern in the grove of the town, the music pavilion in the Elisabeth-garden or the race-course on the road to Győr were all built in a similar style.

At the beginning of the eighteen-eighties the town took a course of actions that provided ground for the evolvement of the local timber building. The first *"hill-terrace"* of the Lőver-region, the Prinzsteg, i.e. the Panorama-street was built. The spreading of the Swiss style houses in Sopron is dated to the 1880s. However, early examples were also found, such as the garden house designed by Ferdinánd Hild (1854), or some decorative summer-houses in the seventies. The more mature creations of architecture, however, were built from the 1880s. According to the reports of the Chamber of Industry the progress of building on the area can be traced accurately. While, for instance, in 1878 only to houses were built, in 1891 ten, in 1892 eleven, and in 1893 twenty-one *"Lőver"* houses were built. (picture 7.) In the Report of 1878 we may find some comments regarding the architectural style of houses as well: *"In the so called Lőver gardens two buildings with connecting walls filled with bricks were erected"*. In the greenbelts of the town between 1870 and 1915 there were several houses built subsequently with close boarding and timber frame constructions, as well as houses with timber verandas. Jig-sawed boards and laths were often used to decorate the fascias, eaves and frontispieces of brick houses. The structures were installed on the site on the carpenter's yard, but the ornaments were in all cases produced in the workshops. With the development of technology there were new tools and machines used for the creation of the ornaments of a timber frontispiece and for the creation of the jig-sawed decorations, which facilitated the serial production of diverse ornaments. Widely spread and international catalogues were used to choose the elements of a certain ornament, and such ornaments were created by combining the desired patterns. (picture 8.) The motives could be abstract geometric patterns, or forms evoking the architectural traditions, such as plant ornaments or the figures of animals. Several design permits were passed down to us of these summer houses, and we can see how frontispieces became more and more vivid with the timber verandas and the jig-sawed board decorations.

The decoration with timber work became so popular soon that the production of *"diverse jig-saw works"* was taught as a subject at the technical school of Sopron as of 1880.

Figure 1: Race-track in 1894.



János Weitzer established a new building joiner and ironmongery factory in Sopron in 1895, where 45 joiner assistants worked and produced annually 2000 pieces of windows with diverse structures and the same number of doors. At that time more and more glass covered verandas were built and the new houses were made with wide windows, and the Caste-district was enriched with beautiful timber portals. The main report of this time commented that *"the building joiners were fairly occupied here and there with the developed and buoyant building activities"*.

The number of carpenters increased evenly until the end of the 19th century. In 1900, 45 master carpenters worked in Sopron[6]. More and more people were heading for America, the majority of them were young carpenters and craftsman, ho left the country after finishing the technical school and gaining one or two years of practice. The building industry was almost paralysed in 1902. The orders they received were for repairs only. The demand for sawn timber dropped and the saw-mills got in difficult situation. In addition to the building joiners the furniture joiners were left without orders as the good quality furniture was overflowing from Austria and mainly from Vienna to Sopron. The sole furniture factory of Sopron owned by János Schiller architect was operating profitably at the turn of the century but in 1903 it went bankrupt. (picture 9.)

As of the second half of the 19th century the timber industry of Sopron, starting from a really low level, in the time preceding the World War I left behind successful and profitable years. The economic and technological background of the timber architecture developed uninterruptedly up to the World War I, and as a result of this improvement the appearance of the town became more colourful and varied.

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[5] 5) Winkler, Gábor: Sopron építészete a 19. században. (Architecture of Sopron in 19th century). Akadémiai Kiadó, Budapest, 1988.

[6] Winkler, G.: Sopron építészete a 19. században. Akadémiai Kiadó, Budapest, 1988.

Figure 2: English made Whip-saw, patent applied in 1863.

