

## **CHANCE WILL FIND A TALENTED PERSON: PHILIPP JAKOB KARELL**

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### **ABSTRACT**

Many people of Estonian ethnicity have found their way out of poverty by chance. Chance will favour the ambitious and hard-working and give them an opportunity to realise their dreams. Several examples can be found among Estonian scientists and cultural figures as well. One of those was Philipp Jakob Karell.

Philipp Jakob Karell, who came from of a family of peasant servants of an estate, graduated from the Medical Faculty of the University of Tartu in 1832 with the doctoral dissertation *De rheumatismo uteri*, and after graduation from the university, a piece of good luck gave the hard-working young man a chance to go to work in Saint Petersburg where, in 1849, he became the physician in ordinary to the Emperor's family. He was the escort of Emperor Nicholas I on his travels both in Russia and abroad. Empress Alexandra Feodorovna was also Karell's patient, and Alexander II also named him his physician in ordinary.

On his first travel abroad, he learned the use of starch casts for the treatment of bone fractures from L. Seutin, chief surgeon of Brussels Saint Peter's Hospital, and in 1837 started to use them himself in the hospital of the Life Guards Cavalry Regiment.

When the Dutch physician Baron C. Heurteloup visited Russia, Philipp Karell was his companion and operating assistant in both Saint Petersburg and Moscow. Ph. Karell summarized what he had learned during the operations in the article "Vollständige Beschreibung von Baron Heurteloups Lithotripsie und Lithokenose durch Percussion, nach dessen eigenen mündlichen Mittheilungen und Papieren", noting among other things that non-physicians should also recognize the initial symptoms of stone diseases (nephrolithiasis, cholelithiasis)

Karell's method of milk therapy where skimmed milk had to be consumed after fixed time intervals, starting from 0.5–1.0 coffee cups 3–4 times a day and reaching two bottles a day on the second week, brought him international recognition. With the method of milk therapy, he achieved good results primarily in the treatment of diseases, connected with disturbances of water balance (cardiac, renal, gastrointestinal and liver diseases, and overweight).

Ph. Karell was also active in the foundation of the Russian Red Cross Society, participated in drafting of its statutes and belonged to its committee. He was also among the founders of the Russian Society of Surgery. On Karell's initiative, sanitary companies were created in the Russian Army.

Although he worked in the Emperor's court, Ph. Karell always remained an Estonian and repeatedly helped to acquire money from the Emperor for Estonian undertakings. He helped to publish the Estonian national epic *Kalevipoeg* (*Son of Kalev*) and always valued his friendship with F.R. Kreutzwald and N. Pirogov, which had started during his university days.

*Keywords:* University of Tartu, Emperor's physician in ordinary, starch cast, lithotripsy, milk therapy

## ORIGIN AND FORMATIVE YEARS

Philipp Jakob Karell was born at Toompea in Tallinn (Reval) on 28 November (10 December) 1806 as the ninth child in the ten-child family of an Estonian peasant servant of a manor. The historical roots of the family date back to 1690 when a forefather called Jaan was born on Orava farm at Ruila manor in Hageri parish. Jaan was later a bailiff at the same manor and an innkeeper at Haiba manor. To his grandson, a granary-keeper (Philipp Karell's father Jakob, son of Kondi Jakob born on the farm of Kondi Jüri), the proprietors of Haiba manor gave the surname of Jakobson, although in 1722 the family had used the surname of Grauwerk [1]. The surname was mostly necessary for communication with finer folks where the names derived from the name of the farm or the person's trade, like Kondi Jakob, Manor Jakob, Valet Jakob or Granary Jakob did not suffice. When the owner of Haiba manor died, his manors and town houses were divided between his heirs. The unmarried daughters of the manor owner settled in Tallinn, and Philipp Karell's father served Miss von Ulrich in Tallinn until he was released from serfdom in 1805, after which he lived for a few years as a free man. The house of the von Ulrichs at Toompea was among the houses that were demolished when the Russian Orthodox Cathedral was

