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Official Analysis of the Great Debrecen Fires of 1802 and 1811

Abstract
Today's appearance of the city of Debrecen was greatly influenced by the fires of its history. Of these, the two most devastating should be highlighted, the fires of 1802 and of 1811. In connection with fire we intend to summarize the amount of damage by processing contemporary sources. After the fires more serious regulations on fire prevention began to emerge These disasters made people aware of the importance of fire protection. In connection with the 18th century town, we try to compare the fire protection regulations of the 18th century with the present one, and to make a comparison with the possibility of today's fire formation by examining the cause of the fires.

Keywords: fire, fire policing disaster, disaster management authority, fire protection, prevention

Introduction

The name of the city *'Debreczen'* is of Slavic origin, according to the historians of the city, the ancestors of this area were the Getaes and the *'lizard-eyed'* Sarmatians long before the arrival of the Hungarians. Debrecen has played an outstanding role in all ages due to its geographical location, as it has been a hub for trade routes from the North, East and South. There is no other city in Hungary like Debrecen in the history which has been destroyed by so many catastrophes caused by fire. The written record of the oldest fire in the city dates back to 1245, in which the complete destruction of the Great Church happened, too.
'*From our cities, Debrecen and Gyöngyös were so often destroyed by the 'red rooster' that they still stick in the memory of today's people as the most typical examples of cities that have been burnt down. In the coat of arms of Debrecen, the phoenix symbolizes that the city was always rebuilt from its ashes […].'*

(Arany, Krisó & Rácz-Székely, 1985, 8.) In the course of our research, we examined the causes of the fires of 1802 and 1811, as well as on the parallels with today's fire prevention authority regulations. Our research methods are a collection and analysis of library and archival materials, with a particular focus on contemporary materials, as well as the city council documents. Unfortunately, the longer a damage occurred, the less likely it is that written memories that can be used and authentically present the event have survived. While processing the topic, I came to the conclusion that places that preserving written memories, such as libraries, schools, and city buildings, have in many cases been prey to fires.

The Fire of 1802 and 1811 as A Disaster

In addition to the fires of 1802 and 1811, there were also significant devastating fires in Debrecen in 1561, 1565, 1568, 1580, 1623, 1639, 1640, 1656, 1669, 1681, 1688, 1693, 1699, 1701, 1704, 1705, 1711, 1714, 1719, 1791 and in 1797. Several of these fires reached the current definition of disaster risk, and beyond that the disaster itself happened, as these events became identifiable with the factual elements of the concept, as, among other things, people's lives, health, material values, basic care of the population. They endangered the environment and the organizations of the time were no longer able to take on the effective fight against these devastating effects in a coordinated manner. The causes of fires can be found in, among other things, contemporary construction habits, the lack of central regulation of prevention, and human negligence and intentionality Andreas Pinxner, a German traveller, also remembered the contemporary conditions following his stay in Debrecen in 1693, recording his experiences he wrote *'He states…, the houses are usually low, built of loam, thatched, and the street in front of them is such as he good God created it: no sign of paving. It is horrible to think that if a fire broke out in a city like this during a windstorm, what a desperate devastation could befall the city.'* (Trócsányi, 1937, 138.) The lack of building habits and proper official control was also compounded by the fact that there were not using in those times matches or other devices suitable to produce a safe and controlled fire, so the fire was produced only with great effort with a so-called steel dowel. To eliminate the difficulty of this process, the fires were kept under constant surveillance in the fireplaces. It was a common practice to *'borrow'* fires from each other, which was transferred from one place to another with a shovel, in which case there was also a high chance that a spark would cause an uncontrolled fire. The most endangered place was the eaves of thatched houses, as if the roof caught on fire, the whole rows of houses, streets

