

# THE ARNAL FAMILY OF «POLYTECHNICIANS» AND ENTREPRENEURS AND THEIR CONTRIBUTION TO THE ECONOMY OF LATVIA

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**Summary.** The study reveals previously unknown facts about the Arnal family, who were well-known entrepreneurs and beverage producers in the late 19th and early 20th centuries, and their contribution to the Latvian economy – the production of mineral water, fruit powders, writing instruments (ink, typewriters, etc.), mustard, table vinegar and many other products, as well as their advertising in the press and at exhibitions. The descendants of the Arnal family studied at Riga Polytechnicum / Riga Polytechnic Institute. Family data have been compiled, revealing new and previously unknown personalities in the Latvian history. Additionally, facts have been uncovered about the family that lived in Latvia until 1940, when the Baltic German Arnals family emigrated.

**Keywords:** Riga Polytechnicum, Riga Polytechnic Institute, engineers, mineral water, industry, national economy, Arnal family.

## Introduction

The Arnal family, who lived in Riga, was a well-known beverage producer from the second half of the 19th century until World War II. As the political situation changed in 1940, private industry was liquidated, supposedly to establish new factories, including the Beverage Factory «Veldze». Its origins can be traced back to the company «Rīgas augļūdeņu un minerālūdeņu fabrika» (Riga Fruit and Mineral Water Factory), which was established on 1 January 1941, by merging the nationalized companies

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«Arnāla dēli», «Oskars Krūmiņš», «Rīgas mākslīgie minerālūdeņi», JSC «Vērmaņa parks», and «Gust Kuncendorf» (Order of the People's Commissariat of the Food Industry of the LSSR No. 276, 31 December 1940 in the newspaper «Ziņotājs» No. 102 [1; p. 1]).

«Rīgas augļūdeņu un minerālūdeņu fabrika» began its work in 1944. On 17 August 1949, the Factory was merged with the Riga Wine Factory «Vīndaris» and named the Riga Fruit and Berry Wine and Non-Alcoholic Beverage Factory. On 30 May 1967, it was renamed the Beverage Factory «Veldze». On 24 December 1969, the Beverage Factory «Veldze» was attached to the Beer and Wine Factory «Rīga» and named the Beer and Wine Production Association «Rīga» of the Ministry of Food Industry of the LSSR. The functions of the factory included the production of wine and non-alcoholic beverages [1; p. 2].

All the most popular soft drinks and lemonades were produced at the factory of the Latvian Soviet Socialist Republic. Before the 1980 Games of the Olympiad in Moscow, the factory «Veldze» became one of the first Pepsi producers in the Union of Soviet Socialist Republics (USSR). State Joint-Stock Company «Beverage Factory Veldze», founded after the restoration of Latvia's independence, was privatized in 1994, while JSC «Veldze» was liquidated in 2006 [2].

The study found that the non-alcoholic sparkling drink produced at the Arnāls factory, which could be made by mixing various flavoured powders into water, had a close relationship with products produced by the factory «Veldze», such as Fanta. Its patent was issued in Germany in 1940, but already at the beginning of the 20th century, various sparkling lemonades that could be purchased at the Arnāls company were advertised in the press of the time, especially highlighting the «Orangenseuer»s sparkling orange drink.

At first, only Emil Amandus Johannes Arnal (1836–1910) was involved in the company's operations, and then the company's name in the press in Latvian, Russian, and German was «E. Arnāls» (E. Arnal; E. Arnahl). In 1901, his two sons – John August Christian Arnal (1872–1907) and Eugen Alexander Adolph Arnal (1873–?) – joined, and the company was known in all three languages as «E. Arnāla dēli» (E. Arnal (Arnahl) Söhne; Sons of E. Arnal). After the tragic death of their eldest son John in 1907, only Emil and his youngest son Eugen continued the business. After E. A. J. Arnals' death in 1910, the company was run by his youngest son Eugen. After the end of the 1920s, the company was represented by John's sons – Egon Emil Robert Arnal (1901–?) and Klaus Robert Arnal (1905–?) – together with their uncle Eugene. In the 1920s, Eugen's son Rolf Ludvig Eugen Arnal (1906–?) had his own company, which probably separated from the company «E. Arnāla dēli» and was engaged in the sale of ink and typewriters.

## The Arnal Family Business in Riga

The German citizen merchant Emil Amandus Johannes Arnal (1836–1910) joined the Riga business community in the early 1860s, upon arriving from Hamburg [3]. He first engaged in wine production and trade. An 1865 advertisement in the newspaper «Mājas Viesis» reported that «in E. Arnal's wine cellar, on Kaļķu Street, in the Minnus House, under Mr. Rēdlih's English newspaper store, one can get all sorts of wine at the cheapest price» [4].

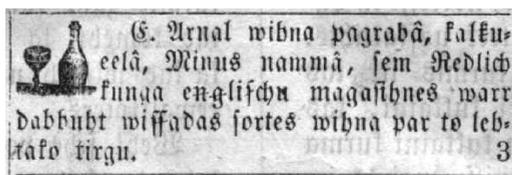


Figure 1. The first company advertisement in the newspaper «Mājas Viesis». 1865.

