



New York 2023

KÜHN

RARE BOOKS & ART

Complete List

ALBIN - GUILLOT, Laure.

Micrographie décorative. Préface de Paul Léon. Paris, Draeger Frères 1931. Folio (435 x 385 mm) 4 Bl. text and 20 photogravures on different colored or metallic paper. Image in size: 285 x 225 mm, each photogravure mounted within passe partout (425 x 360 mm). Spiral-bound original blind embossed hard cover boards in original portfolio folder (440 x 405 mm) The binding cover minimally spotted and a tiny missing part at the upper corner under the metal spiral of the front cover. The cardboard folder stained and with stronger traces of use. Inside very nice and extraordinarily clean copy.

\$ 8.000.-

One of 300 numbered copies (this being: no. 253) of a sumptuous produced classic Art Deco Book which was favourably received by her contemporaries, the shimmering patterns echoing the lapidary and marquetry work of Art Deco designers. Its limited circulation (305 copies), however, and the luxurious nature of the production, ensured that this particular example of artistic - scientific photography did not achieve the widespread popularity of Blossfeldt's botanical studies. The study of geometric forms in nature and the study of fractals in late 20th century have further generated interest in this finely printed book.

„The project was a rare collaboration, not only between scientist and photographer but also between husband and wife. Laure Albin-Guillot was one of the most successful Parisian photographers of the 1920s, her style a commercially astute blend of pictorialism and modernism. She was renowned for a wide range of photography, her portraits, nudes and landscapes, her illustrations for books of modern French poetry, her cosmetic and pharmaceutical advertisements. Micrographie décorative, however was a more personal project, a memorial to her husband, who had died in 1929. He had been a specialist in preparing specimens for the microscope and his wife had helped him to make microphotographs. In these artistic experiments here, microscopic preparations were privately printed by photogravure onto various colored and metallic papers by the well-established Parisian printing house of Draeger Frères, who were responsible for many artists' books. It was included in Beaumont Newhall's historical overview of photography at New York's Museum of Modern Art in 1939: Photography 1839-1939.“ (Parr/Badger, The Photobook: A History I, 80)

post - Incunable of Ibn Sina's Canon

AVICENNA; GENTILE da Foligno (comm).

Primus [- tertius] Avic(enna). Canon cum argutissima Gentilis expositione : habes lector candide Gentilem Fulgi. e corruptissimo castigatissimum ... : auctoritates insuper generaliter allegatas secundum singula capitula sive commenta particulariter positas : auctoritates inquam Hypo. Gal. Arist. ejusve commentatoris Aver. Rasis Sera. Avicen. Halyab. : Mesue Jesushaly Alcanamosali Avenzoar Haly Albucasis Alberti Trusiani Conciliatoris plurimorumque aliorum ex modernis & veteribus : ad hec multas questiones tractatus ac consilia nunc primum impressa : duplicem quoque dubiorum indicem ... : hanc operam quantulancumque hilari fronte Politus & viventibus & posteris navavit ... (Edited by Bassanus Politus, comm. by Gentilis de Florentia and others). 4 parts (part one to three, part two of five) in 1 Vol.- Pavia, Giacomo Pocatela (Jacob de Burgofranco) for L. Castello & B. Morandi, 1510 - 1511. Imp.Folio. (435 x 310 mm). ff. 192 num., 6 nn.; 4 nn., 73 (recte 70) num.; 8 nn., 240 num.; 6 nn., num. ff. 241-503 (= Secunda pars Gentilis super Tertio Avic.). With 4 repeated woodcuts on the title and 3 (two identical) printer's marks. Blind-stamped pigskin of the early 18th century over wooden boards and with clasps, both covers with supra libros of the Abbot of Lambach Maximilian Pagl (gold stamped on the front cover); little stained, few light scuff marks. A few pages waterstained, but due to the heavy paper not that ugly. Overall a very fine copy of an exceedingly rare work.

\$ 60.000.-

Scarce edition, beautifully printed, of an uniquely effort among scholastic medical masters: a commentary of Avicenna's Canon by Gentile da Foligno (died 1348), printed in Padua by Giacomo Pocateli - here of the books one to three, without books four and five, sometimes missing.

The Nuremberg Chronicle of Schedel described Gentile da Foligno as „Subtilissimus rimator verborum Avicenne“ (that most subtle investigator of Avicenna's teachings). Long after Gentile's death in 1348, his remarkable achievement was evidently still famous. Uniquely among scholastic medical masters, he had labored to produce a

commentary covering all five books of Avicenna's *Canon*, the comprehensive, elaborately structured encyclopedia that was one of the mainstays of late-medieval academic medicine. Gentile's *Canon*-commentaries evolved over the course of his teaching career of thirty-odd years (primarily at the Perugia *studium*).

According to William Osler, Avicenna's *Canon* is „the most famous medical textbook ever written“ and it has remained as „a medical bible for a longer period than any other work“ (Osler, 1922). Avicenna needs little or no introduction to those familiar with the history of medicine. Known in the Arabian and Persian world as the Chief or the second doctor (Aristotle having been the first), Avicenna was an accomplished physician as well as a noted philosopher. He wrote widely on theology, metaphysics, astronomy, philosophy, law, and of course on medicine. The present work was his greatest medical compilation and „stands for the epitome of all precedent development, the final codification of all Graeco-Arabic medicine“. A large encyclopedic work on medicine, it is, for the most part, based on the writings of Hippocrates and Galen although Avicenna included many original observations and noteworthy clinical descriptions. The *Canon medicinae* went through many editions and was a dominant force in medical thought, practice, and writing for more than five centuries. Gentile da Foligno (died 18 June 1348) was an Italian professor and doctor of medicine, trained at Padua and the University of Bologna, and teaching probably first at Bologna, then at the University of Perugia, Siena (1322-24), where his annual stipend was 60 gold florins; he was called to Padua (1325 - 1335) by Ubertino I. da Carrara, Lord of Padua, then returned to Perugia for the remainder of his career. He was among the first European physicians to perform a dissection on a human being (1341), a practice long that had been taboo in Roman times. Gentile wrote several widely copied and read texts and commentaries, notably his massive commentary covering all five books of the *Canon of Medicine* by the 11th-century Persian polymath Avicenna, the comprehensive encyclopedia that, in Latin translation, was fundamental to medieval medicine. Long after his death, Gentile da Foligno was remembered in the Nuremberg Chronicle (1493) as *Subtilissimus rimator verborum Avicenne*, „that most subtle investigator of Avicenna's teachings.“ A mark of the respect in which Gentile's work continued to be held, more than a century after his death, was the rapidity with which they appeared in print, from the Italian presses, beginning in the 1470s. For the originality of his thought Mario Timio suggested that Gentile could be indicated as the „first“ cardioneurologist in the history of medicine. He prepared a widely read treatise on the Black Death, recommending theriac among other prophylaxis, but died of the plague himself.- Provenance: Maximilian Pagl, abbot of Lambach Monastery (1705-1725). not in Wellcome & Parkinson; EDIT 16, CNCE 3538; IA 110.585 (see Choulant / Sander) and 110.585; Durling 379; Choulant 364 (only 1-4). Sander 712: „Sur le titre de chaque partie, grand bois représ. Galenus, Avicenna et Hippocrates“ KVK: Trier (as here *Canon* 1-3.2.); Jena, Rostock, Wolfenbüttel; Genoa, Roma, Fermo; Yale, NY Acad. of Medicine; Becker Library; NLM.

„New Perspective“

BALDWIN, Thomas.

Airopaidia: containing the narrative of a Balloon Excursion from Chester, the eighth of September, 1785, taken from minutes made during the Voyage: hints on the improvement of balloons, and mode of inflation by steam: means to prevent their descent over water: occasional enquiries into the state of the atmosphere, favouring their direction: with various philosophical observations and conjectures, to which is subjoined, mensuration of Heights by the Barometer made plain: with extensive tables. The whole serving as an introduction to Aerial navigation: with a copious index.- Chester: printed for the author, by J. Fletcher; and sold by W. Lowndes,... 1786. 8vo (205 x 125 mm) (4), IIII - VIII, (1), 360 (e.g. 361) pp., (1, blank) with four partly fold., partly colored engraved plates. Modern brown calf period style binding, one plate little restored, lightly brown-spotted. \$ 3.000.-

First edition of a fascinating account of one of the numerous balloon flights which took place all over Europe in the years following the year 1783, including the **first picture from a flying object of the Earth from above**: an image showing Chester, in which the author claims to have reached an altitude of four miles and another with the River Dee. The book included everything from an inventory of the items taken (including the weight of each item) to a florid description of his sensations as he flew: „...what Scenes of Grandeur and Beauty ! A Tear of pure Delight flashed in his Eye! of pure and exquisite Delight and Rapture: to look down on the unexpected Change already wrought in the Works of Art and Nature, contracted to a span by the NEW PERSPECTIVE, diminished almost beyond the bounds of credibility.“ Thomas Baldwin's aerial view of Chester which can be seen, together with the River Dee in the corner of this engraving based on his sketch. This is believed to be the first ever actual view of the earth from above. The first manned balloon flights took place in October 1783. Baldwin made his ascent in September 1785, less than two years later. The Italian balloonist Lunardi who had himself made a number of ascents, and was virtually responsible for introducing aerostation into Great Britain, had lent Baldwin his balloon on this occasion. Lunardi inflated the balloon,

in a superior manner' and also launched a small balloon brightly decorated by Baldwin, which was to serve as a sort of pioneer. After Baldwin's safe descent at Rixton Moss he took a number of onlookers for short trips. Just a few days after Baldwin's flight „The Times“ of 15 September 1785 declared „the rage for ballooning“ to be „the folly of the age“ and urged that „some restriction should be laid on the madness of their frequent trips into the air, without one single good purpose being produced“. It is unclear what provoked this response, other than possibly that it was one year exactly after Lunardi's first flight in England. Baldwin's scientific knowledge is evident from his book. He is familiar enough with mathematics to be able to perform quite complex trigonometry, and to be able to do other calculations relating to physics. He also exhibits a good understanding of chemistry and thermodynamics as understood at the time, including how hydrogen as water gas can be produced by passing steam over hot iron, which had been discovered by Lavoisier and mentioned as a means for filling balloons in Cavallo's book (1785). The footnotes in his book indicate that he was remarkably well-read on scientific matters as he refers to many other writers who would have had a quite limited circulation and to some who wrote only in French. Baldwin invented the „Drag Rope“ to control the altitude of a balloon and he made the first sketches of the earth from the air.- Brockett, Bibl. 1203.

first medical pop-up book

BARTISCH von Königsbrück, Georg.

Ophthalmodouleia (graece). Das ist Augendienst. Newer und wolgegründter Bericht von ursachen und erkenntnus aller Gebrechen, Schäden und Mängel der Augen und des Gesichtes.- Dresden, M. Stöckel, 1583. small Folio (315 x 200 mm). 28 nn., 272 num. leaves, 8 nn. Bll. with wood-cut title borders, repeated on leaf 13, two coats-of-arms, full-page portrait, printers - mark and 88 nearly full leaf text woodcuts, of which two are with pop-ups, all images finely hand-colored in old coloring. Little later (18th cent. ?) over-lapping vellum with handwritten title on spine. Some paper browning throughout as often, scattered light staining, small marginal repairs to white section of pages. Overall a fine copy in slightly later vellum, two sections of spine rather crude repaired.

\$ 110.000.-

First edition of a rare book, especially in remarkable contemporary coloring as here, the earliest book to reliably and comprehensively discuss eye surgery and the first extensively illustrated account of any surgical speciality... a comprehensive pictorial record of Renaissance eye-surgery; two of the woodcuts show the parts of the eye in various layers as they are viewed in dissection by means of movable anatomical flaps. This is one of the earliest uses of movable flaps to illustrate a medical book (Garrison-Morton).

First Renaissance book on ophthalmic disorders and eye surgery, published in 1583 by German physician Georg Bartisch (1535–1607), considered by many to be the father of modern ophthalmology. In his forties Bartisch put his special knowledge into this book, apparently doing the illustrations himself, and in 1583, it was printed for him by Matthes Stöckel of Dresden. The work contains a total of 92 woodcuts each depicting diseases of the eye - some using an overlay technique (Pop-up) enabling the reader to “dissect” parts of the head or eye by lifting up a series of flaps. Accompanying the images is a detailed discussion of ocular diseases, surgical techniques, and instruments used, all written in Bartisch's native German rather than Latin, a highly unusual move for the time.

Despite his scientific calling, Bartisch was a superstitious man, believing that astrology, magic, and witchcraft played a significant part in the causes of disease. Along with detailed descriptions of surgical procedures, it contains chapters on white and black magic as well as sorcery, and includes a plate showing the Zodiac man as a guide to astrological influence on disease sites, which by the late 16th cent. was generally considered unreliable.

At the age of thirteen he began his medical career as an apprentice to a barber surgeon, and for a considerable portion of his life Bartisch was an itinerant surgeon who plied his trade throughout Saxony, Silesia and Bohemia. He eventually settled down in Dresden, and in 1588 became court oculist to Duke Augustus I of Saxony. Although Bartisch was not academically trained, he was considered a highly skilled practitioner of ocular medicine and surgery. His work reflects a tremendous breadth of knowledge based on experience and observation and mixed with an interesting component of superstition that was, of course, part of the fabric of his time and experience, superstition notwithstanding, this milestone work in the history of medicine and ophthalmology underscores Bartisch's skill as a master of empirical learning rather than his adherence to the quackery of traditional scholars of medicine of the day. The book is organized appropriately beginning with head and eye anatomy and proceeding to strabismus, cataracts, external disease, and trauma. There is also a chapter on injuries and defects resulting from magic and witchcraft. The chapters are generally formulaic, each including a description of the disorder, followed by a discussion of the disease, a list of largely herbal prescriptions, and ultimately, surgical approaches. Bartisch based his method of eye care on an

effort to understand the anatomy, physiology, and optics of the eye. His anatomical plates are famous for flaps that can be lifted to reveal the next layer. He distinguished different kinds of cataracts according to their color (white, blue, gray, green, yellow, and black). He described cataract couching and its complications, and he recommended several different kinds of eyelid surgery. He had suggestions for the management of exophthalmos (unnaturally large, wide eyes) and he recommended masks for the correction of misaligned eyes. Bartisch was strongly opposed to the itinerant oculists of the day, and he was not fond of the new fashion of using spectacles, he could not imagine how an eye that was already seeing poorly could ever see better when something was placed in front of it. Once Johannes Kepler (1571 - 1630) showed that the retina was the percipient surface, and the lens and cornea were the refracting media, the eye was gradually conceded to be an optical instrument, and the rational use of glasses became appreciated. According to Bartisch's own claim, the remarkable illustrations were based on watercolors that he had done of his cases. Two plates bear the monogram of an unidentified Saxon print-maker of the second half of the 16th cent.: „HH“ (Nagler II, 373-74, no. 1023).- VD 16, B 558; Garrison-M. 5817; Norman 125 (uncolored, Sale no. 30; \$ 36.800.-); Durling 479; Waller 756; Hirschberg § 320, S. 335 ff.; Becker Coll. 34; Wellcome 697; Grolier. Medicine 22; Choulant - Frank 234; Heirs of Hippocrates 369.

