

PĒTERIS ELKSŅĪTIS (1879–1963) – ONE OF THE FOUNDERS OF DAIRY FARMING IN LATVIA

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Summary. In the interwar period, an important sector of the national economy in Latvia was dairy farming, where both university graduates – engineers, and people without higher education worked. One of them – Pēteris Elksnītis (1879–1963), who learned the trade of a blacksmith in his youth and the trade of a technician through self-learning (1910), worked in the company of the Society of Riga Agricultural Central Union «Konsums», participated in establishing dairies, worked in the Department of Agriculture of the Ministry of Agriculture of the Republic of Latvia where he was responsible for agricultural technique, in the Technical Department of the Central Union of Dairy Farmers of Latvia where he was a Manager, participating in the construction and mechanization of dairies and in setting up milk processing points. In the interwar period, P. Elksnītis not only developed the projects of dairies and creameries and took care of their equipment but also obtained several patents for his inventions for milk processing equipment, potato harvesting, and laundry washing. Some patents related to dairy farming were bought and realized by entrepreneurs in Denmark. After an accident (1932), P. Elksnītis retired from paid work and returned to his home in Prauliena. In 1932, P. Elksnītis was awarded the highest award of the Latvian state – the Order of Three Stars.

Keywords: dairy farming, Pēteris Elksnītis, Madona District (County), Latvia.

Introduction

The turn of the 19th and 20th centuries in Latvian agriculture, first of all in dairy farming, brought the features of industrialization. This was facilitated by the work in the breeding of cow breeds, improvement of meadows and pastures, and changes in milk processing were also significant. In the abovementioned processes participated graduates of

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Riga Polytechnic Institute (RPI) – agronomists, mechanics, economists, as well as people without higher education. One of them was Pēteris Elksnītis (1879–1963).

Development was also facilitated through collaboration – livestock monitoring societies, co-dairies (in Latvian – *koppienotavas*) formed by dairy farmers' societies, or co-modernizations (in Latvian – *kopmoderniecības*), as they were called at the time. Especially the latter ensured the continuity of milk processing, facilitated the sale of the main product – butter – and, accordingly, profits for milk producers [1]. Income from milk depended on milk yield, which varied seasonally (higher in summer, lower in winter) but was more regular than selling grain, roots, flax, wool, or meat.

Ancestors and Childhood of Pēteris Elksnītis

The Elksnīši family (also with the surname Elksnis) – Pēteris Elksnītis with his wife Līza, four sons, and three daughters – came to «Vēveri» of Lazdona Parish (now in the territory of the Madona City) in the 1860s, because in the estate audits of the previous decade, they were still listed as residents of the Prauliena Parish. In the spring of 1870, the youngest son Juris Elksnis (1853–?) started the «Vēveri Nr. 54-1» purchase; the property value was set at 3638 rubles at the time of signing the purchase; he paid a tenth of the total amount [2]. A year later, Juris' brother Viļums Elksnis (1850–?) signed a contract for the «Vēveri Nr. 54-2» purchase in the amount of 2988 rubles [3].

Juris Elksnis sold the farm in 1883; from then on, the Elksnīši stayed in «Vēveri» bought by Viļums (the farms were about 400 meters away from each other); from 1905, the owner of the farm was Viļums' son Jānis Elksnītis (?-?), who worked also as a teacher.

Pēteris, the son of Juris and Anna (née Norvile), is registered in the Lazdona Lutheran Church. Pēteris Elksnītis was born on 31 January 1879 (12 February according to the new style) in the house named «Purvvēveri» [4], presumably the same farm as «Vēveri Nr. 54-1». He had two older sisters – Līze and Ieva, a younger sister, Anna and a brother, Jānis. Pēteris first studied for a year far away from home – at the parish school in Varakļāni, then at the two-class ministry school in Lazdona, which was less than a kilometre from «Vēveri» and was created from the former school of the Orthodox Congregation of Lazdona Parish.

Blacksmith's Job

P. Elksnītis finished school at the age of 13 and began learning a trade. First of all, it happened with blacksmith Graudonis in «Stiebriņi» of Lubāna Parish. After that, he was an assistant to Viļums Melbādis (1869–1947), a blacksmith of Cesvaine Rectory. V. Melbādis carefully wrote down the completed works and the amount of money received for the work done. Part of these records is kept in the Madona Museum of Local History and Art. There are also record for the salary of P. Elksnītis' apprentice. Between 10 June 1896 and 25 February 1897, he received 46.74 rubles [6]. It is not known whether V. Melbādis also provided meals to the assistant during this time.



Figure 1. Lazdona Orthodox Church and School, where P. Elksnītis studied (c. 1910).



Figure 2. The entries of P. Elksnītis in the notebook of blacksmith Viļums Melbādis about the apprentice's salary received (1896).

After leaving Cesvaine Rectory, the young man started independent work at the age of 19, first in a rented forge in Lazdona's «*Ķemeres*», then in Prauliena's «*Svārpsti*», later for a longer period in Prauliena's «*Stabiņkrogs*». With his products, the craftsman participated in local exhibitions and also received awards at exhibitions in Cesvaine [7] and Gulbene [8].

While working in Prauliena, the blacksmith P. Elksnītis met Arvīds Brēmers (1871–1941), owner of the nearby *Laudona* «*Glāznieki*», who was interested in various opportunities for education, primarily agriculture. Encouraged by A. Brēmers, P. Elksnītis turned to self-education. In 1901, the self-study notebooks «*Būvskola*» (Construction School; 1901–1914) and «*Mašīnu būvskola*» (Machines Construction School; 1901–1903) authored by Puriņu Klāvs (Nikolajs Roberts Puriņš; 1858–1935) began to be published. N. Puriņš studied architecture at RPI (later, he focused more on journalism). Konstantīns Pēkšēns (1859–1928), a graduate (1885) of the Department of Architecture of Riga Polytechnicum (RP), also participated in the publishing of notebooks. The example was the material for self-study published in Germany by Professor O. Karnack (?-?). Thus, Latvian workers and craftsmen could supplement their theoretical knowledge through self-study [9]. Notebooks in Latvian, also called letters, were translations from German. The preparers of the educational tool faced terminology problems – many technical concepts did not have uniform names in the Latvian language, and training in these areas in Riga was held in German or Russian [10]. The promised machine-building school, which probably interested the blacksmiths more professionally at the beginning, was not particularly developed; everything was mainly related to construction matters. Publishers' relationship with architecture, building design, and construction was of great importance here. The newspaper «*Balss*» wrote that «the purpose of these educational letters is to substitute a trade school for construction workers. The letters will contain all the general and technical sciences needed by a construction craftsman who wants to fulfil the requirements of his profession» [11].

