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# Nicholas Straussler, a magyar származású brit mérnök, feltaláló és üzletember élete, munkássága

# The life and work of Nicholas Straussler, the Hungarian-born British engineer, inventor and businessman

Theses of the doctoral (PhD) dissertation

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## I. Theme and objective of the research

Nicholas Peter Sorrell Straussler (1891-1966), an engineer, inventor and businessman was born in a territory of present-day Hungary under the name of Miklós Sträussler. At a young age he emigrated to Great Britain. He had a significant impact on the development of certain segments of both Hungarian and international military technology in the inter-war period, and during the years of the Second World War. To name just a few of his inventions, milestones that can be linked to his name, for example he was the one responsible for the construction of the first tank made in Hungary, the V-4, or designing of the foundations of the Hungarian 39 M. Csaba armoured car that fought during the Second World War. The impact of his ideas on the development of the pre-World War II Hungarian military industry is unquestionable. But his inventions did not only influence domestic Hungarian events. For example, he created and perfected the Duplex Drive, or DD for short, an inflatable canvas-screen structure and propulsion system for the Allied amphibious tanks during World War II, which also had a non-negligible effect on the outcome of one of the historic battles of the war, the Normandy landings.

And yet, for a number of reasons, very little has been known for sure so far about Nicholas Straussler's extraordinary career or his activities that could be traced to almost any part of the globe. In fact, his name or inventions are considerably not that well known.

There have been attempts to publicize some elements of his work as part of another topic, such as his major inventions. However there has not been a publication published summarizing the life and diverse work of the Hungarian engineer who emigrated to England yet.

In my opinion one of the reasons for this is the so called "language gap", which has a very strong effect on the writings published in connection with him. Straussler operated both in Hungary and abroad, but his Hungarian related work was mostly published in Hungarian, and his work in abroad is most of the times were published only in English, with little shared information between the two languages. His work abroad is hardly mentioned in the Hungarian literature (or, if so, it contains many errors), and conversely, his activity in Hungary is not adequately represented in the foreign literature. A summary that would have combined the sources published in the Hungarian, Anglo-Saxon or other language-related literature on Straussler has not been published so far.

Another significant shortcoming in the literature on the subject is that the description of Nicholas Straussler's inventions has in most cases been only a list or short summary of data and properties associated with them, and has very rarely been followed by contextualization, presentation of their virtues, or evaluation of their significance. Furthermore, the "why" behind the inventor's realized and unrealized ideas has not always been answered.

Against this background, as a gap-filler, I am trying to summarize the life and work of Straussler on the basis of the literature already published on the topic, the fragmentary data in the archives, and a couple of interviews I have made with people who know Nicholas Straussler personally. In addition, I will collect and present in as much detail as possible the ingenious inventions, patents of this undeservedly neglected inventor, analysing the innovative nature of some of his ideas, but not forgetting the disadvantages of his less successful or even failed ideas and the reasons for their failure.

# II. Methods followed

Within history as a science, my doctoral dissertation is mainly characterized by the "view from below", the microhistorical approach, as I try to give an insight into the development of historical events in different places and times through the glasses of a single person's life and work.

Another particularly important method is the history of technology. In many cases, the dissertation focuses more on Straussler's inventions, devices, machines and vehicles, as Nicholas Straussler had the greatest influence on the course of history with physical objects, his inventions, which he dreamed up and then built.

Further significant methods of my work are military history, the history of economics history, and the effects of international relations on history, which help to contextualize and understand the events surrounding Straussler in each of the "episodes" of the dissertation, and what their potential significance really is.

During the compilation of the knowledge required for the writing of my doctoral dissertation, I first studied the available Hungarian and foreign language monographs, series, journals and magazines listed in the table of contents. In addition, I have examined the international patents and patent drawings that have been digitized and made available online over the past decade, which in many cases have helped to establish the chronology of events or to understand the operation of a given invention. my research was greatly aided by other

Internet sources cited in the dissertation, such as various digitized photo and journal collections and online databases.

Unfortunately, it seems like Straussler did not keep a diary, so in many cases today it is hard to deduce why he made some of his decisions. Fortunately, however, contemporary, original documents about the Hungarian-born inventor and his work have survived in several archives. In the course of my research, I had the opportunity to inspect the documents kept in the Hungarian National Archives (MNL OL), the Hungarian Archives of Military History (HM HIM HLI), and the Hungarian Historical Archives of the State Security Services (ÁBTL). In addition, I was able to conduct research in the Bovington Tank Museum, Archives and Reference Library in England, the British Imperial War Museums, and The National Archives in London with the help of my fellow researchers, friends, or the staff at the institution.

Finally, I have to highlight the method of "oral history", as I was able to connect and conduct a (written) interview with Nicholas Straussler's descendants, who are still alive today. Straussler's grandson's childhood memories of his grandfather, the family memory and the results of Straussler's great-granddaughter's family tree research greatly helped to clarify a few details, and supplemented the story of the otherwise difficult-to-research private life of this engineer of Hungarian descent.

#### III. New results

My dissertation relies heavily on publications of the subject –Nicholas Straussler and his inventions that – that have previously been "scattered" all around in the literature of different topics. However, my dissertation is not just a mere collection of these, as I have tried to create a source-critical synthesis that goes beyond what has been published so far by recognizing and correcting the contradictions and errors that have appeared in the literature and incorporating the results of my archival and other research.