Later, it was mentioned that the company was founded on 19 January 1865. E. A. J. Arnal gradually settled in Riga. In 1866, E. A. J. Arnal moved from Mr. Rēdlihs' basement to premises on the corner of Kungu and Pēterbaziņas streets – under Mindelis' cigar booth. Various white and red wines were available for purchase there, such as Madeira, Malaga, and Muscat – 45 kopecks per bottle, rum – 60 kopecks per bottle, as well as French wine – 2.5 rubles per bottle [5].



Figure 2. Logo of the company «E. Arnal». 1880s.

In 1869, the company continued its operations at 25 Grēcinieku Street. In 1870, 2nd guild merchant E. A. J. Arnal was granted permission to sell champagne, punch, and other non-medicinal beverages, in addition to wines [6].

In 1871, the company began producing soft drinks, lemonades, and mineral water, which were offered for purchase in refillable bottles – siphons [7]. The price of the drink was 8 kopecks per litre. The authors of

the article managed to find a picture of such a siphon on the global web – one on the Estonian auction website, the other – in the collection of the Museum of the History of Riga and Navigation (VRVM 189014, Coll. No. 069).

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**Figure 3.** Siphon of the E. A. J. Arnal Company. 1871.



**Figure 4.** Original siphon from the E. A. J. Arnal company. Late 19th century.



**Figure 5.** Porcelain bottle stopper from the E. A. J. Arnal company. Late 19th century.

In the 1870s, the company's products were also sold in Zaslauks. In 1873, the Governor of Vidzeme gave permission to Riga merchant E. A. J. Arnal to move his establishment for the preparation of refreshing, non-medicinal drinks to his house at 4 Strēlnieku Street [8]. From 1873 to 1899, extensive construction was carried out on the corner of what is now Dzirnavu and Strēlnieku streets, where the entire block was built for the needs of the Arnal family – two residential buildings, a factory building, a warehouse, a garden, and a shop. The general address was 16 Dzirnavu Street.

The first development plan for the territory was drawn up in 1869, featuring three buildings designed by architect Heinrich Karl Scheel (1829–1909) [8, p. 3]. In 1873, the factory extension was coordinated by architect Friedrich Wilhelm Hess (1822–1877) [8; p. 3] who also participated in the construction of the Riga Polytechnicum (RP) building at 19 Thronfolger (now Raina) Boulevard. Later – in 1883 – the project for a residential brick building in the mentioned area was coordinated by architect Otto Dietze (1833–1890) [8; p. 8]. In 1888, a project for a canopy was developed, coordinated by the architect Oscar Alexander Johann Baar (1848–1914), a graduate (1874) of the RP Department of Architecture [8; p. 32] and the architect Friedrich Rudolph Hamilkar von Petersen (1851–?) [8; p. 34]. Later, architect Konstantīns Pēkšēns (1859–1928), a graduate (1885) of the RP Department of Architecture, and architect and civil engineer Edmund von Trompowsky (1851–1919), a graduate (1878) of the RP Department of Architecture, also became involved in the development plans for the territory [8; pp. 43, 59, 66, 78]. The last works to improve the area were carried out until 1906 under the leadership of architect Rudolf Philipp Dohnberg (1864–1918), a graduate (1893) of the RP Department of Architecture [8; p. 81].



Until the demolition of the territory and the construction of a new building in 1937, the following buildings existed on the territory: a two-story brick residential building at 16 Dzirnavu Street; a two-story brick mineral water facility building; a two-story courtyard building (horse stable, warehouse, ice cellar, and apartment); a two-story brick residential building with a facade on Strēlnieku Street; a one-story brick wooden shed; a one-story brick extension (smithy, garage) [8; p. 194].

Construction work continued into the early 20th century. Evidence that the factory was actually there can be found in the pictures of the National Library of Latvia's «Zudusī Latvija» (Lost Latvia). In the late 1930s, all the factory buildings were demolished, and the Post Telegraph Building (now the Riga International German Private School) was built in their place.



**Figure 9.** Building at 16 Dzirnavu Street. The two-story brick factory building, an extension was built by the industrialist and merchant E. A. J. Arnal, according to the project approved by the architect Friedrich Wilhelm Hess on 8 August 1873.



**Figure 10.** Plot of land on the corner of Dzirnavu and Strēlnieku streets (address – 16 Dzirnavu street). In the foreground – E. Arnal's company former garden of the mineral water institution with the remains of a fountain. 1930s.

In the 1870s, E. A. J. Arnal also introduced subscription cards that offered discounts to regular customers. If a customer bought six or more siphons, their delivery was free [9]. Siphons were available at two prices – 8 and 5 kopecks, lemonade – 12 kopecks [10]. If the glass cylinder of the siphon was accidentally broken, if the customer returned the bottle valve mechanism to the company, the loss was not to be compensated. If the valve mechanism was broken, the money was not returned.

After the news was published in the newspaper «Zeitung für Stadt und Land» in 1879, the company's product range expanded significantly, starting to produce fruit powders that could be mixed with water, mineral water, and tea. Available flavours included cherry, currant, raspberry, orange, blueberry, strawberry, lemon, pear, pineapple, vanilla (14 variations in total) [11].

In the 1880s, the company had two addresses: the production plant at 23 Dzirnavu dambis (Embankment), the office at 25 Grēcinieku Street [12]. It was a time when the company expanded its product range and distribution regions – its products could be purchased not only in Riga, but also in Liepāja [13], Jelgava, Pärnu and Tallinn [14]. Since 1896, the company has also sold mineral waters in Nizhny Novgorod [15]. At the end of the 19th century, the company's stores were located in several places in Jūrmala Region of Riga – Bulduri, Dzintari, Majori, Dubulti, Melluži, and Asari [16].