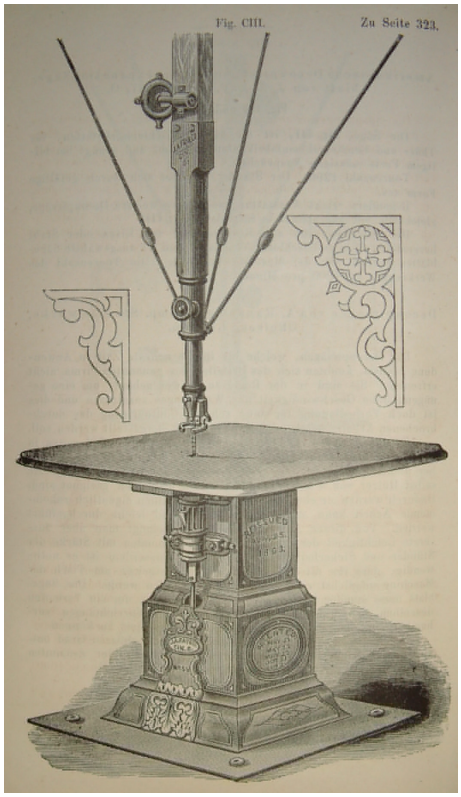

Figure 3: Jig-sawed boards.

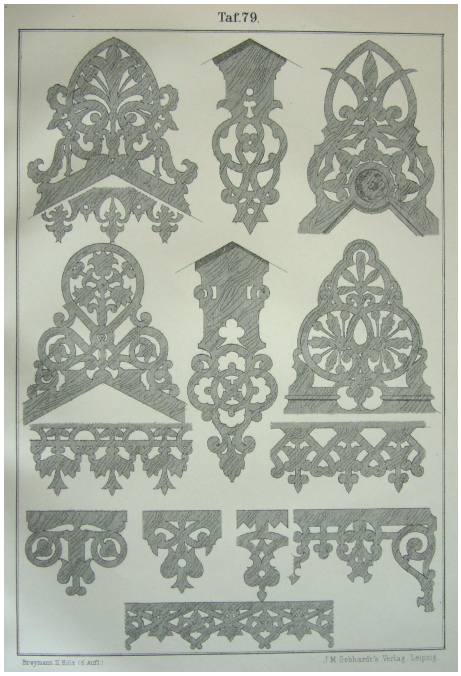

Figure 4: Whip-saw for jig-sawed boards, in 1870.

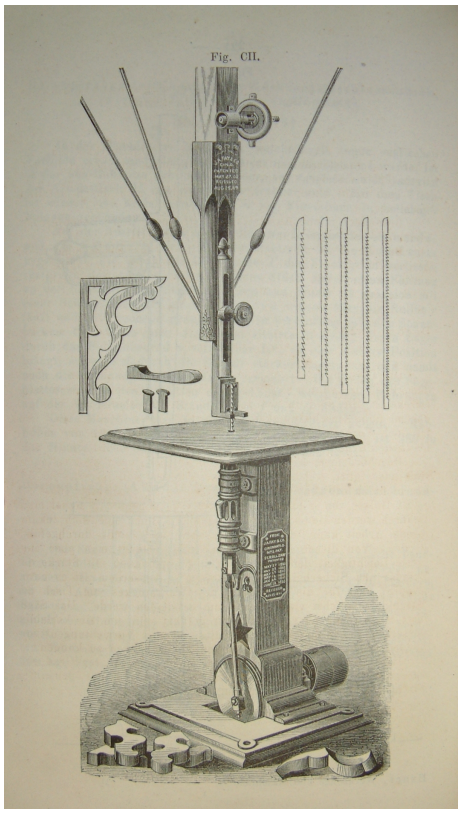

Figure 5: Milling cutter, in 1870.

Figure 6: Whip-saw with arm, in 1880.