Tropical Fish

BENNETT, John Whitchurch.

A selection of rare and curious fishes found upon the coast of Ceylon: from drawings made in that island & coloured 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.

\$ 12.000.-

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 (maybe only with canceled title-page). 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.

(BOTANICAL ALBUM; Scrap-book)

Very fine scrap album with English drawings of flowers, shells, and handwritten poetry from Sheffield around 1830's in a splendidly bound album in green morocco with gilt spine in compartment, gilt edges, cover with gilt printed floral design in the center and ruled borders in gilt and red, gilt dentelle, inner cover with white silk within gilt printed ruled borders, all probably done by the Viennese bookbinder: „C. G. Müller, jun. Buchbinder Kärthner Straße nro. 1053“ (label on inner back cover). The clasp is missing but signed: J. Kosina in Vienna. oblong folio (280 x 370 mm) with 56 sheets (260 x 355 mm) with 49 watercolors in different colors (brown, blue, white) in contemporary green half calf bookcase (315 x 420 mm) with initials: „M. A. J. B. - Album - 1837“ on cover, partly former content removed from the album. Traces of use and removal of former art work.

\$ 7.800.-

A scrap-album with English poems, devotional text and fine executed water-colors of flowers and shells. The text are in English and some of the dates indicate that the content was made in the 1820's but put later into the album. The dating indicate that it was probably done by a family member of the Brewer Joseph Bevan, who occupied Springfield Hall near Sheffield in the 1820's when most of the content was done. One poem „Continuation“ is by the English poet Felicia Dorothea Hemans (1793 – 1835) whose poems have acquired classic status and were popular, especially with female readers. She was by now a well-known literary figure, highly regarded by contemporaries such as Wordsworth. To many readers she offered a woman's voice confiding a woman's trials; to others, a lyricism consonant with Victorian sentimentality. One drawing is signed by the artist N. Dowding (Dowling?) 1825, another monogrammed W.G.H. 1828 (with the poem The Beggar Girl), another poem with drawing is dated Sheffield, June 16th 1829, others with place Springfield. One printed image is from: Achille Devéria. *Flore des salons ou les fleurs et les femmes ...* (Paris, 1831). The very fine botanical and the few shell drawings are unsigned but also date from 1820's/1830's as well.

In the early nineteenth century beautiful albums of high quality were produced having elaborately hand-tooled leather covers, engraved clasps and brass locks. Albums and scrapbooks had blind embossed covers carrying intricate designs of great detail, spines tooled in gold decoration, pages with gilt edgings and pretty end-papers to excite interest in the most genteel of young ladies. High quality of paper used was for the mounting of prints and lithographs or thicker paper was provided for drawings and water colors. Others had decorations printed or blind embossed onto the pages with blank spaces in the shape of circles, ovals or squares where small scraps or prints would be pasted into. Early scrap albums were prized possessions, intended to be handed down through the family over many generations, whose purpose was for the recording of personal mementoes, poems, religious texts and contributions from friends and family.

BRUGUIERE, Francis Joseph.

The Modernist. 13 silver gelatin photographs from original negatives. Berlin, 2020. \$ 3.500.-

Only 5 boxes were made (numbered/stamped - I. to V.) and box no. I. includes the original negatives by Francis Bruguiere from the estate of Rosalinde Fuller. Box I. costs \$ 12.000.-, but will be sold only after boxes II. to V.

Bees, Ants, Wasps

CHRIST, Johann Ludwig.

Naturgeschichte, Klassifikation und Nomenclatur der Insekten vom Bienen, Wespen und Ameisengeschlecht; als der fünften Klasse fünfte Ordnung des Linnéischen Natursystems von den Insekten: Hymenoptera. Mit häutigen Flügeln. 2 Vols. - Frankfurt am Main: Hermann 1791. sm.4to (215 x 160 mm). 535 pp., (1) with double spreading engraved & hand-colored title, designed by Johann L. Christ and engraved by Johann Müller, with atlas with the same double spread engraved & hand-colored title (often missing) and 60 engraved plates in fine contemporary hand-coloring. Contemporary Swedish brown half calf with red morocco label, marbled boards, binding faded and little rubbed, inside in mint condition, with red ribbon bookmark, former owner inscription in the first volume deleted, fresh and clean, a near pristine copy in its first binding. \$ 14.000.-

First and only edition of this beautiful and famous book on bees, wasps and ants (hymenoptera), rarely seen on the market, especially in this pristine condition.

„(The scientific work on hymenoptera) is appreciated for its many magnificently colored plates and for the fact that it contains a number of new descriptions. The book was published in a small edition and has now become very rare. Its price is constantly rising“. (Junk, Rara)

The German naturalist, gardener and „Obstpfarer“ Johann Ludwig Christ was born in Öhringen, Baden - Württemberg, in 1739. As his popular epithet suggests, he was actually a theologian by profession. In Rodheim vor der Höhe (Wetterau), he worked as a pastor from 1776, after intermediate stations in Bergen (Frankfurt a. M.) and Rüdighheim, then from 1786 as head pastor in Kronberg in the Electorate of Mainz.

His real passion, however, was gardening and writing about gardens. He was intensively engaged in theory and practice in various branches of agriculture, especially fruit growing and beekeeping. In Kronberg he established two nurseries of his own and in this way gathered a wealth of practical experience. The spread of the cultivation of sweet chestnuts and mirabelles can be traced back to him. He was particularly concerned with the systematic classification of the various fruit varieties. His detailed works were both technically well-founded, so that they were considered standard works of pomology for many years, and practically written, which made them extremely popular and earned him the designation „fruit priest“. He was also a specialist in the Hymenoptera and described numerous new species, such as the Gallic wasp. This work was partly based for the first time on observations of living insects, which had previously been known to science only on the basis of collection specimens. Christ was not only one of the most important pomologists and bee scientists of his time, but saw himself above all as a teacher close to the people, not least to improve the meager income of small farmers,- as can be seen from the relevant titles: In 1784, for example, Christ published a Bee Catechism for the Country People, and three years later a *Güldenes ABC Book for the Farmers*. In 1813, Christ died in Kronberg of typhus, known as a famine disease. Condition: plate VI with brown spot in one edge.- Nissen 882; Horn- Schenking 3575; Hagen I, 129, 4; Junk, Rara 214 (1913-39): „Der Verf., Pfarrer Johann Ludwig Christ (1739-1813), war Ende des 18. Jahrhunderts einer der angesehensten Fachleute auf dem Gebiete der Imkerei ... Sein einziges wissenschaftliches Werk ist das obige. Dieses wird wegen seiner vielen prächtig colorirten Tafeln und wegen des Umstandes geschätzt, dass es eine Zahl von Neu-Beschreibungen enthält. Das Buch ist in einer geringen Auflage erschienen und jetzt sehr selten geworden. Sein Preis steigt dauernd.“

First photographs of an Aquarium

CHRISTMANN, S. P. (photogr.)

Berlin Aquarium. 12 vintage albumen prints with rounded corners. (Berlin, S. P. Christmann, late 1868 - early 1869) Each circa in size: 170 x 230 mm, mounted to board, titled and photographers name printed below the images on the mount. In original pebbled cloth portfolio with gilt-stamped title: Berlin, Photographien, Aquarium, rubbed and soiled, stained in edges, some minor damage to back cover. Overall very fine set of this unique item.

\$ 12.000.-

This extremely rare portfolio (as we find no institutional holdings, we believe it to be the only extant copy) was probably offered for sale in only a few copies on the day of the opening of the Berlin Aquarium Unter den Linden on May 11, 1869. It was likely aimed at mainly English and French tourists, as indicated by the multilingual typographical information on the boards. Images of the aquarium also exist as stereo views by Christmann, which were commercially distributed. Only stereo views can be found in various museums. Christmann's studio address was also Unter den Linden and he probably wanted to make money with the „hype“ around the opening of the new „Aquarium“. Alfred Brehms' Berlin Aquarium existed from 1869 to 1910 at the address Unter den Linden No. 68. As a major attraction in the center of Berlin, it presented not only marine animals but also many other animals, from birds to gorillas, in attractive aviaries, glass cases and cages. Inside, a 300-meter-long path led visitors past indirectly illuminated niches and grottoes, for which basalt, granite and other rocks had been brought from various German mountains for their decoration. On the lower level, aquatic animals were on display, while other animal species were on display above. The „Geological Grotto“ extended over both floors and showed a cross-section of the earth's crust with its various layers. A small restaurant completed the complex. The construction of the aquarium, centrally located in Berlin and initiated by Alfred Brehm, aroused great interest. Crown Prince Friedrich Wilhelm had already visited the construction site; King Wilhelm I appeared with a large entourage for the opening on May 11, 1869. The aquarium was a great success. In addition to the favorable location, intensive advertising contributed to this; Brehm ensured that there were always new, interesting newspaper articles about his company. Not only snakes, lizards and fish were exhibited, but also beavers and seals, parrots and other species. At the opening, Brehm had stated that, despite some criticism, they wanted to stick to the name „aquarium“, although one could certainly speak of a „vivariu“ or a „zoo under roof“. Alfred Brehm managed the company until 1873, when he was succeeded by the former pharmacist Otto Hermes, who had solved the seawater problem in the opening year and had been involved in the management of the establishment since 1871. He, too, strove to keep the public interest alive. A highlight in 1876/1877 was the presentation of the young gorilla M' Pungu, the first living specimen of its species in Germany. The first public aquarium was opened in London Zoo in May 1853; the *Fish House*, as it came to be known, was constructed much like a greenhouse. P. T. Barnum quickly followed in 1856 with the first American aquarium as part of his established Barnum's American Museum, which was located on Broadway before it burned down. A number of

aquariums then opened in Europe, such as the Jardin d' Acclimatation In Paris and the Viennese Aquarium Salon (both founded 1860), as well as aquariums in Berlin (1869). The old Berlin Aquarium opened in 1869. The building site was to be *Unter den Linden* (along a major avenue), in the centre of town, not at the Berlin Zoo. The aquarium's first director, Alfred Brehm, former director of the Hamburg Zoo from 1863 to 1866, served until 1874. With its emphasis on education, the public aquarium was designed like a grotto, part of it made of natural rock. The *Geologische Grotte* depicted „the strata of the earth's crust“. The grotto also featured birds and pools for seals. The Aquarium *Unter den Linden* was a three-story building. Machinery and water tanks were on the ground floor, aquarium basins for the fish on the first floor. Because of Brehm's special interest in birds, a huge aviary, with cages for mammals placed around it, was located on the second floor. The facility closed in 1910.

„Das Berliner Aquarium in der Nobelflaniermeile Unter den Linden, Ecke Schadowstrasse wurde am 11. Mai 1869 in Anwesenheit des Königs Wilhelm I. von Preußen eröffnet. In den ersten drei Monaten hatten es bereits 102.400 zahlende Besucher besucht. Zur Zeit Brehms (1869-1873) kamen durchschnittlich 220.000 Besucher pro Jahr.“ (Harter. *Aquaria*, pp. 42 ff.)

Pre-Surrealism

COOKE, Edward William.

(Entwicklungsgeschichte) *Grotesque Animals: Invented, Drawn and Described* by E.W. Cooke.- London: Longmans, Green and Co., 1872. Sm. folio (315 x 250 mm) VI, 24 text leaves and 24 autotype plates, each plate with two or three illustrations, printing humorous descriptions of each on the opposing leaf. Publisher's cloth, gilt printed illustrated covers, all edges gilt; minor foxing, as always binding weak and last plates newly glued in binding, largely a good, clean copy of a rare volume. On half-title a mounted **author's dedication** inscription: „To Professor Wyville Thomson from the author with very good wish for a prosperous and successful voyage.“ \$ 4.500.-

First edition, dedication copy (?), of this original, satiric take on Darwin and evolution, invented just after the publication of the „Origins of Species“ in 1864, but published first in 1872. It is remarkably clever and creative. At times bordering on the lampoonish, the illustrations and witty descriptions are surprisingly modernist. Cooke's work depicts imaginary creatures who have been created through combining elements from marine and terrestrial fossils as well as living specimens. Dedicated to the marine zoologist Sir Charles Wyville Thomson (1830-1882) who served as the chief scientist on the Challenger expedition (Dec. 1872, that his work there revolutionized oceanography). The English landscape and marine painter Edward William Cooke (1811-1880) was a skilled engraver from an early age and numerous of his drawings are influenced by Nicolaes Berghem [Berchem], Paulus Potter, or Karel Dujardin. He also had serious natural history and geological interests, being a Fellow of the Linnean Society, Fellow of the Geological Society and Fellow of the Zoological Society. In the 1840s he helped his friend, the horticulturist, James Bateman fit out and design the gardens at Biddulph Grange in Staffordshire, in particular the orchids and rhododendrons.