built there [1, 2]. Father fulfilled the duties of a water carter and keeper of manor owners' hunting dogs [3]. Around 1808 he became a janitor in watchmaker Nestler's house; in the last years of his life, he worked in excise service – he checked the goods arriving in Tallinn to make sure that no spirits would be brought to Tallinn without paying the excise duty. There are two versions in literature about how Jakobson became Karell, and to find an explanation, the life of Jakob Karell's eldest son Carl Friedrich should be studied. As early as at the age of eight, he was a foresinger at the Holy Ghost Church in Tallinn; when he was 13, August Kotzebue invited him to be a violin player at Tallinn theatre and later also its music director. From 1812 he was the organist of the Holy Ghost Church; in 1819 he was invited to work as a choirmaster at a Moscow theatre and the first tenor in the opera. In 1820 he worked as a bandmaster for Prince Lopukhin; he also did the bandmaster's work elsewhere. In 1830, he became the organist and choirmaster at the Swedish Church of St Catherine in St Petersburg. He also taught at several educational institutions and fulfilled the tasks given to him by Prince Peter of Oldenburg. The first legend says that Carl applied his first name as a surname [1]. According to another version, the name has been derived from a dance called *karell*. At the research paper presentation meeting of the Learned Estonian Society and the University of Tartu History Museum, historians tended to support the first variant. Everything seems to fit, but in book 11 of the 6<sup>th</sup> audition of 1811, page 1232, we can find an entry where Jakob Jakobson calls himself Carell for the first time; his son Carl Friedrich was only 20 years old then [1]. Anyway, the whole family applied the new surname of Karell. Carl Friedrich, however, helped his parents to school the younger children.

Philipp received his primary education at the primary school of the Holy Ghost Church; from 1817–1820 he was a student at Tallinn District School and from 1820–1820 at Tallinn Provincial Gymnasium. His best friend was Friedrich, the son of the Nestlers, and everything that was not taught at school he learned by staying frequently with the Nestler family. Together with Friedrich, Philipp Jakob entered the Faculty of Medicine at the University of Tartu (Dorpat) in 1826. In the first years, he faced financial difficulties, but he was supported, as in secondary school already, by Hans Hindrik Falck, who, as a son of a poor miller, had moved to town, and around 1820, after finishing his traineeship, had founded a cabinetmaker's workshop in Nestler's house, which he later developed into a piano factory. The support could have been even greater, but

Philipp Jakob tried to manage on his own. According to Mrs Marie Karell, the statement that the family of Krusenstierns (later spelled as Krusenstern) had been his benefactor is not true, although the Krusenstierns were good acquaintances of Karell [1]. From 1828, Philipp received a stipend from the state. He belonged to the Estonia students' fraternity and was also its chairman. He drafted the house rules of the fraternity, which came into effect in 1830. Simultaneously, one of the members of the Estonia fraternity was Fr. R. Kreutzwald, the author of the Estonian national epic. They sang together in a quartet, and Kreutzwald remained a life-long friend of his.

Along with medicine, Ph. Karell was also interested in philosophy and aesthetics in his student days. An essential lecturer for Philipp Karell was Gottlieb Franz Emanuel Sahmen, and namely because of him, Ph. Karell became interested in practical medicine as a student already. A case history written in 1831 mentions, along with other research methods, auscultation, which was promoted by G. Sahmen.

## A LUCKY CHANCE

Like in the case of several other talented Estonians, chance played its role in Ph. Karell's life as well. When Philipp Karell was taking a walk in the countryside to clear his head before his last exam, he happened to see that the horses attached to Princess Galitsyna's coach had bolted. Karell thrust himself in front of the horses and made them stop. Everything happened so quickly that he did not even understand how he had accomplished such a feat. He introduced himself to the lady in the coach and offered his help. The lady received medical assistance and recovered soon. Mrs Vera Dmitrievna Galitsyna asked if she could be of any help in the future, and whether the gentleman would like to come to St Petersburg. "Why shouldn't I like it? I am receiving a stipend from the state and have to go where I am sent to. I cannot choose my own workplace," Philipp Jakob is said to have answered. "Introduce yourself to me in St Petersburg when you are ready," the kind lady said. "I want to do everything possible to make your wish come true" [1]. The lady was true to her word. Student Karell passed his exams successfully and in 1832 defended his doctoral thesis *De rheumatismo uteri*. He described an anomaly of labour pains which consisted in the painfulness of the uterine muscle during pressing and the following continuous tension [2]. After the doctoral promotion, which lasted for two days, Karell and

his friend Friedrich Nestler left Tartu and reached St Petersburg at the end of May. Nestler became a county doctor; Karell, however, on the recommendation of General von Meyendorff, an acquaintance of Princess Galitsyna, became the battalion doctor of the Life Guard Regiment as soon as on 7 (19) June 1832.

