

Nikola Tesla's Visit to Belgrade 1892.

(as reported in Newspapers of the Belgrade Municipality, Sunday,
May 31,1892)

Translated from Serbian by Dr. Majda Djordjevic, vice-president of the Calgary Tesla Society
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Comment: The original text was archaic and hence complicated to translate because some words were used in a different context, and the syntax and grammar were not the same as nowadays. The May dates are in accordance with the Julian calendar whereas the date of the visit becomes June 01, by today's Gregorian calendar.

Minutes of the Council Meeting of May 18, 1892, Item V

The President informed the Council that the great Serbian scientist and electrical engineer, Nikola Tesla, will visit Belgrade and ordered his visit to be organized as a state occasion at the expense of the Municipality.

The Board unanimously approved that suggestion and ordered all expenditures to be covered by installments from the budget for Unforeseen Events.

Nikola Tesla

The famous electrical engineer and his sojourn in Belgrade

In one of the previous issues, we announced that the Serb, Nikola Tesla, will visit Belgrade. We also briefly informed our readers of who

he is, and the significance of his genius for the contemporary science of electrical engineering.



In this issue, the sojourn of Mr. Tesla in Belgrade will be described.

It is well known that representatives of the Belgrade Municipality invited Mr. Tesla to visit Belgrade as their guest. Tesla gladly accepted the invitation and arrived in Belgrade by train in the evening of May 20 where he was welcomed by many Belgrade intellectuals and university students.

He then was escorted from the train station to his apartment in the hotel Imperial.

Next morning Mr. Tesla met the Minister of Education and Church Affairs. Together, they went to the Court, where an audience with His Majesty the King took place. A visit to the Viceroy, Mr. Jovan Ristic, followed.

Tesla expressed his pleasure to all the dignitaries for the opportunity to spend some brief time among his brothers, the Serbs.

After lunch, our dear guest visited the National Museum where he spent more than an hour admiring Serbian antiquities. Next, he went to the university to meet the professors of our most distinguished school. Together with the professors, all students welcomed him. The

great Serb introduced to them the achievements in the field of electrical engineering as well as of his own in that area.

At about 5 p.m., Tesla strolled in Kalemegdan accompanied by the Mayor, university professors and other intellectuals. In the evening a social dinner was organized in the Vajfert Beer House providing a chance for many scientists to get acquainted with Tesla.

That evening, Tesla was surrounded by more than 100 representatives from all educational institutions and other significant citizens. Everyone's face beamed with joy because they were in the company of a man who will, with his intellect, create an era in science, and in the history of culture, and will prove that the Serbian nation is not just able to be educated, but also to be at the helm of education, and make Serbian people proud before the entire world in the field of science. Our dear guest, Nikola Tesla, was happy to be surrounded by so many true admirers. He said that this reception will give him more energy to continue and complete the enterprise which he commenced, and hence maximally serve Science and the Serbian people.

During the dinner there were very fine toasts. The Mayor delivered the first one on behalf of of His Majesty the King and mentioned that the King received Tesla very warmly, and expressed a great interest in the science that Tesla is working on. Next, the president



of the university succinctly expressed how

university professors were pleased to meet a Serb who earned international fame with his scientific work. Representatives from all corporations toasted Mr. Tesla. He responded twice with a speech in which he expressed his Serbian sentiments.

Mr. Djoka Stanojevic, a professor at the Military Academy, toasted Mr. Tesla and gave a brief overview of his achievements in the field of electrical engineering.

For our readers to learn about the achievements of Nikola Tesla and why he became a celebrity in the scientific world, the entire speech of Mr. Stanojevic is reprinted here from newspapers "Male novine", #182 on May 27, 1892.

"Gentlemen and brothers,

Belgrade welcomed famous people many times, but this is the first time that it hosts not only a world-renowned scientist but also a scientist who is a Serb. Although I am aware that you are familiar with Mr. Tesla's scientific work, I think that it would be purposeful to remind you briefly of the crucial moments of his hard and laborious and yet very important work.