„Mr. E. W. COOKE possesses so high a reputation, not only as one of the leading artists of the day, but also as a man eminently devoted to science, as evidenced by the fact of his having attained the double distinction of Royal Academician and Fellow of the Royal Society, that anything proceeding from his pencil cannot fail to be worthy of notice, and we have accordingly looked through this quaint collection of facsimile drawings with very great interest. Mr. Cooke states, in his preface, that he commenced this series of „grotesque combinations,“ to which he also assigns the euphonious title of „Entwicklungsgeschichte“, while seeking rest and relief on the Somersetshire Coast after the dissipation attendant upon the meeting of the British Association at Manchester, in 1864, and that the idea of publication was forced upon him by friends who wished to have copies of the drawings. We are not surprised at his numerous friends and admirers desiring that these results of his holiday recreations should be given to the world; for, apart from the merits of the drawings in an artistic point of view, containing, as they do, powerful delineations of animal forms, they exhibit a singular and amusing fertility of imagination, the disjecta membra of birds, beasts, and fishes, being worked up together in a variety of fantastic forms which it would puzzle Mr. Darwin or Professor Owen to classify. The plates are accompanied by short descriptions, also by Mr. Cooke, and intended, he says, „as a key to aid the uninitiated in animal lore.“

We give our readers the following-descriptions as a sample:—“Plate v. No. 1. An odd fish—Platax—with dress of a bivalve shell, Pecten Gibbosus. The feet of a sprat-loon, Colymbus Stellatus, and tail of Beroe. No. 2. Encrinurus entrocha, a Lily-encrinure, wears the head-dress of a porpita, one of the Acalephæ. Her dress being of Flustra, her right arm is a Pentelasmis, her left a species of Serpula. No. 3. This pig-faced lady, whose body is 'Parasmilia centralist,' has wings of Avicunla cygnipes (both species from the chalk), and limbs of a bird (species unknown).. .

Plate x. No. I. This scaly creature, capped by Cephalaspis, has the feet of a Brazilian porcupine, the heterocercal tail of a Palæozoic fish, and the lower jaw and tusks of Dinotherium wherewith to scratch himself. Plate xiii. No. 3. This ancient spinster, truly Palæozoic, has the triturating teeth of a fish, Cestracion Philipi; her cap is an Argonauta, her body that of the Port Jackson shark, her fan (Spanish, of course) a Renilla. Isis hippuris furnishes her arms. ... Plate xviii. No. I. This hollow character, formed of the lower jaw of the hippopotamus, has very diverse arms, the right being an Ancyloceras. the left Hamites attenuatus. His head-gear is well got up with hide, horns, and the beak of a spoonbill! ... Plate xx. No. i, thanks to Monte Bolca and its elevated strata of dried fish, we have Semiophorus vellifer (a fish of the Eocene.) With Scutes on his neck, and the claws of a lion, he walks his chalks; an upper cretaceous shell, Plagiostoma spinosum, defends his body." Many of the plates remind us of the gambols of the crustaceae and other marine animals in Babil and Bijou, and we have no doubt that Mr. Boucicault, in his next attempt to "improve the British Drama," will find in this volume an endless variety of suggestions for humorous stage effects. We must not omit to mention the admirable manner in which the drawings have been reproduced by Mr. Sawyer of the Autotype Fine Art Company, the plates being exact facsimiles of the drawings. We anticipate an extensive circulation for this beautifully executed and entertaining work. " (Nature, 1873)

Cut-Paper-Flowers for the future King

(Anon.; late follower of Mary Granville DELANY).

Album with cut-out paper flowers most probably presented to Comte de Chambord. (maybe France 1850). Folio (346 x 259 mm.) 12 cut-out paper flowers with sectional titles in gold (Lys, Pensees, Begonia, Myosotis, Jasmin, Verveine, Rose, Ennemie du Peintre, Fuschia, Seringa, Patentille) in a contemporary green armorial morocco binding for Henri Dieudonné d'Artois, gilt edges, silk endpapers, with light spots.
\$ 12.000.-

The artist is unknown but he/she was without doubt influenced by the work of Mrs Mary Delany (1700 - 1788) who, at the age of 72, began to create botanically accurate 'paper mosaicks' in hand - colored tissue paper. She frequently pursued her work in company and lamented that 'so few would attempt it'. Failing eyesight obliged her to give up her occupation after ten years but by then she had already filled ten albums of Flora which are now preserved in the British Museum in London. If you were a woman of certain class in Victorian England, you were expected to both not work (status) but stay busy (virtue). To satisfy both social requirements, women of means took up crafting—and paper-flower making was at the top of the to-do list. They were made by carefully disassembling a real flower, tracing each component on paper, and using those pieces as a template. The paper petals were carefully cut out, ruffled or crimped to achieve a realistic look, and glued or wired onto stems. The flowers were often finished by dipping or painting wax on each petal. The imitation flowers were displayed throughout the house and were considered an indispensable personal accessory. Provenance: Henri Dieudonné d'Artois, Comte de Chambord (1820 - 1883) was the grandson of Charles X of France, and son of the assassinated Duc and Duchesse de Berry. After his grandfather's expulsion from France in 1830 he initially lived with his aunt Marie Therese, Duchesse d' Angoulême, the only surviving child of Louis XVI and Marie Antoinette. They lived peripatetic lives, finally settling at Schloss Frohsdorf in Austria which she left him in her will. He died there in 1883, the last Bourbon of the main line; acquired by Maggs Brothers from the library of the Count of Chambord for Lord Broughton.- Olivier 2500, fer 3

photographs of the moon

DE LA RUE, Warren.

The Moon. 1862. Accordion-bound album with twelve albumen prints mounted in carte - de - visite style. Leather bound accordion with gilt title on upper cover. Size: folded: 211 x 211 mm; unfolded: 211 x 1219 mm.
\$ 4.500.-

Inspired by John Adams Whipple's daguerreotypes at London's Great Exhibition of 1851, the astrophotographer and amateur astronomer Warren De La Rue began experimenting with lunar photography, using wet-collodion glass negatives and a telescope of his own design. Because his first telescope had no clockwork mechanism, his earliest trials required an assistant to carefully move it in sync with the moon's trajectory through the night sky. By 1856 he had upgraded his instruments, and he began producing prints of unprecedented clarity. Back in the 1850s he had to build his own "camera" to do this. It equates to a 3000mm f/9 camera to expose a wet glass plate so telescope,

observatory and darkroom had to be combined. His exposure times were around 1-20 seconds for those materials but as coating, exposure and processing had to be done in short succession the exposure was still the shortest of the steps. With a wood burning stove to stoke to keep the darkroom temperature within range and even achieving focus was an art. A quote from Warren in 1859 is appropriate here "To photograph the moon continuously is a laborious undertaking and affords full occupation for one observer, who must not fail to pay unremitting attention to the condition of the various chemicals employed, so as to be always prepared for a fine night with such as will work." Between 1857 and 1862, De La Rue made a series of stereoscopic Moon images. - Lit.: Corey Keller (ed.) Brought to Light. Photography and the invisible, 1840-1900. no. 51; <https://societyforthehistoryofastronomy.files.wordpress.com/2013/01/warren-de-la-rue-aa5-18feb2011p14-35.pdf>

True Crime

(Criminal Museum DRESDEN; distributor)

Internationale Photographische Ausstellung Dresden 1909 (**cover title**). Photo- Album for the International Exhibition of Photography, 1909, collected by the Police Museum Dresden and distributed for similar institutions. Album with 51 photographs showing exhibition rooms of different police stations and forensic laboratories. (Dresden, 1909) Folio (315 x 355 mm) with 51 paper-card boards (300 x 330 mm) each with one mounted photograph (approx. 225 x 160 mm) all blind-stamped in image by „Photo Atelier der Kgl. Polizeidirektion Dresden“. All photographs titled below the image on the boards. Contemporary leather, red edges, bumped and soiled, endpapers renewed, overall in fine condition.

\$ 6.800.-

Landmark of early Forensics. Exceedingly rare photo album of the Exhibition rooms of the Dresden Criminal Museum at the International Photography Exhibition Dresden (1909) showing the just established forensic laboratories of several countries (Germany, Austria, France, USA) as well as exhibition spaces of famous forensics: display cases after Cesare Lombroso's theory of offender types, wall-maps after the French biometrics researcher, Alphonse Bertillon (1853 – 1914) who applied the anthropological technique of anthropometry to law enforcement creating an identification system based on physical measurements. Anthropometry was the first scientific system used by police to identify criminals. Before that time, criminals could only be identified by name or photograph. The method was eventually supplanted by fingerprinting, which is also shown here on wall maps. There are also mug shots to be seen: Photographing of criminals began in the 1840s only a few years after the invention of photography, but it was not until 1888 that Bertillon standardized the process.

Some of the exhibition booths were designed by scientists or leading forensics: Like the chemist Dr. Paul Jeserich (1854 - 1927) who was a pioneer in the field of blood trace science. Jeserich earned his doctorate in Jena and initially worked in Berlin as an assistant to the forensic chemist Franz Leopold Sonnenschein, whose laboratory he took over after Sonnenschein's death. He was primarily active in the field of forensics, particularly biological traceology, and ballistics, where he was one of the first scientists to use microphotography to match a fired bullet to the correct weapon. Jeserich also examined traces of blood at crime scenes and on seized evidence on behalf of the police. He testified in court as an expert witness, such as in the Lucie Berlin murder case in 1904.

Or the Booth of the chemist and university lecturer Georg Popp (1861- 1943), called „the Hunter“ who was one of the founders of microscopic and scientific criminology at the Johann Wolfgang Goethe University in Frankfurt am Main and later became a Nazi victim. He formulated Popp's principle: „The differences in soils from place to place make valuable clues to prove the link between a suspect and a crime scene.“ On his own initiative, he founded a new laboratory in Frankfurt in 1889, where he was primarily concerned with toxicological and microscopic chemical examinations (such as of dust, soil, hair, textiles, blades of grass, and pollen) for criminalistic purposes, the Institute for Forensic Chemistry and Microscopy. He wrote criminal history in the Lichtenstein case (1904), the Disch case (1904), the Kroll case (1905), the Filbert case (1908), the Hopf case (1913) and so on. In 1924, Popp became one of the first German forensic chemists to be appointed honorary professor of forensic chemistry and in 1929, he founded the Vienna-based „Académie Internationale de Criminalistique“.

Or the exhibition booth of the German-Swiss criminology-pioneer and forensic scientist Rodolphe (Rudolph) Archibald Reiss (1875 – 1929) who is considered one of the pioneers of criminalistics and the analysis and interpretation of physical evidence gathered from crime scenes. His groundbreaking work at the beginning of the twentieth century created advances in forensic sciences. Reiss also contributed to the development of the forensic institute of the University of Lausanne, which is among the world's prominent forensic education facilities. With the advent of World War I., Reiss was commissioned by the Serbian government to investigate atrocities committed by

the invading Central Powers against Serbs. After the war, Reiss helped establish the first Police Academy in Serbia and he was one of the founders of the Red Cross of Serbia.

The photographs here were distributed by the Dresden Criminal Museum. Before the end of World War II, the Dresden Criminal History Museum was considered one of the world's largest collections of criminal history. The museum has its origins in a training collection of the Saxon police established from the end of the 19th century. A royal ministerial decree had led to the documentation of significant criminal cases for police training in Dresden from 1894. Many of the objects consisted of teaching materials for aspiring criminalists, who used them to learn how to draw crime scene sketches, secure evidence, and decipher cipher writing. The first items were collected under the supervision of Paul Koettig (1856 - 1933), a government councilor and later Dresden police chief who headed the Criminal Investigation Department of the Royal Police Department in his hometown from 1894. The rapid growth of the collection led to the planning of separate exhibition rooms even as the new building of the police headquarters was being constructed. During this period, the Dresden Police was one of the pioneers of modern criminalistics in the German Empire. In addition to the early establishment of its own criminal investigation department, in 1903 Dresden became the first German police department to introduce the method of dactyloscopy, the proof of identity by fingerprinting. By the 1920s, the collection had grown to about 70,000 exhibits. At that time, Dresden was home to one of the world's largest police museums. A considerable group of the exhibits are made up of old police teaching materials shown in display cases, including a „typology of born criminals“ based on Cesare Lombroso's theory of offender types. The photographs show: 1.-16.: Königliche Polizeidirektion Dresden; 17.-19. Königliches Polizeipräsidium Berlin; 20.-21. Polizeibehörde der Freien und Hansestadt Hamburg; 22.-23. Königliche Gendarmerieschule Wohrlau; 24.- 28. Kaiserlich Kgl. Polizeidirektion Wien; 29.- 33. Kaiserlich Russisches Ministerium des Innern, Polizeidepartment; 34. Polizei Riga; 35.- 38. Ministerium des Innern (Abteilung für öffentliche Sicherheit), Paris; 39.-40. Polizeibehörde Paris; 41. Polizei Washington; 42.- 44. Gerichtschemiker Dr. Jeserich (Berlin); 45. Gerichtschemiker Dr. Popp (Frankfurt a. M.); 46. Gerichtschemiker Dr. Loock (Düsseldorf); 47.-48. Prof. Reiss (Lausanne); 49. Dr. Nicolaus Minovici (Bucarest); 50.-51 Photographische Lehr- und Versuchsanstalt München.- Provenance: Kriminal - Museum Hannover (on cover)

DONINI, Giuseppe.

Saggio aeronautico di Giuseppe Donini Tifernate.- Firenze: presso Giuseppe di Giovacchino Pagani, 1819. 8vo (210 x 140 mm) 92 pp. with 4 fold. leaves of plates. Uncut, partly unopened copy in gray wrappers, in modern leather binding. \$ 900.-

Rare work on aerostation by the Umbrian enthusiast Giuseppe Donini, who built his work mainly on the experiences of the Italian aviation pioneer, Count Francesco Zambecari (1752 - 1812) who was killed in a ballooning accident. With chapters on: Descrizione delle principali parti della Macchina; Manovra verticale; Esplorazione delle correnti accelerate, ritardate ed opposte in linea retta; Esplorazione delle correnti trasversali, ed inclinate in senso opposto e favorevole; De' materiali per costruir gli Aerostati; Metodo da tenersi in aria; Scopo dell' Aereonautica.- Maggs Cat. 619, no. 188; Brockett 3721; Boffito 154.

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.

DU PRÉ, F(ernand) (or Francesco).

Memoria sull' aerostato di Pasqual Andreoli. Esposio nella chiesa di S. Giorgio Maggiore il di 21 Novemb. 1806. Di F. du Pré, farmacutico a Venezia,...- Venezia: Andrea Santini, 1807. 8vo (182 x 112 mm) (6), 99 pp., (1, blank) with engraved frontispiece showing the air balloon, and an engraved diagram at pp. 62. Blank endpapers by the Montgolfier paper-mill with their watermark. Slightly later polish calf with two gilt balloons on spine, early 20th cent. endpapers. Blank front paper with old antiquarian notes.

