

FATHER AND SON KÜHNERT IN THE DEVELOPMENT OF FORESTRY AND HORTICULTURE IN ESTONIA¹

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Presented by J. Martin

Received May 11, 1994; accepted June 1, 1994

Abstract. The article aims to give a survey of the life and work of Wilhelm Kühnert (1819—1891) and Heinrich Kühnert (1848—1904), forestry and horticultural specialists in Estonia in the second half of the 19th century.

W. Kühnert was born on December 19, 1819, in Gunsleben (Germany) but he moved to work at the Paasvere Estate in Estonia in 1844. Later, while working at the Angerja Estate, his responsibilities included the management of many estate forests. W. Kühnert was also successful as the first Head Forester of the city of Tallinn (1864—1883), leading the management of urban forests effectively. On his initiative, wide-range forest amelioration and afforesting of sands was carried out. W. Kühnert was also well-known for his scientific activities and horticultural interests.

W. Kühnert's son Heinrich Kühnert was born on December 10, 1848, at Paasvere and he dedicated his life to the development of Estonian forestry like his father, directing the management of many estate forests.

Key words: Wilhelm and Heinrich Kühnert, Paasvere, Tallinn, forests of Estonia.

INTRODUCTION

The last third of the 18th century was a period in the Baltic provinces (guberniyas) when forests and everything connected with them began to develop into an independent branch of economy. It manifested itself in the advancement of elementary forest management and, as a result of this, in the organization of a more regular and purposeful forestry. The circle of persons participating in the birth of forestry was rather wide. It included important state officials, landowners, men of letters, land surveyors, and so on and so forth. Many of them had been educated at German universities where, within the frames of cameralistic sciences, they also learned the rudiments of forestry. Due to the development of real forestry, the need for qualified forest officers came up. Such new forest officers (*Förster*) appeared in the Livonian Guberniya in the 1770s, yet in private estates of the Estonian Guberniya they could be met only at the beginning of the 19th century. The men in question were quite often students of German forestry schools or sons of forest officers who were more or less acquainted with the elementary principles of forestry (Meikar, 1991a).

¹ The present study was completed with the help of the grant of Open Estonia Foundation.

At the beginning of the 19th century, the first forestry institutions of higher education were founded in Germany and Russia, or respective departments were set up at the universities or agricultural academies. It signified a new era in the training of forest officers, and it is remarkable that some of the first graduates of such new educational institutions proceeded to the Baltic guberniyas, too. We can come across these specialists both in governmental forest service and at private estates. This second wave of forest officers, proceeding mainly from Germany, also included Wilhelm Kühnert. Considering the fact that up-to-date forestry was organized on private estates of the Estonian Guberniya somewhat later than in Livonia, W. Kühnert can be regarded as one of the pioneers in his field.

The highly educated German forest officers who proceeded to the Baltic guberniyas to work there, had, apart from a very good professional education, often wide interests in natural sciences. Vegetable gardening and ornamental gardening had both become one of the favourite occupations of these forest officers. As cultivating exotic species had aroused great interest in Germany at the first half of the 19th century, W. Kühnert also became enthusiastic about growing exotic woody plants.

There were many social organizations uniting forest officers at that time in Germany, and amateur sciences related to forestry were cultivated there at a relatively high level. Bringing along from his homeland the experience of social life coupled with deep interest in the matters dealing with forestry and gardening, W. Kühnert joined the surrounding cultural life and had his share in evoking and fostering the forestry and horticultural activities of the society. At the same time, his publications helped to solve theoretical and practical problems that had arisen in the forestry and horticulture of that time.

Since W. Kühnert, and later on his son H. Kühnert, became outstanding figures in the development of Estonian forestry, the aim of the present paper is to sum up — for the first time — their lifework, covering mainly the second half of the 19th century.

WILHELM KÜHNERT

Biographical facts. Christoph Wilhelm Günther Kühnert was born on December 19, 1819 (all the data are from the Gregorian or the New Style calendar), in Gunsleben (Thüringen), Germany.