and parts of the city burned down in a short time. *'The fire was so common – as we can see from the reports of newspapers published at the beginning of the last century, that perhaps it happened every day.'* (Trócsányi, 1937, 139.) Continuous learning from the fires led to a series of regulations on, among other things, smoking, the use of candles, the storage of cob stacks, and certain rules for the pursuit in crafts. Unfortunately, the arsonists were sentenced to death in vain, the dangers were brought to the attention of the population, and fines and other punitive sentences were envisaged (Zoltai, 1903, 83.). Due to the geographical conditions, in the Great Plain there were often significant windstorms, as were several times dry, droughty days, all of which made it difficult to protect against fires. In today's sense, fire-fighting technical devices, equipment and personal protective equipment can also be considered rudimentary and it was difficult to intervene effectively with them during a damage event. In addition to the environmental impact and the negative impact of technical devices and equipment, the construction habits typical for these ages, as well as the lack of safe building regulations against fire, mostly contributed the most to the occurrence of such fires/disasters. The contemporary cityscape shows that the number of brick houses was very little, but their roof structure was usually covered with wooden shingles. On the other hand, most of the houses had *'patics'* walls (mud-framed wooden frame structure) and hut-like, thatched roofs. The size of the parcels was characterized by their narrow and elongated design. These were usually built together and crowded with residential houses and other backyard buildings. In most cases, the fences were made out of wood and twig, so they could not form an obstacle to the wind (Zoltán, 1937, 296.). The architectural customs of the city did not change significantly over the centuries until the fires of the early 19th century. An arson took place in Debrecen on the 11th of June in 1802, which caused the biggest fire in the history of the city, in which '*one thousand five hundred houses, fifteen mills and the tower building of the ancient dormitory also burned down.'* (Arany, Krisó & Rácz-Székely, 1985, 8.) The fire also touched György Bessenyei, a contemporary poet who wrote his poem Debretzennek siralma poémában, in which he remembered of the fire that struck the city of Debrecen. He wrote about the wind, that caught up the fire and the chaotic conditions being present on the streets, as well as the despair of the people who had to experience the fire itself in person. The spread of the fire was also facilitated by the combined effect of environmental phenomena, which means that it was a dry and windy summer day, so on that very day at quarter to one at Kis-Csapó Street, around Morgó Street a fire broke out at the pigsty of a palinka-selling old widow (Kabai, 1821, 20.). The surviving written memoirs are contradictory to the identity of the owner, according to some sources the own-

er was a widow Mihályné, but according to others, it was István Dinnyés. The end of the pigsty led to a narrow ditch, which according to contemporary writings is considered to be the starting place of the fire. Learning from previous fires all the time, they were confident by the appropriate regulations and tools to put out the firefighting through continuous regulations, more or less. Unfortunately, based on the negative coexistence of circumstances and the principle of domino effect, the occurrence of disaster has become inevitable. The perfect presence of all the conditions necessary for burning was given in the high wing, thus spreading from houses next to Csapó and Péterfia Street, destroying Darabos Street, then through Kis-Hatvan Street the most of Miklós Street, as well as the area between Tizenháromváros Street, Piac Street and both Great- and Small Churches along with the wooden bridge and café, taps and the external tents in the fairgrounds on Német Street. As a result of the fire, the church also suffered significant damage, as it was destroyed from the Great Church tower, and the adjacent tower, the Red Tower, was also destroyed. Nothing shows the destructive heat effect of the fire better than the bell donated from György Rákóczi I. in the tower, which melted and fell in the fire.

Figure 1: The devastation of the fire of 1802
(map drawings of the fire commander Jenő Roncsik / 1922–1945 /)

The devastation of the fire left poverty and famine, misery, scanty houses and hundreds of homeless people. The supply of the population also became insecure, many people were left with no usable objects, the fire destroyed everything.

'*Not only nearby towns, but even the most remote cities, such as Bratislava, sent alms to help those affected by the fire. Donations were also collected quite a bit, but the reconstruction was difficult […]'* (Trócsányi, 1937, 144.)