On 16 February 1888, the Governor of Vidzeme granted Riga merchant Emil Arnal a concession to produce artificial mineral water for the production of lemonades and refreshing waters at his company at 16 Dzirnavu Street [17]. As the newspaper «Düna Zeitung» wrote: «... the most extensive requirements in terms of sanitation and hygiene have been taken into account here. In the solution room on three floors, large clay pots containing the salt solutions used are visible. Next to them is a large laboratory equipped with the most complete and excellent equipment. Rinsing systems, arranged according to the latest technology, offer the most comprehensive guarantee of absolute bottle cleanliness. Below is a water distillation apparatus, three carbon dioxide pumps, and several mixing cylinders, which allow the production of 20 000 bottles per day. On the first floor, there is a machine room, a dolomite grinding room, a spacious warehouse and packaging room, and an office. After visiting the facility, you will be convinced that it is a factory with a modern style vision. This fact, and the fact that it is also under the supervision of a professional chemical engineer, calls for public attention to it, especially now that the artificial mineral water season is beginning [18].»



Figure 11.  
Factory area.  
Early 20th  
century.

To prove the quality of their products, regular newspaper advertisements emphasized sterility, noting that the products were made from distilled water under the supervision of professionals. It is also interesting that the company tested the products at the Chemistry Testing Laboratory (station) of Riga Polytechnicum.

In the 1892 newspaper «Balss», E. A. J. Arnals mentioned that the factory's production was supervised by the Director (1871–1887) of the Vērmānes Dārzs Mineral Water Institution, chemist and technician Hermann Seidler (1852–?) [19].

In 1897, the company was called «E. Arnal Söhne», although the family business had not yet been officially transferred to the sons [20]. That same year, the Governor of Vidzeme allowed Riga merchant Emil Arnal to open a warehouse to sell copying machines, called «Automātisks ziklostils» (Automatic Cyclostyle), at 24 Grēcinieku Street in Riga [21]. It is possible that in the late 1920s, Rolf Ludvig Eugen Arnal, grandson of the founder, founded his own company, «E. E. Rattermanis un Biedrs», on its basis.

By the turn of the 19th and 20th centuries, the company suffered several fires – in 1883 [22, 23], 1888 [24], and 1889 [25].

In 1901, following a resolution by the Acting Governor of Vidzeme, E. A. J. Arnal was allowed to transfer his chemical-technical laboratory, as well as an artificial mineral water, lemonade, and kvass production facility in Riga, at 16 Dzirnavu Street, to his sons: John August Christian Arnal and Eugen Alexander Adolph Arnal for further management [26].

In 1905, an advertisement in the newspaper «Dūna Zeitung» indicated the company's sales outlets not only in Rīga, Jelgava, Bulduri, Majori, Dubulti, Ķemeri, Tukums, Liepāja, Ventspils, Aizpute, Kuldīga, Kandava, Sable, Priekuli, Bauska, Baldone, Birzgale, Varakļani, Vecumnieki, Grenči, Cēsis, Valmiera, Smiltene, Ogre, Saulkrasti, Salacgrīva, Sigulda, Kalnamuiža, Vietalva, Skaistkalne, Daugavpils, Lutriņi, but also in Pärnu, Murawjewo (Mažeikiai), Narva, Novoaleksandrovsk, Odessa, Sebez [27].

At the beginning of the 20th century, the expansion of sales outlets reached Poland [28].

On 24 April 1905, the company opened the healing season in the Strēlnieku Garden [29]. On 26 April 1909, at 7 a.m. in the same garden, the company opened a SPA complex, where mineral waters produced by itself were used [30, 31]. In the park, at the beginning of the 20th century, the company organized several musical events, probably to advertise its products [32].

In 1914, the company, together with other local producers of fruit waters, seltzer, and other soft drinks, formed a syndicate to regulate prices and achieve cheaper procurement of raw materials [33]. However, at least in the Latvian society, the reaction to the syndicate was negative. It was said that it suppressed competition and was a «crusade against buyers' wallets». However, that no longer mattered, as World War I broke out. The Arnal company was not evacuated. The sons of E. Arnal produced fruit juices and seltzer even during the years of World War I and in the times of trouble. After the war, Eugen Alexander Adolph Arnal took over the management. In 1924, the Department of Industry allowed the company to open a chemical and technical laboratory in Riga [34].

However, the family business was no longer doing so well. In 1931, due to debts, a few factory belongings – washing machines, automatic fillers, etc. – were sold at auction for the value of 1600 lats [35]. In the autumn of 1931, the sons of E. A. J. Arnal became insolvent. Debts reached 160 thousand lats. However, the company was not closed, it continued to operate under the management of an administrator [36]. The 3rd Civil Department of the Riga Regional Court, in an open court hearing on 16 December 1931, approved the company's administrator, Hermanis Aleksandrs [37]. On 29 July 1932, the same Civil Department appointed Herbert Hahn as an administrator [38], who continued to represent the company until 1936 [39].