\$ 1.400.-

Rare account of the early flight of the Italian aviation pioneer Pasquale Andreoli (1771- 1837) who from a very young age became interested in the „new part of physics“ and becoming one of the pioneers of aero-navigation. He met Bolognese Count Francesco Zambecari (1752-1812) and together they made the first ascent with an aerostat of their own construction in Bologna on October 7, 1803. The government of Bologna sponsored a flight in 1803. Bad weather caused the flight to be postponed in September 1803. Wanting to avoid a second postponement, the balloon took off in bad weather on 7 October. Zambecari was accompanied by Pasquale Andreoli and Gaetano Grassetti. In bad visibility, the balloon crashed into the Adriatic Sea early the following morning. Similarly, another flight with Andreoli on 23 August 1804 also crashed into the Adriatic Sea. On October 18, 1807, taking off this time from the new Arena in Milan, they reached an altitude of 7,600 meters with a double-chamber balloon which is described here. Memorable was the feat on August 22, 1808, in Padua when, together with the scientist Carlo Brioschi, he accomplished with his balloon the first flight in Italy for exclusively scientific purposes and reached an altitude of almost 8,300 meters, which remained the altitude record for hot-air balloons until some 30 years ago. In 1809, in Forlì, he designed and built with Ottavio Albicini a new aerostat christened „La Speranza“ with which he performed various ascents first in Forlì itself, then in Brescia and other cities in Lombardy. He spent the rest of his life experimenting with balloons, generally using a combination of a hot air balloon and hydrogen balloon known as a *rozière* after Jean-Francois Pilatre de Rozier. He died of cholera in Sicily.- Slg. Liebmann 671; Boffito pp. 156; Caproni / Bertarelli 135; KVK: Dt. Museum; Stabi München; Stabi Berlin; Lugano, BL London; OCLC: probably Harvard, MIT, Hagley, etc (some seem to have only a online resource)

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 - colour vignettes, 27 water - colour drawings of orchids, window mounted, contemporary green half morocco gilt, one spine label chipped.
\$ 60.000.-

Fantastic collection of watercolor drawings of orchids, painted by the „Orchid painter“ Cornelius Beavis Durham for the textile mill - owner Edward Salt (1837-1903) who had 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 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 (1809-1884) 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 have had a reputation as a flower painter or he already made these drawings here and Durham recommended him to Day. Durham prepared over 300 paintings for Day, all but a few being sold at auction on Day's death 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. Day himself is noted for producing some 4000 illustrations of orchid species in 53 scrapbooks over a period of 15 years, which also contains one of the few remaining orchid paintings by C. B. Durham: „*Laelia Schilleriana*“. These scrapbooks were donated to The Royal Botanic Gardens, Kew in 1902 and are described in Cribb/Tibbs. *A very Victorian Passion. The Orchid Paintings of John Day, 1863 to 1888* (2004). Day bought his first collection of orchids in 1852 at an auction of the stock of Loddiges nursery upon its closure. At an average price of £1 each, he acquired 50 tropical orchids, not the more common Cymbidiums, but Dendrobiums from India, *Odontoglossums* from tropical America, *Lycastes*, and *Cattleyas*, which he grew under ideal conditions in an orchid house built with an exemplary heating system, in the grounds of his home at High Cross, Tottenham. Between 1863 and 1888 at the height of orchid mania in Victorian England, John Day painted and sketched orchids from his own collection in Tottenham, London nurseries, and the Royal Botanic Gardens at Kew, and visited the tropics to see orchid habitat at first hand. A large number of his illustrations depict plants he had coaxed into flower and are the first-known images of species. During this period (1860s / 1870s), Cornelius Durham also painted some 320 watercolors of orchids which were in the collection of John Day, most of which were purchased by John Coleman on John Day's death in 1888. The majority of these have since disappeared. Eight watercolor drawings are today in the Fitzwilliam Museum/Cambridge (coming from the same provenance as ours). (https://digidownload.libero.it/DURHAM_FAMILY/DURHAM-STRAYS-CORNELIUS-DURHAM-family.pdf) Provenance: Edward Salt; the 2nd Lord Fairhaven (Lord Broughton).

(Albert Einstein) FREUNDLICH, Erwin Finlay.

Das Turmteleskop der Einstein= Stiftung.- Berlin: Julius Springer, 1927. 8vo (210 x 135 mm) 84), 44 pp. Original-Wrappers with mounted photograph, rubbed and soiled, Ex Libris: Robert Engström and with his pencil signature on title. Fine. \$ 400.-

Rare description of the Einstein Tower in Potsdam, its building and its instruments. The „Einsteinturm“ was built by the young architect Erich Mendelsohn (1887-1953) between 1919 and 1922 on the summit of Potsdam Telegrafenberg to house a solar telescope. The telescope supports experiments and observations to validate (or disprove) Albert Einstein's general theory of relativity.

The extravagant appearance makes the building difficult to describe. Its fluid curvilinear, concave and convex forms let it appear sculptured rather than built, resembling in its shape a wind swept submarine with the sprawled arms of a sphinx. Outcroppings on both sides of the building serve as drain spouts. Unusual features include the angled windows placed in stream-lined niches which are moulded into the round corners. Stylistically, the building is seen as an example of the art of Expressionism, and it has been praised both as the epitome of architectural individuality and as the embodiment of modernity. Mendelsohn referred to the plasticity of his design as ‚dynamism‘. The building was first conceived around 1917, built from 1919 to 1921 after a fund-raising tour, and became operational in 1924. Although Einstein never worked there, he supported the construction and operation of the telescope.

In 1919 the young architect Erich Mendelsohn (1887-1953) was given the opportunity to design an observatory for the purpose of making measurements that might validate Albert Einstein's theory of relativity. To create a specialized scientific facility such as this would not seem to have given much scope for architectural innovation. ‚You can make the designs for the exterior architecture‘, Mendelsohn was told, ‚though this won't be a particularly rewarding job for you!‘ Mendelsohn thought differently. This was one of Mendelsohn's first major projects, completed when a young Richard Neutra was on his staff, and is his best-known building. Between 1917-1920 Mendelsohn created numerous sketches with the attempt to create a structure that reflects Einstein's groundbreaking theories. Between 1920 and 1921 he created a building that was as eccentric and untraditional as the scientific concepts with which it was associated. It brought Mendelsohn fame and established his position in the debates over what contemporary architecture should look like that preoccupied the politicized cultural circles of inter-war Germany.

Until then, Mendelsohn had focused on the production of numerous visionary sketches for all kinds of building types, without having ever tested any of his designs against the practicalities of construction. During the erection of the Einstein Tower he quickly came to understand the limits of concrete construction. The exterior was originally conceived in concrete, but due to construction difficulties with the complex design and shortages from the war, much of the building was actually realized in brick, covered with stucco. Because the material was changed during construction of the building, the designs were not updated to accommodate them. This caused many problems, such as cracking and dampness. Extensive repair work had to be done only five years after the initial construction, overseen by Mendelsohn himself.

The Tower unites a domed observatory with an underground laboratory, while housing an unusual optical instrument, an unmovable vertically installed telescope. The requirements for accommodating the delicate optical instruments and other scientific apparatus determined the general elevation and ground plan of the building. Mendelsohn's task was to design only an appropriate shell for the technical equipment. Soon after research started at the site, it became evident that the proof sought would be harder to obtain than originally anticipated since the minimal shift of spectral lines was obscured by other solar influences. The reason was atmospheric turbulence on the solar surface. However, Einstein and Freundlich had from the beginning not only been interested in the specific problem of the red shift, but had also intended basic research in solar physics, and the laboratories were so designed that new equipment could be installed without difficulty. It is said that Albert Einstein was conservative in his architectural taste and didn't like the building much. After having been shown through the building by Mendelsohn he gave a one-word review by whispering into the architect's ear: „organic“.

EINSTEIN, Albert.

Die Grundlage der allgemeinen Relativitätstheorie.- Leipzig: Johann Ambrosius Barth, 1916. 8vo. 64 pp. Uncut in the original printed wrappers, light miscoloring to margins of wrappers. Inner hinges with professional repairs. Previous owner's name in contemporary hand to upper outer corner of title-page. A fine copy. \$ 4.000.-

First issue of the first edition in book form of the foundation of the General Theory of Relativity, being, not an offprint of the „Annalen der Physik“ journal issue (PMM 408) as often stated, but a separate edition of the paper, completely re-set and with significant changes and additions, including for the first time in print the Einleitung and the Inhalt.

The first issue is distinguished from the later reprints with same date by the printing of „Sonderdruck aus den Annalen der Physik Band 49, 1916“, and „Druck von Metzger & Wittig in Leipzig. 314“ to the verso of the title-page and „Metzger & Wittig, Leipzig“ to the foot of the back wrapper. Furthermore, this separate edition is printed on **good, strong paper**, the wrappers are of strong material too, and it is described now as the original edition of this classic paper.“ (Weil).

Einstein's seminal ‚General Theory of Relativity‘ has had an immense impact on all science, philosophy, and man's view of the world in general. Few other books of the 20th century can be said to have so basically altered the way that we view the world and our place in it. Determining space and time as being interwoven into a single continuum known as „space-time“ and determining that there is no absolute space-time coordinate system - i.e. that there are no absolute positions in time and space - established the fact that events that occur at the same time for one observer could occur at different times for another, i.e. all positions in space and time are relative. This general theory of relativity, here presented in its full exposition for the first time, in book form, is now a basic foundation for scientific thought. The theory of relativity has transformed astrophysics, and indeed the whole scientific outlook.“ (PMM).

„Whereas Special Relativity had brought under one set of laws the electromagnetic world of Maxwell and Newtonian mechanics as far as they applied to bodies in uniform relative motion, The General Theory did the same thing for bodies with the accelerated relative motion epitomized in the acceleration of gravity. But first it had been necessary for Einstein to develop the true nature of gravity from his principle of equivalence. Basically, he proposed that gravity was a function of matter itself and that its effects were transmitted between contiguous portions of space-time. Where matter exists, so does energy the greater the mass of matter involved, the greater the effect of the energy which can be transmitted. In addition, gravity affected light. exactly as it affected material particles. Thus the universe which Newton had seen, and for which he had constructed his apparently impeccable mechanical laws, was not the real universe. Einstein's paper gave not only a correct picture of the universe but also a fresh set of mechanical laws by which its details could be described.“ (R. W. Clark).

„This paper was the first comprehensive overview of the final version of Einstein's general theory of relativity after several expositions of preliminary versions and latest revisions of the theory in November 1915. It includes a self-contained exposition of the elements of the tensor calculus that are needed for the theory.“ (T. Sauer in Landmark Writings in Western Mathematics). PMM: 408; Horblit 26 c; Weil 80; Boni 78, 1; Schilpp-Schields 86.

(Albert Einstein) SITTER, Willem de.

Album compiled on the occasion of his 25th anniversary as a professor at the University of Leiden (1908 - 1933) on October 6, 1933: Aan Dr. W. de Sitter aangeboden op den zeoden October Regentien handed drie en destig by gelegenheid van zyn Vuf en twintig Jarig Jubileum als Hoogleraar aan de Universiteit te Leiden.“ (Leiden, 1933) oblong large folio (345 x 460 mm) with 23 leaves incl. a full-page watercolor showing the observatory of the University of Leiden, made by J. M. Graadt van Roggen (250 x 360 mm) and over 200 handwritten original signature by colleagues and friends on mounted cards attached to boards. Master binding in leather with a splendidly colored embossed coat of arms on the front cover. The associated box is little defective, but overall a perfect survival.

\$ 12.000.-

Very fine presentation album with signatures of famous astronomers including Sitter's working circle, scientific network and his friends, incl. Albert Einstein. The signatures are mounted from A - Z, including signatures of the astronomers Giorgio Abetti, Walter S. Adams, Sir Arthur Eddington, Ejnar Hertzsprung, Milton S. Humason, August Kopff, F. K. Küstner, George Lemaître, Bertil Lindblad, J. H. Oort, Antonie Pannekoek und Harlow Shapley, the astrophysicist Henry Deslandres, Dyson und Edward A. Milne, the physicists Albert Einstein, W. J. de Haas, W. H. Keesom, J. D. van der Waals und Pieter Zeeman, Sydney Chapman, Sande Bakhuysen, the mathematicians Emile Picard and others. Other famous members of the circle were already death, like Ehrenfest who just died and H. A. Lorentz (died 1928).

Willem de Sitter (1872 - 1934) was a Dutch mathematician, astronomer, and cosmologist who developed theoretical models of the universe based on Albert Einstein's general theory of relativity. Like Eddington, de Sitter was one of the few astronomers who had the educational background and interests necessary to pursue both the special and general theories of relativity. He began work on the relativity principle (Einstein's first postulate for SRT) already in 1911; two years later he tried to bolster Einstein's second postulate by providing evidence for the constancy of the velocity of light. Even older were de Sitter's interests in gravitational theories, which can be traced back to 1908. Moreover, he closely followed Einstein's attempts to construct a field-theoretic approach to gravitation, including the controversial Einstein-Grossmann theory of 1913. de Sitter's more famous work on the general theory of relativity

was a consequence of his prior research rather than a result of the sudden interest in Einstein's theory that emerged in 1916. The N.Y. Times in Nov. 1934 wrote in his obituary: „In [de Sitter's] work we see the creative mathematician at his best. He is not a cold, dispassionate juggler of Greek letters, a balancer of equations, but rather an artist in whom wild flights of the imagination are restrained by the formalism of a symbolic language and the evidence of observation. Only the musician can fully grasp what it must have meant to de Sitter to see the cosmos shaping itself in new ways in his formulas. Like musical notes, strange symbols, standing for forces and masses that were divined rather than known, arranged themselves into a coherent message. And when the message came to be read a totally new universe was revealed. Here we have something of the direct personal experience of the outer world, of the significance of nature's wonders, that comes only to a Beethoven or a Milton. The expanding universe of de Sitter must be regarded as something more than an inexorable conclusion drawn from the strictest kind of logic with which the human mind is familiar. It is poetry of a new sort - the scientist's way of writing an epic.“

Albert Einstein; SIMON, Gerty.

Portrait of Albert Einstein seated, showing his right profile in size 210 x 180 mm on a sheet 250 x 210 mm, signed by the artist in pencil below the image (Gerty Simon). Minor surface damages at the borders. Overall rare and fine.