The city's fire record includes:

Streets:	Properties:	Damages in Forint:	Dam. in korona:
Hatvan	262	188,594	27
Péterfia	147	143,665	30
Csapó	31	25,814	51
Piacz	303	176,907	54
Damage of the Reformed Church	-	150,000	-
Damage of the Collegium	-	26,412	35
Total:	**713**	**711,395 Forints**	**17 Korona**

Table 1: Damage caused by the fire of 1802 (created by Bence R. Lakatos)

But in addition to the above damages, the amount of each loss in *'goods'* can be estimated at nearly 1.500.000 Forints. All the buildings of the church were destroyed or significantly damaged by the fire. In addition to the damage to the buildings, there was a significant intellectual loss to posterity, as a significant portion of the library and the books there were destroyed. In the fire, the wheat stored in the granary also became a prey to the fire. The consequence of food shortages was famine, for which they also had to find a solution (Gulyás, 1935, 18.). The disaster caused significant material damage to the city, but claimed only one human casualty based on the surviving materials. Unfortunately, the cause of the arson did not fall into the hands of the authorities. Residents of the city, re-learning from the fire, began to rebuild the city. After the catastrophe, the city was again threatened by fire in 1811, according to some sources in a small inn on the 12th of April at noon, while according to most, a fire broke out in the pigsty next to the street of the belt-making master Mihály Vári living at the Czegléd Street gate. It was not established in this case whether the fire was caused by human negligence or wilful arson. As a result of the fire, a significant part of Czegléd Street and Piac Street, the whole of Varga Street was destroyed, several inns, the Roman Catholic Church, the theatre, the Franciscan monastery, Miklós Street and 25 other mills were burnt down. The intensity and strength of the fire

is shown by the fact that in a '*total'* of 4 hours it managed to destroy a significant part of the city. Compared to the fire of 1802, this was an event with significantly more casualties, 21 people (old, young, children), most of the casualties were in houses close to the source of the fire. As a result of the intense wind, people in the houses no longer had the opportunity to escape, or during the escape themselves they suffered such severe burns or inhalation heat damage that it was no longer possible to help them, so they lost their lives. In addition to the considerable fatalities, the number of those who suffered some degree of burns as a result of the fire, or according to the writings, was greatly reduced by the effects of heat, and many became blind. Following the fire, an assessment of the damage and the care of the homeless began, i.e. the provision of the necessary conditions for the survival of the population, when a fire broke out again at the end of the street in Hatvan Street on the 8th of April at 1 p.m., which spread rapidly and on Hatvan, Mester and Darabos Streets, among others, and in addition to Péterfia Street, another 25 mills were destroyed again (Zsoldos, 1917, 296.). The problem was also caused by the fact that in a very short time – 11 years – a considerable part of the city was destroyed three times by fire, which caused more and more significant damage to the people living there and to the city management. Following the events, a smaller fire broke out on the 15th of April, where *'only'* 3 houses burned down. In 1811, as a result of fires over the course of two weeks, residents who lost their houses and property were forced to sleep in the open air, had nowhere to go. After assessing the damage of these two weeks *'1497 residential houses, 540 chambers, 1224 barns and stables, 493 scenes and 50 dry mills, so more than half of the city. The total damage was 4,472,406 Forints, the fire was much larger than in 1802.'*(Roncsik, 1925, 20.)

The Contemporary Fire Protection Regulation of the City

The first fire preventive fire intervention measure of the city of Debrecen was taken in 1556, according to which a person who went to the barn with a candle without a lantern or fired i.e. used a rifle on an open street was punished. Preventive fire protection underwent continuous development. The association of firefighting students, which was one of the oldest organizations in the city, played a significant role in the performance of the city's fire protection and firefighting tasks, as they have been providing fire protection for our city for more than two hundred years. In addition to and in front of the students, there was a significant task for the guilds operating in our city. The life and activities of the student firefighters in Debrecen were regulated by the individual dormito-

ry laws; accordingly, since 1664, it has been prescribed that they take an active part in the early detection of fires in the city and in their subsequent extinguishing of fires (Roncsik, 1934, 18.). The city leadership has determined to *'get 50 leather buckets and multiply the number of water rifles per hundred at the expense of the city first'*. (Tarján, 1964, 17.) Following the constantly evolving rules and regulations, the regulations for machinists such as water syringe operators and those assigned to the machineries and early detection of fire were most precisely issued in the protocol containing the detailed regulations of the *'Acta Curatoratus et Professoratus'* on 25 November 1798. When it was created, the teaching staff asked for a preliminary opinion from the students, and then this set of rules was created taking these into account (Nagy, 1957, 33.).

