



**Amsterdam International  
Antiquarian Book Fair**  
19-20 October 2024

## **42th Amsterdam Antiquarian Book Fair**

**18 - 20 October 2024**  
**Passenger Terminal Amsterdam**  
**Piet Heinkade 27**  
**1019 BR Amsterdam**

### **A selection A - Z**

**by**

#### **Kuehn Rare Books & Art**

Antiquariat Michael Kühn  
Fasanenstrasse 29 / Innenhof  
10719 Berlin - Germany  
[www.antiquariat-kuehn.de](http://www.antiquariat-kuehn.de)

phone: +49 30 65943850 / mobile: +49 170 7744060

e-mail: [mail@antiquariat-kuehn.de](mailto:mail@antiquariat-kuehn.de)

VAT: DE 812539755 7 / EORI: DE 6160506 000

#### **ALBERS, Josef.**

Interaction of Color (Die Wechselbeziehung der Farbe). Text- and Commentary Vol. Starnberg, Keller / Albers, 1973. Folio (370 x 275 mm) Cloth slipcase containing text volume (cloth, 80pp.) and cloth chemise - style box with concordance to plates (wraps, 48pp) and eighty folders (13 x 10 inches, opening to 13 x 20 inches) containing the plates. Plates are printed in as many as twenty colors, with a combination of silk-screen (serigraph), four color separation and photo - offset processes. The box and spines in mauve, the internals are fine and very fresh. The Box is rubbed and one hinge little damaged, else a very fine set of the German edition. € 5.000.-

First German edition of Albers' famous color theory, one of the most important artist books of the 20th century. A major twentieth-century American illustrated book, which has now become quite rare. The text and eighty silk-screened plates form a summation of Albers' teachings in colour relatedness. He demonstrates the facets of colour changes, illusions, and influences produced by the multiple „interactions of color.“ An indispensable document of modern American art, issued in an unspecified limited edition. Josef Albers, one of the most influential artist - educators of the twentieth century, was a member of the Bauhaus group in Germany during the 1920s. In 1933 he came to the United States, where he taught at Black Mountain College for sixteen years. In 1950 he joined the faculty at Yale University as chairman of the department of design. Albers was elected to the National Institute of Arts and Letters in 1968 and was professor emeritus of art at Yale until his death in 1976.

First German edition of Albers' famous color theory, published ten years after the original edition (Yale University Press, 1963), supervised in print by Josef Albers himself. The 80 folding plates contain one or sometimes several color serigraphs or color offsets, some with fold-out color elements, illustrating Albers' theories, such as the „Bezold effect“, the application of which led him to his „Homage - to - the - Square“ paintings. Designed by Norman Ives, who was later also responsible for Albers' „Formulation : Articulation“. Loosely enclosed is a promotional flap card with Albers' facsimile letter of thanks congratulating the publisher on the „excellent reproductions of the color studies“ and especially praising the washable cassette. - Die Lesbarkeit der Kunst 48 - Saur II, 48 - Cf. Danilowitz p. 20.

## Early Botanical Photography

### **ANTOINE, Franz de Paula.**

Photographische Blätter aus dem Wintergarten des k.k. Hofburggartens in Wien Aufgenommen von Franz Antoine, ... (Wien, 1873 or 1875) Folio (440 x 325 mm) Title-Page with mounted albumin photograph and 20 boards with mounted albumin photographs (in size 235 x 200 mm). Mounted within gilt and black ruled frame on heavy boards preserved within original cloth folder with title: Photographische Blätter Franz Antoine. The title page sun faded and one or two photographs slightly faded, otherwise very fine tonality of the photographs. € 14.000.-

Exceedingly rare album with early photographic plant still life's of a famous greenhouse & botanical garden in Vienna. Probably printed only in 50 copies.

Of the 20 photographs in the portfolio, fifteen show views within the Wintergarten; four show large trees displayed within the entrance saloon; and one shows a specimen of *Welwitschia mirabilis* displayed on a glass table in front of a painting of the same species in the wild (faded).

The Austrian horticulturist, gardener and amateur photographer Franz Antoine the younger (1815–1886) had studied botany in the botanical gardens of Vienna under Joseph Franz von Jacquin. For some years he had travelled through Europe to study modern developments in gardening. From 1847 onwards he worked as a court gardener. He received international reputation for his "Wintergarten..." and was honored by the kings of Bavaria and Prussia. From 1865 he was director of Royal Gardens to the Austrian/Austro - Hungarian monarchy. He was an authority on the botanical family of Bromeliaceae, and was also an avid photographer. As a member of the Zoological - Botanical Society in Vienna, he gained great recognition as an amateur photographer, producing mostly large - scale plant studies. His photographs of still life's, plants and scenes of Vienna were presented at photography exhibitions in Vienna (1864, 1873) and Paris (1867). Also the Albertina in Vienna has a large stock of photographs of plants by Franz Antoine, which belong to the earliest and best of this genre. The original, classical greenhouse was built from 1823 to 1826 after designs by Ludwig von Remy. The back wall of the building was part of the then Vienna city wall. After the greenhouse had been demolished at the turn of the century, in 1902–1906 a new green house influenced in its ornamentation by Art Nouveau was built after designs by the court architect Friedrich Ohmann. In 1861 he was a co-founder of the Photographic Society.- Starl. Lexikon Fotografie Österreich, 1839-1945; Hannavy. Encyclopedia of Nineteenth-Century Photography 1287. For his method of photography: Franz Antoine. Ueber die Methode, Pflanzen photographisch darzustellen und zu vergrößern, in: Zeitschrift für Fotografie und Stereoskopie 5, 1862; For a printed work on the Wintergarten by Antoine (1852) see Pritzel 196. Nissen BBI 44; Czeike I, 605. Cf. Bobins 1024 and Mayer, Bibliotheca Viennensis 948 (normal edition in half cloth or cloth bindings). KVK: We could locate only four copies world-wide: Utrecht (16 plates, dating 1875); ÖNB Vienna (17 plates, dating 1880); Univ. Vienna (17 plates); Royal Horticultural Society London (18 plates, dating 1875)

### **Very rare Comin de Trino Printing of Ibn Rushd's Aristoteles**

### **ARISTOTLE, AVERROES [Ibn Rushd], and AVICENNA [Ibn Sina].**

Aristotelis Stagiritae Omnia, quae extant Opera, nunc primum selectis translationibus, emendationibus ex collatione graecorum exemplarium, scholiis in margine illustrata, novo etiam ordine digesta: Additis praeterea non nullis libris nunquam antea latinitate donatis. Averrois Cordubensis in ea opera omnes, qui ad nos pervenere, commentarii. Non nulla super addita dubia, figurae, notationes, nunquam antea editae, ut Averrois media in libros Metaphys. commentatio : eiusdem de Spermate libellus. Graecorum, Arabum, et Latinorum monumenta quaedam, ad hoc opus spectantia. Marci Antonii Zimarae in Arist. et Aver. dicta contradictionum solutiones, quibus nunc addidimus doctissimorum virorum solutiones 100. Haec autem omnia tum ex praefatione, tum ex indice librorum clarius innotescunt. Venice, Comin de Trino, di Monferrato, 1560 [-1562]. € 18.000.-

An exceptional copy, bound in early 18th-century Morocco 'à la Duseuil' for Zacharie Morel, Seigneur de la Brosse et de Saint-Ouen, of the extremely rare complete set of Marco Antonio Zimara's monumental edition of Aristotle's works with the extensive commentaries by Averroes, as well as on Avicenna's *Canticum de Medicina*, and here with the additional and extremely thorough Thesaurus or index by Antonio Poso, published two years later at the same press and almost always absent.

An exceptional complete copy of the extremely rare MARCO ANTONIO ZIMARA edition of Aristoteles works with extensive commentaries by AVERROES, as well as on Avicenna's *Canticum de Medicina*. With the additional and thorough Thesaurus or Index by Antonio PISO, published two years later at the same press and almost always absent. The philosophical writings of Ibn Rushd are divided into two groups, the commentaries on the works of Aristotle, and the personal writings, which are entitled *Faṣl al - Maqāl*, *Kitāb al - Kashf*, and *Tahāfut al - Tahāfut*. As a commentator on Aristotle, Ibn Rushd attempted to restore the Stagirite's own thought, and to supplant the Neoplatonic interpretations of al-Fārābī and Ibn Sīnā. Ibn Rushd regarded Aristotelianism as the truth, inasmuch as truth is accessible to the human mind .... Ibn Rushd's *al - Kulliyāt*, or Latin 'Colliget', his commentary on Ibn Sina's *Urjūza* or 'Canticum de medicina', and his short tract 'De theriaca' here form most of the ninth volume of Comin de Trino's edition. Several editions of Aristotle's Works with Averroes' commentaries and edited by the great Italian philosopher and scholar of Aristotle and Averroes, Marco Antonio Zimara, were printed in the mid-sixteenth century, including three by Giunta, in 1550-1552 ('the culminating point of the printing history of Averroes'), 1562, and 1574-1575. All of these differ in make-up and contents, with 'modifications and additions of text and commentaries' (Dag N. Hasse). Comin de Trino's edition, the rarest of the four and predating by two years that issued by Giunta in 1562, equally differs from those preceding and following, with Averroes' *De spermate* and the important Middle Commentary (*Talkhīṣ*) to the first seven books of Aristotle's *Metaphysics* first appearing here. Antonio Poso's incredibly exhaustive index of over 1000 pages, published by de Trino in the year of the 1562 Giunta edition and rarely found present in the sets recorded, is here bound without a separate title or preliminaries. Beginning with leaf 'A', his work forms the final, twelfth, volume of this beautiful set.- Provenance: late 16th or early 17th inscription in ink 'Di Gir[olam]o Fanti can[oni]co senese' to the title pages of volumes 5, 7, 8, 9, 11, and to the blank verso of the final leaf of Posio's Index volume, carrying Comin de Trino's beautiful, final printer's device.- Adams A 1746 (Aristotle) and P 1980 (Posius); BM Italian p. 537 (Posius only); for Zacharie Morel and his distinctive arms see Guigard vol. 2, p. 376 and Olivier 2333; outside Europe OCLC locates one copy in Colombia, at the Pontificia Universidad Javeriana, and three copies in North America, at University of Southern California, Pennsylvania, and Toronto; German library holdings appear to be of partial sets or individual volumes only, perhaps with the exception of the copy at Göttingen University Library.

### Sparkling

#### **ARMSTRONG, William George.**

Electric movement in air and water with theoretical inferences. Second edition with a supplement. 2 parts in one.- London: Smith, Elder, & Co., 1899. Folio (390 x 280 mm) VII, (1), 55 leaves text (printed recto only), 41 plates; Supplement with separate title: „Supplement to Lord Armstrong's work on electric movement in air and water being a continuation of his experiments ... „; VI, 27 leaves, 14 partly colored plates. Original publ. cloth, spine restored, else fine copy. € 4.500.-

First edition, second issue with supplement in first edition. The first edition was published in 1897, this second issue has a new title and includes the supplement of 1899 (with 14 more plates) in one vol.

Though it was produced as a work of pure science, the photographic plates, reproduced as luxurious autotypes, are what speak to us today: beautiful abstract images, produced by sending electric discharges through water, similar in appearance to lightning, but more fullsome and symmetrical. „In 1897 Armstrong published a beautiful illustrated volume ... in which he discussed the most remarkable series of figures obtained by electric charge over photographic plates“ (DNB) Study of patterns produced by electrical discharges on surfaces revealed by dusting with powdered red lead and sulphur, sometimes termed 'Lichtenberg figures'. These experiments were conducted at Craggside in Northumberland, England, using a Wimshurst machine (electrostatic generator) and two 10-gallon Leiden jars. Current was conveyed to two rod conductors with a spark gap at which coated wires discs or plates were positioned.

Lord Armstrong exhibited figures of the type produced at the Royal Society soiree at Burlington House in London on 16 June 1897. The English engineer William George Armstrong, Baron Armstrong (1810 - 1900) was an armaments manufacturer and industrialist who founded the Armstrong Whitworth manufacturing concern on Tyneside. He was also an eminent scientist, inventor and philanthropist. In collaboration with the architect Richard Norman Shaw, he built the first house in the world to be lit by hydroelectricity. Armstrong was responsible for developing the hydraulic accumulator. Where water pressure was not available on site for the use of hydraulic cranes, Armstrong often built high water towers to provide a supply of water at pressure - for instance, the Grimsby Dock Tower. He produced the weighted accumulator, a cast-iron cylinder fitted with a plunger supporting a very heavy weight. The plunger would slowly be raised, drawing in water, until the downward force of the weight was sufficient to force the water below it into pipes at great pressure. The accumulator was a very significant, if unspectacular, invention, which found many applications in the following years.

### **AUER, Alois.**

Der polygraphische Apparat oder die verschiedenen Kunstfächer der k. k. Hof- und Staatsdruckerei zu Wien. I. und II. Vortrag.- Wien: aus der kaiserlich - königlichen Hof- und Staatsdruckerei, 1853. 8vo (240 x 155 mm). 51 pp., (1), 2 Bll. with 28 (2 double - page) plates in different printing techniques. Contemporary half calf, spine with repairs, slightly spotted, but else a fine copy. € 1.800.-

First edition of the early monograph on photography and nature self-printing, among other things, with descriptions of numerous different printing techniques with illustrations of the various reproduction techniques. Presented are: Photography, microtypography, lithography, chemotype, chalcography, siderography, glass printing, guilloché, stylography, galvanography, natural printing, xylography, mineralography, mineralotype, typography, typometry (double - sheet size). With a photographic view of St. Stephen's Cathedral. The text is divided into two lectures, from December 1852 and February 1853. The number of plates in the comparative copies varies; different copies with different print samples were probably compiled depending on the number of plates. Alois Auer's specific technique of nature printing, depicted in *The Discovery of the Natural Printing Process: an Invention ...* (1853), involves impressing the natural object into a lead plate. Making a printable surface was done by electroplating the impression to create a copper plate, which was used to create the print on paper. This is an intaglio technique, where the ink rests in the shallow grooves of the lead plate rather than on the higher surfaces.- Heidtmann 6407; Bigmore/W. I, 23; E. Fischer, *Naturselbstdruck* (in: Gutenberg JB 1933, S. 186 f.) no. 41; Zucker B0041

## **Fishes of the Indian Ocean**

### **BENNETT, John Whitchurch.**

A selection of rare and curious fishes found upon the coast of Ceylon: from drawings made in that island & colored from life. With letterpress descriptions.- London: printed for the author, Longman, Rees, Orme, Brown and Green, 1841. 4to (307 x 245 mm) VIII, 30 Bll. text, 30 fine full page hand-colored lithograph plates by J. Clark after Bennett's drawings, each plate accompanied by a tissue guard and a page of description. Contemporary purple publisher's cloth, spine faded. Inner hinges weak. € 8.500.-

On the fish of Sri Lanka, a lovely copy and rare in any edition; probably the most spectacular publication on tropical fish, renowned for its accuracy and beauty. Bennett's book described thirty species of exotic fish found in the Indian Ocean in gloriously colorful detail. He produced dazzling effects that conveyed the full glory of these colorful fish to a British & European readership in 1830's.

The British army officer John Whitchurch Bennett (1790-1853) who worked as a Civil Servant in Ceylon (now Sri Lanka) from 1816 to 1827, explains in the preface of his book that he has adhered in his drawings of the fishes, strictly to nature; and, as far as his colors permitted, imitated their various hues: but, alas, in vain must be every endeavor to attain perfection. The details of his life are sketchy, but he is best remembered for the two outstanding books he wrote, reflecting the interest he had in the country and its natural resources. He served in the Royal Marines from 1806 to 1815, transferring to the British Army in 1815 as a 2nd lieutenant. In 1816, he and his wife sailed to Ceylon to join his regiment, where he later worked in junior posts within the Civil Service and was appointed Sitting

Magistrate at Galle and Hambantota on the south coast of the island. When in 1827 Bennett left Ceylon, it was under a cloud: he had been accused of financial mismanagement. He was a member of the Literary and Agricultural Society of Ceylon when he proposed the publication of „A selection ... Fishes“ in 1825. The Society's members agreed to finance the production by subscription, with the government subscribing to three copies of his 'fishes' at £6, 6d. each, a remarkably high price for the time.

Bennett made his drawings from living specimens, hand-coloring them and providing the accompanying text. In the text he gives both the Latin and native name, with a description of the fish plus information on their habitat and the native use of each fish. He named the great trevally, a new fish species to science, *Scomber heberi*, in honor of Reginald Heber, Bishop of Calcutta, who had supported Bennett's ichthyological research. Scientific and local names in Singalese are given for each species. „In my drawings of the fishes I have adhered strictly to nature; and, as far as my colours permitted, imitated their various hues: but, alas, in vain must be every human endeavour to attain perfection!“ (Preface).

The completed manuscript was shipped with a payment of £73 to Rudolph Ackermann, the leading London publisher of color-plate books. The plates were first published in parts between 1828 and 1830, and the work was successful enough for further editions to be published in 1834, 1841 and 1851. Bennett left Ceylon in 1827 a disappointed man, recalled by an order from England. He is listed as a Fellow of the Linnean Society and as a Fellow of the Horticultural Society, with a London address in Prospect Place in 1829. Working as a printer, he suffered bankruptcy in 1839, and was confined to the Fleet Prison.- Alwynne Wheeler 1999, Nissen ZBI 316; Peter Dance, Art of Natural history, 1990, pp. 6, Nissen, SFB 15; Wood, pp. 231; Buchanan, Nature into Art, pp. 147; Dean I, 100.

## Dutch Fruits

### **BERGHUIS, Sybolt.**

Le jardin fruitier néerlandais, décrit et publié par la société pour régler et améliorer les races fruitières, établie à Boskoop. (= Niederländischer Obstgarten, beschrieben und verfasst vom Boskooper Verein zur Bestimmung und Veredlung der Obstsorten). 2 Vols.- Groningen: J. B. Wolters, (1864) - 1868. 4to. (320 x 240 mm) xxvi, 162 pp., (4); (4), 112 pp., 36 pp., 32 pp., (8), (8), (6) pp. With chromolithograph. front.- Portr. of William III, one chromo - lithograph. frontispiece & 124 chromolithograph. plates by Guillaume Severeyn after Sybolt Berghuis. Contemporary beautiful green half morocco with raised bands, decorated gilt spines, occasionally slightly foxed as usual, rubbed and scuffed, else fine copy. € 4.500.-

Complete copy of this splendid pomological compendium of apples (60 plates), pears (36 plates), cherries (8 plates), and plums (12 plates), as well as apricots and peaches (8 plates), all then growing in the Netherlands, with text in German and French throughout. A Dutch edition was printed as well.

The 124 lavishly designed chromolithographic plates each show two views and a cross-section, and in the case of stone fruit also seeds and foliage of two to four fruit varieties. The most famous Belgian lithographer Guillaume Severeyn (1830 - 1909) was a member of the Royal Academy in Brussels and a recognized specialist in botanical illustration. Sybolt (Samuel) Berghuis (1820 - 1896) worked in Groningen as a painter, draughtsman and watercolorist. The work is dedicated to the Dutch King William III, a preface was written by the botanist Karl Heinrich Koch (1809 - 1879) and a foreword was given by the „Boskooper Verein zur Bestimmung und Veredlung der Obstsorten“, which was responsible for the description of the fruits.- Landwehr, Dutch books with cold. plates 14; Nissen, BBI 2221 (Dutch ed.).

## Shells of Maria Theresia „Bibliothèque de Mr. Lavoisier“

### **BORN, Baron Ignaz Edler von.**

Testacea Musei Caesarei Vindobonensis, quae jussu Mariae Theresiae Augustae disposuit et descripsit Ignatius a Born.- Vienna: Sumptibus Joannis Pauli Kraus, 1780. Large Folio (485 x 295 mm) xxxvi, 442 pp., 9 Bll. incl. half - title, dedication to the Empress Marie - Therese, title-page with engraved vignette by C(arl). Schütz. Illustrated 18 fine hand - colored engraved plates of shells by the engraver Schütz (1745 -

1800) or J. Adam after the artist Franz Fuxeder (1725-1797), four head- and eight tail-pieces, 36 illustrations of shells in the text, all engraved by Schütz, C. Conti and others. A few text leaves yellowed. Original boards, boards and extremities scuffed, head and foot of spine rubbed and upper spine slightly defective, corners frayed. € 12.000.-

A fine uncut copy of this sumptuously printed work portraying shells in the imperial collection in Vienna, from the library of the famous chemist, Antoine Laurent Lavoisier with his Ex Libris, one of the most beautiful of all conchological works including examples from the collection of the Empress of Austria, a collection „of great importance to systematists, as Born described from it a number of species new to science.“ (Dance). The work was commissioned by Empress Marie-Therese to record and codify her natural history collection in Vienna. In 1778 Baron Ignaz Edler von Born published a descriptive catalogue of the collection with one plate; the present work, published two years later is on a much more sumptuous scale and included the fine hand color plates. Further volumes were not published after the death of the Empress, as her heir do not wanted to pay for the printing. The splendid plates show 319 different shells and most of the plates are by Jakob Adam, an Austrian artist (1748-1811). A fine example of the Golden Age of Viennese natural history book production which was patronized by the House of Habsburg. „Eines der schönsten Muschelbücher sind die ‘Testacea Musaei Caesarei Vindobonensis, 1780’ von Ignaz Born mit Grossfoliotafeln ... nach Jak. Adam.“ (Nissen II, p. 152). Baron Ignaz Edler von Born was from Karlsburg, Transylvania (now Alba Iulia, Romania), born on the 26th December 1742. Having rejected an education with the Jesuits in Vienna, he studied law in Prague. After graduation, Von Born made an extensive tour throughout Germany, Holland and France. During this period, he was exposed to natural history, including mineralogy and mining. Later he joined the department mines and the mint in Prague in 1770, and mineralogy is the area in which he is now best remembered (DSB II, 315). His death at the relatively early age of 48 was probably hastened by his lively interest in all aspects of the practical side of mining and ore-extraction: „During his visit to a mine at Felso-Banya. He descended into the mine too soon after fires used to detach the ore had been extinguished, and inhaled a dangerously large quantity of arsenical vapors.“ (DSB). His reputation ensured that in 1776 he was called to Vienna by the Empress to arrange and describe the Imperial collection. The works on the shells in the Royal Collection were the only published results of this commission, which was apparently cut short by the Empress’s death in 1780.

Erste Ausgabe unter diesem Titel und mit den prachtvollen Tafeln mit heimischen und exotischen Muscheln und Schnecken von C. Schütz nach J. Adam, F. Fuxeder, E Mansfeld und J. F. Wiedon. „**Eines der schönsten Muschelbücher**“ (Nissen II, 152) Von Born, studierter Mineraloge, wurde 1776 von Maria Theresia nach Wien beordert, um das Naturalienkabinett neu zu ordnen und zu beschreiben. Daraufhin erschien 1778 das Werk erstmals unter dem Titel *Index rerum naturalium*. Die vorliegende Neuauflage konnte nicht vollendet werden, da Kaiser Joseph II. nach dem Tod Maria Theresias 1780 keine Mittel für die Fortsetzung zur Verfügung stellte. Großzügiger Druck auf kräftigem Papier. Die Tafeln in schönstem Handkolorit. Sauberes, wohl erhaltenes Exemplar der seltenen Beschreibung.- Provenance: Antoine Laurent de Lavoisier, Schloss Weitra (Fürstenberg - Weitra). BM (NH) I, 202; Peter Dance. Shell Collecting. An Illustrated History 1966. pp. 93-94; Nissen ZBI 470.