Educational letters were published in 44 notebooks; the price of one in the store was 40 kopecks, and if they were delivered by post, one had to pay five kopecks. On the other hand, when ordering and paying in advance, one notebook was five kopecks cheaper. Two notebooks were published in a month, and 24 were published in the first year. Each notebook is basically devoted to one topic indicated on the cover – arithmetic, algebra, planimetry, stereometry (solid geometry), projection teaching, geometric drawing, drawing, construction, carpentry, mechanics, machine elements, machine drawing, and machine building materials. The basis of everything was different branches of

mathematics – 11 notebooks dedicated to algebra, eight to planimetry, three to arithmetic, and two to stereometry. However, the notebooks on the same topic did not consecutively follow one after the other. For example, notebook No. 28 states that on Tuesday and Friday evenings, it is possible to receive free oral consultations at the «Būvskola» Office in Old Riga (now 15 Vecpilsētas Street; Puriņu Klāvs worked there). On the other hand, from October 1902, the architect who had studied at Riga Polytechnicum (from 1896 – RPI; 1891–1898) Aleksandrs Vanags (1873–1919), promised explanations to the students of the construction school on Wednesday and Thursday evenings at 18–3 Marijas Street. It must be assumed that learning according to these notebooks and also another type of learning allowed P. Elksnītis to pass the tests externally in 1910 and obtain the qualification of a technician.

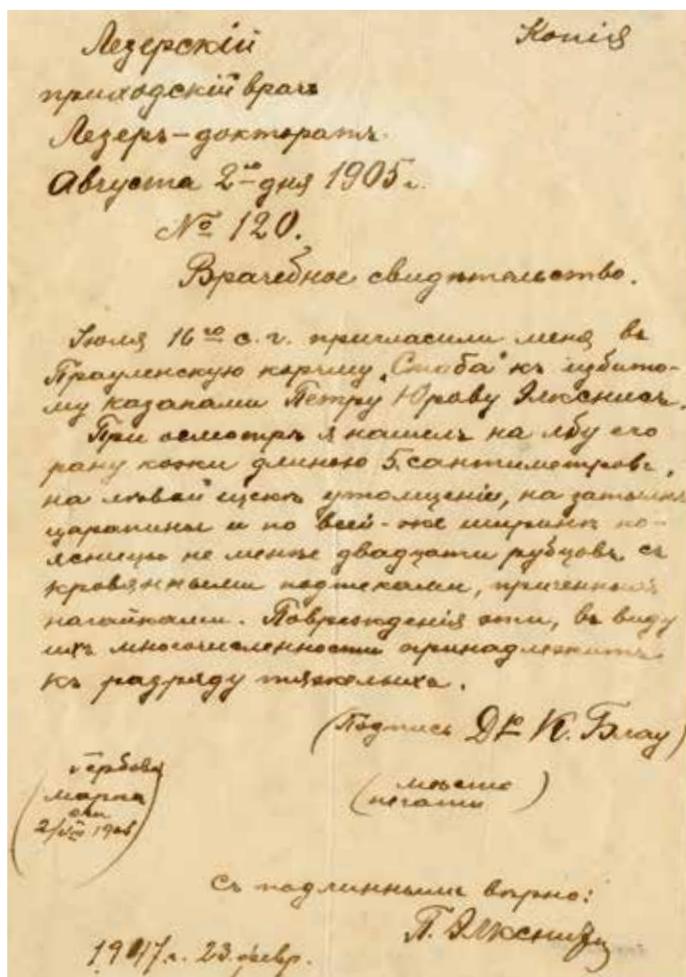


Figure 3. Copy of doctor Kārlis Blaus' report on the state of health of P. Elksnītis (12.08.1905).

The events of the 1905 Revolution should also be remembered. The southeastern part of Cēsis County was one of the centres of unrest since the spring. In order to prevent possible disturbances, at the beginning of the summer, a Cossack Unit was stationed at the Saikava Manor, and its cavalrymen were threateningly riding from time to time. On one such occasion, on the night of 15 June, when the Unit was returning from Madona to Saikava, it was attacked halfway from the hideout in Svārspti pine forest by local men armed with shotguns; it happened a few kilometres from P. Elksnītis' workplace. It is known that the craftsman sometimes also repaired the hunting weapons of the surrounding people. A month later, on a Tuesday, the Cossacks took men and young people from nearby houses, including the blacksmith, to the edge of the forest and began to beat them and interrogate them about what they knew about the participants in the attack. P. Elksnītis, who knew Russian better, tried to defend the youngest detained teenager, Andrejs Kaminskis (?-?), the shepherd of the «Skudras» House, saying that beating is not necessary; he could not say anything. Then P. Elksnītis himself was tied to a tree and beaten to unconsciousness [12]. Injured, he was taken home, and later the Liezere Doctor Kārlis Blaus (1853–1906), father of RPI graduate (1913) Haralds Blaus (1885–1944), was also brought there. On 2 August, he wrote a doctor's report (translation from Russian): «On 16 July of this year, I was invited to the Prauliena Stabu Pub to attend Pēteris, the son of Juris Elksnītis, who was beaten by Cossacks. During the inspection, I found a 5-centimetre-long wound on the forehead, the left cheek was swollen, there were bruises on the back, and the body had no less than twenty bloody wounds from the nagaika cuts. These bodily injuries, taking into account their amount, are considered serious» [13]. A similar certificate was issued later, already during the Republic of Latvia, by the Prauliena Parish Board: «The Prauliena Parish Board confirms that citizen Pēteris, the son of Juris Elksnītis, on 16 Jul 1905, was taken by a punitive expedition of the Cossacs to the forest of the «Skudras» House in this parish and beaten with nagaika until he lost consciousness; after which he had to support himself for three years from other sources due to his inability to work» [14]. The recovery was long, and there was a long break in the blacksmith's work.