In 1934, a property at 16 Dzirnāvu Street 16 was put up for auction (land register No. 144, group 19, plot 39; plot area 2,959 sq. m). The property was up for sale at public auction for 75 080 lats [40]. However, that same year, the company continued to supply sparkling drinks, for example, for the biggest event of the season – the Press Ball [41].

In 1935, a public company was registered in the Commercial Register of the Riga Regional Court – the firm «E. Arnāla dēli», whose personally liable members were Eugon and his nephews Egon and Klaus [42].

In 1937, the company moved to new premises at 19 Laboratorijas Street [43]. In 1938, Ādolfs Feldmanis became a member of the open society «E. Arnāla dēli» [44]. In 1940, the company «E. Arnāla dēli» changed its name to ««E. Arnāla dēli» un I. Kronbergs un biedris» [45, 46]. In 1940, the list of nationalized industrial enterprises included the open company



One of the most extensive advertisements for the company's products appeared in the newspaper «Balss» in 1892 [53]. It divided the products into four categories.

- A. Mineral waters, etc. in bottles – various spring waters, mineral waters, bromine water, fruit waters (lemonades) (more than 40 variations).
- B. Diet drinks – various spring waters (possibly with lower gas content), seltzer, soda water, orange, lemon, and raspberry lemonades, various fruit syrups (about 20 types), fruit waters (powders about 20 types), etc.
- C. For bath procedures – foaming soaps with various fruit aromas, filled in special containers, and the possibility of purchasing bath products containing clay, fats, etc.
- D. Various goods – salt, whey essence, distilled water.

In 1893, in addition to the above-mentioned products, various types of inks (both liquid and powdered) and writing instruments were produced and sold [54]. World-famous mineral waters were also produced and distributed [55], such as Emser Kränchen mineral water, Franz-Joseph-Bitterquelle medicinal water, Hunyadi Janos Bitterwasser, and Vichy Cölestiner. The products were supplemented by vaseline.



**Figure 13.** Vaseline, produced by the company «Arnal & Söhne». Early 20th century.

By the end of the century, the company had significantly expanded its range of products, including office glue, shoe polish [56], stamp paints, and soap [57].

In 1901, the range of artificial mineral water products expanded, for example, the company began producing mineral water «Essentuki 17», «Borshom» (Borjomi) and «Narsan», popular in the Caucasus [58]. In 1906, the production of non-alcoholic champagne «Solo-Sekta» began [59].



**Figure 14.** Advertisement for non-alcoholic champagne «Solo-Sekta». 1906.

Around 1908/1909, table salt «Kristall» was sold, produced by the J. J. Komen factory in Riga [60]. It was sold in 37 retail outlets in Riga and also in Bauska, Kuldīga, Liepāja, Sloka, Jelgava, Talsi, Tukums, Valka, Cēsis, Valmiera, and Dorpat [61, 62, 63].

In 1910, the company began producing «Orangenfeuer», a sparkling non-alcoholic soft drink. For several years, it published interesting advertisements with comic elements [64].



Figure 15. Advertisement for «Orangenfeuer» in the newspaper «Rīgas Avīze». 1910.



Figure 16. Advertisement for «Orangenfeuer» in the newspaper «Dzimtenes Vēstnesis». 1911.

In 1911, one of the company's most elegant advertisements in the newspaper «Rigasche Zeitung» advertised two of its most popular products – the non-alcoholic champagne «Solo-Sekta» and the sparkling non-alcoholic soft drink «Orangenfeuer» [65].



Figure 17. Advertisement of the company's products in the newspaper «Rigasche Zeitung». 1911.

In the 1920s, table vinegar was also produced. It is interesting to note that the company employed Harald Hahne (also Harald Adolf Hahne; 1892–1940), a graduate (1918) of the RPI Department of Chemistry, who patented the invention «Method for the Concentration of Acetic Acid» in 1934 (patent certificate No. 1978) [66, 67].

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**Figure 18.** Table vinegar, produced by the company «E. Arnāla dēli». 1920s.

In the 1920s, seltzer, lemonades, and malt beverages were produced in large quantities [68, 69]. In the 1930s, the company offered the possibility of purchasing the Ķemeri natural mineral water «Veselība» [70].

Even before the company's demise, solutions for new products were sought, for example, in 1934 a new drink was produced – «Gambijas dzēriens» [71], and in 1936 – «Ābolu pērle» [72]. In the late 1930s, colourful posters advertising the company's products could still be found.



**Figure 19.** Advertisement for a malt beverage produced by the company «E. Arnāla dēli». 1938.

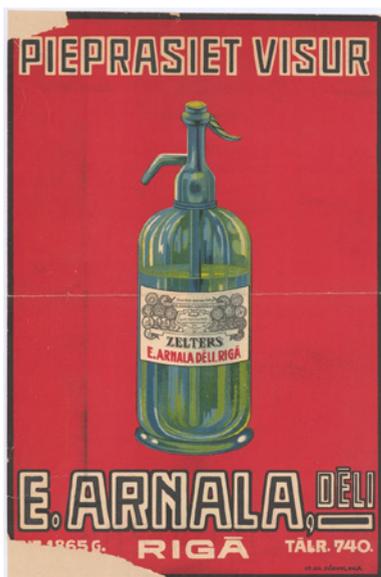


Figure 20. Advertisement for a seltzer product manufactured by the company «E. Arnāla dēli». 1938.

