

## THE BOTANICAL CABINET

RUDOLF JENNY

Moosweg 9, 3112 Allmendingen, B Bern, Switzerland

RJOrchid@gmx.ch

There are a few famous examples of seldom seen botanical periodicals. The orchid plates published in journals like Curtis's Botanical Magazine and Edwards's Botanical Register have been reprinted, but many others are known only from the originals locked away in libraries. A good example is Loddiges' Botanical Cabinet, published in 20 volumes with 2000 plates between 1817 and 1833. The history of this journal and its content must be seen in relation to the Loddiges & Sons Nursery, in Hackney.

At the beginning of the 19th century, tropical orchids were almost unknown in Europe, though some illustrations and descriptions were known from expeditions in tropical countries, along with herbarium material collected on such expeditions. Nobody had a clear idea of the richness of forms and species in this family, and tropical orchids were treated more or less as mere curiosities of the plant kingdom. This situation would change dramatically about 1840, when the orchid fever in England started to spread, first through the island and then also - beginning in Belgium - through continental Europe. It was a part of the life-style of rich people to build up an orchid collection, and the names of nurseries like Sander, Linden, Low and Veitch, all trying to satisfy the growing market for plants from tropical countries, became famous.

Right at the beginning of this development, we find the name of Joachim Conrad Loddiges (fig. 1) and his establishment in Hackney, London. Joachim Conrad Loddiges was born in 1738, the son of a gardener working for a nobleman in Vristbergholzen near Hannover in Germany. He was trained as a gardener between 1758 and 1761 with Joseph Conrad Wefers in Velzen, near Haarlem in the Netherlands. After finishing his education he went to England to start in the best tradition of his family as gardener with J. B. Sylvester in Hackney, London. In 1771 Conrad

took over a small import-nursery from John Busch, with its stock of customers and suppliers. Conrad was a very keen and intelligent businessman, but his starting capital was so low that that he couldn't pay Busch for the nursery at one time, but by 1777 he had paid everything and owned a small but flourishing and profitable nursery with a small shop for seeds. In the same year Loddiges published the first edition of a whole series of catalogues as "A catalogue of plants and seeds which are sold by Conrad Loddiges, nursery and seedsman, at Hackney, near London." We have a handwritten copy by Conrad Loddiges (member of the fifth generation, great-great-grandson of Joachim Conrad Loddiges, or great-grandson of George Loddiges) of this first catalogue published in the year 1814, copied from the original of Sir Joseph Banks (which is now kept in the British Museum). The editions 2 to 8 are very seldom seen, we know only handwritten copies of those catalogues from the Lindley library. In 1804 there were already 9 orchids mentioned, all of them as *Epidendrum*, in 1807 there were still 6 *Epidendrum* listed and in 1811 13 (some of them now known as *Cymbidium* or *Oncidium* species). The orchid catalogues of 1839, 1841 and 1844 list a tremendous number of species, in *Stanhopea* alone, Loddiges offered in 1839 23 species (some unnamed), in 1841 53 species, and in 1844 65 species. Obviously Loddiges was both fascinated by *Stanhopea* and able to cultivate them rather well. Interestingly enough, some colored illustrations of different *Stanhopea* species are known that were not published in the Botanical Cabinet; one of them is *Stanhopea insignis* var. *major* (Fig. 2). The drawing has a label dated 4 October 1844, and the handwritten remark: "drawn in Loddiges' garden." It is quite unclear where these drawings are. Xerox copies showed up in the collection of Herman Sweet, but we have been unable to locate the originals.



FIGURE 1. Joachim Conrad Loddiges, portrait by John Renton, son of the headgardener at Loddiges' nursery.

