

Zdeněk Klan – the first foreign holder of Ebert Prize.

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Since 1873, American Pharmaceutical Association has awarded Ebert Prize those who significantly contributed to pharmacy. In 1923, Doc. PhDr. PhMr. Zdeněk Klan (Fig. 1), a Czechoslovak pharmacist, became its first foreign holder. In this article I would like to take a look at the life of this remarkable man. A man, whose life was negatively influenced by the political course of Czechoslovakia after WWII.

Zdeněk Klan was born on 25th May 1894 at Dolní Kralovice in Bohemia, where his father Antonín (*7. 11. 1864 - † 11. 1. 1913) had a pharmacy “U Anděla strážce“ (Guardian Angel). The family later moved to Prague, where Zdeněk finished his secondary education. He took the compulsory two-year practice in the pharmacy of his older brother Jaromír, who had inherited it after their father’s death in 1913. He began to study pharmacy at Philosophical Faculty of Czech Karl-Ferdinand’s University in the year 1915/16 and graduated with the Master of Pharmacy Diploma in 1917. ¹⁾ (Fig. 2)

After graduation he studied for another two years. As soon as he did his doctor’s degree in 1920, he started working as an assistant at Institute of Pharmacology and Pharmacognosy which was a part of Medical Faculty, Charles University in Prague. Right in September the Ministry of Health and Physical Education sent him to the United States of America on a research fellowship supported by Rockefeller Foundation. For the first three months he studied analytical methods at Johns Hopkins University in Baltimore (Fig. 3). Then he moved to The United State Food and Drug Administration in Chicago, where he stayed for 9 months. At the same time, he attended a local university where he dealt with microchemistry of alkaloids. Soon after he had finished studying in Chicago, he worked for the world-known medicaments producer Parke, Davis and Company in Detroit (Fig. 4). Afterwards he continued with a three-month fellowship at the central laboratories by the Customs Department in New York City, where he finished his stay and studies in the United States. Rockefeller Foundation also made it possible for him to stay in London for two



months to take part in work at scientific laboratories of that time's largest medicaments producer, Burroughs, Wellcome and Company, into which he was introduced by a former scientific director of the company and famous scholar B. Power. Finally, he finished the research fellowship with a two-month stay at *École supérieure de Pharmacie* in Paris.

Immediately after his arrival from the USA in 1923 (Fig. 5) he started working for the State Institute for Drug Control and, at about the same time, he began to spend his time working in his chemical laboratory, which he had opened in his brother's pharmacy "U bílého lva" (White Lion) in Prague. Despite his work at the pharmacy he did not neglect his scientific activities. He got engaged in the research of variations of alkaloidal contents in *Hyoscyamus niger* L. In 1926 he published a book called "Medicinal Plants in Culture" („Léčivé rostliny v kultuře“). Z. Klan founded a large collection of drugs and his library contained approximately 1000, mostly foreign, volumes. He could well use his knowledge of English and French, especially in the time when the Institute of Botany began to establish the "Museum of Drugs". It was necessary to address about 108 different institutes and people from 76 countries in order to get drug samples. Flowingly, Z. Klan asked for habilitation at the Faculty of Natural Science of Charles University in Prague (the field of study - general pharmacognosy), but unsuccessfully. Nevertheless, this failure was in 1932 followed by satisfaction. He was awarded Ebert Prize (Fig. 6) at the congress of American Pharmaceutical Association (Fig. 7). He obtained the prize for his work "Influence of the Period of Vegetation and Development of Plant on the Alkaloidal Contents of *Hyoscyamus niger* L.". He was also involved in the international scene as a corresponding member of the British Pharmaceutical Conference in London.

In 1934 he was appointed lecturer of pharmacoergasy at the Faculty of Natural Science of Charles University. Finally, Z. Klan managed to gain *venium doctenti* at the same faculty in 1946, when its professors accepted his work "Modern Drugs" („Novodobé drogy“). In 1947 he started lecturing on pharmacoergasy (in the field of pharmacy) at the Faculty of Natural Science of Charles University and in 1948 he published "The List of Drugs in All Pharmacopoeias" („Drogy všech lékopisů v přehledu“) (Fig. 8). The book had already been submitted in 1938, however, wartime situation thwarted its publishing. Z. Klan published other works, which are also worth mentioning: *Of the Culture of Giant Blueberries* (O kultuře obrovitých borůvek, 1931), *Of Ginseng and Its Practical Use* (O Ginsengu a jeho praktickém

významu, 1931), Of the market and manufacture of drugs (Z trhu a produkce drog, 1931) and *Fragmenta Pharmacoemporica* (1948).