W. Kühnert's ancestors had been head foresters (*Forstmeister*) in Germany for many generations. It is known that W. Kühnert's grandfather, Johann Christoph Kühnert (1741—1833) worked as Head Forester in Schwarzburg. W. Kühnert's father, Günther Kühnert, was also Head Forester. The profession of grandfather and father was carried on by brothers Johan (he worked as Head Forester in Leipzig in 1857) and Wilhelm Kühnert (EAA, f. 3154, n. 1, s. 2; n. 2, s. 11; Kühnert, 1953).

W. Kühnert studied forestry at the Institute of Forestry that had been founded in 1838 at the Braunschweig Polytechnic School (*Collegium Carolinum*), continuing his studies at the University of Jena, after which he worked in practical forestry for several years. The University of Jena was one of the top universities of Germany at that time and it was popular among the newcomers from the Baltic guberniyas. Thus, there were several students from the Estonian Guberniya among W. Kühnert's university friends who told him about the beautiful broad primeval forests of their homeland, also about vast hunting grounds and patriarchal way of life

there (Kühnert, 1953). So, personal connections played a decisive role when he made up his mind to change his abode. It is quite likely that he also got acquainted with Otto Friedrich Georg von Maydell (1825—1862), the son of the landowner of the Paasvere Estate, who was studying at the Tharandt Forest Academy (Maydell, 1868) and who could have made a concrete proposal to Kühnert to move to his father's estate.

On the arrival at Paasvere in 1844, W. Kühnert was fully aware of his final objective in Estonia when he spent his first working years at the estates owned by the Maydell family (EAA, f. 3154, n. 1, s. 2; n. 2, s. 11).

Otto Ernst von Maydell (1790—1862), the landlord of Paasvere at that time, had come into possession of that estate in 1834. Since the new owner was a learned man (he had been educated at the Moscow University in 1808—1809, having later studied law at Heidelberg and agriculture at Tartu University), the change of hands gave a new turn to the estate's economic life and also to the forestry. Just a few years after coming into possession of the estate, O. E. von Maydell asked Friedrich Wilhelm Geissler, one of the most distinguished forest managers and head foresters in the middle of the 19th century Estonia but at that time only starting on his career, to carry out an up-to-date forestry management which would lay the foundation to organizing real forestry at Paasvere (EAA, f. 1319, n. 1, s. 10—12; Maydell, 1868).

In 1847, W. Kühnert married Adelheid Emilie Müller (1827—1888) from Paide (EAA, f. 3154, n. 1, s. 2; n. 2, s. 11).

After giving up his job at O. E. von Maydell's at the end of the 1840s, W. Kühnert temporarily moved to the Järvakandi Estate. It is possible that his departure was connected with the arrival of forester O. F. G. von Maydell from Germany and his coming into possession of the Paasvere Estate in 1848 (Maydell, 1868).

W. Kühnert's next job (apparently in 1850) was at the Angerja Estate which was owned by Otto von Lilienfeld (Wistinghausen, 1975) and was situated near Tallinn in the parish of Hageri (EAA, f. 3154, n. 1, s. 2; n. 2, s. 11).

At the end of the 1850s (probably in 1859), W. Kühnert and his family took up a permanent residence in Tallinn. On October 9, 1862, he bought from Friede E. W. Gengelbach for 5000 roubles a large plot of land and a house at the then Väike-Roosikrantsi Street (Revaler Hypotekenbuch). And in 1864, W. Kühnert became the first Head Forester of Tallinn (TLA, f. 1338, n. 1, s. 8; Pärn, 1990).

In 1883, W. Kühnert retired from that post; he died on May 11, 1891, and was buried at the cemetery of Kopli (Bericht ..., 1884; Beilage ..., 1891; Kühnert, 1953; Sander, Meikar, 1991).

Forestry activities. W. Kühnert's principal and from the standpoint of our forestry history the most important work was carried out after his arrival at Paasvere in 1844, when he started to organize up-to-date forestry at the estates of the Estonian Guberniya. He relied on the then popular surface periodic forest management method adopted by German forester H. Cotta, improving it in the course of time in accordance with the progress of forest management conception. At Paasvere he could already depend on the economic plan of F. W. Geissler, who also used the above-mentioned method. W. Kühnert took his work very seriously, and when in 1845 A. F. Hueck published a comprehensive research about the progress and the state of agriculture in the Baltic guberniyas, he also mentioned Paasvere and its competent head forester among a few other estates of the Estonian Guberniya that were noted for their forestry (Hueck, 1845).