About the year 1790 Loddiges started to import living plants from other continents, especially from the United States of America. In 1776 his first son William was born, and in 1786 his second son George (Fig. 3): both later joined the company. Therefore, Conrad changed the name of the company to Loddiges & Sons. When Conrad Loddiges died at the age of 87 years, on 13 March 1826, he still was not an English citizen, but he owned the best known and most famous company for the importation of exotic plants in Great Britain. Already in 1800 his nursery was the largest in Great Britain and also the most profitable. According to some authors, Loddiges & Sons was then the largest nursery in the world (Yearsley, 2000). In 1818 Loddiges erected the first, at the time, gigantic, steam-heated palm house, 24 years before Kew got its famous palm house. The technology that Loddiges used for the building and the steam heating system was revolutionary. To the great surprise of the visitors it was even possible to produce artificial rain in the house. In those years, the loss of plants during their transport from outside Europe was dramatic. Loddiges himself mentioned that only 1 plant out of 20 would survive transport. The invention of Wardian cases - in effect, small, transportable greenhouses - changed the situation and dramatically reduced the loss. The Wardian case was invented by Nathaniel Bagshaw Ward, physician and examiner in botany to the Society of Apothecaries in London (1791-1868). By using Wardian cases, only 1 out of 20 plants was lost during transport and this change was one of the reasons for the "Orchid fever" in the second half of the 19th century. Loddiges & Sons was one of the very first companies to realize the tremendous advantage of the Wardian cases, and started to use them immediately after their invention.

Loddiges started to import tropical orchids around 1812; in 1826 his catalogue listed 84 species. Conrad and especially his son George saw the tremendous business possibilities with orchids quickly, and consequently they treated orchids as one of the mainstays of their business. Like many other nurseries, Loddiges also worked together with a number of professional collectors who supplied the nursery in Hackney with material, and from time to time also with new species collected all



FIGURE 2. *Stanhopea insignis* var. *major*, drawing from Loddiges collection, detailed origin unknown.



FIGURE 3. George Loddiges, portrait by John Renton, son of the headgardener at Loddiges' nursery, from the collection of the Royal Horticultural Society in London.

over the world. Hugh Cumming was one of those early collectors, travelling for Loddiges. In 1839, 13 years after Conrad Loddiges died, his son George published the first orchid catalogue, including 1024 different species in 25 different genera. In 1844 the last catalogue was published by Loddiges, and it included no less than 1900 species. In those years, the competition from other nurseries became a problem for Loddiges, other nurseries started to employ collectors and to import huge numbers of plants from tropical areas. To make the situation worse, George Loddiges faced problems concerning the property on which the nursery was built, and he was also faced with dramatically increased air-pollution, which was very damaging to the plant stock.

When Geoge Loddiges died, in 1846, his son Conrad took over the nursery, together with George's brother William. William Loddiges died only 5 years later, and so Conrad junior became owner of the nursery. In the ensuing years the nursery had more and more problems with its competitors. The expanding city of London added pressure to the nursery, and the contracts for the property were cancelled. Another very serious problem was air pollution which badly damaged the plants. George Loddiges had built a new greenhouse for orchids, but in 1853 the final decision was made to close the establishment. Loddiges and sons had to clear out everything, together with the large palm house and all other greenhouses. In 1852 Joseph Paxton erected the famous Crystal Palace in London, and sold the complete collection of about 300 palms to Paxton. Thirty-two horses were used to transport the largest palm, with a weight of 15 tons, to its final place in the Crystal Palace. In two big auctions, the complete orchid collection was sold in 1856 and 1857. Many plants of the famous collection had been sent to the Royal Botanic Gardens in Kew by Conrad junior before the auctions. Conrad Loddiges junior died in 1856, and with him disappeared a great dynasty of nurserymen and a great nursery, the best in its time and the first in England to import plants in great numbers. Loddiges and Sons had the most complete and largest collection of palms in the world, a collection of roses that included all known species and hybrids, a collection of tropical ferns with more than 100 species, and, last but not