## WORK IN ST PETERSBURG

The physician in ordinary to Emperor Nicholas I at that time was Martin Mandt, a German university professor from Marburg. Karell worked in M. Mandt's hospital and during two and a half years listened to his lectures on atomistics – Mandt's pseudoscientific system of therapy which included a touch of homoeopathy. With his industry, obligingness, modesty and humility, Karell won Mandt's respect, and Mandt became an influential referee for Karell. In 1834, Karell was transferred to the post of a junior doctor of the Life Guards Cavalry Regiment; in 1838 he became a staff doctor of the same regiment, and he held this post until 1855. From 1840, he also fulfilled the duties of the General Staff doctor.

In 1837, Ph. Karell went on his first journey abroad, visiting Paris and London [1, 3]. His aim was to acquaint himself with the lithotripsy method of the Dutch doctor Baron C. Heurteloup, but they did not meet during that journey. In May of the same year, however, C. Heurteloup came to Russia himself, and the War Minister appointed Karell to accompany him [3]. Karell also assisted at Heurteloup's operations in St Petersburg and Moscow. He described his observations from the operations in an article published in 1838 in the journal *Zeitschrift für die gesamte Medicin* (Bd. VII) which was published in Hamburg. He described Heurteloup's method for breaking up bladder stones, explained the diagnosing of the disease by an elastic probe and added the drawings of the instruments. As the painful operation was accompanied by great lethality, he found that the public should be informed about the initial symptoms of the disease, so that the stones could be broken before they have grown too big.

During his journey abroad, Ph. Karell learned how L. Seutin, Head Surgeon of St Peter's Hospital in Brussels, applied the starch cast for the treatment of bone fractures (L. Seutin promoted this method from 1835, and it spread successfully until 1852 when Pirogov applied plaster as a hardening substance). As seen from Ph. Karell's article "Seutin's starch cast", published in the journal *Военно-медицинский журнал* (ч. XXXIII, 2, 171–189) in 1839 [4], he began

to apply the starch cast for bone fractures in the St Petersburg hospital of the Life Guards Cavalry Regiment as early as in April 1837, being the first to use it in Tsarist Russia. In his article, he compares L. Seutin's starch cast with other bandaging materials used at the time and accentuates the advantages of the starch cast at wartime. He also presents his own modification for avoiding the formation of crinkles.

In 1849, Mandt recommended Karell as an escort for the Emperor. In 1849, Ph. Karell was awarded the title of Physician in Ordinary to the Emperor's family; in 1851 he was appointed a member of the Learned Medical Committee of the army; in 1853 he became Honorary Doctor of the Court; in 1855 he was also appointed head of the hospitals of the Cavalry Regiment [5]. According to M. Lipp, Karell had told Emperor Nicholas I in their first conversation that he was an Estonian, a son of a poor Estonian peasant who had received a German education. The Emperor is said to have liked that [1]. When Emperor Nicholas I died in 1855, Ph. Karell signed his death certificate together with Professor M. Mandt. After Nicholas' death, Alexander II also appointed Karell his physician in ordinary in 1855, and Karell occupied this post until 1879. From 1855–1866 he was also physician in ordinary to Empress Alexandra (the former Prussian Princess Charlotte).

Karell worked as physician in ordinary to the Emperor until 1879 when he retired at his own initiative. As a token of gratitude, the Emperor awarded him a "princely" pension [1]. Ph. Karell also had his own coat of arms of the family, which was officially approved by the Emperor on 29 December 1864 [1, 2]. Being extremely simple, kind and sympathetic, Karell was able to apply his extensive theoretical knowledge in practice and to draw scientific generalisations from his experience in therapy. He became a beloved and highly appreciated doctor in all strata of the society.