Technician at the Society of Riga Central Agricultural Union «Konsums»

Having obtained the technician's qualification, P. Elksnītis from Prauliena started working at the Society of Riga Agricultural Central

Union (SRACU) «Konsums». Perhaps this happened at the suggestion of A. Brēmers, an activist of farmers' cooperation. At that time, «Konsums» specialized in setting up dairies, and P. Elksnītis was also involved. In the form of a document written in June 1913, the steam engine dairies installed by «Konsums» are listed: in 1910 – Džūkste-Pienava; in 1911 – Krimūna, Krimulda-Eikaži, Līgatne, Bramberga, Matīši; in 1912 – Ranka, Mežmuiža, Rundāle, Veseta, Kraukļi, Mētriena, Jaunpils (Vidzeme), Cesvaine, Lubāna, Meirāni, Jaunpils (Kurzeme), Lielsesava, Gulbene. It was later indicated that until 1915 the technician P. Elksnītis participated in the design and installation of 31 dairies with a steam engine [15]. The author has mainly gathered data about milk processing in the Madona area. Even before World War I, dairies were established in different ways – new buildings were built (Mētriena, Meirāni, Patkule), and existing buildings were used (previous pubs were rebuilt – Jokuma Pub in Kraukļi, Ošupes Pub in Lubāna; Cesvaine Dairy was established in the farmer's homestead «Āriņas»). In the spring of 1913, the Cesvaine Dairy Farmers' Society complained that after the assembly of the machines by the «Konsums» employees, the butter had a taste of varnish. The technician, P. Elksnītis, was sent there; he concluded that the connecting pipes of the equipment were not washed properly and that the steam boiler should also be cleaned. The citizens of Cesvaine, however, did not consider these recommendations to be sufficient for improving the taste of butter [16]. In addition to setting up dairies, P. Elksnītis also participated in the training of their employees and was a lecturer in courses. In October 1913, when the SRACU held a butter quality exhibition, 25 dairies participated in the event. Technician P. Elksnītis told the gathering about the production and use of heat in co-modernization facilities [17].



Figure 4. Pēteris Elksnītis (c. 1920).

During World War I, the technician went to Pskov as an employee of «Konsums» and was mobilized there; but instead of military service, he was enrolled in the hydro-amelioration and irrigation design establishment in Petrograd headed by Georgi Riesenkauff (1886–1943).

The Interwar Period

After returning to Vidzeme, P. Elksnītis worked at the Baltic Machine Testing Station in Priekule. In July 1919, he approached Prime Minister Kārlis Ulmanis (1877–1942), with whom he had previously participated in various courses, saying that he wished to work for the good of Latvia and asking if there would be any job for him [18]. From 9 August 1919, P. Elksnītis was employed by the Department of Agriculture of the Ministry of Agriculture headed by an agronomist and RPI graduate (1903) Viļums Skubiņš (1876–1951). At first, P. Elksnītis worked as a clerk on special assignments and later as a Senior Technician in the Department. At that time, his job was to identify and register various agricultural machines in the Latvian countryside, including sawmills and mills – their possibilities of use and the need for repairs. Some of this equipment was located in manors whose previous owners had left. The War of Independence continued in Latgale at that time. In September 1919, P. Elksnītis, as a representative of the Department, took part in the first tests of a tractor brought from Sweden to Sigulda; and a year and a half later, a presentation on it was given at the Latvian Farmers' Congress «Traktori, to darbība, darbības tehniskie rezultāti un nākotnes izredzes» (Tractors, Their Operation, Technical Results of Operation and Future Prospects) [19]. Practical advice was provided by articles on the repair of agricultural machinery and water supply to farmers [20]. In the spring of 1920, in addition to his other duties, he was assigned to supervise the mechanical workshops of the SRACU. In August 1920, P. Elksnītis was sent to Drīsa County, the territory that, according to the Latvian-Russian Peace Treaty, had to be left to the Latvian army. The task was to look for opportunities to buy agricultural machinery for Latvia from there. In November, he asked the Director of the Department to be released from the job starting at the end of the year because he had to work more than 10 hours a day, there were many business trips away from home, and the salary did not exceed the salary of a simple craftsman [21]. For the next two years, P. Elksnītis mostly lived and worked in «Lībieši» of Prāuliņa Parish, occasionally giving lectures at dairy farmers' courses.

In August 1921, the Latvian Dairy Central Union (LDCU) was founded, which united rural dairy farmers' societies. In the beginning, 13 out of the 18 dairy farming societies in the country at that time joined the Union. The goals of the Union were to promote the creation of new societies, the expansion of the network of dairies, the increase of the export of dairy products, and the promotion of the education of dairy farmers. The following year, the number of members of the Union increased to 36 societies. In order to provide assistance in setting up dairies, a Technical Department was established in the Union on 1 January 1923; its tasks were to develop projects and assembly plans for dairies and creameries, to prepare construction fee calculations, and to give advice to representatives of dairy farming societies on various technical issues [22]. P. Elksnītis was invited to be the Head of the LDCU Technical Department. In the questionnaire, in the space about education, he wrote at that time – «secondary, partly higher technical» [23]. In the beginning, LDCU was operating in Riga, 4a Baznīcas Street; the Technical Department was also located there; later, LDCU was located in Johana Krīgera House at 87/89 Dzirnāvu Street. The number of employees in the Technical Department varied: in 1923, it was 14, and in 1926 – 41. Lists of LDCU employees with salaries in 1931 have been preserved.



Figure 5. P. Elksnītis (1924) – Head of the LDCU Technical Department.