Still, Paasvere was only one of the many working places of W. Kühnert. His forest management in Estonia started already in 1846, at the Sooniste Estate in Läänemaa. Later on W. Kühnert's work embraced the whole guberniya and he managed the forests of tens of estates. In most cases it also became Kühnert's task to direct and check up on the realization of economic plans and, if needed, see to it directly that concrete forestry works were carried out. W. Kühnert was engaged as Inspecting Head Forester till the end of his life, although as time went on his work centred more and more around Harjumaa and to a lesser degree around Järva-maa.

While speaking about W. Kühnert's views on forestry, it should be pointed out that he preferred natural forest improvement and was in favour of seeding fellings. Although he suggested that cultivated forests should be set up only in case of emergency, he himself became widely known for the afforestation of deserted farmlands and burnt woodlands. Especially the latter had proved to be a great problem since many estates had vast areas of forests incapable of reproducing themselves any more. One of the favourite occupations of W. Kühnert's was to afforest such heavily sodded and sandy areas which in places were more than 20 years old. The results of his experiments began to be employed in other places as well.

We should also mention W. Kühnert's work in the field of selective intermediate cuttings, which in his opinion was one of the most important measures of improving the growth of timber, considering the state of forests in the guberniya. If it was necessary and acceptable to the owner of the forest, he propagated soil amelioration of the forest, himself making the layout plan and carrying it out personally as well. The primal aim of his forest management was to achieve in forests wasted by selection felling a more normal age proportion of the stand. However, he could employ his views fully only later, when he worked as Head Forester of Tallinn, as in private forests he inevitably had to pay more attention to increasing timber production.

W. Kühnert's work and achievements soon attracted wider attention. For example, at first the annual surveys of the Estonian Agricultural Society regarded the state of forestry in the guberniya very pessimistically, but in the 1850s a turn for the better had started, and it was largely associated with the name of W. Kühnert.

It is also worth mentioning that W. Kühnert worked for a short time as Head Forester of the Küti Estate where, from 1847 till 1851, a school of forest and meadow technicians, founded by the Society of Estonian Model Economy, operated. Apart from professional assignments it was also W. Kühnert's duty to teach the fundamentals of practical forestry to peasant students (Meikar, 1988).

Another wide sphere of W. Kühnert's activities was connected with the forests of the town of Tallinn where he was Head Forester in the years 1864—1883. During these two decades he succeeded in organizing an up-to-date forestry there. Still, considering how recklessly the forests had been cut down, forest utilization was confined primarily to the products of sanitation felling. He started forest management in 1864 at the Koitjärve Estate that was owned by the town, and in 1866/67 at suburban Kloostrimetsa (Hurt, 1938; TLA, f. 1338, n. 1, s. 19). The former was noticeable for its extensive forest drainage. In addition to draining forests which were suffering from excessive humidity, W. Kühnert planned to ditch swamps and use part of their land (approximately 200 hectares) for growing timber. On his initiative the town agreed to allocate some money, the rent of the peasants of the estate, for the draining, which would have enabled to drain about 740 m a year. The draining began

in 1867, and by 1881 more than 10 km of drains, including large arterial canals, had been dug at Koitjärve. At the end of the 1870s, regular repairs of the drainage system began. In 1877 W. Kühnert drew up a drainage project for Kloostrimetsa by which 135 hectares had to be drained. The work was commenced at the beginning of the 1880s (TLA, f. 195, n. 1, s. 359; f. 1338, n. 1, s. 10).

In spite of the fact W. Kühnert had a wary attitude towards cultivated forests, it was still an essential sphere of the town's Head Forester's work. It was even more important because there were plenty of deserted farmlands in the vicinity of Tallinn and plenty of burnt woodlands and stands of the 1880s, afforestation began also at Kopli. Here we should recall that 117 hectares of land needed afforestation at Kloostrimetsa and at Koitjärve, including 74 hectares of the burnt woodland of Koitjärve, while the rest were mainly the sands of Kloostrimetsa. The work was started in 1875 with plot-sowing, but later on a gradual transition to tree planting took place due to the fact that that year the first permanent nursery had been founded at Kloostrimetsa (TLA, f. 1338, n. 1, s. 10). At the beginning of the 1880s, afforestation began also at Kopli. Here we should recall that the beginning of the afforestation of the sandy region of Lake Ülemiste is also associated with W. Kühnert's name.