In January 1932 he obtained a license to run a public pharmacy in Prague (Fig. 9). His beginnings in the chemical laboratory and getting of the license led him into running his own “Pharmaceutical-chemical Factory of Dr. Z. Klan’s” („Farmaceuticko-chemické továrny Dra. Z. Klana“), which produced 126 humane and 19 veterinary products (Fig. 10). Z. Klan concentrated his efforts on building up his factory also in war years ²⁾. The war influenced him badly for he had been imprisoned by Gestapo (German secret police) for 10 days. After Gestapo released him, they paid regular visits to his pharmacy and factory.

The end of the war brought new hopes. In 1945 Zdeněk Klan started looking for new premises for enlarging his factory as early as in May, nevertheless, troubles caused by “Košice program“ („Košický program“), accepted in April 1945 ³⁾ occurred again.

In October 1945, twenty-nine owners of pharmaceutical companies sent a memorandum to Minister of Industry Bohumil Laušman, in which they suggest reconsideration of further nationalization of pharmaceutical industry. Among other arguments, these appeared:

- “pharmaceutical industry is not a key industry; it is relatively young because its foundations were laid in the first years of the birth of the Czechoslovak state, which made the state and patients independent on import of medicaments from abroad“ ⁴⁾
- “pharmaceutical industry is tightly bound with the personal initiative of the owner“

Dr. Klan’s factory successfully survived the first wave of nationalization, but they could not avoid the second wave. By 31st December 1947 the company employed as many as 105 people. The nationalized company was put under administration of the United Pharmaceutical Plants (Spojené farmaceutické závody – SPOFA), which administered also other pharmaceutical companies.

In July 1948 the social-political section of SPOFA’s management decided that the company was not interested in employing Dr. Klan in SPOFA (Fig. 11). It is senseless to emphasize how hard it must have been for a man, who was trying to get a job in a company he had established and managed. To make the situation more ironic, the reply of the SPOFA management was written on letter paper with Dr. Klan’s company heading.

In November 1948, Z. Klan was accused of an alleged commitment of a misdemeanor and as a result of this supposition he was consequently arrested. He was supposed to have

committed it when preparing an injection solution, after application of which an eight-days-old infant died. Apart from him, other four employees of the factory were taken to the court. In 1949, the owner was sentenced to 2 ½ years' imprisonment. The actual process had typical features of trumped-up and politicized trials, during which former business proprietors, shopkeepers, farmers etc. were presented as criminals. This belief was confirmed by, among others, Dr. Klan's former employees and students.

All these circumstances resulted in Zdeněk Klan's death, which found him on 14th May 1951, shortly after his release from prison. He was nearly 57 years old.

¹⁾ In 1917 the system of pharmaceutical education was as follows: after graduation from the grammar school there was a 3-year compulsory practice. After finishing the practice a novice studied for 2 years at the Philosophical Faculty or, since 1920, at the Faculty of Natural Science of Charles University. This system then changed in 1939, when all universities were closed shortly after German occupation. In 1948 a four-year course was introduced. Next significant changes to the system of pharmaceutical education were made in 1952, when independent faculties in Brno and Bratislava were established, and the studying course was prolonged to 5 years, which has lasted until present.

²⁾ In September 1939 the World War II began when Germany attacked Poland. In the following two years Germany under Hitler's leadership occupied whole Europe except for Sweden and Switzerland. On 7th December the war became a global conflict – the Japanese assaulted the American base Pearl Harbor and the United States were forced to take part in the war.

Since January 1945 the last fights of the WWII are taking place; the act of Germany's capitulation is signed on 8th May and the WWII in Europe ends. Czechoslovakia and Europe are liberated.

³⁾ The optimism of the post-war years was gradually and inconspicuously replaced with a different danger: the communists and their Communist Party of Czechoslovakia (KSČ). The first parliament elections took place on 26th May 1946 and were uncompromisingly won by the communists.

2nd July the Czechoslovak president E. Beneš appointed a new government led by K. Gottwald. Nationalization of the private enterprise was a priority of the first post-war



government. The nationalization was executed on the grounds of the “Košice Government Program” (Košického vládního programu) accepted in April 1945.

In the first stage, the nationalization concerned key industries, businesses over 500 employees and businesses important for the state having more than 150 employees. On the grounds of this decree 2 867 industrial companies employing 61 % of workforce were nationalized until 1st December 1946. Small and middle companies, civil engineering and wholesale remained in private hands.