At that time, in the Technical Department, besides a manager, there were: a foreman Gustavs Puķīte (?-?); a civil engineer Jānis Mazpulis (1885–1938) – a graduate of the Moscow Higher Technical School who had studied at the New York Technical University [24]; a technician Frīcis Kukulis (?-?; LDCU Liepāja Branch); four draftsmen Arvīds Jansons (?-?), Jānis Līcis (?-?), Jānis Plāte (?-?), Arvīds Rubenis (?-?), ten fitters – Alberts Ahentāls (?-?), Eižens Andrupis (?-?), Jēkabs Bille (?-?), Teodors

Jansons (?-?), Vilhelms Johansons (?-?), Jēkabs Lazdiņš (?-?), Augusts Saltups (?-?), Alfreds Šame-Štāls (?-?), Gustavs Šēnhofs (?-?), Oto Ziņģis (?-?), and two caper smiths – Kārlis Krastiņš (?-?) and Jānis Lange (?-?) [25]. The two caper smiths and a couple of fitters were employed only in the first months of the year. The salary of the Head of the Department, P. Elksnītis, was 500 lats per month, of the construction engineer – about half of it, of the foreman and draftsmen a third, and of the fitters about a quarter. In the early years, fitters made up the majority of the department's employees. They mainly worked on the installation and adjustment of machinery and other equipment. About the draftsmen, more is known about Jānis Roberts Plāte (1898–1991). He studied at a railway technical school in Russia; before coming to Riga, he worked at the Ministry of Transport and surveyed railway lines in Vidzeme. He shared an apartment with P. Elksnītis for some time at 34–11 Blaumaņa Street. J. R. Plāte had also submitted his proposal for the competition for the design of the Freedom Monument in Riga.

In the first years, the employees of the Technical Department mostly prepared plans for the construction of new dairies or the reconstruction of buildings. The number of projects prepared by year was as follows: 1923 – 52; 1924 – 36; 1925 – 63. Most of them are stored in the Latvian National Archives of the Latvian State Historical Archive, Fund 6343 «Iekšlietu ministrijas Būvniecības pārvalde» (Construction Department of the Ministry of the Interior). The projects were signed by P. Elksnītis, the Head of the Department. In the biographical dictionary «Ēs viņu pazīstu» (I Know Him), published in 1939, it is stated that «Pēteris Elksnītis ... built and mechanized more than 200 steam dairies» [26]. Some of the dairies' documentation actually has a form of the LDCU Technical Department, in which P. Elksnītis states that he undertakes the management of construction works. The works were usually carried out by local craftsmen according to the prepared project; the Head of the Technical Department sometimes checked how things were going. LDCU recommended the so-called steam dairies, those in which steam engines were used to operate the equipment and locomobiles. Internal combustion engines were also used (mainly in creameries), but they used imported fuel, unlike locomobiles, which ran on wood or sometimes peat. Creameries rarely had hand-turned separators, or they were driven by a horse's capstan (a device for driving; a horse, walking in a circle, turns a large gear with the help of a shaft, by which the necessary machine is driven with the help of smaller gear transmissions). From 1923 to 1931, the Technical Department participated in setting up 155 steam and 216 internal combustion engine milk processing points [27].

The circumstances were different; in many places, in the course of the agrarian reform, some manor buildings were assigned to the newly

formed dairy farmers' societies; in other places, they were built outside the centres of the manors. It should also be mentioned that there were some other compilers of dairy projects, not only the LDCU Technical Department, which nevertheless performed the largest amount of work. For example, in 1925, in the part of the house of the lords of Sāviena Manor, the project of a dairy was developed by the Technical Department of LDCU Society «Konsums» [28], and it was realized. Two years earlier, the employees of «Konsums» prepared a project for setting up a dairy in the part of the Vestiena Manor House [29]; it was not implemented, and a two-year agricultural school was established in the Vestiena Manor. The projects developed by «Konsums» employees were usually more detailed; they also indicated the intended location of the milk processing machines, while the plans signed by P. Elksnītis only noted what would be done in the respective room. In the mid-1920s, the building of the former Cesvaine Manor cheese dairy was rebuilt into the dairy of a dairy farmer society according to a project developed by the trade and industrial joint-stock company «Pollock & Company» [30]. This company had already cooperated with the citizens of Cesvaine in the field of butter export; at that time, the company had not joined the LDCU yet. The next reconstruction of the Cesvaine dairy was already designed by LDCU in 1932, but the documents bear the signature of J. Mazpolis, Acting Head of the Technical Department.

In 1923, the Technical Department planned to rebuild the horse stable of the manor in the centre of Lubāna for the needs of the dairy [31]; in the Baloži Half-Manor of the same parish, according to the project of the LDCU Technical Department, the dairy was set up in the former threshing barn. Also, there were cases when dairies were set up in the buildings of the former pubs. For example, in March 1924, P. Elksnītis signed a project for the establishment of the Patkule Baltiņi Dairy in the former Kalna Pub [32]. In Stadula, it was envisaged to have room for a locomobile, a firewood shed with an ice cellar under it, and a butter warehouse separated by a cross wall; a room for receiving milk and dispensing skimmed milk was planned in the middle of the building and behind it – a place for a separator, and a separate room for a butter churn. An apartment was planned at the southern end of the building, as well as a room for the office and a laboratory. At that time, most dairies had similar rooms. However, the Kalsnava Parish Jaunais Pub on the Vietalva–Bērzaune road was a different case. First, in 1926, the LDCU Technical Department prepared a project for the conversion of the pub into a parish board house and a dairy [33]. However, the reconstruction was not carried out in this way. In 1929, P. Elksnītis reworked the project; at the left end of the Pub (viewed from the road), instead of the dairy, the building was rebuilt into a shop. There was another case when

P. Elksnītis designed a building unrelated to dairy farming using LDCU forms for documentation. In 1918, the stone building of the Orthodox Parish School in Lazdona burned down, where he was schooled when he was a boy. The building remained the property of the congregation; in the mid-1920s, it was decided to restore it and set up a vocational school there. In the spring of 1926, a project prepared by P. Elksnītis for the joint modernization of Cērpene was submitted to the Construction Department of the Ministry of the Interior; he also undertook the management of reconstruction works [34]. However, the renovation took a long time; and as a result, apartments were set up in the building.

The largest reconstruction works, according to the plans prepared by P. Elksnītis, were carried out in the former Russian-Baltic Wagon Factory in Riga, 2/4 Valmieras Street, where in 1925–1927, the Riga Milk Central Office was established.