### **KARELL'S METHOD OF MILK THERAPY**

Karell developed his original method of milk therapy which consisted in treating several diseases by feeding milk to the patients. According to his method, the patient had to use skimmed milk after strictly assigned periods, starting with a half or one coffee cup of milk three or four times a day and reaching two bottles of milk daily in the second week. He introduced his method in 1865 to the St Petersburg Society of Physicians and published it in the journals

*Военно-медицинский журнал* (ч. XCIV, ноябрь, 241–227) and *St. Petersburger medizinische Zeitschrift* (Bd. VIII). In the following year, 1866, the paper was published in a French journal and in 1870 in English in Philadelphia, which made Ph. Karell well-known [5, 6, 7, 8]. With his method, Ph. Karell achieved good results primarily in the treatment of diseases related to water metabolism disorders (cardiac, renal, gastrointestinal and liver diseases, and overweight). In its essence, the therapy regulated the organism's metabolism by a diet poor in nitrogen, sodium, chlorine and calories. On its basis, several physicians developed their own modifications of milk therapy [2].

### **FOUNDATION OF THE RUSSIAN RED CROSS SOCIETY**

In 1864, delegates from 16 countries, at the initiative of the Frenchman Henri Dunant, founded the International Red Cross in Geneva. In autumn 1866 the Russian heir to the throne, Alexander, married the Danish Princess Dagmar (later known as Maria Feodorovna), and the court circles wished to celebrate the event with the foundation of some charitable organisation. The initiative of founding the Russian Red Cross Society, however, belongs to Ph. Karell, together with Marfa Sabinina and Maria Frederiks. A preliminary meeting was held under the chairmanship of Karell on 2 (14) July 1866. On the following day, Karell, when visiting the Emperor, informed him about the plan. The Emperor agreed and ordered to draft the statutes of the society. Karell considered the participation of women in the society natural and, through General Totleben, applied for support for it from the leading circles of Moscow, but Metropolitan Philaret did not consider it possible that women and men would hold meetings together in the administration of the society. As the absence of women would have lead to the disintegration of the society, Karell demanded the foundation of ladies' committees and was successful. The society was founded on 3 (15) May 1867 under the name of the Society for Caring for Wounded and Sick Soldiers; in 1879 it was renamed the Red Cross Society. Ph. Karell participated in drafting the statutes of the society and he was also elected to its central administration. The central administration also included the surgeon P. Naronovich and the therapist S. Botkin. Thanks to Karell's efforts, M. Frederiks and M. Sabinina were elected the first honorary members of the Society. Ph. Karell was also a member of the N. Pirogov Society of Physicians. Soon after the Red Cross, the Evangelical War Infirmary was founded – an institution

that evangelical congregations supported by their donations. In 1876, Ph. Karell also became a committee member of that institution [1]. In 1882, together with V. Karavayev, N. Sklifosovski and A. Krasovski, he was one of the founding members of the Russian Society of Surgeons [12]. Ph. Karell was also a member of the Caucasian and Vienna medical societies, of the Scientific Committee of Military Medicine and an honorary member of the Medical Council at the Ministry of Internal Affairs. At Karell's initiative, sanitary companies were formed in the Russian Army; he was the consultant at designing of several hospitals and procured money from the Emperor's family for their construction. Ernst von Bergmann also received support for founding a surgical clinic at the University of Tartu in 1875 with Karell's help [4].

Ph. Karell had close contacts with N. Pirogov. Their friendship had its beginning during their studies in Tartu (Dorpat). N. Pirogov was a student of the Professors Institute. Later they were in correspondence [13]. Karell attempted to help his friend when the latter fell into disfavour with the reactionary Tsarist government because of his social and educational activities. In 1868, Karell tried to arrange N. Pirogov's return to civil service [13].