I will not delve far into the past where phenomena studied by physics, separated without any connection, were heat, light, electricity, and magnetism. Also, I will not reflect upon the early period of this century when the connection between them was no different than in the previous centuries. I will focus on the mid-19th century when heat and light constituted one group of phenomena, when light was visible heat, and heat was invisible light, as well as when electricity and magnetism were different manifestations of the same phenomenon. At that point when those four groups of physical phenomena were reduced to two, an English physicist, Maxwell, tried to connect them somehow. He

studied the relationship between electrostatic and electromagnetic phenomena and found that they are related by the speed of light. Assuming that it is not unusual that light accompanies various electrical phenomena, and using some other information, he established the electromagnetic theory of light.

If you would permit me to use an image to express myself, Maxwell bridged an abyss separating light and heat on one, and electricity and magnetism on the other side, using a thin wire which was quite weak and insignificant. Nowadays, Mr. Tesla built a bridge between those banks, enabling a safe and secure passage from heat and light to electricity and magnetism and vice versa.

In addition to presenting the theoretic significance of Mr. Tesla's approach, I would like to explain how he acquired that very significant result.

It is well known that if a wire of conductive material moves in the field of a magnet, a temporary electrical current is generated (induced) in it. The same phenomenon is observed if a magnet moves toward or away from a stationary wire. Having such a convenient way to produce electricity, means no longer generating it by friction or in a chemical reaction for industrial application. Currently, water vapour rotates a coil of wire about a magnet or vice versa, in dynamo machines. Electricity generated in such a fashion, can be used as light, or for some other applications.

There are two types of currents, induced by a magnet: direct current (DC) which flows in one direction, and alternating current (AC) which changes the direction of its flow, back and forth. The frequency by which AC changes its direction can be low or very high. Until recently, such current changed its direction only a few hundred times per second.

Mr. Tesla built machines where it occurs a few hundred thousand times per second. Such high frequency currents have a very special character, as we will discuss right away.

The flow of electricity in a wire can be compared to the flow of water. A large volume of water can flow with small inclination (as in a large river) or small volume with great inclination (as in waterfalls). Likewise, a large amount of electricity can flow through a wire at low voltage or small amount at a high voltage. Although relatively high voltage currents can be produced by standard machines, Mr. Tesla focused on production of electrical currents of exceptionally high voltage. Standard machines generate electricity of 5,000, 10,000, or 20,000 volts, while machines built by Mr. Tesla generate electricity of 100,000, 200,000 and higher voltage. Such high voltage and high frequency currents yielded extraordinary and unexpected results.

When such a current is passed through a copper wire, the wire emits light but remains cold. When such a current is passed through two copper wires which do not touch each other, the space with them gets illuminated, although the wires are not connected. If a wire through which such current flows gets broken, at that spot a strong electric flame bursts out, like a flammable gas at high pressure. The wire itself is not burning, only the electricity emerges as shining sparks.

When opposite walls in a room are lined with zinc plates through which electricity flows, the entire space between them gets so electrified that an iron object, a glass tube, or some other objects emit lights when Mr. Tesla takes them into that space.

The greatest sensation in the scientific world was the following phenomenon:

AC of only a few volts which passes through a human body, causes unbearable pain on its path. Stronger currents cause dangerous pain, and at 1,000 or 2,000 volts it becomes lethal. Such current is used for executions.

When a current of 100,000 or 200,000 volts passes through a human body, it is completely harmless.

The difference between the effect of weak and very strong currents can be better illustrated by the following example. It is known that a man can be killed with a gun. If 5, 10, or 50 guns are fired at someone, death is imminent. Just imagine the astonishment if 10,000 or 20,000 guns were fired at someone without harming him. The same phenomenon occurs with electric current. While a person dies from an electric current of 200 volts, Mr. Tesla exposes himself to a current of 200,000 volts in front of the greatest English and French scientists, without feeling anything.

It is not that he does not feel anything. At that moment, a very unusual feeling permeates him. He is in some sort of ecstasy, he has a vision of his birthplace, he remembers that he comes from a Serbian family and tells everyone that he is a Serb (strong acclamation).