Elsewhere, dairy societies built new buildings according to the designs of the Technical Department.



Figure 6.
Construction
workers of the
Vestiena Dairy
during their lunch
break (1923).

The project of Vestiena Dairy, «Jāņlejas», was developed in the summer of 1926 [35]. The construction manager, P. Elksnītis, also participated in the opening of the building on 8 March 1927 [36]. The construction of the new dairy was initiated by the local people who had expressed their wish to the employees of the Technical Department. There were cases when a plan for a larger building was initially conceived, but later it was concluded that smaller premises would suffice. Thus, in April 1925, a project was prepared for the dairy of the

Jumurda Dairy Farmers' Society – a large two-story building with an extension for a locomobile at one end and an ice cellar at the other end [37]. The project was not realized. A one-story building was built with a roof construction according to a revised project in 1927, and the creamery of the *Ērģļi* Dairy operated in it. The building is similar to a project proposal published in the publication «Piensaimnieku sabiedrības, 1909.–1929.» [38]. Also, in the summer of 1923, a large two-story building was designed for the Saikava Dairy Farmers' Society; in 1927, the project was considerably reduced and was similar to the one shown in the mentioned publication [39]. According to the project of P. Elksnītis and under his leadership, a dairy was also built in Viesiena.

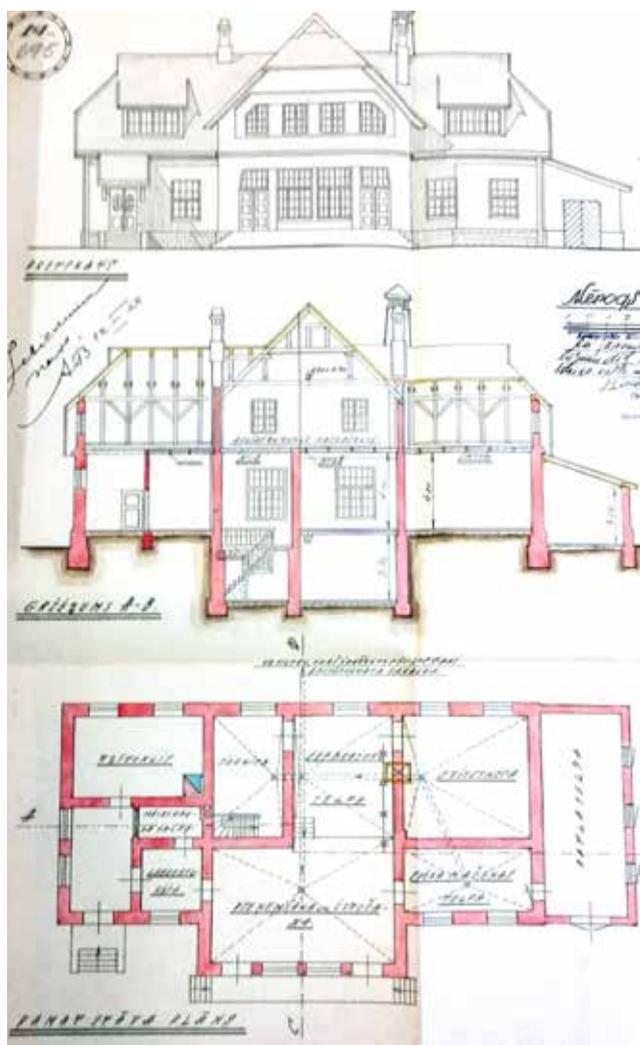


Figure 7. P. Elksnītis' project for the Viesiena Dairy (1928).



Figure 8. Opening of Viesiena Dairy (01.05.1928). Photo by Ā. Krūmiņš.

Milk processing buildings were built in various places, not only in parish centres but also next to former manors, where new farms were formed. The buildings designed by P. Elksnītis had certain features of the national romanticism architecture characteristic of Riga at the beginning of the century – window gaps with bevelled upper corners, small pane windows, and plaster used in various ways. Technician P. Elksnītis developed the projects of dairies and creameries and took care of their equipment. Imported equipment was also used in milk processing. However, the former blacksmith at the patent board in 1923–1924 also applied his inventions, such as the combined milk cooler and filter [40], milk heater–pasteurizer [41], and cream fermentation temperature apparatus [42]. There was no manufacturer of such equipment in Latvia, and on 27 March, the Danish company «Silkeborg» bought the patents back [43]. On 28 June 1924, P. Elksnītis and LDCU dairy farming instructor Fridrihs Ķerselis (1868–?) left for Denmark. Besides seeing dairy farms there, the technician was probably also interested in the use of his invention. In the summer of 1925, he submitted another technical proposal to the Patent Board – «Tvaika mašīna ar riņķojošu virzuli» (Steam Engine with a Rotating Piston) [44]. There, the usual crankshaft would no longer be used to obtain the rotary motion. There is no news about the implementation of the proposal.

In August 1931, the Cesvaine Dairy Farmers' Society decided to build a new dairy in Aizkuja. Previously, such a one with a manual separator had been operated in the former Krusta Pub; the obtained cream was then taken to Cesvaine. The amount of milk to be processed increased;

therefore, it was decided to use a steam engine – a locomobile. The premises to be rebuilt were planned in the new farm «Ceļmalas», in the former farm building of Aizkuja Manor; the reconstruction plan was prepared by P. Elksnītis [45]. He also undertook the supervision of construction works, during which he fell from a height of several meters at the construction site and injured his spine [46].

Certain time after the accident, he still held the position of Head of the Department; on 1 April 1932, he retired and returned to «Lībieši» in Prauliena Parish. His monthly pension was set at 200.10 lats [47]. On 16 November 1932, P. Elksnītis was awarded the Order of Three Stars, V participated in the design of the reconstruction of the Cesvaine Dairy.

Presumably, soon after Elksnītis retirement, the LDCU Technical Department ceased to exist because the construction of new dairies decreased. In the previous decade, it had played its role in the economic life of Latvia. The export of butter abroad from 1926 to 1930 gave a fifth of the country's total export revenue and from 1931 to 1934 – even a quarter, but thereafter, it decreased (the share of timber increased) [49].