### „Neue Frau“

#### **BRANDT, Marianne.**

bauhausfotos. 10 originalfotografien. Herausgegeben von Sabine Hartmann und Karsten Hintz für die Bauhaus - Archiv - GmbH.- Berlin: Bauhaus - Archiv, 1993. Folio. (470 x 360 mm) Original cloth folder with 10 mounted photographs [in size 235 x 175 mm] under museum - like passe-partout, made from the original negatives in possession of the Museum. Two sheets of text. Slightly scratched, else near mint condition. € 6.000.-

One of only 30 copies for this edition (here no. 11), with V copies for archival possession.

The photographs from the years 1927 - 1931 were printed or enlarged from the original glass negatives. The selection was made from a bundle of 150 negatives donated from the estate of Marianne Brandt to the Bauhaus Archive. Some of the motifs have been published here for the first time. These are mainly self-portraits with the typical reflections in the sphere in her Dessau / Bauhaus studio. „Her series of self-portraits are particularly striking. These

often represent her as a strong and independent New Woman; other examples show her face and body distorted across the curved and mirrored surfaces of metal balls, creating a blended image of herself and her primary medium at the Bauhaus." Marianne Brandt (1893 – 1983), German painter, sculptor, photographer and designer who studied at the Bauhaus school and became head of the metal workshop in 1928. Today, Brandt's designs for household objects such as lamps, ashtrays and teapots are considered the timeless examples of modern industrial design. Beginning in 1926, Brandt also produced a body of photomontage work, though all but a few were not publicly known until the 1970s after she had abandoned the Bauhaus style and was living in Communist East Germany. The photomontages came to public attention after Bauhaus historian Eckhard Neumann solicited the early experiments, stimulated by resurgent interest in modernist experiment in the West. These photomontages often focus on the complex situation of women in the interwar period, a time when they enjoyed new freedoms in work, fashion and sexuality, yet frequently experienced traditional prejudices. Brandt's montage works were subject of the touring exhibition entitled „Tempo, Tempo!“ Brandt is also remembered as a pioneering photographer. She created experimental still-life compositions, but it is her series of self-portraits which are particularly striking. These often represent her as a strong and independent New Woman of the Bauhaus; other examples show her face and body distorted across the curved and mirrored surfaces of metal balls, creating a blended image of herself and her primary medium at the Bauhaus.

### **BRODTMANN, Carl Joseph.**

Naturhistorische Bilder - Gallerie aus dem Thierreiche. Hefte / Installment 1 - 33 and 3 supplements in 1 Vol. [Zurich or Schaffhausen], Brodtmann, [1816 and later] (title-page of the ,ersten Heft' Lindau, 1816). Large folio (445 x 365 mm). 2 Bll., 36 pp., 6pp., 10 pp., 16 pp., 4 pp. with a lithographed title-page and 144 lithographs drawn by Brodtmann himself showing humans, mammals, reptiles and amphibians, birds, insects, etc. 19th-century black half calf over boards. Spine repaired, else fine. € 6.800.-

First edition of the complete series of Karl Joseph Brodtmann's lithographed natural history plates, most showing animals, including the plates in the supplement, not mentioned by Winkler.

Brodtmann (1787 - 1862) was a Swiss artist, lithographer and printmaker working in Zürich, Schaffhausen & Lindau. He is especially known for his beautiful and vivid lithographs of animals, respecting scientific accuracy. The present work contains 6 series with a total of 144 lithographs by Brodtmann, each series separately numbered, opening with a series of 12 plates showing people from all over the world, with their costumes, including East Indians, Sandwich Islanders and Inuits. The second series, forming the largest part of the work with 60 plates, shows other mammals: monkeys, bears, canidae (including wolves and hyenas) and felidae (including lions, tigers and panthers), horses and their riders (including an Arabian horse), mice, rats, bats, sciuridae (squirrels and some other rodents), camels, elephants, giraffes, sheep, deer, rhinoceros, walrus, whales, dolphins and many more. Here as in the other series, many plates depict more than one species, so it covers a large number of mammals. They are followed by 32 plates of birds, including some exotic ones like parrots, toucans, a pelican, a nightingale and some birds of prey, including vultures and a condor. But Brodtmann also adds more common birds, like geese and galliformes (gamefowl). The work continues with 12 plates of reptiles and amphibians, including turtles, snakes, frogs and crocodiles. He ends his zoological plate collection with 16 plates mostly devoted to insects, depicting several species of beetles, butterflies and caterpillars, termites and flies, but also worms, arthropods, including scorpions, and spiders. Descriptive texts accompany all plates in the 33 Heften. The present copy also includes the 12 supplementary plates, including their texts, adding, for example, proboscis monkeys, lemurs, flying squirrels and several kinds of seals.- Winkler 105 (not noting the supplement); not in Nissen, ZBI; Brun I, 208.

### **LAFORGUE, Jules; Patrick Caulfield (illustr.)**

Some Poems of Jules Laforgue.- London: Petersburg Press, 1973. Folio. Edition C, one of 120 copies. Signed and numbered in pencil by Caulfield on the limitation page. Original blue-grey leatherette boards, with a blue-grey leatherette portfolio containing the book and illustrated with 22 full page (40.2 x 35.2 cm.) screen prints on 200 gsm Neobond synthetic paper. The separate suite of 6 loose screen prints (40.2 x



35.2 cm.) on the same paper was not included in edition C. Slipcase slightly rubbed at extremities, otherwise all in excellent condition. € 4.000.-

Patrick Caulfield (1936 - 2005) was born in London. He was a student at Chelsea School of Art from 1956 - 1960, followed by the Royal College of Art from 1960 - 63, studying alongside David Hockney and Allen Jones. His subject matter draws more from the masters of modern art such as Georges Braque, Juan Gris and Fernand Léger than from the consumer culture that preoccupied his fellow students.

Caulfield's work is characterized by a reductive, streamlined use of line and the depiction of banal, everyday objects saturated in color. He consistently used screenprint for his graphic work following his introduction to the medium by artist Richard Hamilton and printer Chris Prater in 1964. The deceptive simplicity of his images, perfectly matched by the aesthetic capacities of the process, is clear throughout the various phases of his printmaking career. During his lifetime, major retrospectives of his paintings were held at Serpentine Gallery, London (1992); Hayward Gallery, London (1999), which toured to Musée National d'Histoire et d'Art, Luxembourg; Calouste Gulbenkian Foundation, Lisbon, and Yale Center for British Art, Connecticut; Tate, London (1981) and Walker Art Gallery, Liverpool (1981). In 2006 Caulfield's prints were the subject of a survey at Tate Liverpool, and in 2013 Tate Britain presented a major retrospective of his works. Together with numerous paintings Tate has Caulfield's entire print output, 113 prints made between 1964 and 1999, housed in their collection. Caulfield's works are held by major museums all over the in the world.

### Color Theory

#### **CHEVREUL, Michel Eugène.**

Des Couleurs et de leurs applications aux arts industriels à l' aide des Cercles Chromatiques. Avec XXVII planches gravées sur acier et imprimées en couleur par René Digeon.- Paris, J.B. Baillière et Fils, 1864. sm.Folio (365 x 280 mm) 26 pp., 1 Bll. (table) with 27 chromo-lithographed plates (one double-page) mounted on mitre. Bound in publisher's red percaline with title in gold on upper board, with cold fillets, faint stains and foxing on a few plates, otherwise a very fine copy. € 3.400.-

A rare copy in good condition of the first edition of this important work by the color chemist & theorist E. Chevreul (1786 - 1889). Chevreul was appointed director of the Manufacture des Gobelins in 1824, and was led to carry out in-depth research into the optical properties of colors. In 1839 he formulated the law of simultaneous color contrast known as Chevreul's law. This law, and its applications such as color circles, had a major influence on artists such as Delacroix, Van Gogh, the impressionist and pointillist schools and the first abstract artists.- Indergand nr. 385

### Chinese Butterflies

#### **DONOVAN, Edward.**

An epitome of the natural history of the insects of China: comprising figures and descriptions of upwards of one hundred new, singular, and beautiful species; together with some that are of importance in medicine, domestic economy, etc. ... London, Printed for the Author by T. Bensley, 1798 [- 1799]. 4to (286 x 230 mm), [iv], [92] pp., (2, index) interleaved with [50] hand - colored engraved plates (dated 1798 and 1799), parley with gum arabicum, occasional foxing and spotting; overall very good copy in later strain grained red morocco, gilt edges. € 7.500.-

First edition of this splendid work devoted to the insects of China by the great natural historian and artist Edward Donovan, including some of the most beautiful of all his plates. The contents describe and illustrate various beetles, cicadas, butterflies and moths, dragonflies, spiders and centipedes, the plates being described as „accurately drawn, engraved, and colored, from specimens of the insects“, and the accompanying descriptions as arranged according to the system of Linnaeus.

Donovan's main interest was entomology and his published works included sixteen volumes of *British Insects* and three „magnificently illustrated“ (Dunbar) volumes on *The Insects of China, India and New Holland*, the last being dedicated to Sir Joseph Banks, and acknowledging use of his collections and library. Donovan's approach was to show species that had not been illustrated before, and many previously not described. The illustrations of tropical butterflies, moths, and other insects set against backgrounds of plants and flowers represent a significant advance in compositional style which seem likely to have influenced others in the ensuing Victorian era, in particular H. Noel Humphreys. One justly can point out the volume's interest to botanists: in addition to the plates of Chinese flowers there appears one of the first colored plates of a *Camellia* ... Other flowers include rose, fringed iris, tea blossoms, Chinese lemodoron & nodding renealmia.

Edward Donovan (1768–1837), as were many cultured gentlemen of his day, was a collector of natural history specimens - from personal excursions in the British Isles as well as purchases from notable natural history auctions that included items from voyages of exploration. With the connections he made as a Fellow of the Linnean Society and the Wernerian Natural History Society, he also was able to access the best collections. Donovan referenced all of these sources for his books about the insects, shells, fishes and quadrupeds of England and the insects of China, India and New Holland between 1789 and 1827. The specimens he studied had been brought to him by George Macartney from his famous embassy to China.

He not only wrote and illustrated these books but also prepared the copper plates. It was not uncommon for private collectors to open small public museums of exotica, and in 1807 Donovan founded the „London Museum and Institute of Natural History“ that included several hundred cases of birds, botanical specimens and other subjects. Donovan's voracious appetite for collecting, his unfortunate experiences with unscrupulous book publishers, and the economic decline in England after the Napoleonic Wars most likely forced the closure of the museum in 1817 and the auction of his collection the following year. He continued to publish, but his finances worsened, and in 1833 he published a plea for funds from his supporters to bring suit against the publishers. This was to no avail, and he died penuriously in 1837 leaving a large family destitute.- Dunbar, *British Butterflies*, page 48; Nissen ZBI 1143; Hagen I, 177.

### **D. C. L. (DENECKE or Denicke)**

Vollständiges Lehrgebäude der ganzen Optik, oder der Sehe-, Spiegel- und Strahlbrech - Kunst, darinn die Gründe derselben Theoretisch und Practisch vorgetragen, die Verfertigung der Maschinen und Instrumente, die Zubereitung aller Arten von Spiegeln und Optischen Gläsern deutlich gelehret, auch der Gebrauch derselben bey den Experimenten gezeigt wird....- Altona: David Iversen, 1757. 4to. (210 x 170 mm). (18), 772 pp., (4) with engraved frontispiece, 89 fold. engraved plates, and 4 fold. tables. Contemporary calf., rubbed and soiled, unidentified crest on covers, browning as always. € 4.800.-

The rare & only edition of this richly illustrated and comprehensive compendium on applied optics. In addition to all common apparatus and instruments incl. microscopes, it also covers the grinding of glasses, anamorphoses, the camera obscura and the magic lantern.

„A particularly comprehensive textbook on optics was written by Denecke (or Denicke), (which) appeared in Altona in 1757. It discusses almost all of the microscope models that were generally known at the time, as well as the most important preparation methods. The 15th chapter lists the most popular objects of study, ranging from flowing blood in capillaries to various parts of insects, spermatozoa, infusoria and other small organisms, animal parasites, crystals and parts of plants“ (Gerlach, *Geschichte der Mikroskopie* 168). Plate XXIV has been “omitted as superfluous” (Bl. c2v). The plates were engraved by the German engraver Gottfried Christian Pingeling (1688 - 1769) and his son Thomas Albrecht. Their workshop was considered the “most important” in Hamburg in the second half of the 18th century. They produced illustrations and title vignettes for books and occasional publications, maps, city views and portraits. After Pingeling's death, his son continued the workshop with his pupil Johann Thomas Hagemann.- Holzmann - Bohatta Nr. 1314; not in Poggendorff, Engelmann, *Bibl. mechanica*, etc.

## Orchid Fever in Victorian England

### **DURHAM, Cornelius Beavis (artist)**

„Exotic orchids from the collection of Edward Salt, Esq., Ferniehurst“. 27 **watercolor drawings** of orchids from the collection of Edward Salt. 2 volumes. (Ferniehurst near Bradford/West Yorkshire, after 1868 - 1869) Elephant Folio (730 x 500 mm) Calligraphic titles with water - color vignette, and 27 water - color drawings of orchids, window mounted, in a contemporary green half morocco gilt, one spine label chipped, rubbed and soiled. € 60.000.-

Impressive collection of original watercolors of orchids, painted by the miniaturist and „Orchid painter“ Cornelius Beavis Durham (1809-1884) for the textile mill - owner Edward Salt (1837 - 1903) who had have a world-renowned collection of orchids, which is recorded in these two volumes in sumptuous detail.

Produced during „orchid fever“ of the Victorian era, when collecting and discovering orchids reached extraordinarily high levels, wealthy orchid fanatics like Edward Salt sent explorers and collectors to almost every part of the world in search of new varieties of orchids. Orchidelirium is seen as similar to Dutch tulip mania and was a craze limited to the European upper classes, to include James Bateman at Biddulph Grange, Baron Schroeder at the Dell, Englefield Green and Sir Trevor Lawrence at Burford, Dorking, Surrey and Robert Warner, Sigismund Rucker, James Veitch, Joseph Hooker and others.

A difficult plant to grow in cold or even temperate climates, the rich spent a fortune on orchids that died in unsuitable conditions, generally with waterlogged roots in stifling hot greenhouses. New exotic orchids were most often sold at auction in London, fetching extravagant prices. During this time very little was known about the cultivation of orchids and their survival rate was dismal. Through experimentation and by gathering more information on the growing conditions of orchids in their natural habitat, knowledge was slowly being developed and by 1871 B.S. Williams published the first edition of *The Orchid Grower's Manual*. Following a privileged education in London, Edward Salt (1837 - 1903) entered the textile empire of his father Titus Salt (see *Saltaire*). In 1861 Edward Salt built for his wife and himself a lavish mansion (now demolished) and Green Houses which stood on the north side of the Aire Valley near Bradford. His „*Odontoglossum house*“, where he kept his famous orchid collection, was considered a model of perfection. Disaster struck in 1892, when the business went into liquidation. His collection of orchids had been sold in 1892 and the house had been mortgaged to the Bradford Bank.

The artist Cornelius Beavis Durham exhibited at the Royal Academy every year between 1827 and 1858, winning several awards, including a silver Isis Medal in 1832 given to him by the Royal Academy, as an encouragement award for a drawing in chalk of an animal. He also exhibited at The Royal Society of British Artists between 1832 and 1842. In December 1830, he was admitted to the Royal Academy Antique School. He is regarded as being in the higher ranks of miniature portrait painters working in the nineteenth century.

The English orchidophile John Day (1824-1888), son of a wealthy wine merchant, was one of the richest and most famous orchid growers in Europe and he employed Cornelius Beavis Durham in 1862 to paint watercolors of his best plants. Durham might already had have a reputation as a flower painter. Durham prepared over 320 paintings for Day, all bar a few being sold at auction on Day's death in 1888 to Sir Jeremiah Colman of the mustard family, but only a few of Durham's paintings survive (Kew Gardens; Fitzwilliam Museum Cambridge). John Day received twelve drawing lessons from Durham in the early 1860s and from January 1863 John Day began to draw orchids by himself.

Only Eight watercolor drawings of orchids of Durham are known today, being in the Fitzwilliam Museum/Cambridge (coming from the same provenance as ours). Provenance: Edward Salt; the 2nd Lord Fairhaven (Lord Broughton) Lit.: *Endless Forms*. Charles Darwin, *Natural Science and Visual Arts*. Edited by Diana Donald, Jane Munro. (Yale Center 2009), pp. 266 ff.; Cribb/Tibbs. *A very Victorian Passion. The Orchid Paintings of John Day, 1863 to 1888* (2004). ([https://digidownload.libero.it/DURHAM\\_FAMILY/DURHAM-STRAYS-CORNELIUS-DURHAM-family.pdf](https://digidownload.libero.it/DURHAM_FAMILY/DURHAM-STRAYS-CORNELIUS-DURHAM-family.pdf))

### **ESMARK, Jens.**

Reise von Christiania nach Drontheim durch Oesterdalen und zurück über Dovre, nebst einem Abstecher nach Jemteland. Von Jens Esmark, Professor der Mineralogie und Mitglied mehrerer Gesellschaften der

Wissenschaften.- Christiania (Oslo), Gedruckt bey Chr. Gröndahl, 1829. 8vo. (175 x 110 mm) 83 pp. with fold. lithographed map at the end. Warbled paper card boards. Spotted. Name of Simon Chr. Esmark on title. € 800.-

Very rare travel account of the Danish - Norwegian geologist Jens Esmark (1763 – 1839) who contributed many of the initial discoveries and conceptual analyses of glaciers, specifically the concept that glaciers had covered larger areas in the past. Starting in 1797, Esmark was employed as a lecturer in mineralogy at the Kongsberg Mining Academy. In 1814, Esmark became Norway's first professor of geology at the University of Oslo.

### **FABER, Friedrich (Frederik).**

Prodromus der isländischen Ornithologie oder Geschichte der Vögel Islands.- Kopenhagen: auf Kosten des Verfassers / P.D. Kiöpping, 1822. 8vo. (195 x 112 mm) (4), 110 pp., (2), one fold. table („Natatores“) Contemporary half calf, spine slightly defective, old ink stamped of a Danish school on title (Aalborg Skole). Fine. € 1.200.-

Rare first edition of his first work, draft of the ornithology of Northern European Birds.

The pioneer Danish ornithologist Frederik Faber (1796 – 1828) is best known for his work on the birds of Iceland, Ueber das Leben der hochnordischen Vögel (1825), of which this work is a first printed draft. Faber was born at Henneberg Farm near Fredericia along with eight other siblings. His father was a lawyer who moved to Copenhagen and became a brewer. Faber studied law at the university from 1813 to 1818. He then went on a visit to Iceland and returning in 1821 he became regimental quartermaster in the Sleswig Cavalry Regiment working there until his death. Faber studied birds and animals as an amateur, travelling in the northern parts of Iceland and Jutland. Faber noted that bird migration involved movements towards the poles to their breeding grounds. He also noted that young birds stayed on longer than the adult birds. Towards the end of his life he travelled to northern Jutland with his main interest in fishes. He kept notes on all his travels which are now in the Danish zoological museum.- Otto Helms (2008). Frederik Faber. An early Danish Ornithologist (1796-1828) in: Ibis. 76, pp. 723–731; Stresemann, Entwicklung, pp. 307-309: „Markstein in der Geschichte der Ornithologie“.

### **Fauna collected at the Niger Expedition 1841/42**

#### **FRASER, Louis.**

Zoologia Typica, or Figures of New and Rare Mammals and Birds described in the Proceedings or exhibited in the Collections of the Zoological Society of London.- London, Published by the Author, (1845) - 1849. Folio (365 x 265 mm). With hand - colored title within a scene of giraffe feeding and natives watching a lion across the Niger, and 70 hand - colored lithographed plates with descriptive text and a list of subscribers. Complete. Contemporary brown half morocco, gilt ornamented spine with gilt lettering, gilt edges. € 19.000.-

First edition, limited to 250 copies, a series of seventy colored plates illustrating new birds and mammals collected by Fraser during the Niger expedition in 1841. Originally issued in 14 parts, in this interesting work he described a large number of new species of birds and mammals that were presented to the Zoological Society: the plates issued illustrate forty-six species of birds (on 42 plates) and twenty-eight mammals with representations of their habitat not before illustrated. The excellent plates were executed by Charles Couzens and H. N. Turner.

Employed at the museum of the Zoological Society of London from 1832, Louis Fraser (1819 – c. 1883) left his position to accompany Allen's and Thompson's Niger Expedition (1841 - 1842) as a scientist of the African Civilization Society, where he assembled an important collection of animals in the Gulf of Guinea.

He returned to the Zoological Society and served as its curator from March 1844 to January 1846. While in this post, he started a regular correspondence with the Zoological Society's president Edward Stanley, 13th Earl of Derby, who owned a large private menagerie and natural history collection at his home (Knowsley Hall). During his time as curator, Fraser embarked on a project to publish regularly 'figures of every new and rare mammal and bird species

described in the Proceedings of the Zoological Society of London of which figures had not appeared in any other publication', e.g. the fauna he collected at the Niger expedition especially at Fernando Poó (Bioko). However, financial difficulties (perhaps due to little interest from potential subscribers), his final departure from the society to visit Tunis in order to collect specimens for Lord Derby and his taking up a temporary post of conservator at Knowsley, saw Fraser conclude the project in 1849. *Zoologia typica* contains 70 lithographs by the artists Charles Couzens and H. N. Turner Jr. They depicted 28 mammals and 46 birds from newly identified genera and species, all not yet pictured. The superb coloring of the plates was by the artist Triptree, 6 Guildford Street, Walworth, acknowledged by the author in the preface. Among the birds depicted are: Modest Parraket, Superb Lory, Bronze-winged Parrot, Amber-crested Cockatoo, Elphinstone's Pigeon, Red-billed Ibis, Cape Palmas Finch, Grey-backed Finch, Red-Rumed Warbler, Tailor Bird, Yellow-bellied Bucco, Chattering Thrush, Sykes Oriole, Fernando Po Cossyphan, Strickland's Tephrodornis, etc. The quality of the plates is mixed, with those by Turner generally being the more accomplished and while interesting to look at, several of the illustrations displayed inaccuracies, in particular the addition of plants not native to the habitats in which the animals could be found, but at the time it was irrelevant e.g. not known. From April 1848 he was temporarily responsible for Lord Derby's collection at Knowsley Hall. It was Fraser who published a catalog of the collection in 1850 with *Catalogue of the Knowsley Collections*. The six-volume manuscript on the birds in the collection is in Liverpool. From 1851 to 1853, Fraser was appointed Vice-Consul of Ouidah, Dahomey, during the reign of Gezo, King of Dahomey, through the mediation of Lord Derby. Fraser collected over 1000 specimens of birds in Tunisia, Dahomey (Benin), Niger, Fernando Poo, Ecuador, Panama, Guatemala and North America. 645 have been identified in collections in Great Britain, Germany and the USA, including over 100 type specimens. His collection is in the Natural History Museum at Tring, in Liverpool and in Cambridge. He left extensive and detailed observation notes. Fraser later collected mammals, birds and a few plants from 1859-1861 in Ecuador and California, employed by the Zoological Society's Philip Lutley Sclater (1829-1913). Fraser corresponded with Charles Darwin. Returning to London he set himself up as an agent selling exotic birds (Regent Street), before moving to the United States for what turned out to be the last few years of his life.- Provenance: Armorial bookplate of Alan Francis Brooke (1883 - 1963), a famous British general, whose foremost passion was birds. Armorial bookplate of Henry Rogers Broughton. Zimmer. *Ayer* I, 230; *Anker* 150; *Wood* 348; *Nissen IVB*, 329; *Fine Bird Books*, 75; *Bradley Martin Color Plate* 92; *Lit.*: Moore, Amberley; James Jobling (2004). *The unknown traveller - the ornithological collections of Louis Fraser*; *Bulletin of the British Ornithologists Club*. 124 (1): 2; Amberley Moore: "Your lordship's most obliged servant": letters from Louis Fraser to the thirteenth Earl of Derby, 1840 to 1851. *Archives of Natural History*, Band 31, 2004, S. 102-122.