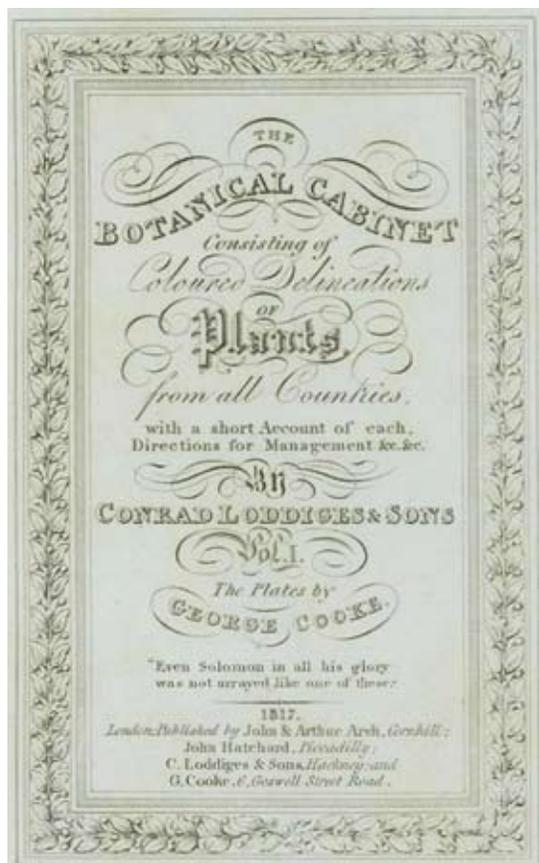


FIGURE 3. Frontpage of Vol. I of the *Botanical Cabinet* from 1817.

least, a collection of trees and shrubs of more than 3000 species, of which it was said that it included every single tree and shrub that could be cultivated in England without a greenhouse. Aside from his activities in the nursery, Geoge Loddiges found time to do many other things, he was vice-president of the Royal Horticultural Society in London and member of the Linnean Society, the Zoological Society and the Microscopy Society. He owned a collection of preserved hummingbirds with more species than all other collections in the world together.

The genus *Loddigesia* Sims (1808, Leguminosae) was dedicated to Conrad Loddiges (father) and quite a few orchids carry the name Loddiges, either for Conrad Loddiges, or George Loddiges, his son:

*Physosiphon loddigesii* Lindley (1835)

*Lepanthes loddigesiana* (Swartz) Rchb.f. (1856)



FIGURE 4. *Goodyera pubescens*, the first plate in the whole series from 1817.

*Octomeria loddigesii* Lindley (1836)  
*Dendrobium loddigesii* Rolfe (1887)  
*Cirrhaea loddigesii* Lindley (1832)  
*Acropera loddigesii* Lindley (1833)  
*Cynoches loddigesii* Lindley (1832)  
*Cattleya loddigesii* Lindley (1821)

Already Conrad Loddiges had the idea of presenting his plants to a broader public in an illustrated form, and so George started in 1817 to publish his own series of publications under the name “*Botanical Cabinet*.” The full title is “The Botanical Cabinet consisting of coloured delineations of plants from all countries with a short account of each, directions for management &c. &c.”, with the added maxim “Even Solomon in all his glory was not arrayed like one of these.” (Fig. 3). In its essence, this periodical was simply