The former blacksmith also thought about easing the work of farmers in their homesteads. In 1937, he submitted the invention «Tupeņu lasītājs» (Potatoes Gatherer) to the Patent Board [50]. It was intended to attach it to a horse-drawn potato digger, whose rotating paws threw the soil together with the potatoes from the plough onto an inclined elevator with a sieve floor (the elevator lifted the potatoes up, and they fall through the inclined sieve into the tank, while the soil gradually falls out through the sieve slots). On the other hand, in June 1940, the «Veļas mazgātājs» (Laundry Washer) was patented [51]. Placed in the water in the tub, the wooden furnace bars are supposed to be moved relative to each other with a lever, thus rubbing the laundry.

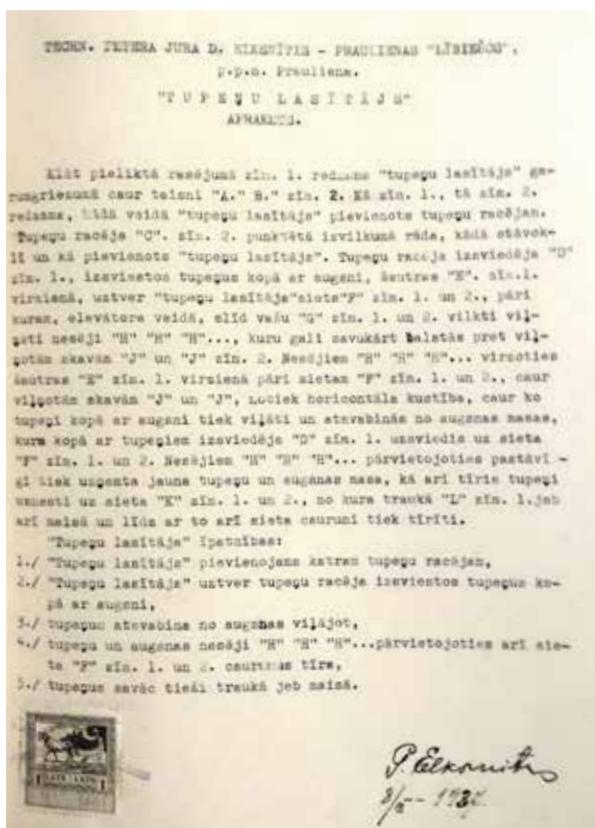


Figure 9. Description of the potato gatherer for patent application (1937).

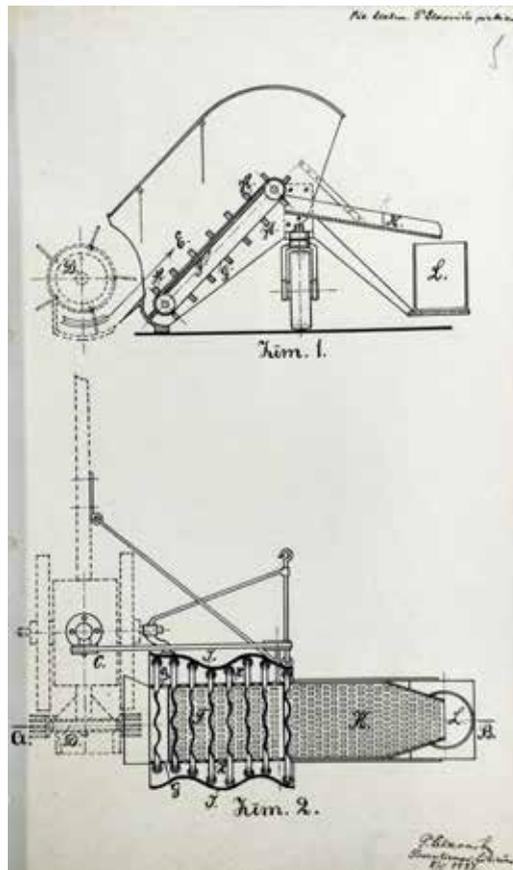


Figure 10. Drawing of the potato gatherer (1937).

Since the mid-1920s, a wind rotor with six blades with a diameter of 14 meters was installed at a height of 23 meters in «Lībieši» of Prauliena Parish. However, the technician admitted that its use is not particularly convenient due to the changing wind [52]. It does not work for powering the saw-mills – if the wind dies down, the log remains half-sawn. If one can cut firewood, one can certainly use the device for preparing fodder and pumping water. The technician does not mention electricity generation at that time.

From December 1946, for a short time in the Elksnīši family house «Lībieši» lived Alfrēds Plāte (1890–1954), born in the neighbouring parish of Prauliena in Meirāni, the brother of the former draftsman of the Technical Department, Jānis Roberts Plāte. In May 1951, he was arrested in Prauliena, accused of participating in the partisan movement against the Bolsheviks in 1919 in Meirāni, distribution of the illegal nationalistic publication «Latvju Raksti. Brīvā Latvija» during the German occupation, and anti-Soviet negotiations with citizens of

Prauliena after World War II. On 21 September 1951, P. Elksnītis was also interrogated as a witness in the case of A. Plāte in the 4th Department of the Ministry of State Security of the LPSR, where he said that he had known A. Plāte for a long time but knew nothing about his anti-Soviet activities [53].

Conclusions

In the 21st century, the buildings built according to P. Elksnītis' projects are rarely used for their originally intended function. Where they have survived, major reconstructions have been carried out as milk processing has changed over the course of 100 years. Once, they all served to their best, now some of them have been demolished or abandoned, and others have turned into residential buildings and guest houses or are used in other ways.



Figure 11. P. Elksnītis (c. 1960).

P. Elksnītis spent the last part of his life in Prauliena, in his house «Libieši». He died in 1963. His family was continued by his sons Ansis Elksnītis (1916–?) and Vilnis Elksnītis (1926–1998), born in a marriage concluded in 1911 with Anna, daughter of Jānis, Siliņa (1888–1963) from «Libieši» in Prauliena [54].