\$ 5.000.-

Rare portrait of Albert Einstein in Berlin in probably 1929 made by the German female photographer Gertrud or Gerty Simon (1887–1970) who worked mainly during the interwar period in Berlin. Born Gertrud Cohn in Bremen to a well-to-do Jewish family with her father being a lawyer, she practiced in Berlin and later in London. She captured many important political and artistic figures in Weimar Berlin, including Kurt Weill, Lotte Lenya, Käthe Kollwitz, Max Liebermann and as here Albert Einstein. Simon's work was shown at major photography salons of the day. She was represented at probably the most important German photography exhibition of the Bauhaus period, „Fotografie der Gegenwart“ (Contemporary Photography) in Magdeburg in 1929. With the arrival of the Nazi Party to power in 1933 life became very difficult for Simon and her family. Simon emigrated and rapidly re-established her studio in London Chelsea, and portrayed many significant individuals there, such as Sir Kenneth Clark, Dame Peggy Ashcroft and Aneurin Bevan. She stopped working as a professional photographer from 1937 for unknown reasons.

Albert EINSTEIN in Berlin. 1930

Original photograph in b/w. Silver gelatin print in size: 165 x 120 mm. Press agency wet stamp on verso (some traces of use including a slight round mark in the centre of the print). Mounted by the corners under matting.

\$ 1.500.-

Original press photograph by the Radio Press Service, New York City. On August 22 in 1930 Albert Einstein held a speech on the exhibition site at the radio tower in Berlin-Charlottenburg at the opening of the 7. Deutsche Funkausstellung und Phonoschau (7th German Radio and Audio Show) in Berlin. The speech which was broadcast via radio was held at stormy weather and near the trams rattling along in the open. Both these unfavourable circumstances and the technical imperfection of the back then sound recording are reflected in the sound quality which can be listened to here: https://www.einstein-website.de/z_biography/einstein1930.mp3 Ref. Françoise Balibar, Einstein. La joie de la pensée. Paris, Découvertes Callimard, 2007, p. 73.

medical peace movement

FLUSSER, Emil; Albert Einstein.

Krieg als Krankheit. Mit einem Geleitwort von Prof. Albert Einstein.- Heide in Holstein: Paul Riechert, 1932. 8vo (200 x 135 mm) (6), 150 pp. Original paper card boards with dust-jacket, rubbed and soiled, dust jacket with minor faults.

\$ 500.-

Rare first edition. In 1932 the Bohemian paediatrician Emil Flusser (1888-1942) published a book in which he argued that war was the result of a psychic epidemic, and that its prevention was a task for the medical profession. Albert Einstein supported Emil Flusser by writing a foreword to the work. The burning of the book in 1933 by the Nazis was followed by that of the author and his family in 1942.

After graduating from school, Emil Flusser studied medicine, specializing in pediatrics. At the beginning of the First World War he was drafted and served as a medical officer in the Austrian Army until the end of the war. After the end of the war, he settled as a practicing pediatrician in České Budějovice. With the strengthening of revanchist, nationalist groups in Germany and Austria, but also the intensifying tensions between the German minority and the Czech population, Flusser's involvement in the peace movement began. After the breakup of Czechoslovakia and the German invasion in 1939, Emil Flusser was banned from practicing because of his Jewish origins. Nevertheless, he continued to treat mainly Jewish children. In 1942, he was finally deported to the Theresienstadt concentration camp. He and his family died in April of that year on a transport to Zamosc.- Lit.: Peter van den Dungen. Dr. Emil Flusser. Forgotten Precursor of the Medical Peace Movement, in: *Medicine, Conflict, Survival* 12 (1996), pp. 90–106.

Color-printed Anatomy

GAUTIER D'AGOTY, Arnaud - Eloi.

Cours complet d'anatomie, peint et gravé en couleurs naturelles par A. E. Gautier D'Agoty, second fils; et expliqué par M. Jadelot. Nancy, Jean-B. H. Leclerc, 1773. Large folio, ff. [2], pp. 25, and 15 engraved, colour - 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, rubbed, soiled, one corner creased. \$ 25.000.-

First edition of this superb anatomical work, one of the younger d'Agoty's most important publications, beautifully illustrated with his famous colour-printed engraved plates, and here well preserved in its contemporary binding. Arnaud-Eloi Gautier d'Agoty was the son of the anatomist and printer Jacques Fabien, successor to the engraver and pioneer of colour printing, Jacob Christophe Le Blon. The younger d'Agoty employed his father's innovative printing process, using four colours, instead of Le Blon's three. Gautier's employment of a fourth, black palte, allowed for representation of shadow, as well as contrast. 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.

GMELIN, Samuel Gottlieb.

Historia Fucorum auctore Samuel Gottlieb Gmelin, ... Petropoli (St. Petersburg): ex typographia Academiae Scientiarum, 1768. Quarto (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.

\$ 4.500.-

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.

GOETHE, Johann Wolfgang von.

Zur Farbenlehre. Erster Band. Nebst einem Hefte mit sechzehn Kupfertafeln. (and) Zweyter Band. 2 Vols.- Tübingen, in der J. G. Cotta'schen Buchhandlung, 1810. 8vo (210 x 130 mm) XXVIII, 757 pp., (1); XLVIII, 654 pp. (and:) Erklärung der zu Goethe's Farbenlehre gehörigen Tafeln (with) Anzeige und Uebersicht des Goethischen Werkes zur Farbenlehre. (Tübingen: J. G. Cotta, ca. 1820) 4to (260 x 215 mm) 24 pp., 12 pp. with 17 (12 col.) engraved plates. Contemporary reddish marbled boards, green morocco lettering piece, rubbed and soiled, partly edges a bit stronger, inside some browning, but overall a very fine copy; and period style marbled boards. Text of the plates with heavier browning, the plates mostly fine, one plate in white margins with repair. \$ 7.000.-

First edition of Goethe's *Theory of Colours* which includes the German poet's views on the nature of colors and how these are perceived by humans. The book contains detailed descriptions of phenomena such as coloured shadows, refraction, and chromatic aberration. The work originated in Goethe's occupation with painting and mainly exerted an influence on the arts (Philipp Otto Runge, J. M. W. Turner, the Pre-Raphaelites, Hilma af Klint, Wassily Kandinsky). The book is a successor to two short essays entitled 'Contributions to Optics'. Although Goethe's work was rejected by some physicists, a number of philosophers and physicists have concerned themselves with it, including Thomas Johann Seebeck, Artur Schopenhauer, Hermann von Helmholtz, Rudolf Steiner, Ludwig Wittgenstein, Werner Heisenberg, Kurt Gödel, and Mitchell Feigenbaum. Goethe's book provides a catalogue of how color is perceived in a wide variety of circumstances, and considers Issac Newton's observations to be special cases. Unlike Newton, Goethe's concern was not so much with the analytic treatment of color, as with the qualities of how phenomena are perceived. Philosophers have come to understand the distinction between the optical spectrum, as observed by Newton, and the phenomenon of human color perception as presented by Goethe—a subject analyzed at length by Wittgenstein in his comments on Goethe's theory in *Remarks on Colour*.

As a catalogue of observations, Goethe's experiments probe the complexities of human colour perception. Whereas Newton sought to develop a mathematical model for the behaviour of light, Goethe focused on exploring how colour is perceived in a wide array of conditions. Developments in understanding how the brain interprets colours, such as colour constancy and Edwin H. Land's retinex theory bear striking similarities to Goethe's theory.

His „longest and, in his own view, best work, today known principally as a fierce and unsuccessful attack on Newton's demonstrations that white light is composite. Goethe supposed that the pure sensation of white can be caused only by a simple, uncompounded substance“ (DSB). Goethe's approach to science was one of sensuous experience and poetic intuition. He expected to be remembered as a scientist and thought his most important work was his 'Theory of Colours' (here). He argued that colours are realities, phenomena of nature. In this sense, Goethe believed colours to

be the result of the contrast between light and darkness, and that the intervention of a turbid medium produces colour. Since all bodies are to some extent turbid, they may appear coloured in daylight. The present work is divided into three parts: „Goethe’s chapter on physiological colors (those which depend more on the condition of the eye than on the illumination) is the most successful and also typifies his psychological approach to color.“ (DSB).

The text is in first edition and the atlas in first edition, second issue (ca. 1820; the plates are not in various sizes and have not the corrections in ink. This edition has the plates in the same size and the corrections already printed.- Kippenberg I, 386 and 387; Goed. IV, 3, 583, 46; Hagen 347 and 347d (nach Hagen liegt der Tafelband im 2. Druck der EA vor, dem ein erster Druck im Morgenblatt für gebildete Stände vorausging. Alle Tafeln in gleicher Größe und mit den Änderungen an den Kupferplatten); DSB V, 445 f. Provenance: R. von Raumer 1870 (Rudolf von Raumer ?, 1815-1876).

Freedom of the sea

GROTIUS (GROOT), Hugo de.

Mare Liberum sive De iure quod Batavis competit ad Indicana commercia Dissertatio. Vltima Editio.- Lugduni Batavorum [Leiden:], Ex Officina Elzeviriana, 1618. Small 8vo. XIV, 1 - 2 [= 16], 17 - 111 pp., I (blank) with woodcut printer’s mark [Concordia Res Parvae Crescunt] on title-page. Sign: [A - G8]. (bound before:) **MAUPAS, Charles.** Grammatica et syntaxis gallica regulas acuratas et certas prononciationis, orthographiae, constructionis et usus linguae nostrae, in gratiam peregrinorum eius studiosorum, continens. Edita Gallicae... Lugduni (Lyon:) apud Remundum de la Rouiere, 1623. (16), 354 pp., (2, last blank) Contemporary full vellum, overall a fine copy with slight spotting. The IN PROMPTU armorial bookplate of the Trotters of Mortonhall on inner cover (thanks to Leo, Tom and others). With interesting handwritten book mark: „This French Grammar by Charl. Maupasio, translated by Theod. Jacom. into Latine belongs to Mr. John Brown; but I find somethings init that make me desire to have it altho it should cost me the dearer. Meall 16 Nov. 1695.“

\$ 8.000.-

Very rare second edition, published nine years after the legendary rare first edition(s), of which only about 78 copies are today known in institutional (& private) holdings; here we have the first edition with Hugo de Groot actually mentioned as author on the printed title, the last copy sold at German auctions 25 years ago.

Few works of such brevity have caused arguments of such global extent and striking longevity as Hugo Grotius’s *Mare Liberum* (*The Free Sea*). In *Mare Liberum*, Grotius formulated the new principle that the sea was international territory and all nations were free to use it for seafaring trade or fishing rights. Grotius was only in his late twenties but already possessed a reputation as one of Europe’s most precocious and penetrating humanist scholars. Though self-taught as a lawyer, his reputation as an advocate and adviser was growing, along with his political influence. By publishing *Mare Liberum*, he was displaying the literary, rhetorical, and philosophical talents that had won him his fame and respect, and he was also intervening in two political debates of pivotal significance for his own country.

The disputation was directed towards the Portuguese *Mare clausum* policy and their claim of monopoly on the East Indian Trade. Grotius wrote the treatise while being a counsel to the Dutch East India Company over the seizing of the Santa Catarina Portuguese carrack issue, with a lot of profit involved. Grotius’ argument was that the sea was free to all, and that nobody had the right to deny others access to it. In chapter I, he laid out his objective, which was to demonstrate „briefly and clearly that the Dutch [...] have the right to sail to the East Indies“, and, also, „to engage in trade with the people there“. He then went on to describe how he based his argument on what he called the „most specific and unimpeachable axiom of the Law of Nations, called a primary rule or first principle, the spirit of which is self-evident and immutable“, namely that: „Every nation is free to travel to every other nation, and to trade with it.“ From this premise, Grotius argued that this self-evident and immutable right to travel and to trade required (1) a right of innocent passage over land, and (2) a similar right of innocent passage at sea. The sea, however, was more like air than land, and was, as opposed to land, common property of all: „The air belongs to this class of things for two reasons. First, it is not susceptible of occupation; and second its common use is destined for all men. For the same reasons the sea is common to all, because it is so limitless that it cannot become a possession of any one, and because it is adapted for the use of all, whether we consider it from the point of view of navigation or of fisheries.“

Although the arena of dispute was local, the implications of *Mare Liberum*’s arguments were global. The book was taken by the English and the Scots as an assault on their fishing rights in the North Sea and by the Spanish as an attack on the foundations of their overseas empire. It had implications no less for coastal waters than it did for the high seas, for the West Indies as much as for the East Indies, and for intra-European disputes as well as for relations between the

European powers and extra-European peoples.- Provenance: John Trotter (1667-1718), the son of John Trotter, first Baron of Mortonhall, an Edinburgh merchant who bought the estate in the middle of the 17th century. The younger John Trotter was a keen book collector and frequenter of auctions. Willems, 140: *Seconde édition Elzevirienne*; see note: Willems 56: Isaac Elzevier a réimprimé cet ouvrage dans la même format en 1618. Bonaventure et Abraham en ont donné deux éditions in 24me sous la date de 1633.; Ter Meulen/ Diermanse, *Bibliographie*, no. 543; Ter Meulen/Diermanse, *Bibl. des écrits sur Hugo Grotius*, no. 50 - 55 - 82, also pp. 1184 - 192; Rogge, *Bibl. Grotianae* (1883), no. 3; Grotius exhibition, 1925, no. 302.

fossils, minerals, botany & paper

GUETTARD, Jean Etienne.

Memoires sur differentes parties des sciences et arts. Par ... 5 Vols. - Paris, Laurent Prault, and Eugene Onfroy; Philippe-Denys Pierre (from Vol. IV), 1768 - 1783. Quarto (255 x 195 mm) [2], cxxvi, 439 pp., (1), (2; errata) and [18] fold. engraved plates; [4], lxxxv, (1, errata), 530 pp. with LXXI (71) fold. engraved plates by J. Robert; [4], 544 pp.; [2] Bll., (2, avert.), 687 pp., (1, blank); [2] Bll., 446 pp., (2, imprimatur by Condorcet) with [167] engraved plates for vol. IV and V. Contemporary calf, gilt spine in compartments, yellow edges. General a very fresh, fine and broad margined copy.

\$18.000.-

First edition, rare in complete form: „un des plus grands livres de science du XVIIIe siecle“.