Figure 2: The devastation of the fire of 1811
(map drawings of the fire commander Jenő Roncsik /1922–1945/)

The organization of the Student Fire Brigade had a complex system of subordination and division of tasks compared to the expectations of the age. The enthusiasm, courage and professionalism of the students is also shown by the fact that during its existence it was able to curb many fires and prevent them from escalating into catastrophes caused by fire. Unfortunately, it was the student body that was one of the weak points of this fire brigade organization, as the students spent their time in the school system in connection with their firefighting duties and, with few exceptions, barely stayed in the dormitory building, so they could not

protect the city. Unfortunately, the fire on the 11th of July in 1802, also fell into the Whitsun period, when students were not in the dormitory building, so the Great Church, along with the Dorm and its associated machineries as a fire station, were able to burn down a significant part of the city. In the aftermath of constant fires, a series of provisions were made to try to prevent these incidents, such as the rule in 1556 that at least one bowl of water should be stored in front of each house, or, for example, that night baking was prohibited from 1629, along with cooking, washing and also firing in smaller shops. City leaders soon realized the activities of guilds pursuing open-flame crafts as a source of danger. According to the remaining written records, the fire policing regulations of Debrecen in the 17th and 18th centuries were characterized by empirical regulation and the subsequent nature of fire policing regulations, so the regulations were always preceded by some major fire. In the 18th century, as a result of many fires, the development of regulations based not only on customary law but also on written legal norms became topical, thus ensuring the development of an adequate level of fire protection. By the end of the century, the fire protection patron issued by King Joseph II of Hungary in 1788 was the first to summarize the fire protection tasks at the legal level. This patent was the first to include provisions for three areas of fire protection in the modern sense, fire prevention, firefighting, and fire inspection. Among the royal commissioner's documents of the Hajdú-Bihar County Archives are the provisions of the Free and Royal City of Debreczen on Fire Orders established by the Governing Council in 1799. Among its most important provisions are the reduction of wooden structures and wooden chimneys in addition to the construction of brick-built houses, but unfortunately the construction of bricks was not suggested in a coercive way, but with the words *'whose talent allows'*. There are also regulations for cleaning contemporary stoves, chimneys, and for handling and using fuels and equipment. The *'naked'* transportation of burning candles also entailed severe punishment in the age. Smoking, where and in what form it can be used safely, has also been regulated. Provisions referring to industrial safety include, for example, laying down requirements for dealers and producers of gunpowder, but its most interesting provision with regard to fire protection is *'also urge your maid to be diligent: cover the fire well in the kitchen so that the cat cannot take it in its fur'.* In addition to fire prevention rules, it also contains the most important requirements for firefighting tactics, such as ensuring the supply of extinguishing water, preventing fires by demolishing tiles, i.e. removing combustible material from the fire path. It also includes the responsibilities of those involved in firefighting. Although the provisions were forward-looking, the problem was that some provisions were not binding or, due to pre-existing architectural features and human habits, could not provide adequate