### **Color Printed Anatomy**

#### **GAUTIER D'AGOTY, Arnauld - Eloi.**

*Cours complet d' anatomie, peint et gravé en couleurs naturelles par A. E. Gautier D' Agoty, second fils; et expliqué par M. (Jean-Nicolas) Jadelot.- Nancy, Jean - B. H. Leclerc, 1773. Large folio (680 x 500 mm) [2] Bll., 25 pp., and 15 engraved, color - printed plates; the title-page with traces of an effaced stamp, leaving a stain, but a copy with a fine provenance even so (see below); a couple of small tears and a few spots; otherwise overall a very well preserved copy, bound in contemporary calf-backed boards; the binding with minor restorations, one corner creased.* € 24.000.-

First edition of this superb anatomical work (a major work of great merit and satisfaction'; Franklin), one of the younger d' Agoty's most important publications, beautifully illustrated with his famous color - printed engraved plates, and here preserved in its contemporary binding.

Arnauld - Eloi Gautier d' Agoty was the second son of the celebrated Jacques-Fabien Gautier d' Agoty (1717 - 86), who for thirty years held the royal privilege for color printing in France. J. F. Gautier d' Agoty was (or claimed to be) the inventor of the four-color method (red, blue, yellow and black) of printing mezzotints in color, an improvement on the three-color method devised in the early part of the 18th century by Jacques Christophe Le Blon (d. 1741). Gautier d' Agoty obtained the color printing privilege in 1742, and over the next three decades he and his associates,

including his son Arnauld - Eloi, issued a series of illustrated works, primarily on human anatomy, that were as radically original and dramatic in their size and artistic composition as they were in their manner of production. "These fifteen plates follow a scheme of progress, from the classical figures at the start, to skeletal hands and feet; or we can see it as a strip performance, from fully clad nudes by stages to muscle and bone. The delightful Apollo and Venus starting the theme were of course prepared in four mezzotint plates by Arnauld - Eloi, but painted by a Nancy artist, Jean Girardet, who died five years later... They are certainly stunning examples from neo - classical France, reproduced with sophisticated art by the Gautier D' Agoty process." (Franklin, Early Colour Printing pp. 49 - 50). The plates illustrate a text by the physician and anatomist Nicolas Jadelot, professor at Nancy University. Jadelot originally envisioned a five-part work, but only the present part was ever completed and published. The copy offered here is rather special and particularly interesting for containing pasted-in slips with contemporary explanations to the plates in Latin. Provenance: from the library of Duke Tommaso de Vargas Machuca or Macciucca (1679-1775), with his bookplate to front paste-down. Macciucca was a descendant of an old, Spanish noble family resident in the Kingdom of Naples since the 16th century, and assembled one of the finest libraries there.- Choulant Frank, History and bibliography of anatomic illustration, p. 273; Wellcome III, p. 97 ; F. Rodari, Anatomie de la couleur. L'invention de l'estampe en couleurs, exposition Paris-Lausanne 1996; Singer, Arnauld - Eloi Gautier d'Agoty, 1-15

### **Cabinet of Wax Fruit Models**

#### **(GEBHARDT, Ernst Heinrich; SICKLER, Johann Volkmar; circle)**

„Pomologisches Kabinett“ (mounted title on inner cover). Collection of 120 mounted watercolors over pencil with depictions of apples, pears, apricots, plums, cherries and hazelnuts by an unknown artist, all titled below the image, and drawn after Johann V. Sickler's „Teutsche Obstgärtner“ (Klein - Fahner/ Thüringia, Gotha or Weimar, 1795 - 1801). Watercolors on laid paper (ca. 200 x 120 mm), each titled in pen and Roman numerals below. Two sheets mounted side by side on blue - grey card, bound in a contemporary marbled cardboard in oblong - folio (230 x 280 mm), scuffed and bumped. The watercolors are in beautiful condition, only occasionally minimally stained. The album probably originally contained once more images, maybe 210 watercolors (last numb. 210 with: „Ende“ (End) in pencil), but some sheets were removed or cut out for whatever reason, silk shirts mostly removed, with mounted signature of Johann Volkmar Sickler inside front cover and place/date at the back inner cover: Klein - Fahner, 1801. Fine survivor. € 15.000.-

Sample catalogue of wax models of pomaceous and stone fruits with splendid, freshly colored watercolors after Johann Volkmar Sickler's „Teutsche Obstgärtner“ (1794 ff.), with drawings cleanly executed and of great detail and naturalness. The images are identical to Ernst Heinrich Gebhardt's engravings in Johann Volkmar Sickler's „Teutsche Obstgärtner“, but the numbering and order is different.

The album might also have been used in the manufacture as a sample book for the coloring of the wax models, then it might have been used by Goethe's later wife, Christiane Vulpius, for coloring the wax models of fruits manufactured with the publisher Friedrich Johann J. Bertuch and his wife, the entrepreneur Friederike Elisabetha Caroline Bertuch (1751 - 1810). Among others, 41 apple varieties and 59 pear varieties are shown in this catalogue.

It could be that this album with images of wax models represent the left over in storage, and the cut outs are the images of wax models no longer on stock. At least on one image is a note: ohne Beschreibung (without description), indicating that the model was present but no longer the printed description.

From 1794 to 1804, the vicar and pomologist Johann Volkmar Sickler (1742 - 1820) was publisher, editor and main author of the first German fruit - growing magazine: Der teutsche Obstgärtner, which was published by Bertuch's „Verlag des Industrie - Comptoirs“. A total of 432 fruit varieties were described in the 22 volumes of ‚Der Teutsche Obstgärtner‘. The colored illustrations were created by the illustrator and trained confectioner Ernst Heinrich Gebhardt (1757 - 1813). The magazine had to be discontinued in 1804 for economic reasons because it had too few subscribers. Also together with the publisher Bertuch, the same Sickler published a „fruit cabinet“ (Pomologisches Kabinett) of wax models, distributed between 1794 and 1820, in which the pome, stone and shell fruits described in

Deutscher Obstgärtner were depicted as lifelike wax models. The model fruits were initially produced by the pastor and confectioner Ernst Heinrich Gebhardt (1757 - 1813). As a confectioner, he mastered the art of decorating magnificent cakes with durable, sculptural showpieces - an ancient art - that was already practiced at princely „show tables“. Gebhardt covered the fruit selected by Pastor Sickler as typical with a layer of plaster, split the still moist mold and sculpted the finer details out. Hot wax was poured into the assembled mold through the handle the mold: this resulted in wafer-thin fruits with a wall thickness of approx. 2 mm, which reproduced all the wrinkles, edges, scabs and warts in accordance with nature. Painted true to nature and provided with a handle made of twisted and waxed twine, the fruits, 8 to 12 in boxes, were sent to the customers as a delivery.

Another source mentioned that these wax models were produced and distributed by Bertuch wife. Together with her sister Bertuch's wife, the entrepreneur Friederike Elisabetha Caroline Bertuch (1751 - 1810) ran her own plasterer's workshop in Weimar. It was a branch of Friedrich Justin Bertuch, who founded this company in 1782 at his wife's suggestion and probably also provided it with the necessary capital. The manufactory was located in Bertuch's own house. It specialized in the production of artificial flowers. The company, which also supplied the Weimar court, also pursued a social goal. The aim was to enable destitute members of the middle classes to earn an income. Christiane Vulpius, the later wife of Goethe, was probably the most important employee of their company. She is known to have provided the coloring of apple wax models between 1795 and 1804. (see BGBM Sonderausstellung 2001 Äpfel) Caroline Bertuch was also involved in the *Journal des Luxus und der Moden*, founded in 1786, which was also used for her own advertising.

After Gebhardt's death, the models were produced by the Gotha porcelain painter Ch. M. Sundhausen. In the 1815 issue of this magazine's *Intelligenzblatt* (p. XVI - XVII), this Chr. M. Sundhausen from Gotha offers: „Wax fruits of all kinds, molded after the illustrations of the *Teutschen Obstgärtner*, in the same perfection as they used to be made by Gebhardt in Töttestädt, to be had on free order, both in dozens and singly. If they are ordered in dozens, in which there can be four large, four medium and four small ones, they cost two Reichsthaler. However, if they are requested individually and have to be made according to molds that do not yet exist and have to be made first, they cost a little more. In this case, some good specimens must be sent in, which will then be shaped and colored according to nature, and the name of which, if they occur in the *Teutscher Obstgärtner*, will also be communicated.“ On the one hand, it can be concluded from this report that wax fruits were to be produced according to the old molds, as they were already available from Bertuch, and on the other hand that models of additional fruit varieties were offered according to special requests. The pomologist Sickler recommends Sundhausen's wax fruits by writing that the quality of his models is just as good „...as the late Gebhardt formerly supplied them to the *Teutscher Obstgärtner*.“

After Bertuch's death in 1822, the collection was not continued.

The Numbers present within the album: Apple/Äpfel: XIII-XIV, XXI-XXIV, XXVII-XXXVI, XXXVIII-XL, XLII-XLIII, XLVI-LV, LIX-LXII, LXV-LXVIII, LXXXIV-LXXXV, Pears/Birnen: I-VIII, XI-XVIII, XXIII-XXVI, XXIX-XXX, XXXIII-XXXIV, XXXVIII-XLVI, XLIX-LXVII, LXX-LXXIII, LXXXVI, LXXXIII- LXXXIV, Apricot/Aprikose: I-IV, Plum/Pflaume: I-III, XVIa-XVIII, Cherry/Kirsche: I-IX, XV-XVI, XX, XXX-XXXVII, Nut/Nuss: I-II.

„Von 1794 bis 1804 erschien im Verlag Bertuch das Magazin „Der teutsche Obstgärtner“, das von 1804 bis 1824 vom „Allgemeinen teutschen Gartenmagazin“ abgelöst wurde. Erstere Reihe wurde von dem seinerzeit bekannten Pomologen Pfarrer Johann Volkmann Sickler (1742 - 1820) aus Klein-Fahern/Thüringen herausgegeben. Im Band 4 des Jahres 1795 finden wir folgende Ankündigung des „Pomologischen Kabinetts“: „Die geehrtesten Leser des teutschen Obstgärtners werden sich aus dem VI. Hefte von J. 1794, oder dem II Bande S. 161 des interessanten Vorschlages des Hrn. Kammerherrn und Ritter-Raths von Könitz zu Untersiemau bey Coburg, dem bisherigen schädlichen Wirrwarr in der pomologischen Nomenclatur, durch gut und treu nach Natur gearbeitete Wachsf Früchte, ein Ende zu machen, erinnern, und was der Herausgeber des *Teutschen Obstgärtners* Hr. P. Sickler hierüber dem Publikum versprochen, dieß Versprechen, den Liebhabern der *Teutschen Obstcultur* ein vollständiges pomologisches Kabinett, mit Beziehung auf den teutschen Obst-Gärtner, zu liefern, können wir nun mehr nach mancherlei überwundenen Schwierigkeiten erfüllen, und wir zeigen hier durch an, daß wir von künftigem Neuen Jahre an bereit sind, an alle Liebhaber die davon Bestellung bey uns machen, die einzelnen Lieferungen des Pomolog. Kabinetts zu versenden.“ Im weiteren werden die Kauf- und Lieferbedingungen beschrieben, z.B. daß jeder Lieferung ein gedrucktes Beiblatt mit dem Inhalt der Lieferung beiliegt, sowie die Art der Verpackung und die Vorausschau, das jedes Jahr 3 - 4 Lieferungen mit jeweils 8 - 10 Modellen erfolgen sollen. Wichtig ist die Feststellung, daß nur solche Sorten geliefert werden sollen, „deren Charakteristik schon völlig für den T(eutschen). Obsfg(ärtner). ausgearbeitet,

und ihr Name also richtig bestimmt ist;“ Tatsächlich finden sich in dieser Reihe und auch in deren Nachfolgerin dem Allgemeinen Teutschen Gartenmagazin ausführliche Beschreibungen mit handkolorierten Abbildungen von Sorten, die im Pomologischen Kabinett dreidimensional wiedergegeben wurden. Auf gleicher Seite im Band 4 des Teutschen Obstgärtners des Jahres 1795 folgt die Meldung, daß die erste Lieferung fertig sei und zum Versand bereitstehe. Die erste Lieferung erfolgte also 1795. In der gleichen Zeitschrift des Jahres 1804 findet sich dann eine Auflistung der ersten 13 Lieferungen, die insgesamt den Umfang von 52 Äpfeln, 52 Birnen, 19 Pflaumen und Zwetschgen, 20 Kirschen, 4 Pfirsiche, 2 Aprikosen und 1 Nuß hatten. Die gleiche Meldung erschien im „Intelligenz-Blatt“ zu ersten Band des Allgemeinen Teutschen Gartenmagazins aus dem Jahr 1804. Wieviele Einzellieferungen es letztendlich waren und zu welchem Jahr die letzte Lieferung erfolgte ist noch nicht endgültig geklärt. In einer vergleichbaren Sammlung aus dem Eigentum der Kulturstiftung Dessau - Wörlitz werden unter der letzten dort vorhandenen, 25. Lieferung bei Äpfeln und Birnen jeweils die 100. Sorte aufgelistet. Einen weiteren Hinweis auf den Gesamtumfang des „Pomologischen Kabinetts aus Bertuch’scher Herstellung liefert eine in Privathand befindliche Sammlung, die der Autor dank eines Hinweises des Westfälischen Museums für Naturkunde ausfindig machen konnte. Zwar fehlen in dieser Sammlung bereits einige Modelle, jedoch sind noch alle Originaletiketten der bezogenen Lieferungen vorhanden, die bezogen wurden. Diese enden bei Äpfeln und Birnen jeweils bei der Nummer 104, also dem Fortgang des Pomologischen Kabinetts folgend die 26. Lieferung, da jede Einzellieferung obligatorisch 4 Apfel- und 4 Birnenmodelle enthielt. Hinweise auf weitere Lieferungen gibt es derzeit nicht und man kann davon ausgehen, daß das Pomologische Kabinett mit der 26. Lieferung eingestellt wurde, die um das Jahr 1813 erschienen sein muß.“ (M. Mäther) – Lit.: Matthias Mäuser. Das Pomologische Kabinett von F. J. Bertuch aus Weimar im Naturkunde-Museum Bamberg, in: LXXII. Bericht Naturforsch. Ges. Bamberg (1997) pp. 49 - 78; Karl-Ludwig Ostertag-Henning. Modellfrüchte – wächserne Kostbarkeiten der Pomologen; in: Zandera 15 (2000), pp. 55-65.

### **Earliest Representations of African, Arabian and Indian People**

#### **(GLOCKENDON, Georg; after Hans BURGKMAIR)**

Der Kunig von Gutzin (1511). The King of Cochin, after Hans Burgkmair by Georg Glockendon; a procession of natives of Africa, Arabia and India, in five wood - blocks, with on the left a standing man holding spears next to two women seated on the ground nursing infants, figures tending cattle in the centre and on the right the King of Cochin seated on a palanquin with musicians. Late 18th century impression from the 5 original woodblocks, then in the Derschau Collection. (Gotha, after 1780) Each of the five sheets in size: 267 x ca. 385 to 395 mm and bound as a panorama. Bound in early 19th cent. paper. Very fine copy on unidentified paper with minor water-stains. € 4.200.-

Early Impression of the large-sized woodcut series of 1511 by Georg Glockendon (d. 1514) after the woodcuts by Hans Burgkmair (1473 - 1531), who made the series in 1508 for the travel diary of Balthasar Sprenger (also Springer; before 1500 - died around 1510) published in 1509. Sprenger’s diary is one of the oldest travelogues in the German language; the title reads: „Dje Merfart vnd erfahrung nüwer Schiffung vnd Wege zu viln onerkanten Jnseln vnd Königreichen ...“ Of the book only a few copies are known to have survived.

Sprenger was sent to Portugal in 1503 by the Augsburg trading house of Welser as a representative to explore new business opportunities. In 1505, on the latter’s behalf, he took part in a voyage among the 22-ship fleet of the Portuguese viceroy Francisco de Almeida, which took him from Lisbon around the African continent and the Cape of Good Hope to the African east coast and on to the Indian south-east coast to Kochi and Calicut to buy spices. After a year, he returned to Lisbon and Augsburg in 1506.

In his travel diary, he not only described the trading voyage and the various towns and settlements the traveling party visited, but also his impressions of the people, settlements and cultures he came into contact with in Africa and India. Only a few years earlier, the sea route to India had been discovered by the Portuguese Vasco da Gama (1497/98). The crew of Sprenger’s ship probably sailed a similar route. Sprenger describes among others „Monbasa“ (Mombasa), „Monsebick“ (Mozambique) and „Mellyndi“ (Melinde). The importance of the account is shown by the fact that the book was illustrated with woodcuts by one of the most renown artists in the field at the time, the Augsburg



draughtsman Hans Burgkmair. Famous is his woodcut „Kunig von Gutzin“ (King of Cochin), made after Sprenger's descriptions, which shows the king of the kingdom of Kochi carried in a procession on a kind of palanquin. A second version of the images was produced by the Nuremberg graphic artist Georg Glockendon for a pirate edition. In Georg Glockendon's set, the last two digits of the year were changed from 1508 to 1511, on the first sheet of the set „In Gennea“ at lower left with the remains of Glockendon's monogram, where from the „printed name in the lower angle of the left hand, here only the initial stroke of the G is still visible“.

This prints here are maybe from Rudolf Zacharias Becker's work „Holzschnitte alter deutscher Meister, Zweyte Lieferung (Gotha 1810), listed as B 26. The teacher, writer and bookseller Rudolf Zacharias Becker (1752 -1822) published a selection of woodcuts from the Derschau Collection, which can be traced back to Hans Albrecht von Derschau (1755 - 1824), who acquired several hundred original woodblocks by 15th - and 16th - century artists around 1780, among others from the former estate of Willibald Pirckheimer (1470 - 1530), a friend of Dürer. The woodblocks were later purchased by the Prussian king, who then donated them to the Berlin Kupferstichkabinett, where they are still kept today. No watermark seen.- Bartsch 77; Muther 13 ff.

## Flowers of the Sea

### **GMELIN, Samuel Gottlieb.**

*Historia Fucorum* auctore Samuel Gottlieb Gmelin, ... Petropoli (St. Petersburg): ex typographia Academiae Scientiarum, 1768. 4to (270 x 210 mm). [18], 239 pp. with 35 folding copper plates engraved under the supervision of Jacobus de Stachlin - Storcksburg, plus three original samples laid down on loose paper slips, one of which dated Norwich, 1801. The 6 pp. Explicato Tabularum, normally found at the end, here bound with the prelims, the Natural History Museum London copy having the same arrangement. Title page & one leaf of preface with neat repair to upper margin, no loss to text. Neat, small circular and unidentified contemporary private ownership stamp to verso title. An excellent copy bound in slightly later diced russia, re-backed to style with label. € 3.900.-

First book dealing exclusively with algae in which binomial nomenclature was used and the first book published in Russia on marine biology in which he described 20 types of algae in the Russian seas. It includes elaborate illustrations of seaweed and marine algae on folded leaves.

Samuel Gottlieb Gmelin (1745-1774) was a member of a celebrated family of German naturalists with Russian connections. An uncle, Johann Georg Gmelin had been encouraged by Peter the Great to move to St. Petersburg, where in 1731 he was appointed professor of chemistry and natural history at the Academy of Sciences. Soon thereafter, he undertook an exploratory journey to eastern Siberia, getting as far as Yakutsk before turning back. His nephew, Samuel Gottlieb Gmelin, was born in Tübingen and obtained a medical degree at Leiden in 1763 at the age of 18. He lived for a few years by the sea in Holland, where he became intrigued by seaweeds and began making observations, collections, and drawings. In 1767 he moved to St. Petersburg, where the Academy of Sciences published his *Historia fucorum*. In 1770, he embarked on a journey on behalf of the Russian Academy of Sciences and in the service of Catherine the Great. The interesting fact is that he was accompanied not only by the other 9 soldiers, but also a flutist and drummer. He researched flora and fauna of the western part of the Caspian Sea and was also visiting the east coast (present day Kazakhstan), making interesting ethnographic observations there.

On February 5, 1774 in Dagestan, Gmelin was taken as a prisoner by the Kaitag Khan, and all attempts by the Russian authorities to influence the khan on the extradition of a scientist were not successful. Gmelin died from mistreatment (anxiety, unrest, malnutrition, exhaustion and dysentery) at the hands of a hostile tribe in the Caucasus at the age of 30. Research of Samuel Gmelin covers the broad spectre - from the Caspian birds, fish as well as mammoth remains described by him in 1769 with a flora and fauna of the Caspian Sea's region.

Like Linnaeus, Gmelin referred all cartilaginous algae to the genus *Fucus*. Unlike Linnaeus, he had a keen interest in these plants and numerous Dutch collections at hand, many of which he perceived to represent previously undescribed species. In his remarkably scholarly treatise, Gmelin synthesized all information on seaweeds. Of the 99 species of *Fucus* that he recognized, 57 were newly described, while 42 were adopted from Linnaeus. Although in some instances Gmelin gave fairly precise collecting information, for most species the collector must be inferred. He indicated the Indian Ocean as the provenance of four newly described species but gave no hint of the collector. For

certain species, he cited Rumphius and Seba. Since Rumphius dealt with plants from Amboina in the Pacific Ocean part of Indonesia and many of Seba's algae came from the Cape of Good Hope in the Atlantic Ocean, we may infer that Gmelin was applying the term Indian Ocean broadly and incorrectly. However, algal specimens used by Gmelin in the *Historia fucorum* are thought to no longer exist (Dixon & Irvine, 1970).