Since afforestation had never been done on such a scale before, experimental cultures began to be planted in 1879 in order to find out the most suitable species of trees and ways of their cultivation. Positive results of the experiments inspired W. Kühnert to make more extensive plans, and in 1880 he drew up a concrete project according to which nearly 440 hectares of sandy regions needed to be afforested there during the following 20 years (Kühnert, 1881; TLA, f. 195, n. 1, s. 292). The actual execution of the work, however, was left to the next head forester.

W. Kühnert was first and foremost a good practician and an efficient organizer who, in order to solve arising problems, could not avoid experiments and had to be familiar with the newest literature in forestry. His experimental and scientific work was presented in the Estonian Forest Society (1878—1890), where W. Kühnert was one of the founders and vice presidents (*Bildung ...*, 1877). He read papers of some length at almost every meeting of the Society, and took an active part in the discussions, introducing his experience and observations on the achievements of forestry. W. Kühnert's scientific heritage includes some ten articles and published papers on the afforestation of deserted farmlands and burnt woodlands, forest drainage and the fight against toothed bark borers, as well as the problems in forest management and the organization of forestry in general.

Horticultural activities. In 1862, W. Kühnert bought a large plot of land with a dwelling-house (it was pulled down in 1971) in suburban Tallinn, on the one side of the then Väike-Roosikrantsi Street (later Väike-Pärnu Road 19 and Pärnu Road 29) (*Atlas ...*, 1865; *Taxation ...*, 1865; TLPATA, 430; TLA, f. R-1, nim. 6-1, n. 2763; Sander, Meikar, 1991). Having settled down, he started to lay out his own garden.

At the time W. Kühnert moved to Tallinn, horticulture had already reached its peak. There were many private gardens, well-known for their rare woody plants, in Tallinn at that time, such as the garden of Brandt (it was situated near W. Kühnert's place on the opposite side of Tatari Street), the gardens of Dietrich, Steffens, Treufurt, and others. Besides, the idea to found botanical gardens was propagated in Tallinn, and the Estonian Horticultural Society (*Ehstländischer Gartenbauverein zu Reval*) started horticultural experiments on the former Ingrian and Swedish bastions and at the moat in front of the latter. At the same time, the

fortification zone that encircled the old town and had come into the hands of the town, began to be turned into a greenery (Ackermann et al., 1863; Dietrich, 1865a; Viirok 1932; Kühnert, 1953; Kenkmaa, Vilbaste, 1965; Annuka, 1991).

W. Kühnert's deep professional interests and the favourable horticultural peak period apparently assisted in turning W. Kühnert's garden into one of the most notable gardens in Tallinn (Dietrich, 1865c; Sander et al., 1990).

The whole territory of W. Kühnert's site was carefully laid out. In addition to an economic yard and a kitchen garden there was also a pleasure garden. The pleasure garden was laid out in consideration of the geographical principle representing different regions of the earth with original and exotic plants (Kühnert, 1953). The garden also had its own nursery and greenhouses.

The kitchen garden reflected W. Kühnert's experiments in the sphere of vegetable and fruit growing. More is known about the former.

In 1864, the Estonian Horticultural Society had ordered from Germany, from the Animal and Plant Acclimatization Society, 70 varieties of potato that were planted in the prepared field of the Kukruse Estate which belonged to the vice president of the Society, Mrs. R. v. Tolli. These varieties were tested there for two years, during 1865 and 1866, and after that the best varieties were presented to the members of the Society for further testing. W. Kühnert took 10 varieties of potato tubers and raised them in his garden for three years (1867—1869). In 1869, he discoursed upon the results of his experiment at a meeting of the Society. It turned out that during the years that had not been the most favourable to potatoes (the summer of 1867 was rainy, the summer of 1868 droughty, and the summer of 1869 wet and cool) the best growers had been the varieties 'Everlasting' and 'Preussische Blaue' (Mitteilungen . . . , 1870).