A second enlarged edition was published in Paris with the publisher Costard from 1774 - 1786 in 7 vols. The „Memoires“ are mainly devoted to mineralogical, geological and paleontological subjects regarding the geography of rocks, rock formations, mines and minerals, and fossils, including reports concerning Guettard's discovery of the French kaolin deposits, weathering of mountains, fossil records, description and classification of several corals, sponges and especially tube-shaped bivalvia. 28 taxa are described here for the first time. There are also essays on paper-making. The 256 engraved plates are by Jean Robert and published here for the first time. With the financial support of his patrons and the Academy, Guettard accumulated not only specimens of rocks, crystals, fossils and mineral specimens, but a large archive of drawings and engravings of many of these objects which he witnessed in his own travels or collected in the field. The French geologist and mineralogist was also the first to survey and map the geologic features of France and to study the exposed bedrock of the Paris Basin. The keeper of the Duc d'Orléans' natural history collection, he was the first to identify several fossil species from and to suspect the volcanic origin of mountains in central France. When the duke died, he left Guettard a sum that allowed him to do pretty much what he wanted, which was traipse around France collecting plants and minerals, and observing the general lay of the land. Guettard has several claims to geological fame, or at least respect. In 1746, he compiled and printed in the *Memoires* of the Paris Academy of Sciences the first geological map anywhere. In fact, he printed two of them, one showing all of Europe, the second zeroing in on France and England. He calls it a mineralogical map, which is more accurate geological map, since Guettard does not claim to show the rocks on the surface (like the subsequent geological maps of, say, William Smith), but simply shows where you are likely for find various metals, minerals, and types of stone. In 1751, Guettard and a fellow traveler were visiting Clermont and the Auvergne region of France, part of what is called the Central Massif, where most of the mountains of France are located. Guettard wanted to see the Puy de Dôme, where Blaise Pascal's brother in law, Florin Perier, had carried a barometer, or Torricellian tube, up the mountain in 1648, which is why they were in the vicinity of Clermont. Guettard observed quite a few mileposts, and some houses, built of a black stone that looked to him like volcanic rock. He was told it came from a village named Volvic, north of Clermont, and he sought it out, found the quarry, and traced the rock to cones in the mountains that looked just like old volcanoes. Nearly every account I have read of Guettard's visit to Volvic relates that Guettard, when he learned that the source of his mysterious building stone was Volvic, immediately exclaimed: „Volvic, *volcani vicus*“. Guettard read and published a paper in the *Memoires* in 1752 in which he argued that the basalt of the Auvergne region was volcanic in origin and had cooled from a molten state, which was new to just about everyone. Credit for this observation is usually given to Nicolas Desmarest, who read a paper making the same claim in 1771, printed in 1774. Guettard spent much of his later life working on a mineralogical atlas of France, which was to have contained well over 200 maps; his colleague in compiling the atlas was the young Antoine Lavoisier, who would later acquire much more fame as a chemist. (Mary Terrall; in: Adiana Craciun (ed.) *The material cultures of Enlightenment Arts and Sciences*. 2016. pp. 25 ff.) Note in the first volume one find the paper (I, 227-253): *Recherches sur les matieres qui peuvent servir a faire du papier*, which reprints a landmark paper in paper making history. The use of wood as a material from which to make paper was first suggested in the West by Reaumur observing the habits of wasp. The investigations of Reaumur while not in actual papermaking, gave the hint to European scientists that paper might be made from other

substances than rags. In 1741 Jean Etienne Guettard made his first observations regarding substitutes for rags in making paper and wrote several articles advocating the use of *coferva* (swamp moss) as a papermaking material (Hunter. Papermaking, pp. 316) According to the preface to the 4th vol., three already existing plates (doubles) should be left out by the binder (Mem. XIV, plate 11, 12 & 13). Some copies have this duplicates still present as presumably the copy, Pritzel used (stating 115 instead of 113 plates). Our copy collates as others with 113 plates (together 256 plates).- DSB V, 577-579; Schuh 2021 (only 3 vols.): "Very rare"; Oberlé 446 (3 vols. from the Duc d'Orleans library); not Schuh online; Ward & Carozzi 975; Roller/Goodman I, 491; Ferchl 204; not in Sinkankas; Pogg. I, 973; Pritzel 3631; Quérard III, 514; Hoefer XXII, 472-77; not in Honeyman & Norman; Brunet, II, 1796; France littéraire, I, 278.

Scientific Instrument „Sammelband“

HARTNACK, Daniel.

Perspectiva mechanica und Eigentliche Beschreibung derer vornehmsten Instrumenten, so von denen berühmtesten Opticis zum perspectivischen Reissen bißher erfunden worden. Unter andern aber, Eines besondern, dadurch ... auch die im Zeichnen noch Unerfahrne, allerley ihnen vorgelegte Geometrische und andere Corpora ... mit leichter Müh verzeichnen.- Lüneburg, Martin Vogel for Johann Kelp, 1683. 4to (200 x 155 mm) (4), 22 pp. with four engraved plates showing drawing instruments and one woodcut plate depicting three-dimensional geometric figures. Overall with wide margins. Uniformly lightly browned and sporadically slightly spotted, water-stained in the gutter. Contemporary calf, upper and lower spine a bit bumped, rubbed and soiled, else only minor browning. Fine copy. (bound with:)

BILER, Johann Matthias. *Neu erfundenes Instrumentum mathematicum universale, vermittelt dessen alle proportiones in der Mathesi ohne Circul, Lineal und ohne Rechnung, bloß mit einen seidenen schwarzen Faden ... mit ungemeiner Geschwindigkeit ... können gesucht und gefunden werden.* Jena, Henrich Christoph Cröker, 1696. 18 nn. Bll. with one fold. engraved plate showing the instrument and text woodcuts. (bound with:)

DALENCÉ (d'Alencé), Joachim. *Abhandlung Dreyer so nothwendig- als nützlichen Instrumenten, nemlich deß Barometri, Thermometri, und Notiometri, oder Hygrometri. Der Lufft geringste Veränderungen in Schwere und Leichte, in Wärme und Kälte, in Feuchte und Truckne, auff das genaueste zu beobachten. Auß dem Frantzösischen ... vorgetragen.*- Mainz, Ludwig Bourgeat for the translator, 1688. (8), 51 pp., (1, blank) with engraved frontispiece and 35 engraved plates. (bound with:)

DALENCÉ (d'Alencé), Joachim. *Magnetologia curiosa. Das ist gründtliche Abhandlung des Magneths, in zwey Abtheilungen enthalten. Der erste Theil begreiff die Erfahrnüß, oder Versuchungen, der zweyte aber die Ursachen, welche davon kennen gegeben werden. Auß dem Frantzösischen ... übersetzt.* Mainz, Christoph Küchler or the translator, 1690. (4), 50 pp., (2, register) with engraved frontispiece, and 33 engraved plates. \$ 5.500.-

First edition of a work on drawing instruments with engl. title: „Mechanical perspective and a proper description of the most refined instruments that until now have been invented for perspective drawings“, describing seven drawings instruments, though without bringing anything really new. Hartnack began a list of authors on perspective and included five non-Germans, incl. Serlio, Dubreuil, Marolois, Niceron and Guidobaldo. By the mid- 1630's, the interest in perspective instruments seems to have declined in the German states - or at least the enthusiasm for writing about them (see before Brunn, Scheiner, Bramer, Faulhaber). Fifty years later the subject was taken up again by the ‚glamorous‘ Daniel Hartnack (1642-1708). He was often on the run, first because as a young teenager he got a woman pregnant, then from prison, to which he had been sentenced because of an unpaid debt, then from his position because he was found to lack the education he had claimed, and so forth. Despite his tumultuous life, Hartnack managed to work as a teacher and a headmaster for most of his life, and to get at least seventy titles published.- VD 17 3:016384L; Anderson, *Geometry as an Art*;

This short work on elementary surveying techniques, describes a half-circular sighting instrument and illustrates its use with a few simple problems involving triangles.- VD 17 3:600842E; Tomash Library B153.

First German editions of both works by Dalencé, the *Traité de l'aiman*, a general treatise on the magnet and its uses, incl. the invention of the compass and magnetic mountains of America and *Traitez des barometres*, ..., the earliest account dealing exclusively with the subject, and especially valuable as the first work laying down rules for the graduation of the thermometer. The physicist and astronomer Joachim Dalencé (1640 - 1707) was the son to the surgeon of the king, who purchased for him the office of royal secretary and counsellor on 15 September 1663. In

1668, during a trip to England, where he bought a telescope, Joachim formed a friendship with Henry Oldenburg, and in 1675 he is known to have served as an intermediary between Oldenburg and Huygens. He was also in communication with Leibniz and served as liaison between the French Academy and Huygens. Beginning in 1679 he published anonymously the first six collections of the *Connaisance des temps*, the first French ephemerides of a purely scientific nature. He gave up this project in 1684 and in 1685 moved to the Low Countries, where for three years he purchased books and art objects for the royal collections. During this time he published the *Traité de l'aiman* (1687), a well-written discussion of magnets, and the *Traitez des barometres, thermometres et notiomètres ou hygromètres* (1688). His detailed description of the principal meteorological instruments of the period is enriched with several new ideas, such as the calibration of the thermometric scale on the basis of two points of change of state; the point at which water freezes and—a much more contestable point—that at which butter melts.- VD 17 39:120078X; DSB III, 534, Roller-G. II, 26; Wheeler 200; VD 17 39:120069Y, Neu 73, Roller-G I, 26, Zeitlinger 929.

most important book in the history of medicine

HARVEY, William.

De motu cordis, & sanguinis in animalibus, anatomia exercitatio, cui postrema hac editione accesserunt clarissimi viri Johannis Walaeci. ... Epistolae duae, quibus Harveii doctrina roboratur.- Bologna: typis Longhi, 1697. 8vo (153 x 80 mm) (24), 178 pp., (2, with two woodcut images) Contemporary Paper-card boards, uncut copy, rubbed and soiled. \$ 5.500.-

Uncommon and rare, but late Italian edition of William Harvey famous work.

„By this brief tract the whole scientific outlook on the human body was transformed. From now on, men begin to think physiologically even when occupied in purely anatomical study.“ (Singer)

There is probably no name better known in the history of medicine than that of William Harvey (1578-1657). An Englishman, educated at Cambridge and then at Padua when Fabricius was in the chair of anatomy, Harvey returned to London and set up in practice. In 1615 he was made a professor of anatomy and surgery at the College of Physicians. By 1616 he had perfected his theory of the circulation of the blood, publishing his findings in 1628 in an unimposing little book, *Exercitatio anatomica de motu cordis et sanguinis in animalibus*, usually called just *De motu cordis*. It is probably the **most important book in the history of medicine**.

Heirs of Hippocrates explains that „what Vesalius was to anatomy, Harvey was to physiology; the whole scientific outlook on the human body was transformed, and behind almost every important medical advance in modern times lies the work of Harvey.“ The work was first published in Frankfurt in 1628, with a second edition including the „*Exercitationes*“ of Parisanus appearing in Venice in 1635; the first is practically unobtainable, while the second lacked the plates, parts of the introduction, and chapters I and XVI. For our third edition, the publisher Maire restored these parts, included the illustrations, and also added the criticism and denials from the 1630 printing of the *Animadversiones* of Harvey's leading opponent, James Primerose. Harvey had studied with Fabricius of Aquapendente, who published a monograph on the valves of the veins upon which Harvey improved and expanded. According to PMM, „it was left for Harvey to combine these discoveries, to conceive the idea of a circulation of the entire blood system, and demonstrate it conclusively by an exhaustive series of dissections and physiological experiments. For twenty years Harvey pursued his objective in both human and comparative anatomy. He proved experimentally that the blood's motion is continuous and always in one direction, and that its actual amount and velocity makes it a physical impossibility for it to do otherwise than return to the heart by the venous route, the heart being itself a muscle and acting as a pump. . . . He even suspected the existence of the capillaries connecting the smallest arteries with the smallest veins, but without the microscope he could not see them The arguments and demonstrations marshaled by Harvey were too cogent to admit of long resistance, and his work was accepted by medical men in his lifetime. Descartes used the discovery as a basis for his mechanistic physiology; English experimental scientists regarded the discovery as of equal importance with Copernican astronomy or Galilean physics. The illustrations in this uncommon edition are crudely copied woodcuts of the usual valves in the veins and appear on either side of the final leaf. Also included are two letters of Johannes Walaecus (Jan de Wale, 1604-1649), anatomist of Leiden, in coroboration of Harvey's thesis. These important letters had first appeared in the Padua edition of 1643 and had been published in two other editions before this Bologna edition. Walaecus sent two letters to Thomas Bartholin in which he records a number of experiments confirming Harvey... He shows that, whereas the blood will flow or even spurt from a vein below a ligature, it will do no more than ooze from a vein incised above a ligature.“ - Keynes 13; Heirs of Hippocrates no. 262; Waller 4097; Wellcome III, 219; Russell 362; Garrison/Morton 759

(1628ed.).- Lit. J. Schouten, Johannes Walaeus and his experiments on the circulation of the blood; in: Journal of the History of Medicine and Allied Sciences. XXIX (1974), 259–279.

Newton, the comets of 1744 & the two-body problem association copy

HEINSIUS, Gottfried.

Beschreibung des im Anfang des Jahrs 1744 erschienenen Cometen nebst einigen darüber angestellten Betrachtungen.- St. Petersburg, Akademie der Wissenschaften, 1744. 4to (235 x 190 mm). (2), 105 pp., (1) with **one mezzotint plate** and three engraved plates. Additionally bound in is an old finely hand drawn constellation map in ink, showing the course of the comet at the sky with dates of its appearance at the sky. (bound before:) **EULER, Leonhard**. Theoria Motuum Planetarum Et Cometarum. Continens Methodum Facilem Ex Aliquot Observationibus Orbitas Cum Planetarum Tum Cometarum Determinandi. Una Cum Calculo, Quo Cometae, Qui Annis 1680 Et 1681. Itemque Ejus, Qui Nuper Est Visus, Motus Verus Investigatur Berlin: Ambrosius Haude, 1744. [3], 4-6, 9-187 (i.e., 188: last page mispaginated), with engraved frontispiece and four folding engraved plates of diagrams. Woodcut vignette on title, woodcut initials and head- and tail-pieces. In this, as in all copies we have seen, the frontispiece, which was printed on A4, has been cut out and bound facing the title. Pages 7 & 8 are therefore omitted, but the text is continuous and the volume is absolutely complete. The remarkable engraved frontispiece by F. H. Fritsch (Berol.; Berlin) depicts the solar system with the Sun as one among many other stars in a plurality of worlds. Contemporary vellum, red edges, with some light wear, but a very good copy. Front paper renewed in the 19th cent. with Ex Libris of the astronomer Fr. Th. Schubert on inner front cover. Many corrections and commentaries to Euler's text in ink, probably by the hand of the astronomer Schubert.