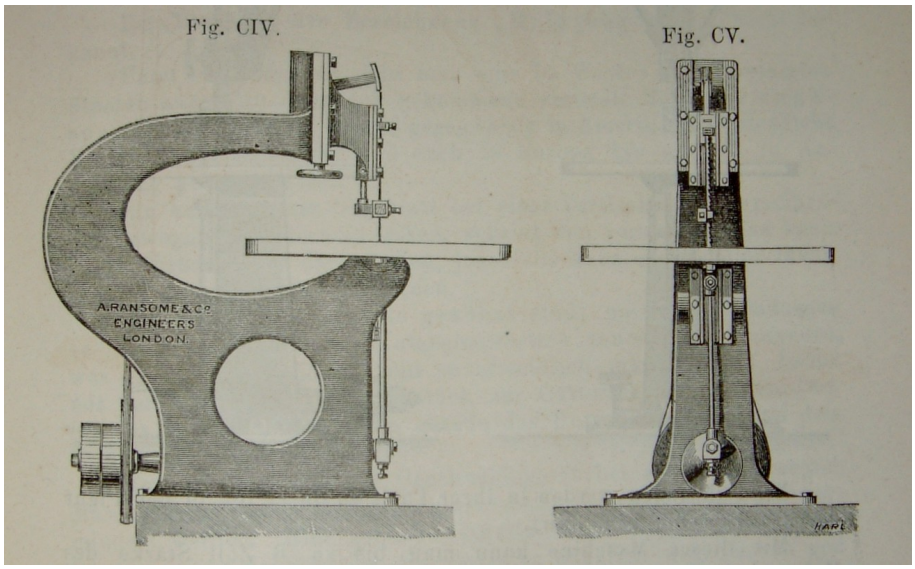

Figure 7: "Lőver" house in Felsőlőverek.

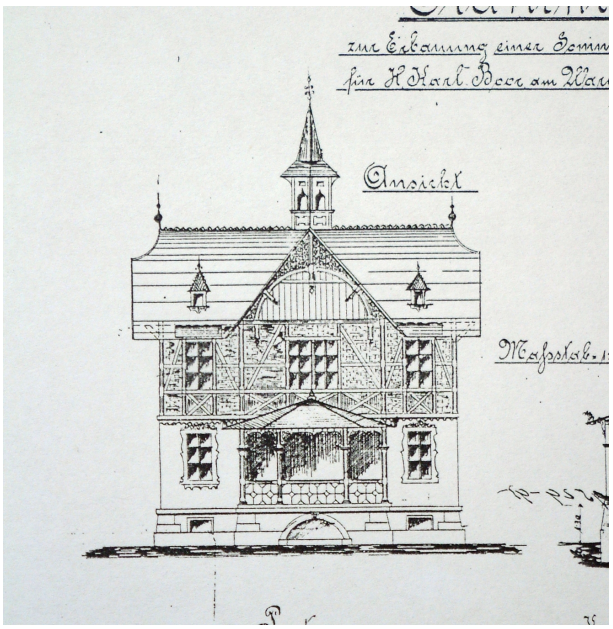

Figure 8: International Architectural Catalogue in 1873.

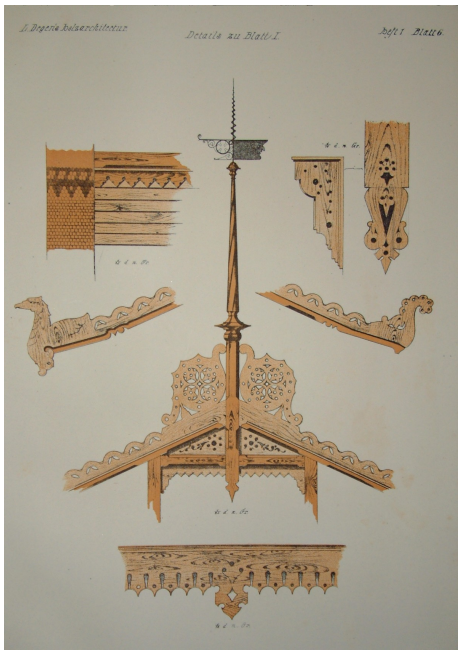

Figure 9: Joiner's factory of Schiller János in Sopron between 1898-1903.