W. Kühnert was also very successful in raising ornamental trees. It is known that in probably 1890 W. Kühnert's garden was visited by Aleksei Gustav von Knorring (1848—1922), Head of the Imperial Gardens of St. Petersburg (*Chaeß der Garteninspektoren der Kaiserlichen Hofverwaltung in St. Petersburg*), who later on became Honorary Member of the Estonian Horticultural Society (in 1898) and its president (beginning from March 9, 1909) and who had a house and a garden in Tallinn in the Kadriorg district (Mitteilungen . . . , 1898; Kühnert, 1953). While strolling with W. Kühnert in his garden (gardener Sipelgas helped to keep the garden in order at that time), A. G. Knorring noticed several interesting and rare woody plants there (Kühnert, 1953). The most outstanding of them was a ginkgo (*Ginkgo biloba*) which was growing as a young tree in the garden. Later on when conversing with A. G. Knorring in the house, W. Kühnert cited a famous poem by J. W. Goethe about a ginkgo and showed a herborized leaf of a ginkgo that had been taken on June 5, 1837, from a tree growing near summer house in Weimar; it was evident that W. Kühnert was greatly interested in the history of that tree.

Even today there are several notable trees growing on the territory of the former garden of W. Kühnert's (Elliku, et al., 1985; Elliku, Tarand, 1986; Sander, Meikar, 1991). In 1992, 35 taxa of woody plants were counted in that area, including such remarkable trees as: white willow (*Salix alba*), two trees 23.5 m and 16 m in height and 457 and 281 cm in breast-height girth, common oak (*Quercus robur*), three trees 27, 27 and 23 m in height and 296, 239 and 190 cm in girth; Berlin poplar (*Populus × berolinensis*), three trees 38, 37 and 28 m in height and 330, 346, 287 cm in girth (the first two trees are the highest in Tallinn); and the biggest sycamore maple of Estonia (*Acer pseudoplatanus*),

23.5 m in height and 250 cm in girth. But the most notable tree is the biggest and oldest ginkgo of Estonia (*Ginkgo biloba*) (Viirik, 1932; Masing, 1986; Sander, 1993a).

Considering the fact that in 1928 the height of the ginkgo — in our conditions an extremely slowly growing tree — was 6 m and the breast-height diameter was 10 cm (Viirik, 1932), we may presume that it is the same ginkgo that was growing in the garden of W. Kühnert in 1890 when A. G. Knorring visited the garden (Kühnert, 1953). But according to the information obtained by E. G. Kühnert (1930), the tree had been brought from Germany and planted here by his father Heinrich Kühnert at about the turn of the century. In 1913, when the then Ahju Street was being extended (Отчет ..., 1914), the ginkgo stood in the way of road construction and E. G. Kühnert transplanted the tree to its present location, near the wall of his dwelling-house (Viirik, 1932). This tree is believed to have been planted in 1898 (Sander, 1993a). At present, the height of the tree is 11.4 m and the breast-height perimeter is 159 cm (5. 04. 1994); it has been under conservation since 1966 (Sander, 1993b).

Due to his horticultural interests, W. Kühnert took part in the initiation and further work of the Estonian Horticultural Society (founded in 1862). We can find his name among the founders of the Society (Dietrich, 1865b) and, since 1869, he belonged to the Board of the Society (Mitteilungen ..., 1870).

HEINRICH KÜHNERT

Biographical facts. Constantin Hermann Heinrich Kühnert was born on December 10, 1848, at Paasvere (EAA, f. 3154, n. 1, s. 2; n. 2, s. 11).

From 1860 till 1864 he studied at the Tallinn Guberniya Gymnasium (the present Gustav Adolf Gymnasium), and in 1867 and 1868 underwent a practical training as a student of forestry at Weimsdorf near Leipzig in Germany. Since 1870, he studied at the famous Tharandt Forest Academy near Dresden, and in 1870—71 he took part in the German-French war (Haller, 1893; Hradetzky, 1931).