REFERENCES

- [1] **Dumpe, L.** Latviešu tradicionālā piensaimniecība: piena produkti un piena ēdieni. Rīga: Latvijas vēstures institūta apgāds, 1998, 22. lpp.
- [2] Pirkšanas-pārdošanas kontrakts par Lazdonas pagasta māju «Vēveri», 1870. g. Latvijas Nacionālā arhīva Latvijas Valsts vēstures arhīvs (turpmāk – LNA LVVA) 218. f., 2. apr., 5461. l., 3. lp.
- [3] Līgums par Lazdonas pagasta māju «Vēveri Nr. 54-2» pirkšanu, 1871. g. LNA LVVA 218. f., 2. apr., 5462. l., 3. lp.
- [4] Lazdonas luterāņu draudzē dzimušo reģistrs, 1879. gads. LNA LVVA 235. f., 15. apr., 573. l., 5. lp.
- [5] Zentas Gailītes un Viļņa Elksnīša pierakstītā P. Elksnīša biogrāfija apkopojumā par Praulienas pagasta revolucionārajiem notikumiem. Madonas Novadpētniecības un mākslas muzejs (turpmāk – MNM) 8845, 126. lpp.
- [6] Viļuma Melbārža pierakstu burtnīca. MNM 24984.
- [7] Cesvaines Zemkopības biedrības III lauksaimniecības izstāde. *Mājas Viesis*, 1902. gada 31. jūlijs, Nr. 31, 4. lpp.
- [8] Pirmā Gulbenes lauksaimniecības izstāde 16. un 17. jūnijā 1907. g. *Zemkopis*, 1907. gada 4. jūlijs, Nr. 27, 426. lpp.
- [9] **Baltiņš, M.** Contribution of Latvian Technical Intelligentsia to Development of Terminology until the Establishment of the Republic of Latvia. *History of Engineering Sciences and Institutions of Higher Education*, 2023/7, p. 12.
- [10] Rīgas Latviešu biedrības Rūpniecības nodaļai. *Zemkopis*, 1901. gada 31. oktobris, Nr. 44, 585. lpp.
- [11] Grāmatu galds. Mācības vēstules pašstudijai. *Balss*, 1901. gada 21. februāris, Nr. 8, 3. lpp.
- [12] **Urtāns, V.** Svārpstu sila kauja. *Muzeji un kultūras pieminekļi*. Rīga: Zvaigzne, 1977, 5.–6. lpp.
- [13] Ārsta zīmes noraksts, MNM 13310.
- [14] Pagasta valdes apliecības noraksts, MNM Plg 957.
- [15] **Barlotti, V.** Klusa darba jubileja. *Latvijas Lopkopis un Piensaimnieks*, 1931. gada 21. augusts, Nr. 33, 497. lpp.
- [16] Cesvaines piensaimnieku sabiedrības valdes sēdes protokols, 1913. gada 4. jūnijs. LNA LVVA 5112. f., 3. apr., 93. l., 20. lp.
- [17] Sviesta izstāde Rīgā. *Dzimtenes Vēstnesis*, 1913. gada 4. novembris, Nr. 254, 2. lpp.
- [18] LNA LVVA 1677. f., 17. apr., 464. l., 1. lp.
- [19] Biedribu dzīve. *Latvijas Lauksaimnieks*, 1921. gada 15. janvāris, Nr. 1, 20. lpp.
- [20] **Elksnītis, P.** Ūdens piegādāšana lauksaimniecībā. *Latvijas Lauksaimnieks*, 1919. gada 15. oktobris, Nr. 5, 69.–72. lpp.
- [21] P. Elksnīša iesniegums Zemkopības ministrijas Lauksaimniecības departamenta direktoram ar lūgumu atbrīvot no darba, 1920. g. LNA LVVA 1677. f., 17. apr., 464. l., 47. lp.

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- [22] Latvijas Piensaimniecības centrālās savienības piecu gadu darbība (1921–1926). Rīga, 1926, 55. lpp.
- [23] Latvijas piensaimnieku centrālās savienības darbinieka P. Elksniša anketa. LNA LVVA 3001. f., 1. apr., 134. l., 1. lp.
- [24] Latvijas ārlietu dienesta darbinieki 1918–1991. Biogrāfiskā vārdnīca. Rīga: Zinātne, 2003, 204. lpp.
- [25] Latvijas Piensaimnieku centrālās savienības algu grāmata, 1931. g. LNA LVVA 3001. f., 1. apr., 944. l., 131.–159. lp.
- [26] Es viņu pazīstu: latviešu biogrāfiskā vārdnīca. Rīga: Biogrāfiskā arhīva apgāds, 1939, 1556. lpp.
- [27] Latvijas piensaimniecības centrālās savienības desmit gadi (1921–1931). Rīga, 1931, 60.lpp.
- [28] Pienotavas Sāvienas muižā projekts, 1925. g. LNA LVVA 6343. f., 10. apr., 166. l., 1. lp.
- [29] Pienotavas Vestienas muižas kungu mājas daļā projekts, 1927.g. LNA LVVA 6343. f., 8. apr., 46. l., 2.–5. lp.
- [30] Tirdzniecības – rūpniecības akciju sabiedrības «*Pollock & Company*» sarakste par Cesvaines pienotavas pārbūvi, 1923.–1924. g. LNA LVVA 6343. f., 8. apr., 167. l., 4.–8. lp.
- [31] Lubānas centra kopmoderniecības ēkas izbūves plāns, 1923. g. LNA LVVA 6343. f., 8. apr., 280. l., 1.–4. lp.
- [32] Patkules-Baltiņu pienotavas projekts, 1924. g. LNA LVVA 6343. f., 9. apr., 271. l., 4. lp.
- [33] Dokumenti un sarakste par Kalsnavas pagasta Jaunā kroga pārbūvi, 1926.–1929. g. LNA LVVA 6343. f., 11. apr., 249. l., 5.–41. lp.
- [34] Sarakste ar Iekšlietu ministrijas Būvvaldi par Cērpenes kopmoderniecības jaunbūvi, 1926.–1931. g. LNA LVVA 6343. f., 11. apr., 97. l., 1.–8. lp.
- [35] Vestienas pienotavas «Jāņlejas» plāns, 1926. g. LNA LVVA 6343. f., 8. apr., 160. l., 3. lp.
- [36] Vestienas pienotavas atklāšana. *Latvis*, 1924. gada 27. marts, Nr. 757, 3. lpp.
- [37] Jumurdas piensaimnieku sabiedrības pienotavas projekts, 1925. g. LNA LVVA 6343. f., 10. apr., 51. l., 3. lp.
- [38] Piensaimnieku sabiedrības, 1909.–1929. *Société laitières de 1909 à 1929*. Rīga: Valsts Statistiskā pārvalde, 1930, 205. lpp.
- [39] Saikavas kopmoderniecības projekts, 1927. g. LNA LVVA 6343. f., 8. apr., 179. l., 14. lp.
- [40] P. Elksniša pieteikums patentam par izgudrojumu «Kombinētais piena dzesētājs-filtrs», 1923. g. LNA LVVA 4893. f., 1. apr., 1972. l., 1.–3. lp.
- [41] P. Elksniša pieteikums patentam par izgudrojumu «Piena uzsildītājs – pasterizators», 1923. g. LNA LVVA 4893. f., 1. apr., 1974. l., 1.–3. lp.
- [42] P. Elksniša pieteikums patentam par izgudrojumu «Krējuma raudzējamās temperatūras aparāts», 1923. g. LNA LVVA 4893. f., 1.apr., 1973. l., 1.–4. lp.