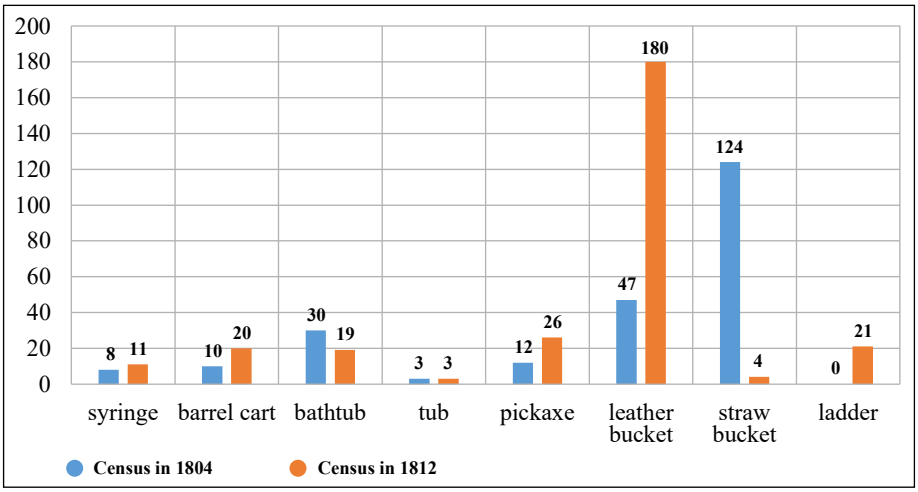
protection against them in the event of a disaster becoming catastrophic. There was no organization at the appropriate level assigned to the rules, which could check the continuous observance of the described rules with sufficient thoroughness and professional knowledge as its main task. From 1799 onwards, the descriptions of the fires and the descriptions of the measures taken were treated separately from the other provisions in the so-called Incendiarium Protocollum. Also in terms of the city's structure and architectural methods, in order to prevent fires, it would have been essential for the houses to be covered with brick or stone instead of wood, and for the roof structure to be covered with tiles instead of reeds or shingles. Unfortunately, this would have made construction much more expensive, as due to the geographical location of the city, the soil conditions in the city were not suitable for making good quality bricks, and in the absence of mountains, there was little stone and transportation would have meant significant increase of costs. Another reason that city dwellers have historically *'become accustomed to'* a lot of people turning up as commercial hubs and many times malicious arsonists have appeared in the city is why they did not want to embark on construction with higher safety but higher costs. Thus, the construction habits did not really change, which was accompanied by the holidays of the student firefighters and the negative impact of the natural elements, so that the devastation caused by the great fire of 1802 easily occurred on the basis of these. Following the damage described above, the city council considered it even more important to change construction habits, prioritizing the use of bricks and tiles. To make this happen, Mihály Péchy took land samples from different parts of the city in order to find out which part of the city would be more suitable for making bricks. The expert opinion arrived in 1803 and designated the brick-laying sites in the brick garden, from which point the *'rebuilding'* of houses and buildings in the city using bricks and tiles began. The Town Archives contain the provisions of Royal Commission No. 47 of 1804, which, when examined, show that they were determined by learning from the circumstances of the origin and spread of the fire, in which several forward-looking provisions are included, still applied today. The city council's protocol of 1808 regulated the basic rules for firewall construction, the rules for room connections, and also gave priority to the fire distances to be maintained between adjacent properties and buildings on one's own property (Szűcs, 1872, 32-37.). The council also regulated that the gates of the properties should be kept dry, free of gas and vegetation. Also in the case of various crafts, such as the construction of a blacksmith's, locksmith's or other workshop with fire, attention had to be paid to the appropriate fire distance, and the workshop must be built of non-combustible materials. By creating these rules, the cityscape of Debrecen was changing. The fires of 1811 also contributed to the development and enforcement of

safer building and fire prevention rules. In a letter to the city council dated 15 December, the city's royal commissioner, Farkas Ibrányi, stated the following: *'the main mistakes due to the fire are the non-execution of good orders, which the council has repeatedly urged but failed to enforce there is not a sufficient number of water rifles, although the council has already instructed the governor to procure them in 1799, the building code decree has not been implemented, everyone is building the way they want, covering the house with reeds and straw despite the ban, the dangerous weed buildings are still in the former state, the decrees are only on paper, so the council has not fulfilled its duty to the safety of the city residents and integrity.'* (Síró, 2007, 59-60.) Learning from the fires, the city management realized that the width of the streets also played a key role, as most of the streets in the city were very narrow during this period. After the constant fire, there was always an attempt to make the streets wider and to cover them with only minimal ground (Sápi, 1957, 90-94.). Smoking has also emerged as a typical problem of the age, the habit of which has become more and more widespread and has affected almost all ages of the population. In order to prevent fires, smoking was also banned and punished in some places, including shops and barber shops, as well as for certain individuals, such as soldiers.