It has been researched that after the company was nationalized in 1940, the family emigrated to Germany and continued their activities there. In the newspaper «Latvija», published in the Federal Republic of Germany, in 1955, a certain Klaus Arnal advertised alcoholic beverages in the German city of Wilshofen am Donau. Similar advertisements can also be found in the 1960s.

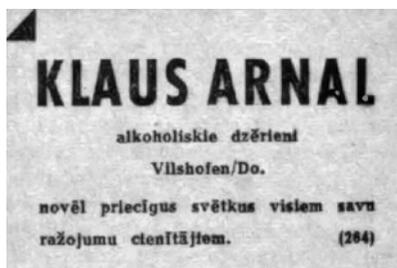


Figure 21. Klaus Arnal's drink advertisement in the newspaper «Latvija». 1955.



Figure 22. Advertisement for Arnal's company in the newspaper «Latvija». 1962.

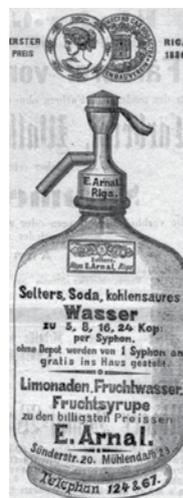
## Company Participation in Exhibitions

In 1880, an exhibition was held where E. Arnal, for the first time, advertised his company's products – snacks and lemonades – to the general public on a mobile exhibition stand [73, 74].

In 1883, the Grīva (Daugavpils) exhibition was held, where the company's products were advertised in the large industrial hall. At this exhibition, the company received its first award (a gold medal); this information later also appeared in the company's advertising pages [75]. The company advertised not only mineral waters and fruit waters, but also soap [76].

In 1886, the company participated in the Horticultural Exhibition held from 26 to 27 July and won a silver medal, promoting refined fruit water and berry essences [77]. At that time, 22 different flavoured fruit syrups and extracts were available [78, 79].

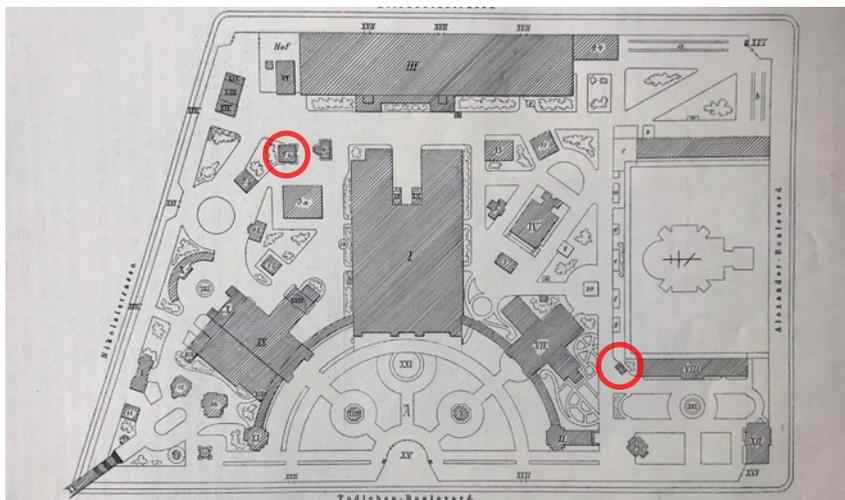
In 1887, an exhibition was held in Tukums [80]. At that, E. Arnal's company won an honourable first place [81], boasting about it in an advertisement in the newspaper «Rigasche Zeitung» [82].



**Figure 23.** Advertisement in the newspaper «Rigasche Zeitung», where the company is proud of having won the first place. 1887.

The greatest preparations at the company took place before the Riga 700th Anniversary Exhibition, which took place from June to August 1901 in Riga at Esplanade Square (industrial and craft exhibition) and Strēlnieku Garden (recreation and entertainment facilities). Several companies discussed the course and layout of the exhibition a year before the event. A pressing issue was the construction of pavilions – some of them were built by the companies at their own expense, others were supported by the Exhibition's Executive Committee. The Executive Committee also undertook the construction of the Arnal company stands [83]. In 1901, before the great industrial exhibition dedicated to the 700th anniversary of Riga, several industrialists met to discuss the layout of the exhibition and the location of their stands. During the meeting, the location of one of the kiosks of the company «E. Arnāla dēli» (E. Arnal

Söhne) (No. 9a) was determined – next to the kiosks of the companies «Livonia» and «Ilgezeem» [84] – No. 9b – near the cathedral.



**Figure 24.** Location of kiosks No. 9a and 9b of the company «E. Arnāla dēli» at the Riga 700th anniversary exhibition. 1901.

It is believed that in preparation for the large exhibition, a special, artistically designed poster was also made, which is available at the Art and Music Centre of the National Library of Latvia.



**Figure 25.** Advertisement for the company «E. Arnāla dēli» in Russian. Early 20th century.

The company «E. Arnāla dēli» (E. Arnal Söhne) participated in the Riga 700th anniversary exhibition with four stands – two outdoors – with refreshing drinks No. 9a and 9b [85; pp. 69, 76] and two in the large industrial hall (building) – where mustard, table salt and other table food products were sold and advertised (No. G9), as well as various inks, glues, varnishes and writing equipment (No. H5), indicating two addresses in the contacts – 16 Dzirnavu Street and 24 Grēcinieku Street [85; p. 255]. In the Riga 700th Anniversary Exhibition catalogue, the company's serial number was 948 [86].