- [43] Nevēlama parādība mūsu rūpniecībā. *Latvis*, 1924. gada 6. maijs, Nr. 786, 4. lpp.
- [44] P. Elksnīša pieteikums patentam par izgudrojumu «Tvaika mašīna ar riņķojošu virzuli», 1925. g. LNA LVVA 4893. f., 1. apr., 285. l., 1.–5. lp.
- [45] Aizkujas krejošanas punkta projekts, 1931. g. LNA LVVA 3001. f., 2. apr., 21. l., 8. lp.
- [46] Zentas Gailītes un Viļņa Elksnīša pierakstītā P. Elksnīša biogrāfija apkopojumā par Praulienas pagasta revolucionārajiem notikumiem, MNM 8845., 126. lpp.
- [47] Darbinieku pensionēšana. *Latvijas Lopkopis un Piensaimnieks*, 1933. gada 15. jūnijs, Nr. 24.–25, 404. lpp.
- [48] Ar Triju zvaigžņu ordeni apbalvoto 13. saraksts. *Valdības Vēstnesis*, 1932. gada 17. novembris, Nr. 261, 4. lpp.
- [49] **Skujenieks, M.** Latvijas statistikas atlass XX. Valsts statistiskā pārvalde, Rīga, 1938, 49. lpp.
- [50] Patentu valdē iesniegtais izgudrojums «Tupeņu lasītājs» 1937. g., LNA LVVA 4893. f., 1. apr., 1756. l., 1.–7. lp.
- [51] Patentu valdē iesniegtais izgudrojums «Veļas mazgātājs» 1939. g. LNA LVVA 4893. f., 1. apr., 1393. l., 1.–6. lp.
- [52] **Elksnītis, P.** Mani atzinumi par vēja motoru. *Latvijas Lauksaimnieks*, 1939. gada 1. decembris, Nr. 23, 776. lpp.
- [53] A. Plātes pratināšanas lieta. Latvijas Nacionālā arhīva Latvijas Valsts arhīvs, 1986. f., 1. apr., 4973. l., 183.–185. lp.
- [54] Praulienas draudzes laulību reģistrs. LNA LVVA 235. f., 15. apr., 846. l., 16. lp.

SOURCES OF ILLUSTRATIONS

Figure 1. Madonas Novadpētniecības un mākslas muzejs (turpmāk – MNM) MNM 32443.

Figure 2. MNM 24984.

Figure 3. MNM 13310.

Figure 4. MNM 8845.

Figure 5. *Latvijas Lopkopis un Piensaimnieks*, 1924. gada 15. oktobris, Nr. 20, 18. lpp.

Figure 6. MNM 22597.

Figure 7. LNA LVVA 6343. f., 10. apr., 113. l., 16. lp.

Figure 8. MNM 32773.

Figure 9. LNA LVVA 4893. f., apr. 1. apr., 1756. l., 3. lp.

Figure 10. LNA LVVA 4893. f., apr. 1. apr., 1756. l., 5. lp.

Figure 11. P. Elksnītis (c. 1960). MNM 25484.



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Indulis Zvirgzdiņš

Pēteris Elksnītis (1879–1963) – viens no piensaimniecības izveidotājiem Latvijā

Starpkaru periodā svarīga tautsaimniecības nozare Latvijā bija piensaimniecība, kurā strādāja gan augstskolu absolventi – inženieri, gan cilvēki bez augstākās izglītības. Viens no viņiem – Pēteris Elksnītis (1879–1963), kurš jaunībā izmācījās kalēja amatu, pašmācībā apguva tehniķa amatu (1910) un strādāja Rīgas Lauksaimniecības centrālbiedrības sabiedrībā «Konsums», piedalījās pienotavu ierīkošanā, strādāja Latvijas Republikas Zemkopības ministrijas Lauksaimniecības departamentā, atbildot par lauksaimniecības tehniku, Latvijas Piensaimnieku centrālās savienības Tehniskajā nodaļā par vadītāju, piedaloties pienotavu būvē un mehanizācijā, piena pārstrādes punktu iekārtošanā. P. Elksnītis starpkaru periodā ne tikai izstrādāja pienotavu un krejotavu projektus un rūpējās arī par to aprīkojumu, bet ieguva arī vairākus patentus par saviem izgudrojumiem piena pārstrādes teknikai, kartupeļu novākšanai, veļas mazgāšanai. Dažus ar piensaimniecību saistītus patentus nopirka un realizēja uzņēmēji Dānijā. Pēc nelaimes gadījuma (1932) P. Elksnītis no algota darba atvaļinājās un atgriezās savās mājās Praulienā. 1932. gadā P. Elksnītis apbalvots ar Latvijas valsts augstāko apbalvojumu – Triju zvaigžņu ordeni.

Atslēgvārdi: piensaimniecība, Pēteris Elksnītis, Madonas apriņķis (novads), Latvija.