Another problem was the lack of water, to which the city management also had to find a solution to, as the captain water prescribed for the houses meant nothing in a major fire, the city was often hit by drought and wind due to its location, so there was no water in the wells in summer, and unfortunately the city does not have a river either (Roncsik, 1926). The problem of adequate extinguishing water could not be appropriately remedied or some time, so it was necessary to provide adequate extinguishing technology, for this purpose in 1804 and 1812 a census was made of the public and private equipment of the city, which established that:

	Name of assets:	Census in 1804:	Census in 1812:
1.	syringe	8	11
2.	barrel cart	10	20
3.	bathtub	30	19
4.	tub	3	3
5.	pickaxe	12	26
6.	leather bucket	47	180
7.	straw bucket	124	4
8.	ladder	0	21

Table 2: Technical fire-fighting equipment available in 1804 and 1812, respectively (created by Bence R. Lakatos)



Graph 1: Private and public firefighting equipment (created by Bence R. Lakatos)

Following the two fires examined, more and more emphasis was placed on fire protection and the organizational regulation of the Fire Brigade by the city management. Thanks to continuous improvements, major catastrophic fires could no longer occur in the life of the city, as increasing safety has become a primary consideration for both the city administration and the population. The graph also shows that the applied firefighting technical equipment was continuously modernized, as the less efficient equipment was withdrawn, while the more efficient equipment was regularized and increased in number.

Fire Protection Authority Analysis of the Two Disasters

In this chapter, we are drawing a parallel with the reasoning between the regulation that developed after 1802 and the fire protection provisions in force today. Based on our research, it can be seen that experiential prevention is the forerunner of central fire protection, which began in the 19th century in the life of the city. The fires that have developed in the country, as many of them with the characteristics of today's catastrophe, have led to the emergence of more and more provisions not only in the city, but also on a national level, and the country's leaders needed to realize that the issue of fire protection needs to be regulated. The basic principles of fire protection have not changed in the past two hundred years, only the formulations have become more accurate and precise, as a result of which the full range of protection and safety has significantly

improved, thus, we are examining the relationship between the contemporary Royal Commission Decree No. 47 of 1804 and the Decree 54/2014 (XII. 5.) of the National Fire Protection Regulations, as amended on 22 January 2020, and other legal provisions related to fire protection, by way of the example below.