As I mentioned when describing the objectives of my research, the extent of the influence of the literature already published on Nicholas Straussler's life and work, or on any other topics mentioning him, was fundamentally determined by the fact that there is very little transition between writings published about him or his invention in different languages. This is a characteristic problem of a subject such as that to which Straussler belongs, who has been active throughout his life both in his homeland, Hungary and in his chosen home, the United Kingdom. During the 20th century, history has more than once pushed these two countries into the opposite sides, so for several reasons the exchange of information between these two parts of the world was far from perfect. In addition, a research on the topic requires the researcher to have at least a high level of knowledge of both the Hungarian and English languages if he or she has any hope for getting a picture that is somewhat close to the full. This has not always been the case in the literature published so far. In this dissertation, I try to fill this gap and present to the reader the results of research on the topic in both languages (or translated into these languages).

Nicholas Straussler's entire career has so far not have been summarized in such detail. In my dissertation I tried to draw Straussler's life from birth to death, and form a comprehensive picture of his work placed in context which could have been found almost every corner of the Earth.

So far, the summary of Straussler's oeuvre has been tried only once in the Hungarian literature. However, those articles were more than surpassable in terms of source criticism, and the depth and quality of research conducted. The incorrectly formulated causal relations, false contradictions and errors in these articles written by Ottó and Lajos Haris in the early 2000's have respectively popped up from time to time so far appeared in the writings dealing with Straussler or one of his inventions. I consider it one of the key results of my research that I correct the misunderstandings and errors first mentioned in these abovementioned articles, to refute the erroneous information and false conclusions with counter-arguments or with citing archival or other primary sources.

During my research, I have come across a lot of information and curios facts about Straussler's private life, business relationships, patents, and other inventions that has not been published elsewhere so far. As a result of my research, for the first time the reader can find out about the youth of Miklós Straussler from authentic sources, and the "mysteries" of his business relationship with one of the largest Hungarian companies of the age, the Weiss Manfréd Ltd. For the first time in Hungarian, readers can learn about the origins and development history of Straussler's most innovative invention, the Duplex Drive system for floating tanks, and the afterlife of this world-famous invention.

In connection with the latter, it is relatively well known fact that the Hungarian Nicholas Straussler had a lot to do with the creation of some of the Allied amphibious tanks equipped with a system called Duplex Drive during the Second World War. So far, however, it has not been published in Hungarian in detail for example what were the antecedents of this? Why, among many other attempts to develop such floating devices and amphibious

tanks in the United Kingdom at the same time, was the invention of this "foreign" constructor became the mass-produced type, systematized in the British, Canadian and American armies, which later became part of the invasion of Normandy on June 6, 1944? To what extent did Straussler's invention influence the outcome of Operation Overlord, one of the decisive events of World War II? In my dissertation I try to answer this and some other similar questions about Straussler's most significant invention.

In addition to these, the reader can get to know several for one reason or another unknown inventions from the doctoral dissertation, which have proved to be less successful or have failed for some reason.

Last but not least, I consider one of the key results of my dissertation that the reader can read for the first time from here about Straussler past as a secret agent. This is the first publication published so far about his espionage and his relationship with Hungarian intelligence in the 1950s.

# IV. Publication activity on the topic

## Studies:

Károly Németh: Straussler Miklós tankjai. In: Hadmérnök 2018/2. 61-88.

Károly Németh: A német LK II és a svéd Strv m/21 típusú harckocsik, valamint magyar vonatkozásaik. I. rész. In: Haditechnika 2019/2. 62-67.

Károly Németh: A német LK II és a svéd Strv m/21 típusú harckocsik, valamint magyar vonatkozásaik. II. rész. In: Haditechnika 2019/3. 64-70.

Károly Németh: Straussler Miklós magyar származású brit feltaláló szerepe a második világháborús szövetséges harckocsikat úszóképessé alakító Duplex Drive rendszer létrejöttében. In: Hadtörténelmi Közlemények 2022/2. (Acceptance statement attached, expected publication: June 2022.).

Károly Németh: Straussler Miklós magyar származású brit feltaláló szerepe a D-nap, a normandiai partraszállás előkészítésében és az invázió sikerességében. In: Hadtörténelmi Közlemények 2022/2. (Acceptance statement attached, expected publication: September 2022.).

# Conferences:

September 22, 2017, NKE A Haza Szolgálatában Konferencia – Károly Németh: Straussler Miklós tankjai.

September 21, 2018, NKE A Haza Szolgálatában Konferencia – Károly Németh: A 39M Csaba páncélgépkocsi és elődei.

December 3, 2018., Magyar Hadtudományi Társaság, Fiatal Hadtörténészek Országos Konferenciája – Károly Németh: A Sherman DD harckocsi – egy magyar találmányának alkalmazása a normandiai partraszállásban.

February 15, 2021., Történelmi Ismeretterjesztő Társulat Egyesület, Sorsok és Folyamatok Konferencia – Károly Németh: Nicholas Straussler, the Hungarian-born British engineer and the impact of his work on the Hungarian and Allied military technology of the Second World War.

# Reviews:

Károly Németh: Eduardo Manuel Gil Martínez: Hungarian Armoured Fighting Vehicles in the Second World War. Pen & Sword Military, Yorkshire – Philadelphia (2019). In: Ab ovo usque ad mala – selected studies from the "Destinies and processes" conference (Acceptance statement attached, expected publication: 2022. Q4).

Károly Németh: Mujzer Péter: Páncélosok - A magyar páncélos fegyvernem és a rohamtüzérség története 1938-1945. Budapest, magánkiadás (2019). In: Sorsok és folyamatok konferencia kötet. (Acceptance statement attached, expected publication: 2022. Q3).