



Kašpar Sternberg (1761-1838) is considered as one of the founders of scientific palaeobotany. His seminal work, "Versuch einer geognostisch-botanischen Darstellung der Flora der Vorwelt" (abbreviated usually as *Flora der Vorwelt*), is well-known through the palaeobotanical community as the starting point of the palaeobotanical nomenclature. In the year 2020 we celebrated 200 years of scientific palaeobotany, 200 years since the issue of the first part of the Sternberg *Flora der Vorwelt*. The unfortunate situation with the world pandemic prevented us from celebrating this jubilee in person during the IOP conference planned to take place in September 2020 in Prague. This text cannot replace the planned celebration but provides at least a symbolic salutation.

Being equipped with a botanical background, Sternberg took a significantly different approach to fossil plants than his contemporaries. He used for the first time in palaeobotany the Linnean system of taxa ordered in natural hierarchies. Each taxon below genus was designated with a distinct Latin diagnosis and an illustration or reference to a earlier published fossil plant. In that way each taxon was associated with its type. In his approach he did not consider fossils as "Petrefacta" but as real fossil plants, that lived once in nature.

In the Czech Republic we celebrate Kašpar M. Sternberg also as a founder or (cofounder) of the National Museum (established in 1818), as an organizer of various industrial activities, enthusiastic supporter of national enlightenment, and generous donor of the Czech science and culture. Kašpar Maria Count Sternberg was born on 6th of January 1761 in Prague as a member of the old Czech nobility. He was the third child of Jan Nepomuk Count Sternberg and Anna Countess Kolowrat Krakovská. His childhood was spent in a family court Radnice near Pilsen. Later he studied in Rome and prepared himself for church carrier. In 1785 he became a canon in Regensburg where he also began to be interested in botany. He is listed as a member of the Botanical Society in Regensburg in 1795. Later he was even involved in politics being a high positioned person of the Perpetual Diet of Regensburg as a part of the Holy Roman Empire.

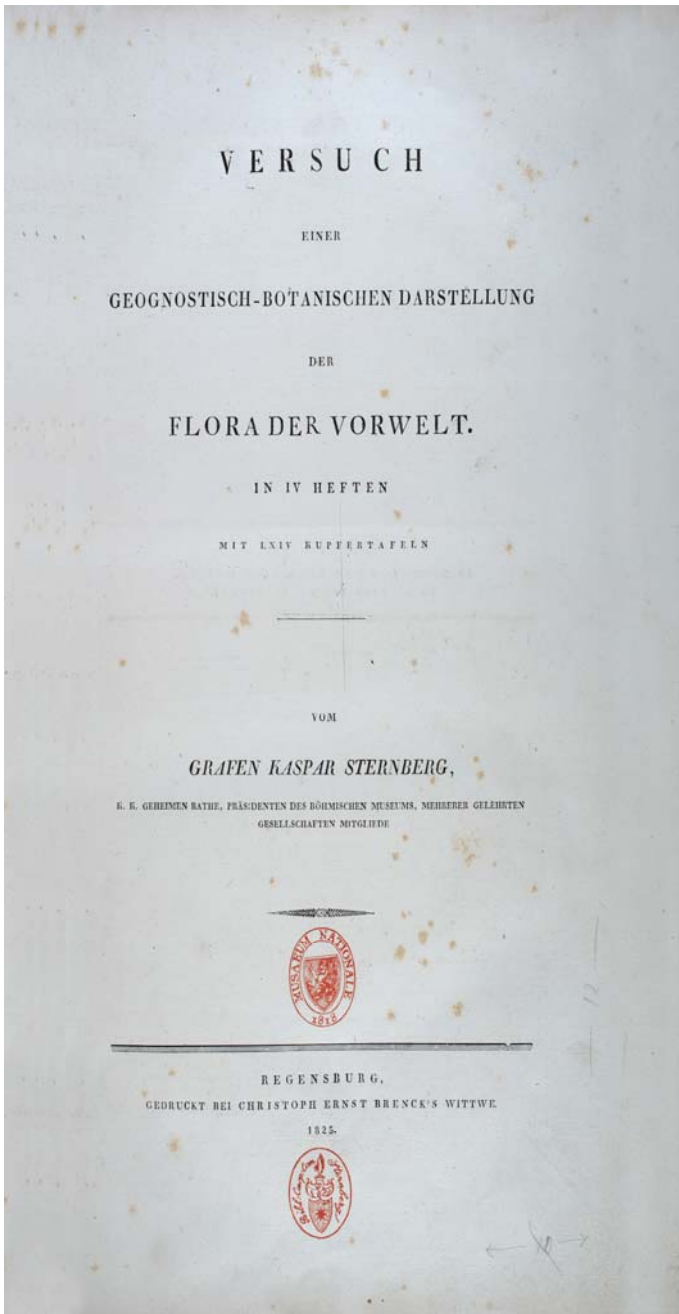
After disappointment with politics, he decided to focus more to natural science, particularly botany. He published a monograph *Revisio saxifragarum* (Sternberg 1810, with two later supplements Sternberg 1821, 1831). After the death of his brother Jáchym (1808) and Napoleons invasion to Regensburg (1809) Kašpar Sternberg