Comparison of Royal Commission Decree No. 47 of 1804 and current legislation:	
Royal Commission Decree No. 47 of 1804	**Decree 54/2014 (XII 5) of the Ministry of the Interior on the National Fire Protection Regulations** (hereinafter: NFPR.) (URL1)
'1. A deputation has been appointed to draw up fire and building regulations.	The enactment of the decree was also adopted and promulgated with the appropriate level of professional training and living conditions included in Law XXX of 2010 on Legislation.
2. Construction plans must be presented in advance.	Section 1 (1) (a) of the NFPR stipulates that fire protection requirements must be observed, inter alia, during the design and construction of the facility, structure or part of a building. In addition, provision must be made for the plans to be submitted to the building authority and, where appropriate, to the competent authority.
3. Only brick and tile-covered buildings should be constructed near larger and public buildings.	The regulations in force specify, inter alia, the requirements for the fire protection class and fire resistance performance of building structures, depending on the purpose.
4. Buildings from a neighbour should always be equipped with a brick firewall.	The NFPR defines the concept of basic fire protection structures, which can be a firewall, a fire barrier and a fire slab. Protection against the spread of fire can be provided according to law, for example by setting up a firewall. For the material of the firewall are the expected fire resistance performance and fire protection classes specified.
5. The master mason is responsible for making the firewalls for 5 years.	Section 40 (1) (a) - (c) of Law LXXVIII of 1997 on the Shaping and Protection of the Built Environment defines the responsibility of the contractor for the lawful commencement and continuation of the construction activity, the existence of the contractor's right, […] as a result of the work performed for the intended and safe use of the established structures, equipment, structures, parts of structures (URL2).
6. Stables, pig sheds cannot be built in a narrow yard.	Pursuant to the provisions of Government Decree 253/1997 (XII. 20.) on national settlement planning and construction requirements, the conditions for the placement of livestock structures - taking into account public health and animal health, as well as environmental protection requirements - may be established by the local building regulations. The nearly 200-year-old provision was intended to prevent build-in causing easier spread of fire (URL3).
7. Stables and pigsties must not be built against the wall of the neighbour.	The NFPR defines the concept of fire distance, so it means the minimum permitted horizontally measured distance between adjacent structures belonging to a separate fire section, adjacent outdoor storage units, an adjacent structure, and an outdoor storage unit. After all, Section 17 (1) a) -d) of the NFPR stipulates that the spread of fire must be prevented.
Provisions 8 and 9	It has no fire protection aspect.
10. The garden at the back of the property should not be installed.	In the current regulations of the NFPR, I would draw a parallel with the provision that in order to ensure the effectiveness of the fire brigade's intervention, unobstructed access to the structure by a firefighting vehicle must be ensured. Due to the tools and circumstances used in contemporary regulation, it was necessary to determine such installations in this way. The current rules for installation requirements should be in accordance with local building codes.

11. Hay and straw should only be stored in the attic of the barn, not in the attic of a residential building.	Section 191 of the NFPR stipulates that material belonging to a highly flammable or explosive class may not be stored in the attic. Other solids may only be placed in such a way and in such a quantity that they do not obstruct access to the roof structure and the chimney, can be removed from combustible elements of the roof structure if necessary and be at least 1 m away from the chimney. Furthermore, the building, part of the building, the open space may only be used in accordance with the fire protection requirements for its intended use.
12. Firewood should not be kept in the yard to a large extent.	No storage is allowed within the fire distance, unless the quantity, quality and location of the stored material do not increase the risk of fire spreading. This area should be kept free of debris and dry undergrowth. In addition, the building, part of the building, the open space may only be used in accordance with the fire protection requirements for its intended use. The legislation also sets out requirements for outdoor storage areas.
13. Fences or faces are not allowed to be made out of reed or picket.	The regulation was created for the purpose of protection against the spread of today's fire, which is: a set of solutions, the continuous application of which can prevent the spread of fire to the protected structure, part of the structure, outdoor storage unit; methods: fire distance, fire protection structure, built-in fire protection equipment, other design providing fire propagation limit or fire resistance performance. According to the contemporary perception, the goal was to be able to reduce significantly the use of these combustible materials.
14. The building must not be covered with straw or weed.	The purpose of the contemporary provision was also to prevent the spread of fire, the current NFPR on roofing stipulates that § 31 (1) - (2) stipulates that for roofing […] material of fire protection class E, or F may be used as a roof covering if the structure has no more than one floor level and it has been approved by the fire protection authority for the given structure […].
15. In tight spaces, reed gutters should not be built on the street.	The NFPR defines the concept of a barrier against the spread of fire, such as a barrier that prevents the spread of fire between the building levels, fire sections, roof fields, and adjacent buildings. The design and geometry of the barriers against the spread of fire must ensure the limitation of the spread of fire.
16. Narrow street houses with a full wall of 8 feet are permitted.	In addition to ensuring the fire distance, the NFPR can protect against the spread of fire with, among other things, a firewall design. In terms of focal length, a kind of contemporary vertical focal length was defined.
17. On a narrow street, the building opposite can lay at least 6 fathoms away.	The protection against the spread of fire shall be determined in accordance with Tables 1 to 3 of Annex 3 of the NFPR, in the case of a special structure, in accordance with Chapter XII or by calculation to ensure the fire distance.
18. The neighbour is obliged to report the ones who do not obey the rules.	Pursuant to Section 5 (1) of Law XXXI of 1996 on Fire Protection, Technical Rescue and Fire, whoever detects a fire or an imminent danger thereof, must immediately report it to the call centre, the operational management department of the disaster management directorate or the fire brigade, or if this is not possible, to the police or the ambulance service or the mayor's office of the municipality (URL4).
19. If a person's house is demolished in order to prevent the spread of fire, the council shall reimburse it.'	Section 8 (1) of Section 5 (1) of Law XXXI of 1996 on Fire Protection, Technical Rescue and Fire provides that, as regards compensation, the maintainer of the fire brigade is obliged by the fire brigade is liable damage caused by non-contractual liability. The maintainer must pay a compensation for non-recoverable damage to third parties caused by fire intervention technical rescue or fire intervention or technical rescue practices in connection with firefighting, technical rescue or technical rescue, with the exception of lost property benefits (URL4).