**Figure 26.** The stand of the company «E. Arnal Söhne» at the Riga 700th Anniversary Exhibition in the large industrial hall with ink, wax, varnish, etc., products. 1901.

In 1907, at the First International Culinary and Crafts Exhibition in St. Petersburg, the company received a Diploma of Appreciation for artificial mineral water [87]. After 1907 and during World War I, the company's advertisements were no longer as bright, although they occupied a significant place in terms of volume. At the 1909 Trade and Industrial Exhibition in Pärnu, the company received the Great Gold Medal [88]. In 1924, at the 4th Riga Fair, the company's products were highly appreciated [89]. At the 1925 Jelgava Jubilee Exhibition, the company [90] received the first place in the soft drinks category [91]. The award was received by Simone Anna Maria Arnal – wife of Rolf Ludvig Eugen Arnal. Information about the award-winning place also appeared in the



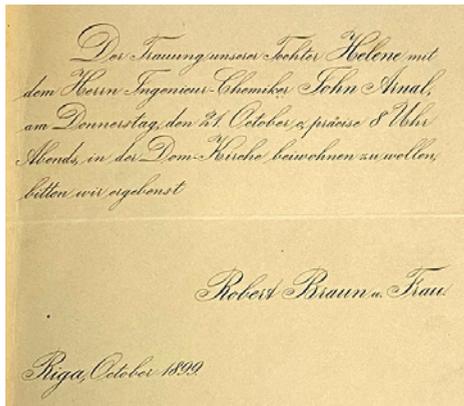
**Emil Amandus Johannes Arnal** (1836–1910) arrived in Riga from Hamburg in the early 1860s, founded the company «E. Arnal», and in 1871 married Matilda Grēve (1847–?) [97]. He donated both money and the company's products to the city of Riga on several occasions. He died in Hamburg in 1910 at the age of 74 [98]. He was a representative of the Riga Rowing Club [99].

E. A. J. Arnal's wife **Matilda Arnāla** (b. Grēve) was born on 6 May 1847 in Hamburg. She lived in Riga, 3 Stacijas Square, apt. 26 (1921); in Majori, 12 Jūras Street, apt. 6/7 (1923) and 12 Jūras Street, apt. 26 (1924); in Riga, 55 Ēbeļmuižas Street, apt. 21 (1927) [100]. E. A. J. Arnal and M. Arnāla had two sons – John August Christian Arnal (1872–1907) and Eugen Alexander Adolph Arnal (1873–?).

E. A. J. Arnal's eldest son, **John August Christian Arnal** (1872–1907), was born on 8 February 1872 in Riga. He obtained his education at Riga City Gymnasium, and after graduating in the fall of 1891, he entered Riga Polytechnicum to study chemistry. He graduated from Riga Polytechnic Institute (1897), obtaining a diploma in chemical engineering. During his studies, he joined the corporation «Fraternitas Baltica». He also worked at Riga Technical Society. After a long study trip to Germany, France, Switzerland, and Italy, he joined his father E. A. J. Arnal's business in the autumn of 1898. Together with his brother E. A. A. Arnal, he joined his father's company as a partner in January 1900. A year later, after his father resigned as the company's manager, he and his brother took over the well-known mineral water factory. Despite the difficult times, thanks to the brothers' tireless diligence and constant enthusiasm for their work, the business continued to expand and prosper [101]. In 1903, J. A. C. Arnal was elected a Fellow of the Natural History Society [102]. Unfortunately, on 7 March 1907, J. A. C. Arnal died in an accident, probably due to negligence [103, 104]. While attending a factory test of a new machine, he was caught in a transmission shaft [105]. J. A. C. Arnal married **Agnes Helen Braun** (1873–?) in 1899 [106].

**Figure 29.** Obituary of the engineer chemist J. A. C. Arnal in the newspaper «Rihische Zeitung», 1907.





**Figure 30.** J. A. C. Arnal and A. H. Braun's wedding invitation, signed by Agnes' parents. 1898.

Agnes Helen Braun was born on 20 February 1873 in Riga. She lived in Riga, 4 Elizabetes Street, apt. 1 (1914, 1920, 1937) [107; 18., 85., 86. p.]; in Jūrmala, 12 Lienes Street (1921) [108]. A. H. Arnal owned a summer house in Jūrmala, 12 Jūras Street [109], opposite the Benjamiņi summer house. The building has not survived to this day. Together with her sister Ģertrūde Grīna (Gertrud Grün), she owned property in Majori [110, 111]. She was a member of the German Theatre Society [112].

In 1937, she travelled to Magdeburg, later to Dresden. On 22 November 1939, A. H. Arnal's request to renounce Latvian citizenship was approved [113]. She was a member of the German Cemetery Commission and took care of unkempt graves, collecting donations [114].

From the marriage of J. A. C. Arnal and A. H. Arnal, two sons – Egon Emil Robert Arnal (1901–?) and Klaus Robert Arnal (1905–?) – were born.

J. A. C. Arnal's first son, **Egon Emil Robert Arnal**, was born on 14 July 1901 [115]. He was educated at the City German Secondary School in Riga, after graduating from which he entered the Faculty of Chemistry of the Latvian Higher School in 1921 [116]. In the academic year 1922/1923, he studied at the Faculty of Mathematics and Natural Sciences of the University of Hamburg.