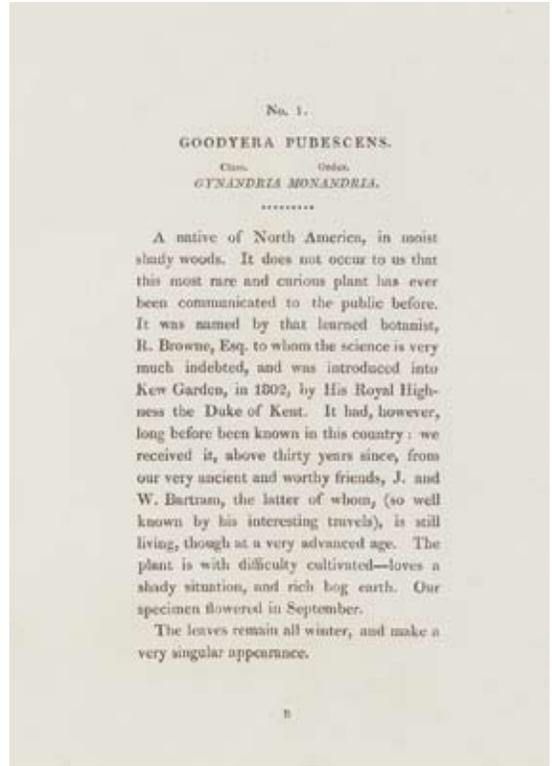


FIGURE 5. Text of the plate of *Goodyera pubescens*, from the *Botanical Cabinet* for 1817.

an illustrated catalogue or an illustrated supplement for the catalogues of the nursery. The idea was to publish the best and most interesting plants available in the nursery as coloured illustrations - photographs were not yet available at that time - together with some information about origin and culture and a short description. The *Botanical Cabinet* was, except for the Curtis’s *Botanical Magazine* and Edwards’s *Botanical Register*, one of the very first periodicals of this kind to be published. The editor tried to make clear that his *Botanical Cabinet* was not intended to be a competitor of Curtis’s *Botanical Magazine*. George Loddiges contacted John Sims, from 1800 until 1826 the editor of the *Botanical Magazine* (vol. 14 to 53), before he started the publication and explained the situation to him. The very short texts accompanying the plates in *Botanical Cabinet* reflect Loddiges’ effort to avoid any conflict with a well established and scientifically accepted journal like Curtis’s *Botanical Magazine*.

The first part was published in May 1817, the last part of volume 20 was distributed in December 1833. Each month one part with ten completely hand-coloured plates was published for five shillings, in parallel a cheaper version with only partially coloured plates was sold for two shillings and six dimes. The twenty volumes included a total number of 2000 plates, 131 of them were orchids, many of them created by George Loddiges, himself. A number of drawings originated from Edward William Cooke and Jane Loddiges. Jane was the daughter of Conrad Loddiges (and sister of George) and E. W. Cooke was her husband. Edward William Cooke was a landscape and marine painter, born in 1811 in Pentonville, London. The drawings made by E. W. Cook and Jane Loddiges, together with those from George Loddiges himself, and other involved artists like T. Boys, Miss Rebello, W. Miller, P. Heath and J. P. Heath were engraved by George Cooke, father of E.W.Cooke, printed and then coloured by different artists. George Cooke was born 1781 in London and was a line-engraver by profession. The originals from E. W. Cooke and Jane Loddiges were offered in 1929 by their grandson to the Bombay Natural History Society. The originals of all drawings are kept today in the collection of the British Museum. In a letter of October 1879, E. W. Cooke stated that all 2000 engraved copper plates were stolen by one of Loddiges' men from his library in the garden. The exact publication dates of all 2000 plates between May 1817 (Vol. 1, fasc. 1, t. 1 - 10) and December 1833 (Vol. 20, fasc. 10, t. 1991 - 2000) are published in Stafleu in *Taxonomic Literature* and by Garay in the journal *Taxon* (1969).

The plates are almost perfect, and the colour reflects reality and is not - unlike many later similar publications like *Flore des Serres* or *Lindenia* - exaggerated. The very first plate published in 1817 was an orchid: *Goodyera pubescens* (Fig. 4, 5), described in 1813 by Robert Brown. Loddiges received it much earlier from J. and W. Bartram and had it since about 1785 in cultivation. Kew received it from the Duke of Kent in 1802. As Loddiges wrote: "The plant is with difficulty cultivated -- loves a shady situation, and rich bog earth. Our specimen flowered in September." The original drawing was made by George Loddiges himself.



FIGURE 6. *Ficus setacea*, from *Botanical Cabinet*, Vol. 12.