Although reasonably well noted bibliographically & institutionally, very scarce in commerce, last time 1989 at German auctions.- Nissen BBI 722; Cleveland 487; Pritzel 3396; Stafleu & Cowan 2050; Brunet II, 1628; BM(NH) 685; Ebert 8613; Banks III, 344; Jackson 155.

### **HAECKEL, Ernst.**

*Kunstformen der Natur*.- Leipzig und Wien, Bibliographisches Institut (1899) 1904. Folio (mm) Printed wrapper of the first title, title of the second volume., 1 leaf foreword, 100 plates with 100 leaves explain. text, supplement. Complete copy with the supplement with 100 lithographed plates, partly printed in color. Contemporary private half leather with gilt printed title on cover, covers and edges slightly rubbed, especially at backside. Overall good and clean copy of the famous book. € 4.500.-

First edition, second issue, with the title to first part not bound in, instead wrapper of the first installment bound in. Considered one of the marvels of 19th century naturalist illustration. With their sinuous lines and tendency to idealize nature, these drawings are also considered a forerunner of the Art Nouveau movement. Indeed Haeckel's most lasting legacy may lie in the field of art. In science, where artistic license is often called fraud, Haeckel's reputation was sorely tarnished.

Originally published in sets of ten between 1899 and 1904 and collectively in two volumes in 1904, *Kunstformen der Natur* (known in English as *Art Forms in Nature*) consists of 100 prints of various organisms, many of which were first described by Haeckel himself. Over the course of his career, over 1000 prints were produced based on Haeckel's sketches and watercolors; many of the best of these were chosen for *Kunstformen der Natur*, translated from sketch to print by lithographer Adolf Giltisch.

The work was „not just a book of illustrations but also the summation of his view of the world.“ (Breibach)

The over-riding themes of the *Kunstformen* plates are symmetry and level of organization. The subjects were selected to embody these to the full, from the scale patterns of boxfishes to the spirals of ammonites to the perfect symmetries of jellies and microorganisms, while images composing each plate are arranged for maximum visual impact. Among the notable prints are numerous radiolarians, which Haeckel helped to popularize among amateur microscopists; at least one example is found in almost every set of 10. Cnidaria also feature prominently throughout the book, including sea anemones as well as Siphonophorae, Semaestomeae, and other Medusae. *Kunstformen der Natur* was influential in early 20th-century art, architecture, and design, bridging the gap between science and art. In particular, many artists associated with Art Nouveau were influenced by Haeckel's images, including Hendrik Petrus Berlage's Amsterdam Commodities Exchange. Haeckel's images continue to be reprinted in numerous editions, making this work his most widely influential contribution to culture.- Nissen ZBI 1783 (II, 336 ff); DSB VI, 10; Richards, *The Tragic Sense of Life: Ernst Haeckel and the Struggle over Evolutionary Thought*, pp. 405-6.

### **HAGENDORN, Ehrenfried.**

*Ehrenfridi Hagendorni, ... Cynosbatologia ad normam Academiae naturae-curiousorum adornata*.- Jena, impensis Johann Bielcke, 1681. 8vo (162 x 92 mm) 14 leaves incl. engraved title, 191 pp., (1), 7 leaves with engraved title and 7 (incl. two fold.) engraved plates (sometimes the plates are counted to nine, because the second fold. plate is cut in two). Contemporary half-calf, marbled boards, rubbed and soiled, front-fly with date: Leydae (Leyden) 1697 and maybe price: zxy. Copy in first binding. € 650.-

First edition of this treatise on rosehips by the German doctor and personal physician of the Elector of Saxony, Ehrenfried Hagendorn (1640-1692) from Görlitz. Hagendorn studied medicine at the universities of Leipzig and Jena. In 1667 he received his doctorate in Jena. He then worked as a physician in Görlitz. A few years later he became personal physician to the Elector of Saxony. In 1674, Ehrenfried Hagendorn was admitted as a member of the *Academia Naturae Curiosorum*, today's German Academy of Natural Scientists Leopoldina. The work covers the

etymology of the word in Greek and German; descriptions of the various types of rosehips, the parts of the plant and how to cultivate it; its medicinal uses against a cough and various digestive disorders; and how to obtain its essence for use in scents and different drinks. Rose hips are used for herbal teas, jam, jelly, syrup, soup, beverages, pies, bread, wine and marmalade. They can also be eaten raw, like a berry, if care is taken to avoid the hairs inside the fruit.- VD 17 23:288499W; STC H 141; Pritzel 3693; Wellcome III, 190.

### **African Flower first described**

#### **HEISTER, Lorenz.**

Descriptio novi generis plantae rarissimae et speciosissimae Africanae ex bulbosarum classe ... Cui In Honorem ... Caroli Brvnsvicensim Ac Lvnebvrgensim Dvcis Hodie Regnantis ... Brvnsvigiae Illvstre Nomen Imposvit. In Qva Simvl Mvltae Botanicorvm Qvorvndam Hallvcinationes Indicantvr Et Emendantvr Cvm Tribvs Magnis Tabvlis Aeneis Hvivs Plantae Coloribvs Natvralibvs Repraesentatae.- Braunschweig, Orphanotropheum (Waisenhaus), 1753. Folio (510 x 350 mm) 1 Bl., XXVIII pp. with 3 hand - colored engraved plates. Period style red half calf. Fresh and fine copy, only the title-page with repaired tear.

€ 7.500.-

Very rare first description of a South African flowering plant in the family Amaryllidaceae (*Brunsvigia* Heist.), named after the House of Braunschweig (Brunswick) - Lüneburg, specifically honoring Karl, the Duke of Brunswick, who promoted the study of plants.

The German surgeon and botanist Lorenz Heister described here a single bulb received in 1748 by the Dutch colonial administrator for the VOC (Dutch East India Company), Gustaaf Willem van Imhoff (1705-1750) from the Governor of the Dutch Cape Colony, Ryk Tulbagh (1699 - 1771) at the Cape and given to the Duke of Brunswick. The family contains about 20 species native to southeastern and southern Africa from Tanzania to the Cape Provinces of South Africa. Two years later Lorenz Heister described a plant from the Amaryllis family, Aztec lilies or Jacobean lilies which was named after Johann Heinrich von Spreckelsen (1691–1764), who supplied the plants to Lorenz Heister. Spreckelsen might also be involved in the distribution of the *Brunsvigia*. The German lawyer and Hamburg council secretary, von Spreckelsen, had the first private botanical garden established in Hamburg, which the naturalist Carl von Linné visited in 1735. Spreckelsen had sent the botanist Lorenz Heister the first specimens of scallions from his garden, whereupon they were given the genus name *Sprekelia* after him in 1755. The German anatomist and surgeon Lorenz Heister (1683-1758) studied at the University of Giessen under Georg Christoph Möller. In Giessen, Georg Theodor Barthold gave Heister the opportunity to perform his first dissection of a male corpse. He found „a large male member, but very small testiculi.“ In 1703 Heister followed Möller to the University of Wetzlar, where Möller had been appointed kaiserlicher Kammermedikus. Heister studied in Wetzlar until 1706. When he left Wetzlar, Heister had completed the study of all subjects needed for the practice of medicine. Thereafter he went via Leiden to Amsterdam, where he attended the botanical lectures of Caspar Comelin and the anatomical demonstrations of Frederik Ruysch (1638-1731). One of his other teachers was Johannes Jacobus Rau. Amsterdam was at the time the world centre for the study of exotic plants and one of the few places where anatomy could be studied by practical dissections. In June 1707, during the War of the Spanish Succession, Heister worked as an assistant physician of the confederates (die Föderierten) of Brabant, training in surgery in the field hospitals at Brussels and Ghent. In the winter of 1707 he visited Johannes Palfyn, then returned to Leiden to study anatomy under Bernard Albinus and Govert Bidloo, and attended Hermann Boerhaave's lectures on chemistry and on the diseases of the eye. Besides these studies he undertook studies in botany and learned the grinding of glasses. He obtained his M.D. at the University of Harderwijk on May 31, 1708. After his return to Frederik Ruysch in Amsterdam, Heister gave lessons in anatomy with demonstrations on cadavers. Ruysch, the official professor of anatomy, limited himself to an hour's discussion of his anatomical preparations daily. Heister's first class consisted of ten French surgeon's apprentices, his second of German students. He lectured to each group in its own language. On November 11, 1711 he was appointed professor of anatomy and surgery at the University of Altdorf, near Nuremberg. In 1720 Heister was appointed professor of anatomy and surgery at Helmstädt, where his teaching duties changed several times. In 1730 he was charged with the teaching of theoretical medicine and botany, and in 1740, upon the death of Brandanus

Meibom, with the teaching of practical medicine and botany. He remained in Helmstädt for the rest of his life. His botanical garden in Helmstädt soon became one of the most beautiful in Germany.

**HELLINGWERF, Pieter (van).**

Wisconstige Oeffening, behelfsende eene verhandeling over veele voorname zaken van de Mathesis. In vyf deelen onderscheyden: als 1. De weegkonst, 2. Musica, 3. Zonnewyzers, 4. Vloeystoffen weegkunde, en 5. Mathematische Mengelstoffe ... Amsterdam: by Joannes Loots, 1718. 4to (200 x 150 mm) (16), 478 pp, (2, last blank) with numerous geometrical text woodcuts and 7 fold. engraved plates at the end. Contemporary plain vellum, handwritten title on spine, rubbed and soiled, title little water-stained, browning throughout, else a very fine copy in first binding. € 3.200.-

Exceedingly rare text book on practical mathematics („Mathematical Practice“) by a mathematician from Hoorn, with a chapters on mechanics, statics, music, sundials, hydrostatics & specific gravity and mathematical miscellaneous incl. perspective in V parts, more or less an overview of existing knowledge, with mathematics applied to physics and reports of experiments by the author. In the last chapter, on p.421, Hellingwerf presented in a short text on “The flow of magnitudes” a definition of differentiation and integration. He mentioned differentiating (‘differentiëren’), flow (‘vloeyen’), reduction on the infinitely small (‘reductie op het oneyndig kleyn’) etc. He mentioned De Graaf and his symbols, but gave an example using dot notation, similar to the notation in use in *Mathematische Liefhebberye*, suggesting that the procedure of ‘flow’ (differentiation) was a relatively new, but known procedure. A reviewer in the „*Neue Bibliothec oder Nachricht und Urtheile von neuen Büchern*, Vol. X, 182 ff. praised the work: „Der Herr Hellingwerf hat sich... alle Erfindungen sowohl der Frantzosen, als anderer Nationen wohl bekannt gemacht, und seine Statick vornehmlich nach den Grund - Regeln des Herrn Varignons eingerichtet. Er gehet in einigen Stücken noch weiter, als derselbe, und vergisset auch die zusammengesetzte Werckzeuge nicht, und hat beynahe alles aus dessen Grund - Reguln hergeleitet, was nur von dieser Wissenschaft vorgebracht werden kan; ... Bey der Musick weiset er, was man durch ausrechnen und abmessen herausbringen kan. Von den Sonnen-Uhren hat noch niemand so wohl und ordentlich geschrieben, als er. In der Hydrostatick ... gehet er zwar etwas von Stevin ab, hält es aber doch nicht mit dem Rembrant, sondern folget vielmehr Nieuwentydt; wie er dann seine Beweis - Gründe alle aus dem Mariotte, Pascal, Cartesio, Nieuwentydt, Perier, Cassini, Valerio und anderen genommen hat, also daß man hier in einem ... alles so beysammen findet, was sowohl die Alten als Neuen merckwürdiges hievon gesagt haben.“

About the author (ca. 1673 - ca. 1738), we didn't find much. He was probably a relative of Adriaen Claesz Hellingwerf, who ran a school in West, a street in the centre of Hoorn (Dutch Republic) from 1694 to 1703 and taught subjects including navigation, arithmetic and bookkeeping. He wrote at least four books on these themes up to 1703. Pieter Hellingwerf also wrote a book on ballistics (Sloos 07040). Hoorn at the Zuiderzee reached its splendor in the 17th century and was the birthplace of several great men, including Willem Schouten (who sail around the tip of South American continent (Cap Horn), Abel Tasman (who discovered New Zealand and Tasmania), Jan Pieterzoon Coen (who founded Batavia, today's Jakarta) et al. As was the case for numerous other cities on the Zuiderzee, Hoorn's decline began in the 18th century when the supremacy of the Dutch fleet was overshadowed by the English merchant marine on the great international trade routes. With the decline of the navigation school, the author might have changed his subjects to new customers, like the „mathematical amateur“.- not in Hoogendorn (but see pp. 462); not in *Dict. Dutch. Phil.*; not in Vagnetti, not in Roberts/ Trent or Rouse; van der Aa 483; Lit.: Jenneke Krüger. Differential calculus in a journal for Dutch school teachers (1754 - 1764) <https://publimath.univ-irem.fr/numerisation/ACF/ACF19017/ACF19017.pdf>

KVK: no copy in Germany, no copy in the Switzerland; at least 6 copies in the Netherlands incl. Univbibl. Amsterdam; COPAC: Oxford, UCL; OCLC: only Oklahoma.

**One of the Most Attractively Illustrated Entomological Works of the Period**

**HERBST, Johann Friedrich Wilhelm; JABLONSKY, Carl Gustav.**

Natursystem aller bekannten in- und ausländischen Insecten. Zweite Abteilung: Schmetterlinge. Nach dem System des Ritters Carl von Linné bearbeitet. 10 vols.- Berlin: bey Joachim Pauli, 1783 - 1806. 8vo and

oblong 4to. (22), CXXVI, (2), 216 pp.; XXXII, 295 pp.; XII, 232 pp., (4), VIII, 208 pp.; VIII, 231 pp., (2) 162 pp.; (6), 178 pp., (8), 304 pp.; (6), 205 pp., (2), 334 pp., VIII; XIV, 392 pp., one hand colored frontispiece and 11 hand colored title-vignettes. 11 vols. text uniformly bound in seven contemporary half calf bindings with gilt lettering and ornamentation to spines. Extremities with wear and spines with water stains. Front hinge of vol. 3-4 split. Water stain to first leaves of 1 and 3-4, otherwise internally fine and three atlas vols. in different but contemporary paper card boards with 328 brilliantly hand colored engraved plates, with occasional brown spotting. € 9.000.-

An exceedingly rare and beautifully illustrated work on butterflies by Carl Gustav Jablonsky and Johann Friedrich Wilhelm Herbst, whose *Natursystem* is one of the first attempts at a complete survey of Exotic and European butterflies, and edited following the system of Carl Linnaeus (1707 – 1778), the father of modern taxonomy, as stated in the subtitle of the work. The natural history system, written mainly by Herbst after the early death of Carl Gustav Jablonsky in 1787, was published until 1806 in two sections (First section on beetles (Käfer) and Second section on butterflies (Schmetterlinge) with a total of 21 volumes and a two-part atlas, of which the part on butterflies is presented here in its entirety with text and plates.

Carl Gustav Jablonsky (1765 – 1787) was a Berlin naturalist, entomologist and illustrator, and also the private secretary to the Queen of Prussia, Elisabeth Christine of Brunswick - Wolfenbüttel - Bevern. Jablonsky died at age 31, willing his works to his colleague, Johann Friedrich Wilhelm Herbst (1743 – 1807) who edited the work from volume three onwards. Jablonsky and Krüger of Berlin designed the plates while the engravings were done by Ludwig Schmidt and his assistants with brilliant coloring.

Johann Friedrich Wilhelm Herbst was a German naturalist and entomologist who dedicated his life to the study of insects. He recognized the need for a systematic classification of insects to provide a comprehensive overview of the diverse and complex insect world. Inspired by the Enlightenment's emphasis on empirical observation and classification, Herbst embarked on a monumental task of creating a comprehensive catalog of all known insect species, both domestic and foreign. The book consists of beautifully detailed engravings accompanied by precise descriptions of insect species, organized according to a hierarchical taxonomic system. Herbst's system followed the Linnaean classification method, with each insect species assigned a unique name and categorized into orders, families, genera, and species.

Provenance: Frederick DuCane Godman (1834 - 1919)

Nissen 2048; Horn & Schenkling 10130; Hagen I, 358; Junk, Rara 10: „Die Tafeln sind vorzüglich colorirt; ... prächtige Original - Exemplare, wie das obige, (werden) immer seltener und theurer.“

### **Inner Beauty of Flowers**

#### **JOSING, Hanna (photogr.)**

12 prints in size in modern cloth portfolio. The images are reproduced from original film material (x-ray negatives) in the possession of Michael Kühn. The images are free of rights and were transferred from the original negatives by Mike Crawford (Lighthouse Darkroom / London). Only 10 boxes were made, each with 12 prints. Each print is stamped and numbered by hand (Box no. / image no.) Box no. I. includes the modern prints and the original 31 X-ray photographs of flowering plants mostly in size 295 x 235 mm and a few smaller in size 235 x 175 mm produced from the late 1940's to 1952 by Hanna Josing, in contemporary Agfa paper box, rubbed and soiled and little defective, together with 12 original proof prints of seven motifs (four laterally correct, one laterally reversed doublet). Silver gelatin on Agfa Provira and Zupex, all unsigned in size 290 x 230 mm. Two prints are inscribed on the reverse with Josing's private address in Aschaffenburg. Films with pin marks in the corners, those of the prints with some small defects.

€ 2.200.- (Box 1: € 9.000.-)

According to some enclosed typewritten letters (one with the artist's own handwritten draft reply) and newspaper clippings, Josing worked in the X-ray department of the district hospital in Heidenheim / Brenz and photographed the „soul of plants“ in her spare time.

Here images were published by AGFA in photo-paper sample catalogues in the late 1940's and in 1951, her pictures were shown at the Agfa booth at the International Photo and Cinema Exhibition in Cologne and at the Stuttgart exhibition „Beauty of Technology“.

The German female amateur photographer Hanne Josing might have read about the botanical radiographs of Dr. Dain Tasker which he had published in international photography magazines including *U.S. Camera* in 1939 and *Popular Photography* in 1942.

At least the American physician was a one of the pioneers of botanical radiographs in the 1930s. Dr. Dain Tasker (1872 - 1964) stands as a pioneer of botanical radiographs, especially emerging from a period when radiography was new and scientists' understanding of radiation was still developing. With their soft, boneless bodies, flowers may not seem like candidates for X-rays, but the doctor applied his knowledge of radiology to them, creating sublimely minimalist images of their inner beauty. Tasker was the chief radiologist at Wilshire Hospital in Los Angeles when radiology was in its beginning stages. In the 1920s, he became interested in pictorial photography as a hobby, creating photographs based on genres such as landscape and portraiture. After being inspired by an X-ray photograph made by a fellow physician in the 1930s, he began using his X-ray machine as a camera to record the anatomy of flowers. While another American photographer at the time, Imogen Cunningham, was known for her botanical photography that gave full-blooming majesty to magnolias and calla lilies, Tasker reduced flowers to their barest core. His photographs made from X-ray negatives have been called “nature's sketchbook for flowers” and the fragile and ghost-like representations expose the delicate details of roses, lilies, and irises and highlight the soft layering of petals and leaves. His black-and-white prints appear more like ink drawings than photographs.

“Flowers are the expression of the love life of plants,” Tasker wrote of his photographs, and the minimal compositions seem to contain a romantic appreciation for his subject matter. He also apparently noted that there was nothing difficult about taking such images, with the only requirements being “an abiding patience” and a knowledge of “flowers and their habits.”

Tasker showed his images at the annual salons organized by the Camera Pictorialists of Los Angeles in 1931 and 1932. Tasker's most well-known image of a calla lily was also printed by Ansel Adams and displayed at the Golden Gate International Exposition in 1939 on Treasure Island in San Francisco Bay.

Prints he reportedly gave as gifts to his nursing students upon their graduation. Tasker stopped taking X-rays of flowers sometime in the 1940s.

## Sea Urchins

### **KLEIN, Jacob Theodor.**

*Naturalis dispositio Echinodermatum. Accessit Lucubratiuncula de Aculeis Echinorum Marinorum cum Spicilegio de Belemnitis.*- Gedani (Gdansk), Thomas Johannes Schreiber, 1734. 4to (250 x 200 mm) (2), 78 pp., (2) with 36 engraved plates on 35 sheets. (bound with:) *Descriptiones tubulorum, in quorum censum relati lapides caudae cancri, Gesneri, & his similes belemnitae; ... Musei Kleiniani, addita est Dissertatio epistolaris de pilis marinis.*- Gedani (Gdansk), apud Knochium, 1731. (4), X, 26 pp. with ten engraved plates, (4). Contemporary half vellum with two morocco lettering pieces, red edges, worming to covers and inside covers, and a little to the first two and last two pages, else very clean and printed on strong paper. The last plate of the second work is nearly cut through by the binder, but nothing is missing. Cover with provenance monogram: D. A. S. 1775 (?) € 3.000.-

First edition of Jacob Theodor Klein's beautifully illustrated work on sea urchins, their fossil remains as well as belemnites from some of the most famous cabinets of natural curiosities of the time.

‘Klein's *Naturalis dispositio Echinodermatum* (1734) was one of the earliest monographic treatments of the sea urchins' (DSB). Klein called these the Echinodermata and divided them into three classes according to the position of the vent. The classes were then divided into nine sections, corresponding to the genera of later authors, and twenty-two species. Although altered and enlarged, this work was a major source of information on the Echinoidea for zoologists and paleontologists throughout the eighteenth century and remained a point of departure in discussions by such early nineteenth-century authors as James Parkinson.

The final two pages of text contain a 'conspectus' of a *Wunderkammer*, detailing the cabinets' contents, and their divisions. The superb plates, many engraved by Georg Wolfgang Knorr, depict specimens from a number of collections, including that of the important natural scientist Johann Heinrich von Heucher, who created various cabinets of natural curiosities at Dresden, the Danzig lawyer Nathanael Jacob Gerlach, the Lutheran theologian and historian Michael Lilienthal from Königsberg, member of the Prussian Academy of Sciences and honorary professor of the University of St. Petersburg, the famous naturalist Johann Georg Gmelin, the Königsberg physicist and teacher of Kant, Johann Gottfried Teske, the Leipzig pharmacist and naturalist Johann Heinrich Linck, the influential Leipzig alderman and collector Johann Christoph Richter, the Leipzig mathematician Christian August Hausen, known for his research on electricity, as well as examples from a number of other sources.

Klein (1685-1759), who studied law at the University of Königsberg and served as court secretary in Danzig from 1714, had many and diverse interests in natural history besides sea urchins. He developed a botanical garden in Danzig, founded and directed a naturalist's society there, made extensive collections, and published about two dozen monographs, including studies of birds, fishes, reptiles, and invertebrates other than the sea urchins, particularly the mollusks. Fossils are dealt with in various publications, and Klein edited the *Sciagraphia lithologica curiosa, seu lapidum nomenclator* (1740) of J. J. Scheuchzer, which was published after Scheuchzer's death.

## Shells

### **KNORR, Georg Wolfgang.**

G. W. Knorrs Verlostiging der oogen en van den geest, of verzameling van allerley bekende Hoorens en Schulpen, die in haar eigen kleuren afgebeeld zyn. Thans nagezien, verbeterd, vervolgd, en met een geheel nieuwe nederduitsche beschrijving uitgegeven. 6 parts in 2 vols.- Amsterdam: the heirs of F. Houttuyn, 1770 - 1775. 4to (260 x 195 mm). Six letterpress titles, 190 hand-colored engraved plates by J. A. Joninger, J. A. Eisenmann, A. Hoffer and others after Knorr, C. Dietsch, J. Wartenaar and others.