## KARELL AND ESTONIA

In his first years of service, Karell asked to be sent to Rapla because of the threat of a cholera outbreak in Estonia [1] to take the corresponding measures, and actually the disease did not break out there. As revealed by A. Schiefner's correspondence [14], Karell always took an interest in his homeland. Being a central figure in the circle of Estonian patriots in St Petersburg, Karell helped Fr. R. Kreutzwald publish the popular edition of his epic *Kalevipoeg*, and Karell's direct financial support enabled Kreutzwald to visit St Petersburg in person in 1859. In a letter to A. Schiefner of 19 May 1859, Kreutzwald wrote, "At present, he is perhaps the only Estonian in such a high position, whose heart still beats for his nation, while nearly all the others renounce their nation as soon as they don the German coat" [14]. Under Karell's auspices, Kreutzwald received the Demidov Price and 760 roubles [14], and, in 1872, an extraordinary award of 248 roubles [1].



According to J. Köler, Karell was a permanent guest at the parties of the Estonian Society. He was a member of the Estonian St John's congregation in St Petersburg [1].

In 1864, delegates from 24 Estonian communes came to St Petersburg to present a petition to the Emperor; Karell sent his servant Nicolas Tischler, also an Estonian, to meet them, and the letter reached Alexander II. Under Karell's auspices, the Emperor allocated a plot and donated 15,000 roubles for building the Charles's Church in Tallinn [2].

Karell often visited Estonia – Tallinn, the surroundings of Haapsalu and his brother Johannes Ludvig in Rapla. In 1881, Johann Voldemar Jannsen, one of the leaders of the Estonian national awakening movement, was suffering from a stroke. He was staying in the summer house of his son-in-law Dr H. Rosenthal in Kadriorg in Tallinn, and Ph. Karell who was their neighbour came to treat him, prescribing him a course of milk therapy. Reportedly, the therapy was successful. J. V. Jannsen's son Eugen Jannsen dedicated his doctoral thesis on the treatment of blood vessels injuries to Ph. Karell. With Karell's help, Eugen Jannsen and Eduard Michelson (husband of the poetess Lydia Koidula) received good jobs as naval doctors in St Petersburg [2], and P. Blumberg, the brother of Kreutzwald's son-in-law, as a doctor in Tbilisi [4]. Karell's nephews Gustav Reinhold Hirsch and Friedrich Enghoff also owe their education to Karell. Gustav Reinhold Hirsch served as the physician in ordinary to the Russian Emperors Alexander III and Nicholas II; another nephew August Julius Frechmin, however, became the Emperor's court physician.

He also helped the sister of another leader of the national awakening movement, Carl Robert Jakobson, to get to Paris to study singing there [1].

Estonians' education was essential for Ph. Karell. To support it, he founded a stipend with a 5000-rouble fixed capital for the students of Gustav Adolf Gymnasium in Tallinn in 1884. The second article of the stipend's statutes says: "The stipend should benefit (1) first of all, the Estonian boys or young men from the parishes of Hageri or Rapla in Estonia who are in poor financial condition and study at the Tallinn German Provincial Gymnasium; (2) if there are no such persons, then the students of Estonian descent of the same school who are in the same condition and originate from Tallinn; (3) in the extremely unbelievable case, if there are even no such persons, then other poor students of the same school [1].

## 50<sup>TH</sup> DOCTORAL JUBILEE ON 16 (28) MAY 1882

The jubilee celebrant was woken up by the choir of St Peterburg's Estonian St John's congregation; congratulations were sent by both the Russian Emperor Alexander and the aged German Emperor Wilhelm I. He was congratulated by grand dukes, the Pirogov Society of Physicians, the Central Administration of the Red Cross, the Estonia fraternity and its alumni in St Petersburg. The University of Tartu had recently elected Karell its honorary doctor; the corresponding diploma was handed over by Rector Schmidt; the town of Tallinn in the person of Baron von Uexküll gave him the diploma of an honorary citizen of Tallinn; Fr. R. Kreutzwald greeted him on behalf of the Learned Estonian Society and handed over his book *Viina Katk (The Plague of Alcohol)*.

Philipp Karell had gastric cancer and passed away at 2 a.m. on 18 (30) August 1886. On 22 August (2 September) a funeral service was held in St Peter's Church in St Petersburg, and thereafter, a special train took his coffin to the graveyard of St Sergius Monastery. The funeral was attended by many Estonians of St Petersburg; the highest dignitaries included Emperor Alexander III and Grand Dukes Alexei and Vladimir.

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