E. E. R. Arnal lived for some time in Riga, 4 Elizabetes Street, apt. 1 (1920, 1924) [107; p. 9] together with his mother A. H. Arnal; in Riga, 1 Alberta Street, apt. 17 (1937, 1938) [117; pp. 283, 312]. He travelled a lot in the 1930s.

Egon Emil Robert Arnal married **Margareta Kivulis** (also Kivullis (Kiwull); 1901–1946) on 17 November 1929 [118, 119].

Margarete Arnāla was the daughter of Otto Voldemar Kiwull (1866–1932), a gymnastics teacher at Riga City Gymnasium and a promoter of sports, especially swimming, and an active lifestyle. He promoted the introduction of swimming as a sport and recreation in Latvia and, in 1903, established a swimming school in Majori, soon after founded the sports

organisation «I Baltic Swimming Association and Swimming School». He actively participated in the work of the Latvian Olympic Committee and the Latvian Swimming Union. On 16 November 1932, he was awarded the Order of the Three Stars [120].

M. Arnāla lived in Majori (Jūrmala); Riga: 1 Alberta Street, apt. 17 (1927); 12 Lienes Street, apt. 26 (1928); 12 Lienes Street; apt. 3 (1929), 16 Dzirnāvu Street, apt. 3 (1930); 1 Alberta Street, apt. 17 (1937) [121]. In the early 1930s, she travelled outside Latvia. In 1939, E. E. R. Arnal and his wife M. Arnāla lived in 1 Alberta Street, apt. 17. On 11 November of the same year, the family's request to renounce Latvian citizenship was approved [122].

J. A. C. Arnal's second son, **Klaus Robert Arnal**, was born on 26 January 1905. K. R. Arnal lived in various places in Riga: 4 Elizabetes Street, apt. 1 (1929); 4 Elizabetes Street, apt. 10 (1930s) [123]; 13 Pulkveža Brieža Street, apt. 23 [124; pp. 136, 137]. He emigrated from Latvia at the end of the 1930s.

On 6 April 1935, he married **Margrieta Olga Monika Bergmane** (also Bergmanis; 1905–?), born on 30 October 1905. M. O. M. Arnāla lived in Melluži, 10 Kalpaka Street, apt. 10 (1927) [125], 12 Žubītes Street (1928); in Riga, 13 Pulkveža Brieža Street, apt. 9 (1933), 13 Pulkveža Brieža Street, apt. 23 (1935) [126].

From the marriage of K. R. Arnal and M. O. M. Arnāla, the son, Bernd Arnal (1939–?), was born on 5 April 1939 [126]. On 10 November 1939, at the request of M. O. M. Arnāla, approval was granted for both her and her son to renounce Latvian citizenship, and K. R. Arnal received notification of this on 23 November 1939.

The younger brother of the chemical engineer J. A. C. Arnal, **Eugen Alexander Adolph Arnal** (1873–?), was born on 9 June 1873. E. A. A. Arnal lived in Riga, 16 Dzirnāvu Street, apt. 1 (1928, 1929, 1930, 1933, 1935, 1937) [127] and 13 Elizabetes Street, apt. 8 [128; p. 82]. He was a major businessman and member of various organisations, one of the founders of the zoological joint-stock company «Latvijas sudrablapsu ferma» [129], and a Member of Riga Zoo Society [130]. In 1917, representing the Board of the aforementioned Society, he convened a general meeting in his apartment at 16 Dzirnāvu Street, where he addressed issues regarding animal feeding during the war [131]. In the late 1920s and early 1930s, he travelled extensively to Europe (e.g., Estonia, Lithuania, Poland, and Germany). He also visited the city zoo in Berlin, possibly to expand his knowledge [132, 133, 134]. He visited also Belgium [135]. During the interwar period, he was a Member of the Riga City Council [136, 137, 138], and a Member of the Philatelists' Audit Commission [139]. He served on the Board of Directors of the Riga Bourse Committee [140], the Board of the Great Guild [141], the Freemason Lodge [142], and the Board of the

Shipping Joint-Stock Company «A. Augsburg» [143]. On 6 November 1939, E. A. A. Arnal's request to renounce Latvian citizenship was approved [144].

In 1905, E. A. A. Arnal married **Lidia Dorothea Kathrina Mathilda Būjanhoff** (1882–?) [145]. L. D. K. M. Būjanhoff was born on 2 December 1882 [146]. She lived in Riga, 16 Dzirnavu Street, apt. 1 (1921, 1928, 1935) and 13 Elizabetes Street, apt. 8 (1937) [147]. On 13 February 1906, a son, **Rolf Ludwig Eugen Arnal** (1906–?), was born to Eugen and Lidia.

R. L. E. Arnal lived in Riga, at 16 Dzirnavu Street, apt. 1 (1921, 1928, 1929, 1931, 1935) [148, 149, 150, 151], 7 Kalpaka Boulevard, apt. 9 (1931) [152], 13 Elizabetes Street, apt. 8 (1937) [128; p. 83] and 14 Rūpniecības Street, apt. 12 (1937, 1939) [153]. Like his father, he travelled a lot in the late 1920s and 1930s (both to Northern Europe, for example, to Helsinki in 1937, and to Germany, for example, to the Berlin Zoo in 1938, possibly together with his father, etc.), and in 1938 also to Switzerland [154]. On 16 September 1939, he applied to the Foreign Passport Department of the Ministry of the Interior for permission to travel abroad on company matters. He went to Germany to meet with representatives of the following companies in Berlin: «J. F. Eisfeld G. M. B. H.», «Durener Metallwerker», «Zeis Ikon-Goerzwerk». The permit was issued on 22 September [155; p. 3]. On 12 December 1939, his request to renounce Latvian citizenship was approved.