Contemporary brown tree calf covers paneled in gilt with foliate corner pieces, intricately decorated gilt spines, marbled edges, extremities lightly rubbed, spines creased. Occasional very light spotting, plates impressively clean. € 12.000.-

A finely colored set of this most beautiful work on shells, the first Dutch edition, totally devoted to mollusca in the style of Rumphius; it had previously been published in German (Nuremberg, 1757-1772) and French (1760 - 1773) and had been translated, corrected and enlarged by M. Houttuyn. Parts I to III of the present edition are by Philip Ludwig Stadius Müller (1725 - 1776) with the remaining parts by Martinus Houttuyn. The plates are were drawn from examples in collections in both Holland and Germany with the contemporary owners of the shells being identified in most instances. The plates are hand colored, bringing out all the exotic beauty in brilliant colors. The last ten plates show the shells in white on dark brown background. Landwehr, Dutch Books with coloured plates, Nr. 96 mentions: „The colouring of copies varies“. Georg Wolfgang Knorr (1705 - 1761), an artist and naturalist from Nuremberg, worked first under Martin Tyroff on the illustrations for Scheuchzer's „Kupfer-Bibel“ *Physica sacra* and became interested in the natural sciences. Through his own studies, Knorr gained a wide knowledge in art history and the natural sciences. Around 1730, Knorr started a publishing firm, which was continued after his death by his heirs. From 1726 he engraved portraits, landscapes, geological formations, and animal studies after A. Dürer and the Kilian family. He was a paleontologist, as well as a painter, draftsman, engraver and collector, publisher and art dealer. He is the author of several sumptuous and exquisitely illustrated books on the wonders of natural history, among them one on geology and petrification, and this present work, on corals and shells, and other salt water animals. It required particular care since these objects appear in many striking and diversified colors. Knorr, and the artists who continued his work, employed some of the most accomplished Nuremberg artists to make the illustrations as faithful and perfect as possible, and the result is one of the most exciting and colorful illustrated books of the 18th century.

The majority of the shells depicted on the plates are sketched after specimens contained in four German and three Dutch private natural history cabinets and shell collections which are named on the respective plates. Ranking first regarding number of specimens depicted are examples from the collection of August Martin Schadeloock (1707 - 1774), a deacon of the Laurentius Church in Nuremberg, and an ardent book collector, his library described in two volumes was sold in 1774, who had also built up a natural history cabinet which contained about 4000 specimens of

shells, a large collection of minerals and fossils and other cabinet of wonder objects. According to the scholar J. S. Schröter his natural history collection was regarded as one of the most important private collections existing in Germany in 1775. Unfortunately no catalogue of this natural history collection seems to exist. (Grieb, *Nürnberger Künstlerlexikon* vol. III, 1303. Not mentioned in Wilson, *The History of Mineral Collecting 1530-1799*). Other examples are from the collection of Philipp Ludwig Stätius Müller (1725-1776), a German zoologist who published among many other works, a German translation of Linnaeus' "Naturesystem" and from the collection of Johann Phillip Breyne FRS (1680-1764), a Polish botanist, palaeontologist, zoologist and entomologist; last but not least a few examples are from the collection of a certain D. J. H. Sommer, a doctor from Nuremberg. Ranking second regarding number of specimens depicted are those from the shell collection of Martinus Houttuyn (1720 ?-1786), a Dutch naturalist who studied medicine in Leiden and an author of many books on natural history who brought together a large collection of shells which was said to contain numerous rare species. Other examples are from the collections of Joan Coenraad Brandt (1703-1791), an Amsterdam druggist, whose cabinet was famous and naturalists and travellers often came to see it and from the collection of Willem van der Meulen, a wealthy merchant from Amsterdam. (Cf. Dance, *Shell collecting* pp. 82-85).

"In the French and Dutch edition there are nearly a thousand figures, all extremely well drawn and beautifully painted ... No order is preserved in the figures, however, and the same species is sometimes figured more than once on different plates to show slight variations. The text is simply an amplification of the plates relating chiefly to the appearance of the shells represented" (Dance, *Shell Collecting. An Illustrated History* p. 74). According to Dance the plates to volume III in the French edition differ from those in the German edition (Dance p. 318).

The six volumes are divided as follows: The first volume contains illustrations by Knorr himself, a few plates signed by him this being the only illustrations by Knorr for this book, and the shells represented not related to any specific collection. Volumes two through four contain illustrations after specimens from the collections of Schadeloock, Breyne, Müller and Sommer including a few from Houttuyn's collection in volume four. Volumes five and six contain illustrations after specimens from the collections of Houttuyn, van der Meulen and Brandt.

"Trotz fehlender Universitätsbildung unterliess Knorr es nicht, die Texte zu seinen Werken selbst zu schreiben. Zwar bemerkte die gelehrte Welt durchaus, dass seine Werke unsystematisch angelegt waren und wissenschaftlich nicht befriedigten. Dennoch erfreuten sich seine schönen und sorgfältig gearbeiteten Kupferstiche grosser Beliebtheit. ... Wie in seinen Petrefakten- und Konchylienwerken griff Knorr auch hier auf Exponate aus Naturaliensammlungen zurück. ... Mit dem Werk wandte er sich nicht so sehr an die Naturgelehrten, sondern eher an ein bürgerliches Liebhaberpublikum, dem er auf dem Weg der graphischen Reproduktion rare Naturalien zugänglich machen wollte, die es selbst nicht erwerben konnte. ... Die meisterhaften Kolorierungen der Kupferstiche in Knorrs Publikationen sind besonders bestechend. ... Die alten Kolorierungen der Werke Knorr's, Seligmann's und Rösel's gehören sicherlich zum Besten, was im 18. Jahrhundert auf diesem Gebiet geleistet wurde. Die schier unglaubliche Mühe, die um 1750 in Nürnberg für die Illumination naturgeschichtlicher Kupferstiche aufgewendet wurde, lässt sich nicht nur mit marktorientierten Verkaufsstrategien erklären. Wie in der naturhistorischen Kabinetmalerei waren es in den gedruckten Tafelwerken auch die ästhetischen Ideale der Physiko - Theologie, durch die diese hohen Qualitätsmassstäbe gesetzt wurden. Illuminatoren, Stecher, Sammler und Käufer orientierten sich am physiko-theologischen Dogma der idealisierenden Mimesis." (Heidrun Ludwig. *Nürnberger Naturgeschichtliche Malerei im 17. und 18. Jahrhundert*, pp. 173-174). Collation: Part 1 (1770): Voorrede [3-6], Berigt [7-10], [1]-44, pls 1-30; Part 2 (1771): 45-82, pls 1-30; Part 3 (1772): 83-118, pls 1-30; Part 4 (1773): [1]-34, pls 1-30; Part 5 (1774): 35-62, pls 1-30; Part 6 (1775): 63-[118], pls 1-40; Syst. Bladwyzer [1-14]; Bladwyzer [1-10].

Cobres, p. 428, 30 (German edition). Brunet III, 679: „Les figures sont enluminées avec beaucoup de soin“; Nissen, *ZBI* 2236 and vol. II, p. 151 f. Heidrun Ludwig. *Nürnberger naturgeschichtliche Malerei im 17. und 18. Jhd.*, pp. 346 - 348 (for Knorr); H. H. Dijkstra (2010). A collation of the three editions of Georg Wolfgang Knorr's conchological work ‚Vergnügen‘ (1757 - 1775); in: *Basteria* 74, pp. 33-50; Dance. *Shell Collecting Bibliography* 156-157; Dance. *History* pp. 50; Landwehr 96.



## Starfishes

### **LINCK, Johann Heinrich the Elder (Christian Gabriel Fischer; editor).**

*De Stellis Marinis liber singularis Tabularum Aeneorum figuras exemplis nativis apprime similis et autoris observationes (...)* Ill. Christianus Gabriel Fischer (....) Acc. Edw. Luidii, de Reamur et Dav. Kade huius argumenti Opuscula.- Leipzig, Jacob Schuster (colophon: ex typographia Bernhardi Christophori Breitkopf), 1733. Folio (440 x 270 mm) Title page, 11 unpaginated pages, 107 pp., (1), with three engraved head pieces and several engraved text illustrations. The plate section has a separate title page in black and red with engraved vignette, 2 pp., 42 engraved plates. The plates engraved by J. A. Corvinus after Hildebrand, text occasionally evenly browned. Uncut copy with full margins. Contemporary half leather over marbled boards, gilt spine in compartments, black morocco lettering piece. Very fine copy in its first binding, which is often heavily browned, as here, due to the use of hygroscopic paper. € 3.800.-

First and only edition of the first monograph on starfishes (echinoderms), with an early thorough scientific description and classification. The Linck family of pharmacists from Leipzig amassed an extensive private collection over three generations between 1670 and 1807. Johann Heinrich Linck the Elder (1674 - 1734) used the numerous starfish, hair stars and brittle stars contained in the collection as the basis for his highly regarded monograph, which he published in 1733. It is the first monographic treatment of the species of sea, hair and brittle stars known at the time. The type specimens, some of them from tropical regions and the Red Sea, depicted in the monograph in copperplate engravings have been preserved. The book was edited (disposuit et illustravit) by the philosopher and naturalist Christian Gabriel Fischer and illustrated by the well-known German artist Johann August Corvinus (1683 Leipzig - 1738 Augsburg) after a drawings by Hildebrand (Hildebrandt ?). The book has also three appendices: the original essay by the naturalist David Kade. *Stellae marinae quinque radiorum Holsaticae coloris violacei anatomellis marinis*, the latin version of René-Antoine Ferchault de Réaumur's (1683 - 1757) *Observatio de stellis marinis* (1710) and by the Welsh naturalist and curator of Oxford Museum, Edward Lhuyd (1660 - 1709). *Praelectio de stellis marinis oceanii Britannici, nec non de asteriarum, entrochorum et encrinorum origine* (a letter to Breyne published in Oxford 1703).

The Editor was the philosopher and naturalist Christian Gabriel Fischer (1686 - 1751) who from 1715 worked as Prof. of natural sciences at Königsberg University. After small theological writings, he published „*Historie des unterirdischen Preußens*“, a detailed history of underground Prussia, as a result of mineralogical and geological studies, in which he combated several superstitions linked to stones. In 1723 he became a follower of Wolff and when Wolff was expelled from Halle by the Pietists (1723), Fischer appeared in a challenging manner as a representative of Wolffianism, and the consequence of this was that he was ordered to leave Königsberg in 24 hours and Prussia in 48 hours by Cabinet order of November 15, 1725. He first went to Danzig, fand the magistrate of Danzig granted him permission to give public lectures, but in 1727 he embarked on a long journey during which he traveled through Germany, Italy, France, Holland and England. „He may not have been an original thinker, but he was one of the representatives of the radical Enlightenment in Germany who stood up for freedom of thought, even though it led to a great deal of personal suffering for him.“ (Kuehn. Bloomsbury Dict. German Phil.)

While the founder of the art & natural history collection, Heinrich Linck (1638 - 1717), focused on being an apothecary and collecting naturalia and publications, his son Johann Heinrich Linck the Elder (1674 - 1734) devoted himself to the study of nature and the intellectual and material exchange with other scholars from all over Europe. He was particularly fond of the comparative study of his numerous starfish, which resulted in the monograph „*De stellis marinis*“, which is still relevant for taxonomy today. In it, the scholar presents the first systematics of these echinoderms and divides them into the orders of asteroids (starfish) and ophiuroids (brittle stars), which are still valid today. Johann Heinrich Linck the Elder dedicated his work to the President of the Royal Society of London, Hans Sloane, and the Society's scholars. The first engravings for this prestigious book were produced around 1726: they are not idealized depictions of animals, but exact illustrations of Linck's starfish from the „*Museum Linckianum*“, i.e. from the apothecary's private collection. In an inventory of his collection from 1727, he mentions „30 varieties of sea stars in 5 drawers“, adding in a footnote that he was „about to publish a curious description, for which 19 copper plates are already finished“. In the end, 72 illustrations of sea stars were presented on 42 plates. As a token of

appreciation for this work, a genus of sea stars (*Linckia*) was later named after the apothecary. Johann Heinrich Linck the Elder put most of his energy into research, scientific networking and correspondence. His son Johann Heinrich Linck the Younger (1734 - 1807), on the other hand, worked on cataloguing and organizing the collection from 1783 onwards. These efforts resulted in a three-volume work, the „Index Musaei Linckiani, oder kurzes systematisches Verzeichniß...“ The last representative of the apothecary dynasty listed all the objects collected up to that point according to their collection areas in Latin and German: the zoological objects in the first volume, the minerals and fossils in the second, the plant material, the „art objects“ and scientific instruments as well as the library in the third. Johann Heinrich Linck the Younger used the latest scientific views and classifications for the arrangement of the listed objects and the detailed information, which is also reflected in the impressive library index, which also provides detailed information on the presentation in the collection rooms. Unlike today, most of the objects were not visible and were well organized in drawers. The Linck collection was particularly rich in reptiles and was documented by Johann Jakob Scheuchzer in his *Physica Sacra* (1731 – 1735), which figured 67 specimens of snakes and amphisbaenians based on a set of unpublished illustrations, the *Icones Serpentum et Viperarum*, prepared under the direction of Johann Heinrich Linck the Elder. Some of these snakes served as holotypes or syntypes of species described by Linnaeus and Blasius Merrem and, thus, are of taxonomic significance. At a minimum, these specimens were present in the Linck collection in 1729, but they may be as much as half a century older, as the reptile collection was already large and well known by the debut of the century. Even at the minimum age possible, the surviving Linck snakes figured by Scheuchzer are among the oldest documented fluid-preserved herpetological specimens in the world.- Nissen, ZBI 2514. Hein/Schwarz I, 374. Ebert 11993.

### **Atomism in Galileo's Circle One of the Earliest Egyptological Works Written**

**LUCRETIUS CARUS, Titus; Giovanni NARDI.**

*De rerum natura libri sex. Unà cum paraphrastica explanatione, & animadversionibus.* Florence: Amatore Massa, 1647. 4to (229 x 167mm). Half title, unsigned leaf with dedication to Giovanni Andrea Ricco inserted after p 268. 9 engraved plates, woodcut ornaments (some gatherings toned, Ll1 repaired at gutter). Contemporary limp vellum, a few little cracks. € 3.800.-

First edition of the Italian physician and natural philosopher Giovanni Nardi's (1585 - 1654) commentary on Lucretius – an important Galilean text and also a „Wunderkammer book“, illustrating Egyptian antiquities from both Nardi's collection and that of Fernando II de' Medici. The present work was the first complete edition of Lucretius' controversial poem of ancient atomism to be published in Italy following Aldine 1515 edition, and after the prohibition of the Synod of Florence in 1517 against the publication of the text. Its appearance in the years following the death of Galileo, and the ensuing debates at Pisa over atomism, made a major impact on his followers, inspiring much correspondence and even a new translation into Italian, which would not see print until 1717. Nardi's commentary here is considerably larger than the poem itself, comprising fifty „adnimadversiones“ relating natural history, medicine, physics, and Lucretius' theory of atomism. He had studied at the University of Pisa before becoming the personal physician to Ferdinando II, Grand Duke of Tuscany. He corresponded with many of the leading natural philosophers and antiquaries of his day, including members of the Accademia dei Lincei. Nardi created his own museum of curiosities in Florence, part of which is illustrated here as part of a discourse on the funerary practices of the ancient Egyptian. During the final year of his life, Galileo recommended to his correspondents – mathematicians such as Renieri and Cavalieri, but also sophisticated laymen such as Micanzio and Rinuccini – to read Giovanni Nardi's *De igne subterraneo* (1641), a book he regarded as deserving scrutiny and discussion. Galileo was well aware that a new theory of the earth as part of a new sublunary physics was a necessary consequence of accepting the Copernican cosmology and that such theory should be based on a corpuscular conception of matter radically different from the elemental theory of Aristotle. The dedication leaf found after p. 268 was probably intended to be in the initial gathering of the work, where it appears in some other copies preceded by a blank. Provenance: Ex libris Nicolai Berigardi Molinensis Galli (inscription on half title and several marginal notes; perhaps a relative of Claude

Guillermet de Berigard, who succeeded Liceti at Padua in 1653 and was deeply involved in atomist debates.-  
Schweiger III, 575; Lit.: JOACHIM ŚLIWA. Giovanni Nardi (c. 1580 – c. 1655) and His Studies on Ancient Egypt  
[http://etudsettravaux.iksiopan.pl/images/etudtrav/EtudTrav\\_otwarte/EtudTrav\\_21/15\\_JOACHIM\\_SLIWA.pdf](http://etudsettravaux.iksiopan.pl/images/etudtrav/EtudTrav_otwarte/EtudTrav_21/15_JOACHIM_SLIWA.pdf)

## Nature - printed Botany

### LUDWIG, Christian Gottlieb.

Ectypa vegetabilium usibus medicis praecipue destinatorum ... Nach der Natur gefertigte Abdrücke der Gewächse, welche besonders zu dem medicinischen Gebrauche bestimmt sind, und in Apotheken aufbehalten auch auf verschiedene Art zubereitet werden. Nebst einer kurzen Beschreibung deren Wartung, Eigenschaften und Wirkungen. 8 parts in one volume.- Halle: Johann Gottfried Trampe for Johann Christoph Breitkopf in Leipzig, 1760 [-1764] Folio (373 x 226 mm). (4), 96 pp. with 200 plates of flowering plants nature - printed and hand - coloured, parallel text in Latin and German with fleurons used as running heads, plates XXXVII, XXXIX, XLI, XLIV, XLVI, XLVII, XLVIII, with cancel plate number over-slips and plate 105 corrected from IV to CV by stamp and the words *rotunda* and *runde* corrected to *longa* and *lange* by overslips as issued (plates XCIV-XCVIII bound in reverse order, pl. XXV affected by oxidation (printing error), title faintly stained, some faint scattered spotting throughout, heavier to first leaf of text and pl. L. Two pages hand - written index at the end. Contemporary calf, spine hinges repaired, lower joint cracking, repair to head of spine itself now slightly defective, corners bumped, extremities rubbed, marbled edges. € 24.000.-

First and only edition of this rare work, preceded only by J. H. Kniphof's *Botanica in originali* (Halle, 1757-64) as an example of 'Naturselbstdruck' or nature - printing, and produced on a larger and more ambitious scale. The work was published over four years in 8 parts with a series of 25 plates in each. In the process of reproduction the plant itself took the place of the woodblock or engraved plate. Once the specimens were arranged, they were covered with a dark dust, and the outlines thus formed on the paper were then coloured either by hand or a combined colour printing and hand - colouring process. Particular care was required in inking the specimens many of which could only sustain the smallest of print runs. Although some forms of detail are lost, the plates possess crude vigor in some cases and linear grace in others, and do seem remarkably like dried and pressed herbarium specimens with their flattened perspective. However, it is their colour which brings them to life and gives them a special immediacy. The specimens were delicate and could sustain only the smallest of print runs. Several of the plates have the names of the plants and plate numbers corrected using pasted over-slips. Leyser announced the book in on 21. Februar 1760: „Vorjetzt ist der Herr Verleger beschäftigt die Officinalkräuter besonders abzudrucken. Es werden davon alle halbe Jahr wenigstens 25. Blatt erscheinen und jetzige Ostermeße 1760. die ersten 25. zu haben seyn. Zu diesen Officinalpflanzen wird unter der Aufsicht des berühmten Herrn Doct. und Prof. Ludwig in Leipzig eine ausführliche Beschreibung ausgearbeitet werden, worinn der Nutzen, die Kräfte derselben, nebst ihrer Würkung und dem Gebrauch in der Arzeneywissenschaft abgehandelt werden wird. Es ist genug der ge-lehrten Welt denjenigen berühmten Mann angezeigt zu haben, unter dessen Aufsicht dieses Werk an das Licht treten wird, um sie schon zum voraus von der vorzüglichen Vollkommenheit desselben zu überzeugen.“ Christian Gottlieb Ludwig (1709 - 1773), a botanist - physician from Silesia (Brzeg), who became professor of medicine at Leipzig, published works on both plants and mineralogy, and is remembered in the genus 'Ludwigiana' Linn., a member of the evening primrose family. Ludwig's Ectypa and the final edition of Kniphof's *Botanica in originali* were jointly „the eighteenth century's most valiant efforts at nature-printing.“ (Hunt/Stevenson); both were produced in the same shop, that of Trampe in Halle. As Kniphof's book was issued in black and white and the Ludwig only in color, the latter may be seen as the major colored nature-printed book of the 18th cent.- Fischer 8; Dunthorne 188; Hunt 569; Nissen BBI 1252; Stafleu and Cowan III, 5068; Cave & Wakeman 10; Hunt/Stevenson 569;“Das Werk ist heute sehr selten“ (Heilmann 408); Oak Spring Herbaria pp. 339; Madeleine Pinault Sorensen, *Le Livre de botanique*, 2008, p. 164; Kümmel, F. 2012: Die Hallesche Ausgabe des Werkes "Botanica in Originali" (Naturselbstdrucke) von J. H. Kniphof in: *Schlechtendalia* 24, pp. 53 -71; Plesch Coll. 488; Fischer, 200 Jahre Naturselbstdrucke (in: Gutenberg - Jahrbuch 1933, p. 199)

## „The Bohemian Galileo“

### MARCI de Kronland, Jan Marek (Johann Marcus).

De proportione motus figurarum rectilinearum et circuli quadratura ex motu.- Prag, Typographia Academica, 1648. 4to (190 x 150 mm) 74 nn. Bll./ ff. with engraved title, engraved portrait, one plate and 32 engraved diagrams within text. (Sign.: A4, B, wrongly A2-A4, C4-S4, Errata sheet, maybe one blank leaf at the end, plate after B) Text printed throughout in decorative border. Contemporary marbled boards, handwritten label on spine, rubbed, soiled and bumped. Paper somewhat browned and slightly spotted. Old repairs on upper part of the sheets due to short paper, partly covering head lines, but a fine copy in its first binding. € 4.800.-

Extremely rare first edition of his theory of the collision of bodies in which he gives an account of the experiments whereby he reached it; it is a continuation and elaboration of his earlier publication: *De Proportione Motus seu Regula Sphygmice* (1639). In this work, Marci addresses the criticisms of his earlier book and puts forward new theories on the geometrical form of bodies in motion, the properties of free fall, the duration of the oscillation of a pendulum and its length, etc. He discusses various phenomena of perfectly elastic central and lateral percussion in a rather qualitative manner. Although he does not attempt to bring his results into an analytical form, they represent an important milestone towards the laws of percussion.