Brothers, yesterday in a conversation, Mr. Tesla said that science and electrical engineering, in particular, will change our entire social life. Anyone who knows even a bit about scientific progress during just a few previous years, will agree with this opinion. I am strongly convinced and believe that you will agree that such a change will be made by none other than our brother Nikola Tesla."

Our beloved poet, Jovan Jovanovic Zmaj, greeted the guest with his poem which he read with great emotion. That poem follows:

GREETING TO NIKOLA TESLA ON HIS VISIT TO BELGRADE IN 1892.

By JOVAN JOVANOVIĆ ZMAJ

Translated into English by:
Zeljko Sulaver, Lillian Beltaos and Lydia Emanuel

*Was it in my dreams,
Alternating through my mind
As soon as we've heard of your visit,
You've made us all electrified.*

*We need no conducting wires!
Electricity runs far and wide,
Connections are passing through the air,
(even Ether afterwards).
Serbdom stands - an ageless tree,
Like a mother to her sons - its leaves.
Most vibrant one did not stay,
Fluttered off and flew away.*

*O, virtuous Tesla, you chose a distant nation,
By stronger current you were propelled
To a land more fertile for your imagination,
Where your horizons would be swelled.*

*Tesla, it worked out after all,
Your boundless thoughts triumphed in the end,
You conquered distances not so small,
Returned to be welcomed by your motherland.*

*Embrace the land that nurtured thee,
Lay your head upon her chest, valued son,
Every branch of the proud Serbdom tree
Espouses Tesla as its next of kin.*

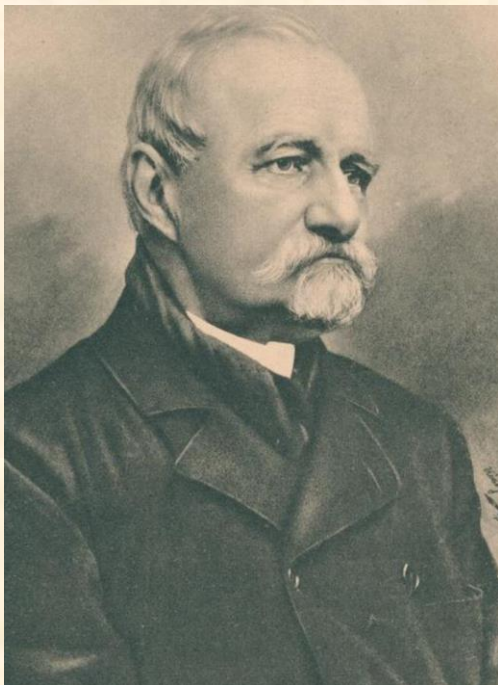
*Belgrade is very jubilant today,
With its genius, shaking hands,
Opening a heart that's filled with joy,
To the Serb renowned in many lands.*

*Though once again you're on your way,
Our rendezvous brief, and like no other*

*And since you could no longer stay
Carry our warmth as brother to brother.*

*Your vision has come to fruition,
Enormous and wondrous,
All distances are gone, broken to depletion,
Forging new links between us.*

*Our leaflet will realize and feel,
Its every vein from its own tree.
The electricity will forever enable,
(the electricity of our hearts)
Our connection with no wire, with no cable.*



Tesla was very moved and kissed Zmaj's hand.

During the entire evening Tesla was in a very good mood as well as all his attending friends. The evening concluded at midnight when our dear guest bid a heartfelt goodbye to everyone.

The next day, the Serb celebrity Nikola Tesla travelled to Budapest and then again to the far away world – North America - to spread his fame and Serbian name with his wit, and to prove to the world the great ability of Serbs, not only in the battlefield, but also in the field of science.

HOW SERBIAN NEWSPAPERS DESCRIBED NIKOLA TESLA

Mr. Tesla is an unusually charismatic and imposing person. He is tall, slim, has black hair and a pale complexion, dreamy thoughtful eyes under a tall forehead, with very fine facial features – he attracts people's attention at very first sight. He speaks slowly in perfect Serbian language of his bold Lika, although he has spent 14 years far away from his homeland and his people. He is exceptionally modest, almost shy. It is obvious that he is spending his life deep in thoughts, away from the trivial glamour and commotion of the world.