Upon his arrival in Estonia, he started to work in practical forestry as a manager of private forests in 1872.

In 1881 he married Antonie Ernestine Normann (1851—1912), daughter of Gustav Normann (1821—1893), the most famous organ builder in Estonia at that time (Kühnert, 1953; Eesti muusika ..., 1990). Having worked all his life as head forester and forest manager, H. Kühnert died on February 1, 1904, in Tallinn (Sander, Meikar, 1991) and was buried at the cemetery of Kopli (Wilhelm-Heinrich Kühnert, 1992 — personal information).

Forestry activities. After graduating from the Tharandt Forest Academy in 1872, Heinrich Kühnert returned to Tallinn and followed his father's steps, starting to work as a forest manager and an inspecting head forester. At that time there were already some ten head foresters with higher education working in the Estonian Guberniya but in spite of that the forests of about 30 estates (approximately 5% of the forest—growing stock of the Estonian Guberniya) and a few others in the Livonian Guberniya were still under H. Kühnert's supervision at the beginning of the 1890s. On several occasions H. Kühnert continued the work that had been started by his father (EAA, f. 5089, n. 1, s. 63a).

At the beginning of this century H. Kühnert worked mainly in Harjuma (Juuru, Rapla and other places) where he supervised the private

forests of several parishes. It was also characteristic of H. Kühnert to attach great importance to the improvement of felling and to insist on natural forest regeneration. So, in his case forest amelioration remained in the background, moreover it was already the concern of other specialists.

The active social and scientific work of H. Kühnert fell to the period of the Estonian Forest Society. He was one of the organizers of the Society and its regular Honorary Secretary. In practice it meant that he had to deal with managing and organizing the business affairs of the Society, he had to do paper-work and arrange the correspondence, and to publish bulky minutes in the weekly *Baltische Wochenschrift*. Thanks to H. Kühnert's neat management of the affairs of the Society, the archives of the Estonian Forest Society have been preserved up to the present day (EAA, f. 4898).

Alongside with the extensive social work, H. Kühnert managed to publish five research papers of considerable length dealing first and foremost with the organization of forestry and the management of forests but also with matters pertaining to forest improvement. When in 1882 the nursery of the Society started to work in Tallinn, by the Kaarli Church, H. Kühnert had also a share in directing its work. Here, H. Kühnert reveals his researcher's nature and interest in dendrology, since it was on his initiative that introduction experiments with species of exotic trees were started in the nursery. Annual reports of the nursery can also be regarded as proper research papers (Meikar, 1991b).

H. Kühnert and his forestry studies attracted attention outside Estonia as well. Thus, he participated in the Fourth Baltic Agriculture and Forestry Convention in Riga (June 14—19, 1880), delivering a speech on the expediency of forestry estimate basis of that time — it was on the 17th of June in the Section of Forestry (IV Versammlung . . ., 1880).

Horticultural activities. H. Kühnert's deep preoccupation with his basic work did not let him devote himself more thoroughly to his garden. In E. G. Kühnert's recollection his father was frequently away from home because of his work and when at home he mostly stayed in his study till late at night, drawing up forest plans.

However, taking great interest in Nature, H. Kühnert tried to spare time for his other spheres of interest — gardening and ornithology.

It is known that H. Kühnert followed up his father's work by growing fruit trees in his garden, also ornamental trees and bushes. His main interest belonged to apple-trees and conifers. His participation in a horticultural show held on September 5—8, 1897, in Tallinn, was extensive. At that show he exhibited big and beautiful specimens of 10 conifer species of (*Abies alba*, *A. balsamea*, *A. sibirica*, *Larix sibirica*, *Picea abies*, *P. engelmanni*, *P. glauca*, *Pinus cembra*, *P. mugo* and *P. strobus*) and a wide selection of apple-trees. Appearing at the show, he assumed responsibility for trying to find opportunities for protecting town birds. He suggested that nest boxes, food cabins, drinking cups and washing vessels should be made for birds, and traps for raptorial birds. Two big silver medals were awarded to him at the show for his articles on nursery and for fruit-tree breeding. He was also given a bronze medal and a small silver medal (Mitteilungen . . ., 1898).