The Bohemian physician and scientist Jan Marek Marci de Kronland (1595-1667) was rector of the University of Prague and he achieved considerable renown as a physician, becoming physician to the Kingdom of Bohemia and personal attendant to two emperors, Ferdinand III and Leopold I. He had studied under the Jesuits and during a diplomatic trip in 1639, Marci met Paul Guldin and Athanasius Kircher, with whom he studied and corresponded for a long time, and also read Galileo's *Discorsi*, although he did not meet Galileo. There are a number of references to Galileo in the book. He spent most of his career as a professor in Prague, where he served for over thirty years as a professor of medicine, eight times as Dean of the medical school and once as Rector in 1662. As a scientist, Marci worked in considerable isolation and his knowledge of the researches of his contemporaries was at best random, and his own work shows evidences of the ideological pressures of his own Prague environment. Marci's studies covered the mechanics of colliding bodies, epilepsy, and the refraction of light, as well as other topics. Experimenting mainly with wooden balls, but also with billiard balls and cannonballs, he classifies collisions into those between hard, soft and fragile bodies, thereby already recognizing that the velocity is an important quantity for characterizing the intensity of the impulse. Marci is the first to make the important observation that in the case of elastic percussion, a moving body colliding with a body at rest of the same mass abruptly ceases in motion and transfers it fully to the other body, thus giving a unique and surprising example of the conservation of momentum. Marci discovers that a ball, striking a plane obliquely, will be reflected at an angle which equals the angle of incidence, and applies the law of reflection to the game of billiards.

Although these experiments are described precisely, Marci was unable to formulate general quantitative laws from them, since his results were not drawn from exact measurements of either of the sizes and weights of the spheres that he employed or of the direction and velocity of their motion. Rather, he was content with simple comparisons of the properties that he investigated, characterizing them as being ‚smaller,‘ ‚bigger,‘ or ‚the same‘ as each other; his allegations of their proportionalities are thus unproven. His concept of impulse lack exact definition, but despite these shortcomings, his observations and conclusions are generally right. He was able to distinguish different qualities of spheres and to state the concepts of solid bodies and of quantity of motion. He also stated the correct relationship between the duration of the oscillation of a pendulum and its length and proposed using a pendulum for measuring short periods of time (for example, for taking the pulse of a patient). He further described the properties of free fall. Here the question of the influence on Marci of Galileo's *Discorsi* must arise. The *Discorsi* was published a year before *De proportione motus*, and Marci certainly read it before publishing his own book, but the exact extent to which he drew upon it remains unknown. Certainly Marci had less skill than Galileo in reducing mechanics to mathematical forms; but if, in later years, he chose to emphasize the divergence of his opinions from Galileo's he may well have been influenced by the attitude of the church toward the latter's writings.

Marci also carried out research in optics, setting down most of his results in *Thaumantias liber de arcu coelesti* (1648). Prior to Marci, the prevailing theory of color assumed that light was modified by the action of a medium to produce color. Most theories were based upon the assumption that color was simply a modification of light varying between whiteness and blackness. Marci preceded Isaac Newton in his belief that „Light is not changed into colors except by a certain refraction in a dense medium; and the diverse species of colors are the products of refraction.“ Although he thought that different colors were caused by varying angles of incidence across the 1/2 degree apparent diameter of the sun, he stated that each color was condensed or disentangled from the others after refraction into homogeneous or elementary colors of red, green, blue and purple, and that no further change in color was obtained by additional refraction of elementary colors. Marci at some time came into possession of the Voynich Manuscript, apparently upon the death of its former owner, the alchemist Georg Baresch.- Provenance: Friderich (handwritten on front-fly), Königl. katholisches Gymnasium Golgau (ink inscript. & stamp on title); R. D. Godefredi Schönborn, (?) Glogoviensis (on title). Other German Libraries also have books from this provenance, like Freiburg. KVK: Stabi Berlin (two copies; one with a last leaf with with three engravings, also in the book on: B1 verso, C2 recto and D2 recto); Bamberg, Nürnberg, Stabi München; Dt. Museum; BNF; ETHZ (without the plate); Cambridge, BLL, Manchester, UCL; Cornell.

### **Astronomical Instruments in the Enlightenment**

#### **MARINONI, Giovanni Jacopo de.**

De astronomica specula domestica et organico apparatu astronomico libri duo.- Vienna: Leopoldus Joannes Kaliwoda, 1745. Folio (365 x 253 mm.) 12 Bll. (incl. the engraved frontispiece by Sedlmayr after Bertoli), 170, (2), 171-172, (2), 173-174, (2), 175-176, (2), 177-178, (1), 180-210 pp., (2, one leaf of errata). Slightly later green half calf over marbled boards, for the most part clean fresh and bright, with engraved frontispiece, title printed in red and black with engraved vignette of a map of Vienna, beautifully illustrated with 17 half- to full-page engravings and headpiece, woodcut ornaments, 43 folding engraved plates, last leaf with errata and instructions to binder (in Latin and German). Plates and title with stamps by a 19th cent. Vienna deceased Military Institution. A very fine copy, crisp and clean. In modern preservation so-lander box. € 9.000.-

First edition, first issue on good paper, of this most luxuriously printed & illustrated volume on astronomical instruments. The work describes and illustrates the astronomical instruments in the private observatory of Giovanni Jacopo Marinoni (1676 - 1755), mathematician and astronomer to the Imperial Court of Austria. Like the private observatories of Tycho Brahe in the 16th century and Hevelius in the 17th century, Marinoni's observatory was one of the most beautiful and best equipped in Europe in his time. He built his instruments on own and those illustrated here include quadrants, telescopes, micrometers, an improved Graham pendulum, and a camera obscura. Especially remarkable astronomical instruments are a double telescope, the so-called Culminatorium, for the observation of the meridian passages, Marinoni's wall quadrant, the *Quadrans ampliatus*, the position micrometer with its screws, and pendulum clocks (for his observations he used 5 pendulum clocks; two he had obtained from G. Graham and then had 2 similar clocks built in Vienna. The 5th clock had been built by Faucheuer in Paris in 1736 and had been provided with a dial to indicate the mean time and the equation of time). Marinoni left all the instruments to the Empress Maria Theresa, to whom this work is dedicated. It should be noted that many of the instruments are still preserved at the Vienna Observatory. „In 1755...in connection with a general reform of the University of Vienna, the Habsburg's decided to establish a great central astronomical observatory. Its basic equipment was to be the instruments of the late Imperial mathematician and geodetic surveyor, J. J. de Marinoni, who had made his house, on a relatively favorable site at the edge of Vienna, into an astronomical observatory.“ (DSB VI, 233).

Giovanni Giacomo Marinoni (Johannes Jacobus Marinonius), born in Udine, Italy in 1676, studied in Vienna and became imperial court mathematician, also ,teacher of Empress Maria Theresa in astronomy' (Wurzbach XVI, 448), director of the Academy of War Science in Vienna in 1726 and died there in 1755. He surveyed the Duchy of Milan and built on his house in Vienna at his own expense an observatory, which was considered one of the most beautiful existing at his time.

Our copy is a first issue with the title dated 1745 and with only one leaf of errata (the second issue is dated 1746 with an additional leaf of errata also smaller in size).- Boffito, pp. 129 & plate 81; Poggendorff, II, 53; Riccardi, II, 119; Turner, *Early Scientific Instruments. Europe 1400-1800*, 223; Kenny, *Catalogue of Rare Astronomical Books*, p. 200 (1745 edition): "One of the most exquisitely illustrated astronomical works ever printed"; Lalande 426; cf. Zinner, *Astronomischen Instrumente*, 206 & 437 (1746 edition). Provenance: Erwin Tomash; his catalogue M 37.

### **First Plant-Geographical Description of a Local Flora**

**MATTIOLI, Pietro Andrea; CALZOLARI, Francesco.**

*De plantis Epitome vtilissima. Novis iconibus et descriptionibus pluribus nunc primum diligenter aucta à D. Ioachimi Camerario. Accessit catalogus plantarum, quae in hoc compendio continentur, exactiſſ.* (and) Francesco Calzolari. *Iter Baldi civitatis Veronae montis, in quo mirabili ordine describitur montis ipsius, atque aliarum quarundarum ipsium contingentium partium situs. Recensentur praeterea quaedam insignes plantae, ac herbae ibi nascentes, quae vsui Medico plus caeteris conferent.* 2 parts in one. Frankfurt am Main, (Johann Feyerabend), 1586. 4to (222 x 167 mm) 6 Bl., 1003 pp., (1), 14 Bl. with woodcut printer-mark on title and 1003 text woodcuts after Mattioli and Conrad Gessner. Contemporary vellum, fine copy. Endpapers with tear, somewhat browned throughout, occasional few wormholes, pp. 765 f. with tear, mostly very clean and fresh. The woodcuts in very good, high-contrast impression. € 6.000.-

First Latin edition by Johann Feyerabend of the abridged version of the Mattioli commentary without the text of Dioscorides, the last book by Pietro Andrea Mattioli (1501-1577), first printed in Venice in 1571 and then republished in expanded form in 1584.

Francesco Calzolari's *Il viaggio di Monte Baldo*, which is both an excursion flora and one of the first plant-geographical descriptions according to vegetation stages, is attached. Mattioli's work mentions around 1030 plants, the sections are divided into *Nomina*, *Forma*, *Qualitates* and *Vires*. Information on the genera and the locus, the place of discovery, can be added. The appendix includes Francesco Calzolari's *Iter Baldi*, a guide to the plants of Monte Baldo and thus one of the earliest local floras in Italy. The mountain ridge east of Lake Garda, which rises from 65 to over 2200 meters, was a treasure trove for numerous species of different vegetation stages, some of which only occur here. There is an illustration on each counted page, some without columns of text. As a rule, the plants are depicted with roots, some as branches and in a few cases only the fruits are shown. Mattioli used the smaller woodcuts from the 1558 edition. The woodcuts are around 120 x 70 mm in size and were probably partly drawn from softened dried plants. However, they are usually not as lifelike as those by Fuchs or Brunfels. In the 16th century, botany was still regarded as a branch of medicine, plants "only as carriers of healing powers" (Zoller 216) and in this followed the Greek authorities Dioscorides and Theophrastus. The Italian physician Pietro Andrea Mattioli (1501-1577), later personal physician to Emperor Maximilian II, had published Dioscorides' *Materia medica* with his own commentary in 1544, and several expanded and richly illustrated editions followed. Unlike their northern European colleagues, the Italians were "well placed for identifying the plants described by classical authors, since their own flora was related to that of Greece and the other Mediterranean regions" (Arber 92). Francesco Calzolari, an Italian apothecary and collector of natural objects, was born July 10, 1522, in Verona. He was known for his vast knowledge of the Veronese flora (most of the preparations sold by apothecaries were herbal in origin), and for the collecting excursions he led up nearby Monte Baldo. He was also renowned for his preparation of theriac, a universal remedy for most human ailments, concocted from over 60 ingredients, of which the most notable came from freshly-killed vipers. The making of theriac was an annual ritualized ceremony in most Italian cities and towns, and Calzolari's in Verona was one of the most famous.- VD 16 M 1612 and VD 16 C 326. Adams M 909. Arber 78. STC 601. Durling 3029. Ebert 13409. Graesse IV, 446. Hunt 153 (Titelvariante). Neufforge 510. Nissen, BBI I, S. 53ff. and Nr. 1308. Pritzel 5983 (Titelvariante).

**MELLE, Jacob von.**

De lapidibus figuratis agri litorisque Lubecensis Ad V(iri) Cl(aris.) Iosephum Monti, Bononiensem, commentatio epistolica.- Lubecae (Lübeck), typis Struckianis, 1720. 4to (220 x 175 mm) 44 pp. with 4 engraved plates. (Sign.: A - E4, F2) Contemporary paper card boards, rubbed and soiled, name on front fly, title stamped recto, slightly browned, else a very fine copy. € 1.800.-

„Rare. This work describes the figured stones and petrifications originally found near Lübeck, Germany and contained in Melle's collection. The text is in an alphabetical listing of the specimens together with commentary. Melle references many contemporary works, comparing and contrasting their theories with his own. His collection was further described in Brückmann's *Epistolae Itinerariae* I, no. 31, 65 & 100.“ (Schuh, 2 online). First edition of this published letter to Giuseppe Monti (1682 – 1760) on fossils and figured stones from the collection of the Lübeck pastor and historian Jacob von Melle (1659-1743). Melle was Deacon (1684), Pastor (1706) and Senior (1719) at Lübeck. He authored many papers on archaeology. The „Museum Mellianum“, as Melle himself titled his collection, marked the beginning of scientific collecting in Lübeck. Melle's collection of curious objects, which he made accessible to visitors in his house in Fleischhauer Straße in Lübeck, included not only works of art, coins, traditional costumes, weapons and natural objects, but also historical toys from the time of the first archaeological excavations in Lübeck's old town, documents and medieval wills as well as treasures from the northern countries such as the 7th century „Bornholm Goldgubber“, a Lappish calendar made from reindeer bones or an Icelandic drinking horn. These objects reflect regional events and Lübeck's trade routes to the north. After Melle's death in 1743, the collection passed into the possession of his son. A few years later, the objects were sold to the later Lübeck councillor and mayor Johann Caspar Lindenberg (1740 - 1824), who continuously expanded the collection until it came into the possession of the „Gesellschaft zur Beförderung gemeinnütziger Tätigkeit“, Lübeck's oldest citizens' initiative, in 1831. With the emergence of museums in the 19th century, the objects were reorganized and categorized in the context of scientific collection strategies. As Melle, the Bolognese botanist and natural historian G. Monti collected minerals, stones, shells and fossils, which became part of the first Italian paleontological collection, the *Musaeum Diluvianum* in Bologna.

Provenance: Dr. Hild (?), Wetzlar 1784; stamp recto title: Ex Libris Albert Richter.- Schuh online 2; Gatterer, *Mineral. Lit.* I, 130; Hoover *Coll.* I, 130; Ward & Carozzi 1536; *Lit.*: P. Range. *Zwei paläontologische Arbeiten aus dem Beginn des 18. Jahrhunderts*, *Zeitschrift der Deutsche Geologische Gesellschaft*, 85 (1933), 684-687.

**First Mineral Collection  
„Bibliothèque de Mr. Lavoisier“**

**MERCATI, Michele.**

*Metallotheca. Opus Posthumum, auctoritate, & Munificentia Clementis ...* Edited by Giovanni Maria Lancisi. 2 parts in one Vol.- Rome: Johannes Maria Salvioni, 1719. Folio (382 x 240 mm) (6 Bll.), xiii-lxiv, 378 pp., [18] pp., 1 Bl., 54 pp. including half-title, title printed in red and black, engraved frontispiece (after prel.), engraved portrait of Mercati (bound after lxiv), 6 engraved plates (2 double-page mounted on stubs, one additional engr. title), 139 text engravings (some full-page), title vignette, 2 engraved initials and one engraved tailpiece. Signatures: [a]4 b-h4 A-3B4 3C6. The engraved portrait of Lancisi is bound not in the appendix but at the front. Contemporary full calf binding, gilt spine in compartment, internally clean with only very minor occasional spotting to the end, little browned in places, a few contemporary ink notes in margins, a few pages with heavier browning due to paper. A fine copy. € 15.000.-

Lavoisier's copy (with his Ex - Libris), although not mentioned in Beretta, of this landmark work in the Earth Sciences. Also stamped by the Jesuit Soc. of Besancon (later or earlier ?).

First edition, second issue of this superb catalogue of the Vatican „Armaria“, a series of cabinets with drawers which housed Michele Mercati's fossils, marbles, ores, shells, earth samples, salts, alums, gums and resins; of particular interest to gemologists are the fine illustrations of lapis lazuli, jet, amber (including the absurd depiction of a frog

encased in amber), precious coral, pearls, and nacre. The work existed only in manuscript at the time of Mercati's death, but it was prepared for publication by Giovanni Maria Lancisi (1654 - 1720).

A landmark treatise in the history of mineralogy and metallurgy. Michele Mercati (1541-1593) was personal physician to Popes Gregory XIII and Clement VIII, and superintendent of the Vatican Botanical Garden. He formed a collection of minerals under the aegis of Pope Sixtus V as early as 1574. Although the collection was dispersed on Mercati's death, his catalogue remained to be published almost 150 years later. It represents 'a landmark treatise in the history of mineralogy and metallurgy describing what was among the first organized mineralogical museums ever established' (Schuh). The work was published in 1717 and reissued with a canceled title in 1719, a portrait of Lancisi added, also with a separately paginated appendix which was not included in the first edition of 1717.

„The collection reflects the state of knowledge extant at the time and therefore includes objects of presumed magical or medicinal virtue as well as those which are correctly identified and described. The plates can scarcely be equaled for fidelity to originals and the exquisite care employed in their engraving and printing.“ (Sinkankas). David Clarke describes Mercati as „the archaeological counterpart of Cardano in mathematics, Vesalius in anatomy, Galileo in the physical sciences and Copernicus in astronomy.“

Brunet III, 1644; Caillet 7390; Hoover 581; Ward & Carozzi 1541; Hirsch IV, 208; Cicognara 2929; Graesse IV, 493; Brunet III, 1644; Cobres I, 107-08, 20; Sinkankas 4390; DSB IX, 309; Thorndike VI, 334; Wilson, Mineral Collecting, pp. 32-34; not in Beretta, Bibliotheca Lavoisieriana.

### **MEYEN, Joachim Friedrich.**

Kurzer Unterricht von der Beschaffenheit und dem Gebrauch der Vergrößerungsgläser und Teleskopien.- Dresden und Leipzig: Friedrich Hekel, 1747. 4to (195 x 160 mm) (8), 72 pp., (2, blank) with 7 folding engraved plates with illustrations of optical instruments and mechanical tools, with head- and tailpieces.

Later style period binding, red edges, brown spotted throughout, else fine copy. € 2.400.-

Rare trade catalogue of the optician and lawyer Joachim Friedrich Meyen (1707-1772) with an introduction into the optical sciences and microscopy and their use to educate people and teenager; described are magnifying glasses, microscopes and telescopes and from pp. 65 is a list with the instruments sold by the Meyen optical shop, with title: „Verzeichniß von denen vorrätigen optischen, mechanischen, und andern mathematischen Sachen, welche zu haben sind, bey Joachim Friedrich Meyen, Königl. Hofoptico“.- VD 18.11555858.

### **MÖLLER, Johann Dietrich.**

Lichtdrucktafeln hervorragend schöner und vollständiger Möller'scher Diatomaceen - Präparate. Herausgegeben von J. D. Möller, Wedel in Holstein, (1891). 59 Tafeln nebst Vorwort. Selbstverlag des Herausgebers, Wedel in Holstein 1891. Folio. Title, one leaf text, one leaf index and 59 heliogravure plates. In modern cloth portfolio. Title little water-stained, else fine and complete copy. € 3.600.-

Extremely rare publication of diatom photographs, produced from 1886 to 1890. The German optician Johann Dietrich Möller (1844 -1907) was born in Wedel near Hamburg in 1844 as the son of a linen weaver. He did an apprenticeship as a painter, studied at the art academy and also began training as an optician, which he discontinued after only six months, however, in order to set up his own company for the manufacture of optical measuring instruments in 1864. In addition to running his optical works in Wedel, he began to perfect himself in making preparations from diatom shells, arranging the algae under the microscope into artistic patterns and selected arrangements. He made diatoms laid out in rows for science on 'type plates' intended for species identification. He laid out circular specimens on which were usually spread the diatoms of individual sites, which he called 'habitat specimens' and labeled with the name of the particular locality. And he produced the 'salon preparations' arranged into ornaments for edification. The diatom material for the plates he procured partly on his own travels to Norway, Russia and North America. The diatoms for most of the preparations from distant waters, however, he obtained from Johan Cesar Godeffroy VI, a Hamburg merchant and shipowner who, in addition to his trading activities, sent out research collectors to provide him with botanical, zoological and ethnological material for his private museum. Leading ,diatomists' of his time also provided J. D. Möller with material. Until 1892 more than 4,000 preparations



were produced by Möller which were sold not only to private individuals, but to scientific and museum collections. On the preparations, under microscopic control, usually between 60 and 700 diatoms were arranged with horsehair on a circular surface of 2 to 6 mm diameter. On the largest plate even more than 4,000 diatoms were spread out. Möller also made microphotographs of diatom preparations as early as the end of the 19th century. In 1891 he published a portfolio titled: *Lichtdrucktafeln hervorragend schöner und vollständige Möller'scher Diatomaceen - Präparate* (Photographic plates of outstandingly beautiful and complete Möller diatomaceous preparations) including the description of the species and the history of the laying of 25 type plates, 29 circle preparations and four salon preparations. After this work was judged to be scientifically worthless due to the priority of aesthetic over taxonomic criteria, Möller withdrew from the company's activities in 1896.

Johann Dietrich Möller (1844 - 1907) war ein Deutscher Optiker. Er begründete die „Optische Werke J.D. Möller“ und begann Mikroskoplinsen und Prismen herzustellen. Sie hat gegenwärtig noch Weltgeltung als Produzent augenchirurgischer Präzisionsgeräte. Schwerpunkt von Möllers Schaffen waren Legepräparate von Diatomeen, also mikroskopisch kleinen, vielgestaltigen Kieselalgen, die nach ästhetischen und mathematischen Gesichtspunkten in einer Kreisform oder zu komplexeren, zumeist runden, symmetrischen Formen arrangiert wurden. Das Betrachten derartiger „Salonpräparate“ diente dem Zeitvertreib in gesellschaftlich höheren Kreisen. Diatomeenpräparate von Möller gelten, was die Zahl der gelegten Diatomeen, die Präzision der Platzierung und die Ästhetik des Arrangements betrifft, als unübertroffen. Kein anderer Diatomist verfügte über zugleich höchstes handwerkliches Geschick und ästhetisches Empfinden wie Möller. Mit den Kreis- und Salonpräparaten auf der einen Seite sowie den sogenannten „Typenplatten“ zur Klassifizierung von Diatomeen schaffte Möller, dessen Diatomeenpräparate zunächst als „unwissenschaftlich“ galten, letztlich den Spagat zwischen ernsthafter Wissenschaft und Kunst. Auf den größten Typenplatten wurden bis zu 4000 Diatomeen geometrisch angeordnet. 1890 veröffentlichte Möller einen Katalog dieser Legeplatten, in welchem er sie fotografisch dokumentierte. Für seine Arbeit wurde er international ausgezeichnet.

### **MOORE, Frederic.**

*The Lepidoptera of Ceylon.* Publ. under special patronage of the government of Ceylon. 3 Vols.- London: L. Reeve, 1880 - 1887. sm.folio (290 x 220 mm) xii, 190 pp., (2); viii, 162 pp.; xv, [1], 578 pp., (2) with half-titles, and 215 original hand colored lithographed plates by and after Moore. Orig. red publisher's maroon cloth, gilt titling to spine, publisher's gilt monogram to centre of upper covers, corners and extremities of binding slightly rubbed and bumped. Fine copy. € 5.000.-

First and only edition, an extremely fine and clean set of this work which is seldom offered for sale.