\$ 4.500.-

Very rare first edition, with an additionally bound in plate showing the course of the comet, probably made by astronomer **Theodor Friedrich (Fjodor Fjodorowitsch) Schubert (1789-1865)**, grandfather of the mathematician Sofya Kovalevskaja and a very fine, unusual mezzotint plate. Heinsius has made himself known by the excellent physical description of the great comet of the year 1744, which he followed with a telescope borrowed from the merchant Wolf.

The German mathematician, geographer and astronomer, Gottfried Heinsius (1709 – 1769) was awarded a Ph.D. in 1733 from the University of Leipzig with a dissertation on *De viribus motricibus*. Later he became professor of mathematics at the same institution. Heinsius may have been the first to publish an announcement about the return of Halley's comet in 1759. From 1736–1743 he taught astronomy in St. Petersburg along with Leonhard Euler and was a member of the St. Petersburg Academy of Sciences. The Academy appointed him associate professor of astronomy with the obligation to work as adjunct of Johann Nicolas Delisle. After the death of his former teacher in Leipzig, he was offered his position, which he accepted and therefore worked in Leipzig again from 1745-1769.

Heinsius uses here the, for scientific works, unusual technique of mezzotint: The technique of mezzotint first emerged in the 17th century in the Netherlands and was embraced by English printmakers where it rose to great prominence in the 18th century. It was the evolution of experimentation with marks on a plate, and it broke with traditional printed image making as it is not based in line work, but rather tones. The first mezzotints by Ludwig von Siegen in the 17th cent. were made using the light to dark method, but in the 18th cent. the dark to light method became the most common method. The whole surface (usually) of a metal, usually copper, plate is roughened evenly, manually with a rocker, or mechanically. If the plate were printed at this point it would show as solid black. The image is then created by selectively burnishing areas of the surface of the metal plate with metal tools; the smoothed parts will print lighter than those areas not smoothed by the burnishing tool. Areas smoothed completely flat will not hold ink at all; such areas will print „white“ ,that is, the color of the paper without ink. Jacob Christoph Le Blon used the dark to light method and invented the three and four-color mezzotint printing technique by using a separate metal plate for each color. Le Blon's color printing method applied the approach whereby red, yellow and blue were used to create a larger gamut of color nuances.- SKI 1251; Brüning 1682 (wrongly one plate).

First edition of Euler's first treatise on astronomy, „a fundamental work on calculation of orbits“ (DSB); his calculations are mentioned in the Anhang (amendment) of Heinsius' book. Stimulated by the appearance of two great comets in 1742 and 1744 (now designated C/1742 C1 and C/1743 X1), Euler developed new methods to determine the (elliptic) orbits of planets and the (elliptic and parabolic) orbits of comets. His first major contribution in the present work was to the ‚two-body problem,‘ the problem of determining the motion of two spherical bodies

under their mutual gravitational attraction. Newton had attacked the two-body problem using geometrical methods in his Principia, and preliminary analytical results had been presented in 1734 by Daniel Bernoulli, but it was Euler in the present work who gave the first complete analytical solution. The second major contribution of the present work was the introduction of new techniques of perturbation theory - the method of successive approximations that Euler used to determine parabolic orbits is still known as ‚Euler’s method.‘ Euler used these new techniques, together with observational data supplied by Alexis-Claude Clairaut in Paris, to calculate the orbits of the comets of 1742 and 1744, and his success stimulated others to use his methods to predict the next return of Halley’s comet, which Edmond Halley had first observed in 1682. „When Euler reported back on his successful calculation of an orbit from their data, the Parisian astronomers, even die-hard Cartesians like Jacques Cassini, had to accede to the power of Newtonian theory. In fact the French adopted it with such enthusiasm that they virtually took over the work on Halley’s comet at its forthcoming apparition, Clairaut foremost among them.“ (Broughton, p. 126).- Eneström 66; Honeyman 1063; Houzeau & Lancaster 11948. Broughton, The first predicted return of Halley’s comet, in: Journal for the History of Astronomy 16 (1985), pp. 123 - 133. Holdings: Bonn, Erlangen, Bremen, Göttingen, Göttingen, et al.; ZB Zürich, Paris Observatoire, NYPL, Adler Planetarium.

Kepler’s Supernova

HERLITZ, David.

Astronomische und historische Erklerung Des Newen Sterns oder ungeschwänzten Cometen / so Anno 1604. im ende des Septembris, und folgendem Octobri, auch Novembri erschienen/ und der anfenglich im himlischen Serpentario oder Schlangentreger (wie ihn die Astronomi nennen) sich hat sehen lassen.- Gedruckt zu Alten Stettin (Stettin or Szczecin), Jochim Rhete, (ca. 1605). sm.4to (162 x 145 mm) 22 unpag. Bll. with woodcut portrait of Herlitz recto title, woodcut initials and diagrams within text. Period style modern vellum with mounted label and modern leather ties, slightly bent. Evenly browned, the endpapers renewed, title-page professionally restored in the margins, trimmed short to text as often, a few pages in upper part shaved touching text, one page with little text lost in first line. Overall fine.

\$ 5.000.-

Exceedingly rare description of an astronomical phenomenon, which the author calls „untailed comet“, but it was the explosion of a supernova in the ankle of Ophiuchus on October 10, 1604. The new star was no ordinary star; it remained visible even in the daytime sky for over a year. The new star prompted widespread debate about what it might portend and whether the heavens could change. Kepler described the phenomena in *De Stella Nova in Pede Serpentarii* (On the New Star in the Foot of the Serpent Handler) published in Prague in 1606. Observation conditions were good, particularly when it was first visible. A conjunction of Jupiter and Mars happened to be taking place near the place where the supernova appeared, meaning that astronomers happened to be looking in its direction. As a result there were many witnesses to its appearance, but Kepler’s observations were particularly meticulous. The care he took not only to record his own observations but to compile the observations of other astronomers make *De Stella Nova* a very important record both of the supernova itself, and of the astronomy of the early 17th century. Kepler’s measurements allowed him to be certain that the ‘new star’ showed no parallax. Thus, as suggested by the supernova observed 32 years previously by Tycho Brahe, the Aristotelian doctrine that the distant stars were fixed in the firmament must be false. Now called Kepler’s nova, it was the second supernova to be observed in a generation, after the supernova in Cassiopeia, described by Tycho, which appeared in 1572. No supernova within the Milky Way galaxy has been observed since. In addition to the reasons for the appearance of comets, Herlitz also explains the significance of comets (precursors of important political events and as announcements of unusual natural phenomena such as droughts and crop failures). The portrait of the author shows him with the attributes of a scholar such as astrolabe stylus and book as well as a carnation as a symbol of the Passion of Christ. The German physician, mathematician and astronomer David Herlitz (*Herlicius*; 1557 - 1636) was from 1585 professor of mathematics at the University of Greifswald. In 1598 he left Greifswald, and first became physicist in Stargard and from 1606 was city physicist in Lübeck. In 1614 he returned to Stargard, set up his practice there and made himself a name as a medical and mathematical writer. Herlitz wrote annual calendars from 1590, sometimes several editions per year with different contents, which were published in Stettin, Magdeburg, Wittenberg, Frankfurt a. d. Oder and Nuremberg until 1655. Several of his writings were devoted to astronomical topics, including direct instructions on celestial observation and astronomical phenomena, such as eclipses and comets. In 1628, Wallenstein commissioned him to record the horoscope of King Gustav Adolf of Sweden. During the siege of Stargard on October 7, 1635, he lost his library with numerous manuscripts and died soon after.- VD17 39:123175T; Brüning, Kometen 642; Zinner 3991;

Peuckert, Rosenkreutz 43 (with image of the horoscope) OCLC: Stabi Berlin, Leipzig, Wolfenbüttel, Erlangen, Strasbourg, Columbia.

unknown manuscript of Boyle on colors ?

HOOFNAIL, (J.) (attr.)

The Art of Drawing and Painting in Water - Colours. Whereby a stranger to those arts may be immediately render'd capable of delineating any view or prospect with the utmost exactness..., with instructions for making transparent colours of every sort, partly from some curious personages in Holland, France and Italy, but chiefly from a manuscript of the great Mr. Boyle, particularly a receipt of that gentleman's, for making a blue colour equal to ultramarine.- London: Printed for J. Peele, 1732. 8vo (200 x 120 mm), [5], 6-70 pp., [2, index], with one woodcut illustration of a „portable Case of Colours“ within the text, some light browning and staining to text. Recent half calf, marbled boards, spine ruled in gilt with leather label, a nice copy. \$ 1.800.-

Second enlarged (?) edition, although we could not trace a first edition. The author states in the preface that „Among other particulars which they contain, are several receipts for making and preparing of Colours, from a manuscript of the late famous Mr. Boyle, which has never yet appear'd in Public“, similar statements occur in the text without anything to indicate which, if any, are from the alleged manuscript of Robert Boyle.

The Boyle bibliographer Fulton notes „It is possible that the author is J. Hoofnail who in 1738 issued *New Practical Improvements... Touching Colours*, which also purports to have been drawn from unpublished manuscripts of Boyle... it is more likely that this work... [is] drawn directly from *Experiments and Considerations touching Colours* by Boyle, published in 1664.“ Robert Boyle (1627-1691) first published his *Experiments... on colours* in 1664. On completing the text, he added the subtitle 'The beginning of an experimental history of colours,' indicating that, rather than a doctrine of theory, this was written as a record of colour research. It is an account of some of Boyle's many experiments on the origins and changes of colours. These include trials made with common materials, such as "Of the Mixing and Tempering of Painters Pigments" and "Of the Greenness of Salt Beef," reflections on the causes of different skin colours, and experiences of unusual colour vision among Boyle's acquaintances. Although the collection focuses mainly on chemical experiments, it includes a handful of observations made with prisms. If there were further manuscripts by him on color experiments we don't know.- see Fulton, *Bibliography of Robert Boyle*, 372.

Alexander v. Humboldt's Guano

(HUMBOLDT) FOURCROY, Antoine Francois.

Analyse de la terre du perou appelée Guano, et rapportée par monsieur (Alexandre de) Humboldt. Original manuscript in black ink on paper written by the French chemist of Antoine Francois Fourcroy of his and Louis - Nicolas Vauquelin's analyses of guano samples brought back to Europe by Alexander von Humboldt from his voyage to South America. (no date, no place, but Paris, 1806). small 4to (230 x 175 mm) 13 handwritten pages on 8 leaves loosely inserted in modern folder.

\$ 7.500.-

Important manuscript in the history of chemistry, the public presentation of the chemical analysis of Guano by the French chemists Antoine François Fourcroy (1755 – 1809) and Louis-Nicolas Vauquelin (1763-1829) showing its fertilizing properties for agriculture which played then a pivotal role in the development of modern input-intensive farming. The report was published as: Antoine François Fourcroy and Nicolas Louis Vauquelin. *Sur le guano, ou sur l'engrais naturel des ilots de la mer du sud, près des côtes du Pérou. Mémoires de l' Institut des Sciences, Lettres et Arts. Sciences mathématiques*, no. 7, 1806, pp. 369–381.

Guano, the white gold of the seabirds, is the best natural fertilizer known to mankind. The term Guano applies to natural mineral deposits consisting of excrements, eggshells and carcasses of dead seabirds found in almost rainless, hot-dry climatic regions and corresponding fertilizers. The most significant nitrogen Guano is the Peru-Guano, which has been used over 2000 years as agricultural fertilizer in Peru. In Europe the application of Guano as fertilizer emerged in the 1840 as "Guano boom" and lasted until the early twentieth century when Guano was replaced by industrial manufactured fertilizers. Only a small quantity is still exported to Europe as additive to organic/mineral fertilizers, more for image boosting than for effect.

In November 1802, Prussian geographer and explorer Alexander von Humboldt first encountered guano and began investigating its fertilizing properties at Callao in Peru, and his subsequent writings on this topic made the subject well known in Europe. Although Europeans knew of its fertilizing properties, guano was not widely used before this time. During his stay in Lima Humboldt received samples of guano, a mixture of bird droppings from the Chincha Islands off the Peruvian coast, which he took to Europe and had analyzed by the most famous chemists.

After his return, Alexander von Humboldt gave the guano samples to the leading analysts of his time, Antoine François Fourcroy and Nicolas Louis Vauquelin in Paris and Martin Heinrich Klaproth in Berlin. Fourcroy and Vauquelin published the results of their analyses in 1806, Klaproth in 1807. The results showed outstanding fertilizing effects, in particular due to the high content of nitrogen and phosphorus. Although chemists recognized the importance of guano for crop production, it was decades before its use became common. On St. Helena Island in 1808/1809, guano far outperformed traditional fertilizers in early trials using pig manure, horse manure, and guano from offshore Egg Island on potatoes; experiments and trials in Great Britain were equally successful. The chemist Humphrey Davy delivered a series of lectures which he compiled into an 1813 bestselling book about the role of nitrogenous manure as a fertilizer, *Elements of Agricultural Chemistry*. It highlighted the special efficacy of Peruvian guano, noting that it made the „sterile plains“ of Peru fruitful. Justus Liebig's publication of his book „Die Chemie in ihrer Anwendung auf Agrikultur und Physiologie“ (Chemistry in its Application to Agriculture and Physiology) in 1840 had a decisive influence on the general acceptance of fertilization with guano in agriculture. The ensuing boom starting from the 1840s influenced seriously agriculture in Europe and the economy of Peru. Demand for guano rapidly declined after 1910 with the development of the Haber - Bosch process for manufacturing synthetic nitrogen and phosphorus. The chemist Fourcroy collaborated with Lavoisier, Guyton de Morveau, and Claude Berthollet, on the *Méthode de nomenclature chimique*, a work that helped standardize chemical nomenclature. One aspect of Humboldt's travel to South America (1799–1804) received little attention,- his contribution to modern agriculture remains almost unnoticed.

minerals from the Ararat

HUMBOLDT, Alexander von.