decided in 1810 to return to Bohemia. He moved to Březina near to Radnice, where he finished a simple court and designed a botanical garden. He took over management of the family property, continued his brothers effort in coal mining and industrialisation of the inherited land. As a byproduct of mining he and his collectors found

numerous fossil plants. They were topic of his interest and source of his pioneering studies in palaeobotany. Since 1820 K. Sternberg begun to publish successive parts of his *Flora der Vorwelt* that finally in 1838 reached 8 parts in two volumes (Sternberg 1820-1825, 1837-1838). In his *Flora der Vorelt*, Sternberg decided to provide illustrations of representative examples of the fossil plant taxa which he described. For this purpose, he financed expensive illustrations done by renowned painters and engraved by top class engravers (Cleal et al. 2004). Therefore each hand painted copper engraved plate of his *Flora der Vorwelt* is a master piece on its own.

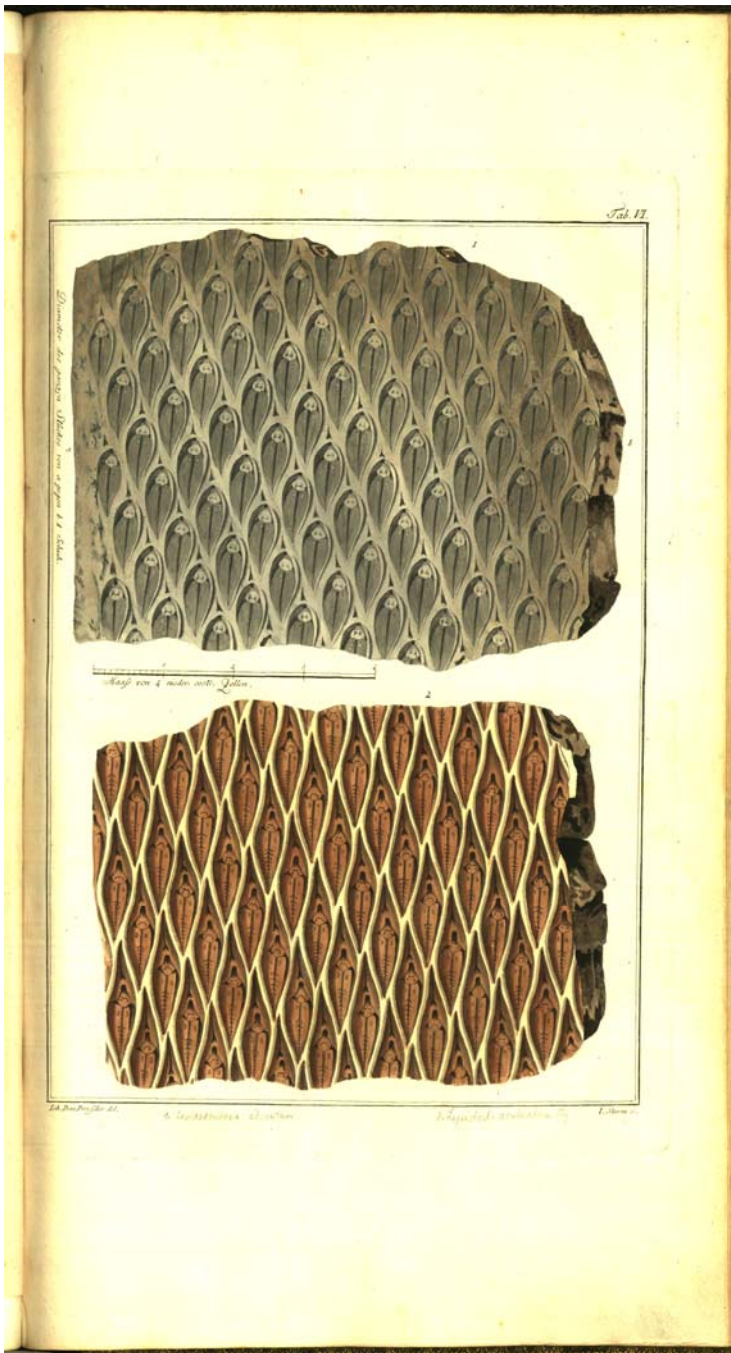
Kašpar Sternberg and his collaborators (Karel Bořivoj Presl and August Karl. J. Corda) described in their works more than 600 taxa of 82 genera, and more than 500 species. The exact numbers of taxa is a topic of separate publication--the second edition of the Sternberg catalogue (Kvaček and Straková 1997- Kvaček et al. 2021). Sternberg's collection of fossil plants, which was mentioned by Humboldt, who saw it personally, was among the largest in the world in that time, and is still one of the most valuable parts of the National Museum's holdings. The majority of the type material of *Flora der Vorwelt* is housed in the National Museum Prague. Type material of 80 additional species has been located in more than 10 other European museums. However, some of the type specimens are still missing and a number of them are probably lost.