The British entomologist Frederic Moore (1830 - 1907) was originally an artist associated with the East India Museum. „Moore entered the doors of entomology by way of his artistic abilities. Dr. T. Horsfield (1777 - 1859), long associated with the East India Museum, required someone capable of doing natural history drawings and, through an introduction, Frederic Moore obtained the post. Thus began a lifetime association with Indian Lepidoptera.“ The fine drawings in this work „representing about 350 species, of which about 250 are figured in their various stages of larva, pupa, and imago“ were drawn and lithographed by the author after drawings by the Ceylonese artists Geo. & W. de Alwis and others. The collection of drawings was exhibited at a meeting of the Entomological Society of London in 1878, and „was considered to be such a valuable contribution to Eastern Entomology that the following resolution was proposed ... It was hoped that an application to the Ceylon Government for their publication would be successful.“ Moore offered that if this publication were approved, he would offer his services free of charge to edit and prepare descriptions of the various species and incorporate new material, „thus forming as complete a history of the Lepidopterous fauna of Ceylon as was at present possible.“ Moore also produced six volumes of *Lepidoptera Indica* (1890-1913), a major work on the butterflies of the South Asia, and a catalogue of the birds in the collection of the East India Company.- Nissen ZBI, 2877.

## Early Discussion of William Harvey's Discovery

### **NARDI, Giovanni.**

Noctes Geniales. Annus Primus. Mit Holzschnitt-Druckermarke auf Titel und Holzschnitt-Buchschmuck. Bologna, Ferronius, 1656. 4to. 6 Bll., 748 pp., 20 Bll. with printers woodcut mark on title. Contemporary vellum with handwritten title on spine. Title page with loss in lower margin, slight loss of text. Book block detached from spine. Barely noticeable browning and only slightly stained. Very good copy. € 1.800.-

First edition, second issue with canceled title-page. Published posthumously by Nardi's son Filippo and dedicated to Carlo de' Medici, the work describes ten ten imaginary meetings of physicians, disputing matters of medicine, surgery and physics. Theories of classical medicine, polemical diatribes against his contemporaries and experiences from the author's medical practice are intermingled. In the tenth of these meetings, the heart and blood circulation are discussed. Nardi, known as the „Florentine Esvulapius“ had corresponded with Harvey on these questions. In this section, Nardi criticizes the theories of English physician William Harvey who in 1628, with his work *Exercitatio anatomica de motu cordis et sanguinis in animalibus*, had accurately described the circulatory system of man and the functions of the heart. He asserted in his *Noctes geniales* that Cesalpino had previously described the circulation of the blood. It appears that although Cesalpino did mention that some form of pulmonary circulation existed, he envisioned the pulmonary circulation to be of the nature of a distillation by heat and explained the action of the valves of the heart as conserving the heat either of the blood or the heart. He did not attribute circulation to the motive force of the heart. William Harvey's book on the circulation demonstrated clearly that the heart pumps blood in a circle through the body. Strange as it seems to us today, this concept was so revolutionary to Harvey's contemporaries that the world's basic understanding of how the body functions was thrown into turmoil. Only after another half century did the immediate aftershocks clear, leaving a legacy that affected forever all of medical science.

The Italian physician and natural philosopher Giovanni Nardi (1585 - 1654) became court physician in 1620, and Ferdinando II de' Medici, Grand Duke of Tuscany, chose him as his personal physician. Nardi followed the Grand Duke on his travels and shared with him an interest in medical studies, natural philosophy and antiquities. In his Florentine home, at Via dell' Alloro 13, in a building that Nardi himself had restored, he set up a collection of antiques. In addition to his profession, which he practised successfully, Nardi wrote several volumes on natural philosophy. The first *Lactis physica analysis*, a treatise on milk published in Florence in 1634, was dedicated to Ferdinand II. Of particular interest is the work *Titi Lucretii Cari De rerum naturae libri sex*, a commentary and digression on Lucretius' didactic poem published in 1647, where he distinguished himself from dogmatic Aristotelianism by approaching rather the new conceptions of natural philosophy and atomism.

## Changing Environment

### **OLSEN, Ole Theodor.**

Piscatorial Atlas of the North Sea, English and George's Channels [...] Illustrating the fishing ports, boats, gear, species of fish (how, where and when caught) and other information concerning fish and fisheries.- Grimsby & London: Taylor & Francis, 1883. Folio. (570 x 450 mm) 3 Bll. text, 50 chromolithographed plates. Blue publisher's cloth, gilt title on cover, a little faded and worn, re-backed. Contemporary book label of Walter Heape, probably the pioneering specialist in reproductive biology. verk.

Rare groundbreaking atlas of the North Sea fisheries based on comprehensive statistical information collected over many years, a series of 50 lavishly chromolithographed charts recording the distribution – spawning grounds and abundance – of the major edible species of fish, shellfish and crustacea caught in the North Sea and off the coasts of the British Isles. There are insets showing the fish themselves, and the vessels and gear used to catch them, with a table of detailed information covering time of spawning, number of eggs, when and how caught, bait and food, size and weight, 'quality', when in season and other remarks, the product of a decade or more of reports and correspondence with British fishermen. The *Piscatorial Atlas* is significant not only for its visual appeal, but also for its historical and environmental interest. Since the publication of the *Atlas*, the composition of the sea bed has changed.

The large North Sea oyster bed off Helgoland, noted by Olsen to be underexploited, is gone. Since the introduction of large-scale trawling by factory ships in the mid 20th century, many more species have declined alarmingly due to overfishing. The Atlas offers a fascinating glimpse into the North Sea fishing industry at a time which now seems picturesque and romantic, but which was, in fact, a laborious and dangerous life for fishing communities.

O. T. Olsen (1838 – 1925) was born in Norway. He went to sea as a boy, and worked on English trading ships, developing an interest and expertise in navigation. He later worked as an assistant to Matthew Maury (later known as the father of modern oceanography), collecting oceanographic data from around the British Isles. After his career at sea ended, Olsen settled in Grimsby, on the east coast of England. Here he continued to collect navigational data on deep-sea soundings and the composition of sea beds from local fishery captains. He also developed an interest in the fishery industry and the fishes themselves – their numbers, habits and habitats. In the early 1870s, Olsen created a simple form which he distributed to fishermen in Grimsby and Hull. In it, he requested information such as location, tides, tack, and weather; quantity and description of fish; and description of refuse (bycatch). After gathering this data for almost a decade, in 1883 Olsen published the *Piscatorial Atlas of the North Sea, English and George's Channels*. Illustrating the fishing ports, boats, gear, species of fish (how, where and when caught) and other information concerning fish and fisheries.- KVK: Coburg; Stabi Berlin (lost); OCLC: some copies incl. Smithsonian, Harvard, et al.; only two copies held in Australian libraries.

### **First Description of the Earth Water Cycle**

#### **PERRAULT, Pierre.**

*De l' origine des fontaines.*- Paris: Pierre Le Petit, 1674. 12mo. (20), 353 pp., (7) Contemporary calf, gilt spine in compartments, rubbed and soiled. Ex-libris : Henri Tardivi, manuscript note manuscrite verso pp. 155. Fine copy. € 3.000.-

First edition of the French hydrologist investigation of the origin of springs which was instrumental in establishing the science of hydrology on a quantitative basis. He showed conclusively that precipitation was more than adequate to sustain the flow of rivers; thus he refuted theories traceable as far back as the writings of Plato and Aristotle that invoked some variety of subterranean condensation or return flow of seawater to account for the discharge of water in springs and rivers. Perrault presented a study of a substantial section of the Seine river, beginning at its source, northwest of the city of Dijon. His numerical estimates demonstrated that the annual river runoff was only one-sixth of the amount of water falling as rain or snow over the drainage basin in a year.

Pierre Perrault (c. 1610 - 1680) was a Receiver General of Finances for Paris and later a scientist who developed the concept of the hydrological cycle. He and Edme Mariotte were primarily responsible for making hydrology an experimental science. Perrault grew up in a bourgeois family, had at least seven siblings, and probably lived all his life in Paris. Little is known about his life, despite the fame of some of his younger brothers. These include Claude, an architect of part of the Louvre Palace; Nicholas, a doctor of theology known for his denunciation of the Jesuits; and Charles, author of *Tales of Mother Goose*. Perrault was trained as a lawyer, and in 1654 purchased the position of Receiver General of Finances for Paris. This post involved collecting taxes for Louis XIV, and he received a percentage of the taxes he collected. This position ruined him when Louis XIV chose to calm rebellious taxpayers by granting a remission of all taxes that were still owed after 10 years. Pierre had used some of his tax receipts for 1664 to pay creditors, and when he could not deliver the money to the royal treasury, he was forced into bankruptcy. After the bankruptcy Perrault became an amateur scientist and focused his attention on the origin of springs. The result of his labor was his book: *De l' Origine des fontaines (On the Origin of Springs)*, published anonymously in 1674 and dedicated to his friend Christiaan Huygens. In the millennia before Perrault published his book on the *Origins of Springs*, most natural philosophers asserted that there was not enough precipitation to account for the flow in rivers and springs. Aristotle claimed that most of the water came from underground caverns in which air was transformed into water. Many others argued that seawater entered underground caverns, was heated until it rose as vapor, then condensed and fed springs, which in turn fed rivers. Although some philosophers such as Anaxagoras had more realistic models of the hydrologic cycle, the weight of authority was behind the more fanciful theories. Perrault devoted the first part of his book, *On the Origin of Springs*, to analyzing the ideas of his predecessors and what he called the „Common Opinion“, rejecting most of it. He estimated the flow in the Seine River and compared it with

rainfall in the watershed, showing that the rainfall was easily enough to account for the flow in the river. This conclusion was later supported by a more rigorous quantitative analysis published by Edme Mariotte. With a series of experiments, Perrault showed that rain does not penetrate the soil beyond about 2 feet. Thus, most of the rain that falls does not go into springs. Perrault went on to develop the theory of the hydrologic cycle, correctly accounting for the roles of evaporation, transpiration, through flow and surface runoff. Perrault was aware that his methods were crude and his estimates approximate. Nevertheless, he argued that even imprecise measurements were superior to the verbal method of argumentation employed in Aristotelean natural philosophy. "I know very well that this deduction has no certainty ...[but] it is more satisfactory than a simple negative like Aristotle's"

There was thus an unresolved problem in Perrault's theory: he was not able to discern the route by which infiltration occurred. He rejected "universal and uniform penetration", and speculated waters perhaps "go underground through some gravely and permeable spot". Perrault shrugged off the problem, concluding "whatever the way in which waters of rains and melted snows enter rivers, I do not care, having no other interest but to see the rivers swelled by these waters in whatever way it may be" Perrault's conception of stratigraphy was necessarily primitive. He envisaged the presence of a "continuous and universal bed of clay" overlain by "much pure sand ...mixed with pebbles of all sizes". Rivers were underlain by this clay layer, and the presence of the impermeable clay "prevents them from sinking lower".  
Lit.: Jason A. Hubbart. Origins of Quantitative hydrology; Pierre Perrault, Edme Mariotte and Edmund Halley; in: Journal American Water Ressource Association 13 (2011), pp. 15-17; Raymond Nace. Pierre Perrault: The man and his contribution to modern hydrology. Journal of the American Water Resources Association. 10 (1974), pp. 633-647; David Deeming. Pierre Perrault, the Hydrologic Cycle and the Scientific Revolution, Groundwater, 52 (2014), pp. 156-162.

### **First History of the Elephant**

#### **PETRI von Hartenfels, Georg Christoph.**

*Elephantographia curiosa, seu elephanti descriptio, multisque selectis observationibus.*- Erfurt, Johann Heinrich Grosch for the author, 1715. 4to (200 x 160 mm). 15 Bll., 284 (recte 286) pp., (2) With engr. frontispiece, 26 (1 fold.) engraved plates and one text engraving. Browning throughout, engr. plates shaved to borders, and partly to the edge of the image. Bound in contemp. calf, spine richly gilt in compartments, some rubbing, edges and corners neatly restored in places, red edges, underlinings to one page. Fine copy.  
€ 6.000.-

First edition of the first special monograph on elephants, with beautiful illustrations after designs by Tobias J. Hildebrandt. The copperplates show various methods of capturing and domesticating elephants, as well as their use in commerce, war, sport, and entertainment. The text also covers fossil remains of elephants, and the differences between the Indian and African elephant. The folding plate shows an elephant skeleton with anatomical details. The relevant zoological and travel works were used, from which the engraver, Jakob Petrus from Erfurt, also took his models. He succeeded in creating a uniform sequence of the best Baroque book illustrations from the heterogeneous and in part completely misrepresented original depictions (see Aubry's herd of elephants in Ludolf's work on Ethiopia. The German physician, natural scientist, university professor Georg Christoph Petri von Hartenfels (1633-1718) was the son of a merchant. After serving Count Heinrich V von Reuss zu Greiz (1655 as courtier, 1657 as personal physician), he became garrison medical officer in Erfurt and from 1666 on he made a career in the electoral and municipal medical service and in the Erfurt council. His last position was chief mayor, councilor and private physician to the Elector. He was a member of the German Academy of Sciences (Acad. Curios.).- Nissen, ZBI 3149; Eales I, 1256; Wellcome IV, 347; Schwerdt II, 68; Wood 518.

## One of the finest Works of Herpetologic Literature

### **RÖSEL VON ROSENHOF, August Johann.**

Naturgeschichte der Froesche Deutschlands. Neue vom Präsidenten J(ohann). C(hristian). D(aniel). von Schreber verbesserte und von Dr. und Prof. J(ohann). Wolf mit einem ergänzenden Nachtrag versehene Auflage.- Nürnberg, Stein, 1815. Gr.-Folio (470 x 337 mm). VIII, 85 pp. With hand colored engraved frontispiece by M. Tyroff and 2 sets of the 24 engraved plates and 7 engraved head vignettes. Each of the 24 plates is present twice: beautifully hand colored with the figures still unnumbered, and in black and white with the figures numbered (and key letters added). Just slightly foxed and finger-stained, binding sunned and somewhat rubbed, a well-preserved copy, printed with broad margins on strong paper. € 14.000.-

Very rare third (& best) edition (actually the second edition) of this important monograph on frogs and toads, a masterpiece of 18th century zoological book illustration, important from both an artistic and scientific point of view. Based on a number of facts and assumptions, it can be roughly estimated that not more than 150 to 200 copies of the original edition of 1758 (incl. the second edition) were produced. The second edition uses this original sheets with a new title-page (first edition, second issue with canceled title).

‘Prof. F. Leydig writes that the plates of this new edition (which I have not seen), which are identical in content and number to those of the original, are significantly better than those of the latter.’ (Junk, Rara).

For the printing of the ‚Insektenbelustigungen‘ relatively poor quality paper was used, which considerably diminishes the visual impression considerably (cf. Bauer 1985). This shortcoming Rösel wanted to remedy this shortcoming in the frog book by using significantly better paper (‘fine real paper’) and a larger format (folio). Rösel was expressly interested in creating an aesthetically to create an aesthetically sophisticated and attractive work. As the ‘skilful hand’ he won over Martin Tyroff (1704-1759), a star of the trade at the time. The precision and aesthetics of the illustrations prompted many authors to copy and imitate them, practically always without naming Rösel as the source (cf. Schmidler 2009).

August Johann Rösel (1705-1759), the author and artist, was the only natural historian of his time who studied both entomology and amphibians and reptiles, an essential combination in today’s study of ecosystems. The text describes the natural history of all German frogs and toads in great detail. While the text proved valuable, the book’s greatest fame lies in its plates. They are well designed from a practical point of view, highly artistic and skilfully executed, providing detailed and accurate information, and are beautifully and naturally colored by hand. The 24 plates are present twice as intended by the publisher. One suite, in the earlier state without figure numbers or key letters, is beautifully colored by hand, while the other, in the later state with figure numbers and key letters added, but with Rösel’s name erased, is in black & white. Rösel was not only interested in the purely morphological appearance of animals, but also in their way of life. His aim was to get to the bottom of a creature’s origins. The text contains very detailed descriptions and discussions about the reproduction of frogs, which were judged differently by the scientists of the time. The illustrations, in which six artists besides Rösel were involved, are among the best of their kind in terms of the accuracy of the anatomical details. Rösel used self-made solar microscopes to examine the insects, which enabled him to dissect animals or draw microscopically small details of the insects. In 1752, Jan Swammerdam had published instructions for the dissection of insects in his ‘Bible of Nature’. Some of the plates show the prepared frogs fixed trompe-l’œil-style on a support. As Rösel was primarily interested in the reproduction of amphibians, he depicted the ovaries separately and enlarged them ‘together with the other parts belonging to the production’ so that they would ‘catch the eye better and more clearly’. This edition was edited by Johann Christian Daniel von Schreber (1739 - 1810) and the naturalist Johann Wolf (1765-1824), teacher in Nuremberg, who was the most important author of the issues 2-4 (1799, 1802, 1805) in Sturm’s wonderfully hand colored »Fauna Deutschlands Dritte Abtheilung Amphibien«. By his herpetological studies in the field around Nuremberg he detected that the males and females, phenotypically different in *Lacerta agilis* and *Triturus vulgaris* as well, represent the same species in each; he also stated first the specific difference of the Nuremberg viviparous lizard (*Lacerta crocea* Wolf in Sturm, 1805) from *Lacerta agilis*. A beautiful copy of a beautiful book: a classic of natural history illustration in color and an important contribution to the study of frogs and toads.

Nissen ZBI 3465; Junk, Rara pp. 162 f.; Wood pp. 541: the illustrations are of the finest; H. Tunner, Ein Künstler erforscht die Welt der Frösche. Linz. (online unter: www.zobodat.at); DSB XI, pp. 502-503  
Provenance: Exlibris F. G. Bertoni; stamp of the collector Heinrich von Haerdtl (1854-1939) (Vienna)

### **Famous Mineral Cabinet**

#### **SAINT - LAURENT, Joannon de.**

Description abrégée Du Fameux Cabinet De M.r Le Chevalier De Baillou, Pour Servir a L' Histoire Naturelle Des Pierres Precieuses, Métaux, Minéraux, et Autres Fossiles. Par Joannon De St. Laurent.- A Luques (Lucca), Chez Sauveur & Jean-Dominique Marescandoli, MDCCXLVI (1746). 4to. (225 x 160 mm) (2), I-VIII, 1-156 pp., one plate (facing pp. 149; in red and black). Title in red and black. Printer's device. Contemporary polished calf, red edges, red morocco lettering piece, scuffed and little traces of worming at spine. Ex Libris on inner cover. Fine copy. € 4.800.-

An extremely rare work. Sole edition of this remarkable 1746 prospectus that describes only a small portion of the extensive mineralogical cabinet of the Florentine naturalist Jean de Baillou (1679 - 1758), General Director of the Galerie du Grand - Duc de Toscane. At the time, the complete collection comprised 30.000 samples of minerals, fossils, rocks and shells, and was one of the largest in the world. This volume provides details of Baillou's collecting philosophy and descriptions of some of the finest specimens of precious stones, native metals, minerals, crystals and other fossils contained in the collection. Baillou vainly hoped that the publication of this small volume would help obtain support for a much more ambitious catalog of his collection; however, its only effect was that it influenced Emperor Franz Stefan I. into purchasing the collection in 1748 and retaining De Baillou as its curator, when the whole was moved to Vienna. Upon the Emperor's death in 1765, the Empress Maria Theresa presented the collection to the state and opened it to public viewing. The remnants of it are preserved today in the Naturhistorisches Museum in Vienna. The volume opens with a preliminary discourse, followed by 27 chapters. Topics include a general idea of the cabinet, the philosophy behind collecting natural history specimens, the principles of the cabinet and petrifications. Other chapters describe the metals, precious stones, marine fossils, corals, crustaceans, animal fossils, earths, salts, sulfurs, alabaster & marble, jaspers of various types, agates & cornealians, pyrites, semi-metals, and rock crystal. The last chapter provides a general description of the cabinet's organization. Facing page 149 is a plate printed in red and black, showing the title page of a proposed and never published work. It was Baillou's wish to prepare a full descriptive catalog of the collection, utilizing his own system of classification. It would appear in seven folio size volumes, printed on imperial paper and illustrated by 600 plates rendering the finest specimens. It was a grandiose plan, and without the backing of a wealthy patron, impossible to complete. Unfortunately, the publication never went further than this preliminary solicitation for funds. Baillou had invested too much in building up his collections and in the experiments. The remains of this collection are now housed at the Naturhistorisches Museum in Vienna. Provenance : Ex - Libris de Jacques Annibal Claret Delatourette. see: Catterer, Mineralogischen Literatur I, 271; Patsch, 1851 no. 470; Sinkankas, Gemology Bibliography, 3230; Wilson, History of Mineral Collecting, pp. 101, 124 & 159.

### **TBC & „Gerson - Sauerbruch - Herrmannsdorfer Diet“**

#### **SAUERBRUCH, Ferdinand; HERRMANNSDORFER, Adolf.**

##### **Felix EISENGRÄBER (artist)**

(Tuberculosis) 97 highly artistically gouache drawings of TBC infected patients, mounted within passe - partout, drawn by the Munich based artist Felix Eisengräber in different sizes (from 110 x 150 mm to 400 x 310 mm). The works show the pathology and effects of tuberculosis, especially the so - called „soft tissue tuberculosis“. Produced as illustration designs for different publications between 1925 and 1928, including the „Zeitschrift für Tuberkulose“ (Leipzig: Johann Ambrosius Barth Verlag) among others. Almost all sheets are signed by the artist (some monogrammed), dated and mostly personalized (patient) by the artist himself. Some with author's reference to the articles for which the illustrations were designed on

the verso. Some sheets with preparatory plate notes, mostly in lead. Some typed notes to certain patients on Charité paper indicating that Sauerbruch / Herrmannsdorfer worked from 1928 in Berlin on the the same project. Individual leaves somewhat dusty and fingerprints. Overall in very good condition. Boxed in modern cloth portfolios. € 14.000.-

Set of ninety seven finely executed gouache drawings of tuberculosis patients, drawn by the artist Felix Eisengräber, for a study by Adolf Herrmannsdorfer with Ferdinand Sauerbruch on the treatment of pulmonary tuberculosis by diets, commonly known as Gerson - Sauerbruch - Herrmannsdorfer diet (G/M 2345).