Table 3: Comparison of Royal Decree No. 47 of 1804 and current legislation (created by Bence R. Lakatos)

Based on the above provisions, we can see that our current rules can be paralleled with the legal provisions of the times presented but based on the research it can be clearly stated that due to social conditions and technical development, more precise, precise and complex legal regulations are always needed. In addition to the legal provisions, there was a need for an organization with an appropriate system of official tasks, tools, and measures to ensure effective and preventive central fire prevention. It was characteristic of the contemporary regulation of the city of Debrecen and the country that it did not yet have such an organization. For the contemporary duties, one person usually had several specializations and generally performed law enforcement duties in the course of their own work. At the time of the fires of 1802 and 1811, and in the case of the disasters that preceded them, there was no proper organization, no important licensing processes during construction, then no feedback during the use, no methods of inspections, no continuous monitoring, and not a control system with a frequency appropriate to their level of danger. Although the city administration of those time created certain sanctions and measures to comply with the fire protection rules of the time, back these were not accompanied by sufficient deterrent power in several cases. After that, the various regulatory areas, such as fire protection, also underwent continuous specialization. In the case of contemporary fires, I should also mention the significant role that the existence of today's field of civil protection would have played with the associated human and material resources, as we could see that in both cases people who lost their homes had nowhere to go and their food supply and the health care of the injured were also hampered. In today's system, this would not be possible, as we can also see from the legal definition of civil protection that it is their task to provide the conditions and take the necessary action, so it would be the task of today's professional disaster management organization. With today's rules on eviction, evacuation and reception, and the existence of the necessary action plans at the time, would have been possible to secure people in designated reception areas according to the protocols, to take care of their food and health care, among other things.

Summary

The person of Jenő Vitéz Roncsik, who can be certainly called on of the polymaths of fire protection in Hungary, and later on he became the first chief firefighter of the city of Debrecen, played a key role in the establishment and regulation of the Hungarian fire protection including prevention and fire intervention.

He also owed his knowledge to his extensive qualifications and experience, as well as his faith in the work. He believed in the importance of fire protection and the triple division of tasks. In the research of authors, according to the documents revealed, it can be stated that we could have prevented the destruction of the two fires by observing today's rules and by the central authorities of prevention, which play an important role in enforcement, and by our sophisticated sanction system, and thanks to our sophisticated sanction system, we could have prevented and, in the event of an incident, the damage could have been minimized by using effective firefighting tactics and the deployment of trained and appropriate personnel with effective technical equipment. January 1, 2012 brought significant changes in the field of fire protection, at which time the disaster management bodies were reorganized, thus a professional disaster management organization based on sub-superiority and operating under unified management could be established. Prior to the entry into force of the legislation, even independent professional municipal fire brigades were integrated, so that professional fire brigades were established as a local body of the professional disaster management organization in connection with the branch offices. Local, regional, and national government departments have emerged that play an essential role in performing complex and effective fire prevention tasks. Their task is to minimize the chances of a fire and to protect the lives and property of both the interveners and the public in the event of a possible damage event.

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