In 1814 Sternberg visited Graz to inspect the newly established Museum Joanneum. It was perhaps there that the idea of a Czech national museum occurred to him. It took him and his allies from Czech aristocratic community, some time, but finally they succeeded. The foundation later titled



Front page of the first volume (issues 1-4) of *Flora der Vorwelt* (published 1820-1825)

"To patriotic friends of science" was published on April 15, 1818, where it was emphasized the



Flora der Vorwelt, pl. 6

necessity of founding the Patriotic Museum of Bohemia. The Society of the Patriotic Museum of Bohemia was founded in response to this appeal, and it began its active existence on December 23, 1822. Count Sternberg was elected as a president

of this society during the first meeting. As the most prominent scientific personality of the museum, and as a representative of the Czech aristocracy, he guaranteed its social prestige. At the Society's opening meeting he announced that he would donate his entire natural history collection and science library to the museum. By that time, Sternberg had 9000 species of plants in his herbarium and a library of more than 4000 volumes, while the geological collection that he gathered consisted of about 5000 mineral specimens and 1400 fossils.

Kašpar Sternberg was tireless organiser of various industrial initiatives e.g. as a construction of a horse railway. In 1837 Kašpar Sternberg fulfilled his other plan to organise in Prague an international scientific congress. In co-operation with German scientists, particularly with Lorenz Oken, he succeeded to organise the Fifteenth Congress of German Medical Doctors and Naturalists in Prague.

His contacts with German poet and naturalist Johan W. Goethe is another aspect of his multidisciplinary interests. There is a story in the Sternberg family that was told me by a doyen of the family Zdenko Sternberg who got back the castle Český Sternberg in restitution after 1989. In 1827 Goethe donated his new book "Ueber Kunst und Alterthum" to Sternberg with a hand written poem. Near the end of the end of the Second World War Březina court was used for accommodation of American troops. Probably some educated US soldier found the Goethe's book in the Sternberg's library and cut of the signature of the famous poet from the book; the poem itself fortunately was left preserved.



Holotype of *Lepidodendron aculeatum* Sternb. 1820, Radnice, CZ, Carboniferous, collection National Museum Prague), published in issue 1 of *Flora der Vorwelt*, pl. 6, fig. 2.

Kašpar Sternberg was active till the end of his life; in 1838 he chaired for the last time the Museum Society. In December of the same year following a hunt that he organised, he suffered with heart attack that gave him only three days of life. He died on December 20, 1838 at the age of 76.

Jiří Kvaček, *Prague*

References

- Cleal, C.J., Lazarus, M., Townsend, A. 2005. Illustrations and illustrators during the 'Golden Age' of palaeobotany: 1800-1840. In: Bowden, A. J., Burek, C. V., Wilding, R. (eds.), *History of palaeobotany: selected essays*. Geological Society London Special Publications 241(1):41-61.
- Kvaček, J., Straková, M. 1997. Catalogue of fossil plants described in works of Kaspar M. Sternberg. National Museum, Prague, 201 pp.
- Kvaček, J., Dašková, M., Libertín, M. 2021. Catalogue of plant fossils described in works by Kaspar M. Sternberg. Second revised edition. *Sternbergiana*, 1: 1–309.
- Sternberg K.M., 1810. *Revisio Saxifragarum Iconibus Illustrata*. H.F.A. Augustin, Regensburg.
- Sternberg, K.M., 1822. *Revisio Saxifragarum Iconibus Illustrata. Supplementarum*. C. E. Brencks Witwe, Regensburg.
- Sternberg, K.M., 1831. *Revisio Saxifragarum Iconibus Illustrata. Supplementum secundum*. J.G. Calve, Prague.
- Sternberg, K.M. 1820-1838. *Versuch einer geognostischbotanischen Darstellung der Flora der Vorwelt*. Vol. I, 1 (1820), 24 pp., pls. 1-13, F. Fleischer, Leipzig; vol. 1,2 (1821), 33 pp., pls. 14-26, F. Fleischer, Leipzig; vol. I, 3 (1823), 39 pp., pls. 27-39, Ernst Brenck's Wittwe, Regensburg; vol. 1,4 (1825), 48 pp. tento I-XLII, pls. 4059, Ernst Brenck's Wittwe, Regensburg; vol. 1,5/6, (1833), 80 pp., pls. 1-26, Johann Spurny, Prague; vol. II, 7/8: 81-220, pls. 27-68 A, B, Gotlieb Haase Sbhne, Prague.