The artist Felix Eisengräber (1874 - 1940) studied at the Academy of Fine Arts in Leipzig under Ludwig Nieper, later at the Academy of Fine Arts in Munich under Ludwig von Herterich and Paul Hoecker. He was a Member of the Luitpold Group, and had exhibitions in the „Glaspalast“. In his early years he designed books for S. Fischer and F. Volckmar and was here engaged by the famous German surgeon Ferdinand Sauerbruch (1875 - 1951). Sauerbruch worked at the Ludwig Maximilian University of Munich from 1918 to 1927 on surgical techniques and as here on diets for treating tuberculosis. The Stockholm internist Hans Christian Jacobaeus (1879-1937), a member of the Nobel Committee from 1925 to 1933, addressed Sauerbruch's nomination for a nobel prize of his achievements of a salt-free diet for tuberculosis patients: „In surgical tuberculosis and lupus, a salt-free, vitamin-rich diet has achieved good results, in some cases better than heliotherapy. In pulmonary tuberculosis, no effect has been shown so far. After all, these questions were primarily examined by Adolf Herrmannsdorfer (1889-) and Max Gerson (1881-1959).“

The treatment of pulmonary tuberculosis, which Ferdinand Sauerbruch saw as being firmly in the hands of surgeons, was a central field of activity not only in the pulmonary health resorts of Switzerland, but also in Munich. The number of people suffering from tuberculosis increased enormously, especially in the population that was severely affected by the First World War and the massive recession. Between 1918 and 1921, 57 lung patients were treated at the Sauerbruch Clinic using the clinic's standard procedure, i.e. the closure of the affected lung sections. With a mortality rate of seven percent, germs were no longer detected in 26 percent of cases and an improvement was achieved in 42 percent. However, in addition to this surgical approach, Sauerbruch was looking for another way to combat the rising infection rates in the population. Turning away from the prevailing dogma in bacteriology, he wanted to investigate the individual causes of infection and answer the question of when an organism was particularly susceptible to bacterial colonization. He saw a possible answer to this question in an unfavorable metabolic state of the human organism. With these ideas, he entered the field of dietetics, which met with great approval among the general public, but was viewed with skepticism in the world of science. In 1922, Ferdinand Sauerbruch set up an experimental station in his Munich clinic and entrusted his assistant Adolf Herrmannsdorfer with its management. The theoretical approach followed here was very simple: the pathological germs were cultivated on different culture media and their growth characteristics recorded. The next step was to adapt the patient's diet based on the findings. The low pH value of inflamed tissue was to be balanced by alkaline foods, thus combating the inflammation and its bacterial colonization. Sauerbruch also clinically tested Max Gerson's (1881-1955) diet therapy as part of his dietetic experiments. For this purpose, Sauerbruch sent his two assistants Schmidt and Herrmannsdorfer to Gerson working in Bielefeld. Herrmannsdorfer based his experimental design on his dietary recommendations. Gerson had initially developed the low-salt diet as a migraine therapy, but had observed a decline in tuberculosis manifestations in his patients. The series of experiments in Munich were able to partially replicate Gerson's empirical studies, and Sauerbruch turned to the public with the caveat that the experiments were still at an immature stage. The diet was particularly effective in tuberculosis patients with severe skin, joint and bone manifestations. The results with pulmonary tuberculosis, on the other hand, were unsatisfactory. In 1929, Herrmannsdorfer published his findings together with his wife Mimica in the book „Praktische Anleitung zur kochsalzfreien Ernährung Tuberkulöser“. Sauerbruch, who was often met with incomprehension by his surgical colleagues, but also by doctors from other disciplines, when spreading the new treatment aspect, did not want the diet to be seen as a solution, but as a useful supplement in the treatment of tuberculosis.“ (Joe Mario Mahendra Bhandari. Sauerbruch and his students. Dissertation Tübingen 2023. pp. 40 ff.) (see Thieme-Becker X, 432 for Eisengräber); Garrison & Morton 2345: „Gerson introduced a salt-restricted diet in the treatment of tuberculosis; this was subsequently modified by Sauerbruch and Herrmannsdorfer, becoming known as the Gerson - Sauerbruch - Herrmannsdorfer diet.“

**SCHINZ, H[einrich] R[udolf]; Carl Joseph Brodtmann.**

Naturgeschichte und Abbildungen der Reptilien. 17 Hefte / Installments.- Schaffhausen, Brodtmann für Weidmann, Leipzig, 1833 [-1835]. Folio. [2] Bll., 240 pp., [IV] with engraved title and 102 (of which 99 are hand colored) lithographs by C. J. Brodtmann. Loosely inserted in original printed wrappers in later half cloth folder with title on spine and covers. Text browned, partly spotted, overall very fine copy. € 6.800.-

Rare copy in perfect condition of this treatise on turtles, snakes, amphibians, etc. with plates in colorful coloring. Carl Joseph Brodtmann (1787 – 1862) was a Swiss artist and lithographer, as well as a printmaker, publisher and bookseller. He worked in Zürich and Schaffhausen. Brodtmann's natural history lithographs include Schinz's works on reptiles and birds, published in the early 1830s. Brodtmann produced his lithographs in the post-Linnaean Age of Enlightenment. Natural history specimens were depicted in more expansive hand-colored sets for the use of biologists and the aristocracy, the latter being not only great patrons of the arts and sciences, but including many who were actively interested in fauna and flora. The artists respected scientific accuracy and often displayed a remarkable sense of aesthetics. The text was written by the Swiss physician and naturalist Heinrich Rudolf Schinz (1777 – 1861), a medical practitioner and a teacher of physiology and natural history at the medical-surgical institute in Zürich, from 1833 to 1855 he served as an associate professor of zoology at the Univ. of Zürich and also as curator at the natural history society of Zurich.- Nissen ZBI 3671; Brun I, 208; Die Lithographie in der Schweiz, pp. 45 (Brodtmann).

**De THOU Copy  
of Schooten's Work on Conic Sections  
studied by Isaac Newton**

**SCHOOTEN, Frans van.**

De Organica Conicarum Sectionum in Plano Descriptione, Tractatus. Geometris, Opticis, Prasertime verò Gnomonicis Mechanicis utilis. Cui subnexa est Appendix, de Cubicarum Aequationum resolution. Leyden, Elzevier, 1646. 4to, pp. [16], 17, [3, blank], with title printed in red and black and numerous fine woodcut diagrams in the text; a superb copy, clean and crisp, in contemporary calf, gilt; upper joint cracked but firm; Jacques Auguste de Thou's copy with his gilt arms on covers. € 9.000.-

'Schooten's first independent work was a study of the Kinematic generation of conic sections (1646). In an appendix he treated the reduction of higher-order binomial irrationals to the form  $x + \sqrt{y}$  in cases where this is possible, using a development of a procedure of Stifel's. An interesting problem that Schooten considered was how to construct a cyclic quadrilateral of given sides, one of which is to be the diameter - a problem that Newton later treated in the lectures on *Arithmetica universalis* (Mathematical Papers, V, 162–181).

'After the death of his father in 1645, Schooten took over his academic duties. He also worked on a Latin translation of Descartes's *Géométrie*. Although Descartes was not completely satisfied with Schooten's version (1649), it found a broad and receptive audience by virtue of its more carefully executed figures and its full commentary. It was from Schooten's edition of the *Géométrie* that contemporary mathematicians lacking proficiency in French first learned Cartesian mathematics' 'Schooten possessed an excellent knowledge of the mathematics of both his own time and earlier periods. Besides being an extraordinarily industrious and conscientious scholar, a skillful commentator, and an inspiring teacher, he was a man of rare unselfishness. He recognized his own limitations and did not seek to overstep them. Fascinated by the personality and ideas of Descartes, he worked hard to popularize the new mathematics; his highly successful efforts assured its triumph. (DSB).

Provenance: from the library of Jacques Aguste (II) de Thou, Baron de Meslay, Ambassador to the Netherlands, and 'Président aux Enquêtes, with his gilt arms on covers; shelfmark 'Vestibule 1. ere o T. f. n. 99.' In ink to front paste-down; modern bookplate 'T. V'. Willems 607.



## Apple & Pears

### **SCHWEIZERISCHER LANDWIRTSCHAFTLICHER ZENTRALVEREIN (ed.)**

Schweizerische Obstsorten: Äpfel und Birnen. 2 Vols.- St. Gallen: Eigenverlag des Vereins, 1863 - 1872. oblong 4to (325 x 230 mm) with beautiful chromolithographed title & 100 attractive chromo - lithograph. plates with letterpress descriptions & index. Original publ. half calf with embossed cloth with gilt lettering. Spines a bit chafed, scattered foxing throughout, mostly marginal. € 4.500.-

First and only edition of a superb & rare Swiss pomology, a description of 50 apple varieties and 50 pear varieties on 100 leaves with chromolithographs, each leaf with side view of a center fruit with calyx, from the sunny side, a longitudinal section, a leafy branch, with printed name (in German and French) all printed in highest quality by "Farbendruck v. J. Trobelhorn in St. Gallen".

Between 1863 and 1872, 100 apple and pear varieties common in Switzerland were scientifically drawn and described on behalf of the Swiss Agricultural Association. The life-size drawings were created by the Swiss painter Salomon Bühlmeier, who devoted himself meticulously to the depiction of fruit and branches in the years that followed. Salomon Bühlmeier was born in Trogen in 1814. After attending the cantonal school in Trogen, he trained as a painter and etcher at the academies in Munich and Augsburg. Bühlmeier was a drawing teacher in St. Gallen and always worked independently. As an etcher, he decorated works by the St. Gallen theologian and teacher Johann Jakob Bernet. In 1863, through the Tribelhorn lithographic studio, he was engaged as a painter for the national project "Swiss Fruit Varieties" of the Swiss Agricultural Association. He drew the scientific views and sections of the apple and pear varieties selected by the association's pomological commission on the basis of their suitability and distribution in Switzerland. For each apple and pear, he also printed comments on names and synonyms, parentage and distribution, tree characteristics, fruit description, use and preparation. The illustrations and descriptions were published from 1863 to 1872 using outstanding color printing techniques and were distributed in 10 deliveries, each containing 5 apple varieties and 5 pear varieties. The Swiss fruit survey appears to be the first pomology ever to be provided with color lithographs. It was accompanied on the one hand by an index in booklet order and on the other by an alphabetical table of contents, which defined the classification in the later bound work, with volume one being intended for apples and volume two for pears. The survey was completed in 1872. In the final report of December 1872, it is mentioned that the original drawings were handed over to the Swiss Polytechnic as property. At the Swiss Federal Agricultural Exhibition of 1873, the work - the original pictures and the color prints - was awarded an honorary diploma with a silver medal, the highest distinction. Salomon Bühlmeier died in 1876 while working on the original plates. His daughter, who helped him, was not only one of the first female photographers in Switzerland, but probably also the first note forger.- Nissen BBI, 2360.

### **SMITH of Adwick - Hall, Miss (fl. 1818).**

Studies of Flowers from Nature, dedicated by permission to Her Royal Highness, the Princess Elizabeth, this work will consist chiefly of a selection of subjects from the choicest exotics, painted after nature, with a correct outline of each, and instructions for producing a facsimile of the finished drawing by Miss Smith.- Adwick Hall near Doncaster (and London: printed by W. & S. Graves): sold by the author [no date, ca. 1818; plates watermarked 1817 - 1820] Sm. folio (360 x 255 mm), Hand-colored engraved aquatint title, text leaf and plates in 2 states, comprising: 20 text leaves, 20 hand-colored aquatint plates, and 19 (of 20) uncolored aquatint plates, list of subscribers at end (amended in manuscript), without the errata slip sometimes present. Blank leaves bound in. Contemporary red morocco-edged boards, spine with raised bands in seven compartments, gilt edges, lacking uncolored duplicate plate of „Rosa mundi“, light scattered spotting and browning. Fine copy in good coloring on strong paper. € 7.000.-

„A rare work with finely colored plates [and] most interesting examples of the use of aquatint of the finest possible grain“ (Dunthorne).

The work, „illustrated with excellent fine-grain aquatints“ (Blunt, 256), is typically of the genre of botanical coloring books, which sprung up in the very late 18th and early 19th century, frequently written and drawn by female artists and drawing teachers, such as Clara Maria Pope, Mrs Withers or Mary Lawrence. The format of these books was similar to that of *Studies of Flowers from Nature*, which was aimed at „young Ladies and private Governesses“ . Fashionable though these floral copybooks were, perhaps due in part to the royal patronage that they received, as Blunt notes, „many of them, to judge by their rarity today, were either published in small editions (subscriber list indicate less than 100 copies) or thrown away when they had been duly ‚tinted in‘ (Blunt, 255 - 256). Containing uncolored duplicate plates intended for amateurs to practice on, this is one of the finest instruction manuals supporting the contemporary fashion of flower painting. In our copy only the „Rosa mundi“ had probably been used and never bound with. There are Images of the following flowers: Gentianella, Fuschia Coccinea, Rosa Sinensis, Chrysanthemus, Pelargonium Cardatum, Pelargonium Zonale, Poconia, Var., Ixia tricolor, Mimosa paradoxa, Gardinia florida, Camelia japonica, Begonia Evansiana, Erica Cerinthoides, Erica coccinea, Roses, Rosa mundi, Passiflora alata, Dahlias, Crassula coccinea, Strelitza regina, Miss Smith, who did the coloring for the aquatint engravings, is known to us only by her last name and place of residence. The subscriber list includes mainly female subscribers incl. the Princess of Hesse Homburg, Duchess of Rutland, Duchess Dowager, Duchess of Leinster, Countess Manvers, .... The name Smith might be a pseudonym. Adwick Hall near Doncaster was the family home of the Washington family (related to George Washington also). The hall was built in 1673 for Richard Washington and was a vernacular building in an old fashioned style, even for the time. The hall was demolished ca. 1866 after falling into ruin. There is a description of Adwick Hall’s grounds from 1802 when the ‘core’ part of the estate was advertised as to let. At that time it was described as having ‘80 acres or thereabouts of corn, meadow and pasture land and convenient gardens walled round with greenhouses etc., stables for 23 horses, coach houses, barn, cow house, brew house, farm yard, poultry yard etc.’ The parkland had clumps and some exotic tree planting within it. To the south of the hall there was a small walled kitchen garden with stove-house, sited very close to the hall, which may have been the site of earlier formal gardens. Estimates for the size of the parkland are in the region of 12 ha (30 acres). The work is dedicated in print to Princess Elizabeth of England and Landgravine of Hesse-Homburg (1770-1840) who was the seventh child of George III and Queen Charlotte, and an enthusiastic amateur artist, whose patronage of this work is entirely apt: she and her mother had both taken lessons in nature drawing and coloring from Franz Bauer (1758-1840), and the worth of this work would have been evident to her eye.- Dunthorne 283; *Great Flower Books* (1990) p. 140; Nissen BBI 1855; KVK: Cambridge, Yale, Morgan Library, Dumbarton Oaks; Univ. Wisconsin; Morton Arboretum.

### **STEFFENS, Henrik.**

Vollständiges Handbuch der Oryktognosie von Heinrich Steffens. Erster [-Vierter] Theil and Supplemente. 4 vols.- Halle: in der Curtschen Buchhandlung, 1811 [-1824]. 8vo. xxiv, 212 (i.e., 512) pp.; [4], 428 pp.; [2], 408 pp., [2]; [2], xlvi, 432 pp., [2], [433] - 720 pp. Contemporary half calf over marbled boards, red morocco label, blue edges, overall fine copy. B.U. H. gilt printed on lower spine. € 1.600.-

This, rarely found, considerable handbook of mineralogy distinguished itself from all similar works of the period. „The compilation is made from a praise worthy compactness, with thoroughness and a true critical circumspection. Above all else one finds interspersed through out the volumes highly interesting and important comments. No mineralogist’s library should lack this publication. At the end of volume four, with its own title page is a supplement. Due to its appearance over 14 years this is a rare work in complete sets.“ Schuh online 1.

### **STEFFENS, Henrik.**

Geognostisch - geologische Aufsätze, als Vorbereitung zu einer innern Naturgeschichte der Erde.- Hamburg, B. C. Hoffmann, 1810. 8vo. xxvii, [3], 337 pp., [1] Contemporary half calf over marbled boards, blue edges. Fine copy. € 1.200.-

„Very scarce“ (Schuh) geological essays, all that was published and one of the most important geological writings of Henrik Steffens (1773-1845), German scientist, philosopher, and man of letters. He was a professor of mineralogy at

the University of Halle and later professor of natural philosophy at the University of Breslau. Steffens made important contributions to our understanding of the origins of coral atolls. The main essays is here: „Vergleichung der Flötze der skandinavischen und norddeutschen Gebirge mit besonderer Beziehung auf Holstein.“ Steffens completed his career as professor of philosophy at the University of Berlin. He was a member of the Academie of Wissenschaften [Academy of Science] in Berlin.- Schuh online 3; Pogg., II, 988-99. Provenance: early 19th cent. private stamp on title; Rosenkilde og Bager, bought 1960.

### **VOLCKMANN, Georg Anton.**

Sciagraphia et Icones Plantarum Indigenarum, maxime vero Exoticas jum turissimo labore collectarum à vivis depicta additis synonymis et locus natalibus singulari industria et penicillo ... Latin manuscript in ink and watercolors on paper. The very neatly executed and carefully colored drawings in our volume partly with handwritten inscription on drawn banderole and each with handwritten explanatory leaf. With 245 full-page watercolors, titled in ink with latin names. (no date, but most probably Legnica/ Silesia around 1700) Folio (320 x 220 mm). Slightly later calf around 1836 with gilt printed morocco label on cover: „Hr Ct Dubois. Buttes“, rubbed and soiled, inside slightly faded and evenly browned. Title page stained and mounted at time of binding, slight finger and damp marks in the margins in places. Overall in excellent condition.

€ 25.000.-

Extensive, unrecorded botanical manuscript on the Silesian wild and garden flora by the well - known Silesian physician and naturalist Georg Anton Volckmann (1664 - 1721), who is still known today as the author of the geological work 'Silesia Subterranea', printed in 1720, which includes elaborate sketches of fossils including Carboniferous plants from the Lower Silesia region.

Georg Anton Volckmann was the son of the botanist Israel Volkmann (1636 - 1706), whose fundamental collection 'Phytologia magna' he continued. The series on the Silesian wild and garden flora, comprising a total of 10 volumes and was written between 1666 and 1716, but never printed; the manuscripts are now in the Saxon State and University Library (SLUB) Dresden: Mscr.Dresd.B1 116-125. The famous Liegnitz physician Dr. Israel Volckmann and subsequently his son Dr. Georg Anton Volekmann wrote down the manuscript in their own hands and illustrated with plant depictions, sometimes accompanied by insects, after nature in watercolours and opaque colours. The names commonly used in older literature and the medicinal uses of the plants are each on the reverse of the nearly 3.600 leaves. The work was intended for publication, but would have been too expensive because of the many copper plates required. Our manuscript might be a condensed or shorter version of these 10 vols. also intended to be published which however never happened. The Sciagraphia might have Robert Morison's work on the plants of Oxford (1680) as model.

Georg Anton Volckmann was born in Liegnitz/ Legnica in 1663, studied medicine (where is unknown; only his stay in Padua is certain) and settled as a doctor in Legnica/Silesia in 1687 at the latest. His father was the doctor Israel Volckmann, born on 6 December 1636 in Nikolstadt near Legnica, where his father was a priest from 1630-1633, attended the town school in Legnica, then the Elisabethgymnasium in Wrocław, studied medicine and philosophy in Leipzig from 1655 to 1659 and, after a stay in Italy, settled as a doctor in Legnica in 1660 or 1661, his mother was Ursula Marianne née Schultheß. His father introduced Georg Anton to botany at an early stage and, from 1687 onwards, entrusted him with the continuation of his 'Phytologia magna' (vol. I, 1666/68; II, 1668/70; III, 1670; IV, 1671/77; V, 1678/85), a large manuscript work with his own plant drawings, which his son enlarged by a further five volumes (VI, 1678/85). 5 volumes (VI, 1686/89; VII, 1689/91; VIII, 1692/97; IX, 1698/1703; X, 1704/18). Georg Anton's drawings are more artistic, his location details more abundant than those of his father, who died in Legnica on 5 February 1706. The magnificent work came to Dresden with G. A. Volckmann's collection to Dresden, first to the Zwingers collection of vegetation, later to the State Library. On numerous journeys G. A. Volckmann explored Silesia on numerous journeys; he recorded his mineralogical, geological and prehistoric observations in 'Silesia subterranea' (Leipzig 1720). He also produced a handwritten 'Historia Conchyliorum' and an 'Ornithologia' (before 1712, now lost) as well as a collection of Silesian town coats of arms drawn by him. He analysed the water of the Hedwigsbrunnen fountain discovered in the Grüntal valley near Legnica; in 1716, together with Maximilian Preuß, Gottfried David Mayer and Gottfried Ernst Wilhelm, he described the health springs in Skarsine.

He undertook excavations at Töpferberg in 1697/98 and 1707, at Simsdorf near Legnica in 1712 and at Großendorf near Steinau in 1716. Volckmann died on 21 March 1721 Lit.: H. Neumann, ‚Liegnitzer Naturforscher‘ in Mitt. d. Gesch. u. Altertums Ver. Liegnitz, Heft 8, 1920/21, Liegnitz 1922, p. 246-262); Heinrich Robert Göppert, Über ältere schlesische Pflanzenkunde als Beitrag zur vaterländischen Kulturgeschichte, Schles. Provinzialbl., 96, pp. 1–27. **Provenance:** Maybe looted property in the Napoleonic Wars, as an ownership note of a French officer ‘à l’ Etat major du 5 corps d’ armée à Breslau, le 12 may 1808 is on the title. Later added ownership note “à Ami Dubois”, dated July 1836; since then privately owned in Switzerland.

**WANGENHEIM, Marie von.**

FLORE zeigte mir viele der lieblichen Blüten, mein Pinsel ahmte sie nach zu meinem und Anderer Vergnügen. Album with thirty - three original gouache drawings against black background mounted on boards (250 x 330 mm). Enchanting, carefully painted depictions of flowers from all seasons, from individual leaves and blossoms to elaborate bouquets of flowers. The elaborately painted title page shows a lushly blooming garden with a motto for each season and the inscription: „Flora showed me many of the lovely blossoms, my brush imitated them, for my and others’ pleasure.“ The gouaches in size: 268 x 215 mm, accurately executed on a black ground, all are numbered by hand in Roman numerals and described on two manuscript index pages at the end. Contemporary calf binding in Selenka style, gilt cover, rubbed and soiled, slight traces of use, plates only slightly stained. Fine survivor. Book label of a Rouen Papetier.

€ 7.500.-

Enchanting, carefully painted depictions of flowers from all seasons, from individual leaves and blossoms to elaborate bouquets of flowers, done, probably, by the amateur Marie von Wangenheim (1814- 1891), née Aichner Freiin von Heppenstein, who was married to the Prussian government councillor Karl Hermann von Wangenheim (1807 - 1890). Both lived in Berlin from 1853 and became friends with the writer Theodor Fontane. Some Catholic motifs in Fontane’s novels can be traced back to the von Wangenheim family and especially to Marie. Marie might be related to Luise von Wangenheim (fl. 1800 - 1820) who is known to have illustrated Karl Gottlob Roessig’s (1752-1806) work on roses from 1802 to 1817.

A note at the end of the index indicate that Marie von Wangenheim has made (gemacht, not painted) this album between 1848 to 1861. If she only made it or also painted it, is unclear, as well if she painted it in 1848 and made the index or the album in 1861 is also unclear.

These illustrations here use an older style of flower paintings introduced in Germany by the Nuremberg school of natural history painting incl. Barbara Regina Dietzsch (1706 - 1783), a celebrated painter of botanical and zoological subjects in Nuremberg. Dietzsch developed a highly personal style of painting using dense layers of body color, and also frequently using dark background that served as a striking foil for her botanical specimens. Another hallmark of her work was the insertion of insects and other lively little creatures into her floral compositions, in keeping with an iconographic tradition initiated by Jan van Kessel and subsequently adopted by numerous Dutch painters. Similar are also the floral paintings of Johann Christian August Birnbaum (Dresden 1729 - 1807 Meissen). Marie von Wangenheim as an amateur didn’t reach the quality of Dietzsch’s paintings but might have known her work.