The second stage commenced in February 1948 – restrictions were put onto keeping land over 50 hectares, companies with more than 50 employees, complete wholesale and foreign trade (95 % of industry). Before the end of 1948 the private sector was totally eliminated. The nationalization concerned also pharmacies. All pharmacies in Czechoslovakia one by one went under administration of the state-run company Medica. In that time the communists already held all power in Czechoslovakia. This “dark period” lasted in Czechoslovakia until November 1989, when the Velvet Revolution broke out.

⁴⁾ Czechoslovakia was founded in 1918, when it split off from the Austro-Hungarian Empire. Prior to the establishment of an independent republic and shortly after it the pharmaceutical industry depended on costly import of medicaments and medicinal preparation from abroad. The independence on foreign (mainly German) industry was reached no sooner than in 1930s.

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The article was compiled using the archive sources of Czech Pharmaceutical Museum.

Picture annex:



Fig.1 – portrait of Z. Klan

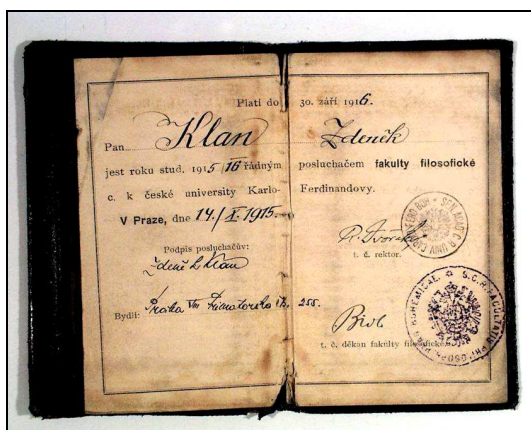


Fig. 2 “Student’s document“ of the pharmacy student Zdeněk Klan



Fig. 3 – a relic of the studies in Baltimore left in Doc. Klan’s inheritance

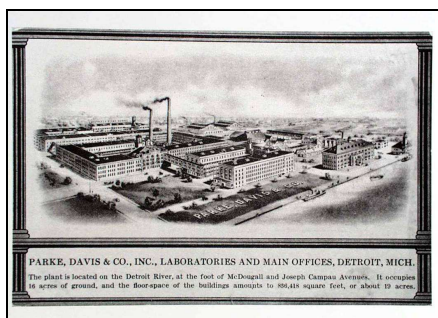


Fig. 4 – the world-known medicaments factory Parke, Davis & Co. in Detroit



Fig. 5 – the passage from the USA at the end of August 1922 (Z. Klan the second one from the right)



Fig. 6 – Ebert Prize for Z. Klan



Fig. 7 – Z. Klan at the congress of the American Pharmaceutical Association in Toronto, 17th August 1922

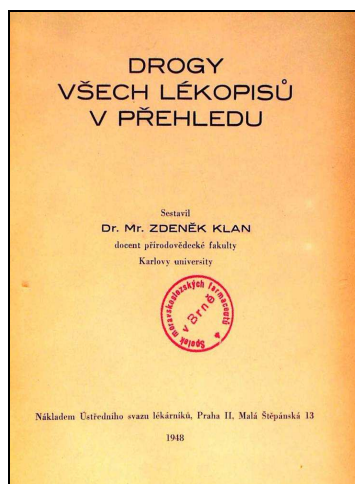


Fig. 8 – Dr. Klan’s work „Drogy všech lékopisů v přehledu“ (“The List of Drugs in All Pharmacopoeias”). Published by Central Association of Pharmacists (Ústřední svaz lékárníků) in Prague in 1948.





Fig. 9 – Z. Klan’s pharmacy in Prague XIII - Strašnice, Na Klínku 449, opened in 1932. The photo is made from a slide showed in the cinema.



Fig. 10 – a sample of the preparation “Magma Milk” (antacid) manufactured in Dr. Klan’s plant from 1936

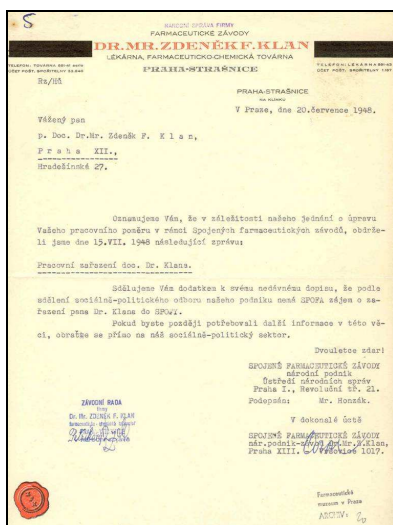


Fig.10a – The letter from “SPOFA” management from 20th July 1948 telling Doc. Klan that the company is not interested in hiring him.