H. Kühnert was a member of the Estonian Horticultural Society (Mitteilungen . . ., 1898) and took part in its work when it dealt with the growing of fruit trees, also ornamental trees, and when it was concerned with protecting birds.

CONCLUSIONS

Wilhelm Kühnert, who had moved from Germany to Estonia and settled down here, and his son Heinrich Kühnert, who was born in Estonia, had an important part to play in the development of Estonian forestry and horticulture. It can be summed up in the following way:

1. The activities of father and son Kühnert embrace the management and mapping out of the forests of several estates and the organization and supervision of practical forestry.

2. The work of W. Kühnert as the first Head Forester of Tallinn attracted attention in the sphere of forest management, forest drainage and afforestation of sandy regions.

3. The Kühnert's contribution to raising, discussing and solving several theoretical problems of the Estonian forestry was remarkable.

4. The Kühnerts were the founders of the Estonian Forest Society and directed a considerable part of its work. They were also among the most active members of the Estonian Horticultural Society.

5. The Kühnerts' contribution to the advancement of horticultural conceptions and the raising of ornamental trees in Estonia was profound, indeed.

It could be added that H. Kühnert's son Ernst-Gustav Kühnert (1885—1961) became an outstanding architect. E. G. Kühnert should also get credit for studying the architecture of Tallinn. Being a connoisseur of old Tallinn, he obtained good results in reconstructing historical buildings (Wulffius, 1982; Hallas, 1991).

In 1939, before the Soviet occupation, H. Kühnert's son E. G. Kühnert and his family left Tallinn and thereby a nearly 100-year-old period in the history of the Kühnert family during which the Kühnerts had been connected with Estonia, came to an end.

ACKNOWLEDGEMENTS

The authors thank Wilhelm Kühnert (Germany) and Heino Ross (Estonia) for the possibility to use the materials on Kühnert's family.

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ISA JA POEG KÜHNERTI OSA EESTI METSANDUSE NING AIANDUSE ARENGUS

Heldur SANDER, Toivo MEIKAR

On käsitletud Wilhelm Kühnerti (1819—1891) ja tema poja Heinrich Kühnerti (1848—1904) elu ning tegevust Eestis.

Sündinud 19. detsembril 1819 Gunslebenis Saksamaal, asus W. Kühnert 1844. aastal Eestisse tööle metsaülemana. Tal on silmapaistvaid teeneid Eesti mõisametsade korraldamisel, kuivendamisel ja jäätmaade taastamistamisel. Ka tema töö linnametsade majandamisel ning liivikute metsastamise algatamisel (aastatel 1864—1883) Tallinna metsaülemana oli tulemusrikas. Ostnud 1862. aastal krundi Tallinna praeguse Süda tänava piirkonda, tegeles ta oma aias ilu- ja viljapuude kasvatamisega.

W. Kühnerti poeg H. Kühnert, kes oli metsaülem paljudes mõisates, viis edasi isa poolt alustatud tööd Eesti mõisametsade majandamisel. Ta jätkas ka oma isa rajatud aia hooldamist.

ВКЛАД ОТЦА И СЫНА КЮНЕРТОВ В РАЗВИТИЕ ЛЕСОВОДСТВА И САДОВОДСТВА В ЭСТОНИИ

Хельдур САНДЕР, Тойво МЕЙКАР

Статья посвящена жизни и деятельности Вильгельма Кюнерта (1819—1891) и его сына Хенриха Кюнерта (1848—1904) в Эстонии.

В. Кюнерт родился 19 декабря 1819 г. в Гунслебене (Германия). К работе лесничим в Эстонии он приступил в 1844 г. и многое сделал для разведения, осушения и воссоздания лесов на залежных землях. Свои планы по насаждению городских лесов и облесению песчаных территорий он успешно реализовал, будучи лесничим в Таллинне (1864—1883). В 1862 г. В. Кюнерт купил себе в Таллинне дом и большой земельный участок, где заложил сад и занимался выращиванием декоративных и плодовых деревьев.

Сын В. Кюнерта Х. Кюнерт, который работал лесничим во многих поместьях Эстонии, претворил в жизнь и развил многие идеи отца, а также продолжил начатые им работы по уходу за садом.