As explained above, only 131 plates of the 2000 were orchids, and it is interesting to see that most of them represent species that are not too difficult to transport from their home to England and rather easy of culture, or, more honestly, hard to kill. Cultivation of orchids during Loddiges' time was rather different from today's ideas about cultivation and only really tough plants could survive. This is not the place to write much about plants other than orchids, but I would like to show at least a few examples, *Ficus setacea* (t. 1138) from vol. 12 (Fig. 6) after a drawing by T. Boys and *Passiflora herbertiana* (Fig. 7) from vol. 14, both are very good examples to document the high quality of the drawings.

Plate 585 from 1822 takes a very special place in the whole series, it is *Cypripedium venustum* (Fig. 8). The very first species of the genus *Paphiopedilum* was described and illustrated by John Sims only two years earlier in *Curtis Botanical Magazine* as *Cypripedium venustum*. We don't know who the artist of this plant was, but under the impression of the strange, beautiful plant and flower, Loddiges wrote: "The view of such pleasing and astonishing



FIGURE 7. *Passiflora herbertiana*, from *Botanical Cabinet*, Vol. 14.



FIGURE 8. *Cypripedium venustum* from *Botanical Cabinet*, 1822.



FIGURE 9. *Cynoches Loddigesii* from 1833, the last plate in the work.

productions of Divine power and Goodness is an endless source of gratitude, wonder and delight. Under the influence of such impressions, who indeed can avoid exclaiming with the inspired penman of old, "O Lord, how manifold are Thy works; in wisdom hast Thou made them all."

Also the last published plate (no. 2000) is an orchid: *Cycnoches loddigesii* (Fig. 9) described and named by John Lindley. The plant was collected by John Henry Lance, barrister and at that time commissary judge in Surinam and imported by Loddiges in 1830, it flowered in Loddiges' culture in 1832 for the first time, the drawing was made by

Jane Loddiges and shows the male flowers of the species. Beneath the few words about *Cycnoches loddigesii*, Loddiges also explained why he would stop the publication of the Botanical Cabinet with Vol. 20; he wrote: "Having been enabled to complete our twentieth volume, and thus to place two thousand plants before the public, our labours are closed; the precarious state of our draughtsman's health not permitting him to go on any farther."

Though only about 131 of all the plates of the Botanical Cabinet show orchids, the whole work is an invaluable addition to any library, it documents the first steps of the orchid fever in England.

#### LITERATURE CITED

- Garay, L.A. 1969. Dating of the Botanical Cabinet and of Paxton's Flower Garden, *Taxon* 18:709 – 712.
- Loddiges, G. 1804. Catalogue, handwriting.
- Loddiges, G. 1807. Catalogue, handwriting.
- Loddiges, G. 1811. Catalogue, handwriting.
- Loddiges, G. 1814. A catalogue of plants and seeds Ed.9: 35 – 40.
- Loddiges, G. 1818. A catalogue of plants Ed.11: 3 – 11.
- Loddiges, G. 1820. A catalogue of plants and seeds Ed.12: 3 – 13.
- Loddiges, G. 1823. A catalogue of plants and seeds Ed.13: 3 – 11.
- Loddiges, G. 1826. A catalogue of plants and seeds Ed.14: 3 – 18.
- Loddiges, C. 1914. The following lists are compiled.....
- Loddiges, G. 1839. Orchideae in the collection of Conrad Loddiges and Sons : 1 – 24.
- Loddiges, G. 1841. Orchideae in the collection of Conrad Loddiges and Sons : 1 – 40.
- Loddiges, G. 1844. Orchideae in the collection of Conrad Loddiges and Sons :1 – 45.
- Loddiges, G. 1849. A catalogue of plants and seeds : 1 – 82.
- Solman, D. 1995. Loddiges of Hackney, the largest hothouse in the world, Hackney Society, John Straker ed.
- Staffeu, F. 1981. *Taxonomic Literature* 3(Lh-O): 133 – 137; Bohn, Scheltema & Holkema, Utrecht.
- Yearsley, G. 2000. Conrad Loddiges & sons, the first orchid nursery; *Orchid Review* 108:116 – 121.