In 1928, together with businessman Ernests Edvīns Ratteramanis (1902–?), he founded the company «E. E. Rattermanis un Biedrs», which was located at 15 Kaļķu Street. The company was engaged in the sale and distribution of typewriters, bookkeeping machines, 10-key calculating machines, calculating machines, postage stamp deposit machines, and index cards [155; p. 1], representing such companies as «Underwood-Elliot-Fisher Company, U. S. A.», «Sundstrand», «Mercedes-Büromaschinen-Werke A. G.», «Triumphator Werk Heer und Co.», etc. On 15 December 1939, the company, along with its assets and liabilities, was sold to AS «KOTA», located at 88/40 Blaumaņa Street, for 56 394.83 lats [156].



Figure 31. Rolf Ludwig Eugen Arnal's company letterhead. 1930s.

In 1937, R. L. E. Arnal married Simone Anna Maria Gely (1908–?) [151, 157], born on 15 September 1908. S. A. M. Arnal lived in Liepāja, 66 Uliha Street, apt. 4 (1931, 1934); in Riga, 63 Tērbatas Street, apt. 9 (1932) and 27/31 Karlīnes Street, apt. 3 (1933) [158]; in Liepāja, 11 Labrenča Street,

apt. 3 (1933); in Riga, 2 Dzirnavu Street, apt. 2 (1935) and 14 Rūpniecības Street, apt. 12 (1937, 1938, 1939) [159, 160].

She travelled a lot with her husband in the 1930s. In 1938, she was in Paris; in 1939 – in Belgium [160]. From 1938 to 1939, she repeatedly asked the Foreign Passport Department of the Ministry of the Interior to allow her to travel abroad to her relatives, her father in France [161]. On 12 December 1939, she received a summons confirming her request to renounce her Latvian citizenship. Information about Simone and Rolf can be found on the website that compiles Holocaust survivors in France [162].

During the course of the research, it has been found that in the marriage of E. A. J. Arnal to M. Arnāla, in addition to the sons – John and Eugene –, there were at least two more daughters. One – Marianna Johanna Maria Arnal (m. Braun; 1875–?) was born on 2 January 1875 [163].

## Conclusions

When starting the research, the authors have had no idea of the amount of information that can be obtained about the Arnal family and their industry, as well as their contribution to the Latvian economy. It was only known that the Beverage Factory «Veldze», known in the Latvian SSR and Latvia, was established on the basis of companies nationalized in 1940, including the company «Arnāla dēli». After studying more than 160 literary sources, even more illustrations available in periodicals, and documents from the Latvian State Archives, the result is quite impressive – the Arnal family's company operated in Latvia for 75 years, experiencing the 1905 revolution, World War I, and the economic crisis of the 1930s, continuing to expand the business that began as a wine trade. The family-owned company at the time offered a very wide range of products – from several dozen types of mineral water, lemonade, fruit juice, mustard, table vinegar to shoe polish, typewriters, stamps, hygiene products, and bathroom accessories. In addition, the company's products were also used in construction and furnace construction. The family's wealth is also evidenced by their participation in various associations and advertising on the front pages of major newspapers of the time, frequent trips abroad, as well as the development of a huge territory at the intersection of Strēlnieku and Dzirnavu streets – both residential buildings and a factory. One can only imagine how the family business would have developed if World War II had not broken out. However, the family was forced to emigrate, and all that is known about the post-war years is that a certain Klaus Arnal advertised alcoholic beverage production in the German town of Wilshofen am Donau in the 1950s and 1960s.

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The Arnal Family of «Polytechnicians» and Entrepreneurs and Their Contribution to the Economy of Latvia

*Ilze Gudro, Jānis Kalniņš*

### **«Politehniķu» un uzņēmēju Arnālu dzimta un tās devums Latvijas tautsaimniecībai**

Pētījums atklāj iepriekš nezināmus faktus par Arnālu dzimtu, kas 19. gadsimta beigās un 20. gadsimta sākumā bija pazīstami uzņēmēji un dzērienu ražotāji, un tās ieguldījumu Latvijas tautsaimniecībā – minerālūdens, augļu pulveru, rakstāmpiederumu (tintes, rakstāmmašīnas u. tml.), sinepju, galda etiķa un daudzu citu produkciju ražošanā, kā arī tās reklamēšanu presē un izstādēs. Arnālu dzimtas atvases studēja Rīgas Politehnikumā / Rīgas Politehniskajā institūtā. Ir apkopoti dzimtas dati, atklātas jaunas un līdz šim nezināmas personības Latvijas vēsturē un fakti par dzimtu, kas Latvijā dzīvojuši līdz 1940. gadam, kad vācbaltiešu Arnālu dzimta izceļoja.

**Atslēgvārdi:** Rīgas Politehnikums, Rīgas Politehniskais institūts, inženieri, minerālūdens, rūpniecība, tautsaimniecība, Arnālu dzimta.