Biedermeier hexagonal cardboard box with green and brown cover containing a small collection of stones of the Ararat (five items) as a souvenir of the first ascent of mountain Ararat made by the Baltic German naturalist and mountaineer Johann Jacob Friedrich Wilhelm Parrot (1791 – 1841) in 1829 and given to the Turkish Emperor (Tsar Nicholas I. or Mahmut II. ?) who gave them to Humboldt in Warsaw in May 1830. Humboldt's handwritten note on the upper lid reads: „Sommet de l'Ararat / roches recueillies par Mr. Parrot donné par Sa Majesté l'Imperator de Turquie / Varsovie Mai 1830 - Humboldt“. A small part of Parrot's delivered stone samples had apparently been left to Alexander von Humboldt by Tsar Nicholas I. or Sultan Mahmut II. as a souvenir. The writing slightly blurred by use of the box or the sun.

\$ 8.500.-

Very rare survivor relating to Alexander von Humboldt, Tsar Nicholas I. of Russia (or Sultan Mahmut II.) and the first ascent of the legendary mountain, Ararat (5165 m), by the Dorpat (Tartu) physics professor Johann Jakob Friedrich Wilhelm Parrot (1791-1841). In his account of the expedition, Parrot wrote that „all the Armenians are firmly persuaded that Noah's Ark remains to this very day on the top of Ararat, and that, in order to preserve it, no human being is allowed to approach it.“

After the Russo-Persian War of 1826-1828, Mount Ararat came under Russian control by the terms of the Treaty of Turkmenchay. The German-Russian scientist Friedrich Parrot felt that the conditions were now right to reach the peak of the mountain. With a team of science and medical students, Parrot left Dorpat in April 1829 and traveled south to Russian Transcaucasia and Armenia to climb Ararat. The project received full approval from Tsar Nicholas I., who provided the expedition with a military escort. Accompanied by the Armenian writer and national public figure Khachatur Abovian, Parrot and his team crossed the Arax River into the district of Surmali and headed to the Armenian village of Akhuri situated on the northern slope of Ararat 4,000 feet (1,200 m) above sea level. Following the advice of Harutiun Alamdarian of Tiflis, they set up base camp at the Monastery of St. Hakob some 2,400 feet (730 m) higher, at an elevation of 6,375 feet (1,943 m). Parrot and Abovian were among the last travelers to visit Akhuri and the monastery before a disastrous earthquake completely buried both in May 1840. Their first attempt to climb the mountain, using the northeast slope, failed as a result of lack of warm clothing. Six days later, on the advice of Stepan Khojiant, the village chief of Akhuri, the ascent was attempted from the northwest side. After reaching an elevation of 16,028 feet (4,885 m), they turned back because they did not reach the summit before sundown. Accompanied by Abovian, two Russian soldiers, and two Armenian villagers, Parrot reached the summit on the third

attempt at 3:15 p.m. on 9 October 1829. Abovian dug a hole in the ice and erected a wooden cross facing north. He picked up a chunk of ice from the summit and carried it down with him in a bottle, considering the water holy. Georg Friedrich Parrot, professor of physics at the university of Tartu (Dorpat) from 1802 until 1826, founded the best physics laboratory in the Russian empire, containing 450 experimental devices of which more than 60 had been invented by Parrot himself. of the total number of instruments approximately 50 are still preserved in the university of Tartu Museum collections. Parrot's organizational talent took both the laboratory and the teaching in Tartu to the highest level at the time.

IANNONE, Dorothy.

Lists (IV). from The Book of D(orothy). + D(ieter). A much more detailed than requested reconstruction.- Cologne: Diver Press, 1968. oblong 4to (220 x 275 x 11 mm) Set of 34 drawings (silkscreen on plastic with foam and board). Book object. Signed and numbered at the front (#3) dated and with dedication by the artist, Jan. 18th, 1969. \$ 3.500.-

One of 30 copies made. The bookwork embodies a visual record of Iannone's erotic relations with various partners, accompanied by a list of their names. The list ends with Dieter Roth whom she met in Reykjavik and lived with in Düsseldorf for many years. Good copy, the printed plastic still unusually fresh. The feminist artist Dorothy Iannone (born 1933) object is full of personal and sexual allusions. In Düsseldorf she developed her very own style and found the real core of her creative work. The theme of love and the taboo representation of sexuality lived out with relish continued to dominate her work.

First photographs of the sun surface

JANSSEN, Jules.

Annales de l' Observatoire d' Astronomie physique de Paris sis Parc de Meudon, publié par M. J. Janssen. Tome I.- Paris: Gauthier - Villars et fils, 1896. 4to (280 x 220 mm) (4), 122 pp., (2) with 9 photo-gravure plates (hel. Dujardin) showing the observatory and 12 original mounted photographs (230 x 170 mm) showing the grainy surface of the sun. Original publisher's printed paper-card boards, little rubbed & dust-soiled, little spotted inside, handwritten dedication on title, else a fine association copy.

\$ 10.000.-

First photographs of the sun surface made by Pierre M. Arents and Louis Pasteur under the direction of Jules Janssen. Description of the observatory of Meudon and an essay on the photography of the sun: „Mémoire sur la photographie solaire“ with spectacular original mounted photographs (photoglyptie) of the grainy surface of the sun which were also partly later issued in his famous „Atlas de photographies solaires“ of 1904.

With **handwritten dedication by Janssen:** „à Mon cher et éminent confrère le Dr. Potain souvenir affectueux, J. Janssen“. The French solar astronomer, Pierre Jules César Janssen (1824 - 1907) discovered that it is possible to see prominences beyond the limb of the sun without waiting for an eclipse and demonstrated that some features in the solar spectrum are actually caused by gases in the Earth's atmosphere. Janssen's device for imaging solar prominences was a prototype of the spectroheliograph. It was left to George Hale to add photographic plates to produce the first spectroheliograph, but Janssen invented other photographic devices, including an „astronomical revolver“ permitting many short images to be taken in quick succession. The French government agreed to Janssen choice of Meudon (an old royal domain that other-wise would have been divided up for housing) as a site for a new solar observatory in 1874. At the physical observatory of astronomy of Meudon, the celestial service of photography created by Jules Janssen in 1876 undertook a systematic study of the solar surface. Those principal results were published between 1896 and 1910 and in the astonishing Atlas de photographies solaires (1904), which illustrated the precise granulations of the surface of the sun. The quality of the images, which resolved granulation as fine as 1" was not bettered until the 1950's. (Raymonde Bartholot) With the 5.5-inch solar telescope of the Meudon Observatory made by Adam Prazmowski, Janssen and his collaborators made some 6.000 photos of the sun during the period of 1876 to 1903. These photos are the base of Janssen's monumental work: L' Atlas de photographies solaire, published in 1904. Of the 6000 glass plates only seven (!) survived (Launay, 2012. pp. 119).

In 1877 Janssen used this telescope to take a photograph of the solar photosphere which for the first time showed clearly the granular nature of the sun's surface. „Janssen travaille alors beaucoup avec son photographe Pierre Marie Arents (et Louis Pasteur) pour utilisier au mieux la si précieuse photographie.“ (Francoise Launay.- Lit.: Jules Janssen et la photographie; in: Dans le champ des étoiles, pp. 26); Canguilhem. Le merveilleux scientifique.

Photographies... 1844-1918. photo 58 (pp. 76), Dans le champ des étoiles. Les photographes et le ciel, 1850-2000. photo 47a+b, 48a+b; Encyclopedia of Nineteenth-Century Photography edited by John Hannavy, pp. 91; Stefan Hughes. Catchers of the Light. III. 3.6., 3.7. pp. 269 ff. BEAI, 588-89; DSB VII, 73-78.

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). Thanks to him for his thoughtfulness and superior expertise. 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.

\$ 2.800.- (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.

Kircher's last works: on pre-history

KIRCHER, Athanasius.

Athanasii Kircheri ... Arca Noë, in tres libros digesta, quorum: I. De rebus quae ante Diluuium, II. De iis, quae ipso Diluuiio ejusque duratione, III. De iis, quae post Diluuium ... Quae omnia novâ Methodo, nec non, Summa Argumentorum varietate, explicantur, & demonstrantur.- Amsterdam: J. Janssonius à Waesberge 1675. Folio (366 x 238 mm) 7 Bll., 240 pp., 8 Bll. with engraved frontispiece, three engraved maps (of which two are double-spreading), 14 engraved plates (of which 10 are double-spreading and one, multi-folded, printed on three sheets), 10 text engravings (one full-page) and over 100 text woodcuts incl. world map (Shirley 470), three maps of Palestine (Laor 398 - 400) **(bound with:)**

KIRCHER, Athanasius. Turris Babel, sive Archontologia qua primo Priscorum post diluuium hominum vita, mores rerumque gestarum magnitudo, secundo Turris fabrica civitatumque exstructio, confusio linguarum,... Amsterdam: Janssonius à Waesberge 1679. 7 Bll., 219 pp., (13) with engraved frontispiece, 14 partly fold. engraved plates, 13 partly full-page engravings and text-woodcuts. Contemporary German blind-stamped pigskin with handwritten label on spine, rubbed and soiled, partly browned as always, a few wormtracks, but mainly vertical and in white borders, slightly water-stained in one edge in the second work.

\$ 10.000.-

A fanciful elucidation of the biblical story of the flood and the building of the tower of Babel, full of delightful illustrations and lively description. The stories of the Noah's Ark and the Tower of Babel are among the best known in the Old Testament. They were alluded to frequently during the sixteenth and seventeenth centuries, and were often used at that time to frame accounts of the progress of knowledge.- D.C. Allen, *The Legend of Noah: Renaissance Rationalism in Art, Science and Letters* (Illinois, 1949); P. Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley, 1994); J. Godwin, *Athanasius Kircher. A Renaissance Man and the Quest for Lost Knowledge* (London, 1979); R. W. Unger, *The Art of Medieval Technology: Images of Noah as Shipbuilder* (New Brunswick, 1991). Dünnhaupt 2346, 29 (number of engravings vary; here the portrait of king Carlos II. of Spain was never bound in as in other copies, as well as two small engravings on construction details of the ship that should have been printed in the text but were delivered only afterwards); Dünnhaupt 2347 f., 32; De Backer/S. IV, 1068f., 33; Nissen 2195; Honeyman Coll. 1831; Caillet 5768; Brunet III, 666; world map (Shirley 470); Freilich Sale 306

Automata

KNAUSS, Friedrich von.

Selbstschreibende Wundermaschinen, auch mehr andere Kunst- und Meisterstücke.- Vienna: for the author by Schulz-Gastheim, 1780 sm.4to (200 x 130 mm) (18), 170 pp., (2) with engraved frontispiece portrait by Mansfeld, and 10 plates (of which 9 are fold.), errata at the end, last blank, woodcut ornaments, some dust marking to edges, else a near fine copy, clean & fresh bound in contemporary half calf, morocco title label on spine, the board corners slightly worn, otherwise quite excellent, in its first binding.

\$ 8.000.-

First edition, privately printed and exceedingly rare in fine condition, a work on early automata, especially machine for writing. Friedrich von Knauss (1724-1789) was a watchmaker and inventor of automata, including a clockwork musician that played a simple flageolet, and some sets of talking heads. In this book here, the author describes and illustrates several automatic writing machines, designed to replicate handwritten pages simultaneously with the creation of the original, using pen and ink and both to impress and amuse royal guests. This was able to automatically write 68 Latin characters and, on its first performance, composed a letter in French. He began his career at the court of Prince Charles of Lorraine and later moved to Vienna to work for Franz I. and his wife. Maria Theresa made him the director of the Physikalisch-mechanische Kunstkammer, where he spent the rest of his life creating court amusements and more basic machines such as water pumps. His most famous, though ultimately unsuccessful, automaton is the „Four Talking Heads“. In 1779, a competition held by the Academy of Sciences in St. Petersburg had as its theme the construction of talking heads that had to be able to pronounce five vowels. The jury found Knauss's automaton to be inadequate. Knauss' contraptions foreshadow the „polygraph“ machine that **Thomas Jefferson** used extensively from 1804, to produce copies of his signature. A later mechanical development is the „autopen“, used by Harry Truman, J.F. Kennedy and other American Presidents and Celebrities.- Tomash & Williams K53; Peter Frank; Johannes Frimmel. *Buchwesen in Wien, 1750-1850*, pp. 178 ff.; VD18 10612114; Poggendorff I, 1279; Brunet III, 677; Roller & Goodman II, 46; Berlin Katalog 1795; Pollen 1003; BMC 14; 155; Wellcome III, 403; Chapuis & Droz 289. Provenance: Ranschburg I/1975.

with a letter regarding his optical glass

KÖRNER, Friedrich.

Anleitung zur Bearbeitung des Glases an der Lampe, und zur vollständigen Verfertigung der, durch das Lampenfeuer darstellbaren, physikalischen und chemischen Instrumente und Apparate.- Jena: August Schmid, 1831. 8vo (190 x 115 mm) XII, (2), 286 pp. with 5 fold. engraved plates. Period style paper card boards with black morocco label on spine, uncut copy, slightly spotted and browning. Modern Ex Libris on inner cover. A handwritten letter regarding his optical glasses is coming with the book. \$ 2.400.-

Rare first edition of an important German work on optical glass & glass manufacture by the German manufacturer of microscopes and optical instruments, Johann Christian Friedrich Körner (1778 - 1847) who was trained as a craftsman in Freiburg and studied mathematics in Jena. In 1816 the university employed him as a mechanic. He also lectured as a private lecturer on the manufacture and handling of instruments. His most famous apprentice was Carl Zeiss. At page 285 - 86 is a list of instruments for sale: Verzeichniß von physikalischen und chemischen Instrumenten, ...“, including microscopes and camera obscura, telescopes, etc.

In Jena he worked at the Glasshütte, small glassworks that was supported by Johann Wolfgang von Goethe and funded by Grand Duke Charles August himself. There he produced optical glass and optical instruments. Körner also created a so called simple microscope. He wanted to produce flint glass, which was well suited for eyepieces and telescopes due to its optical properties, and which was usually imported from England at the time. He tried out different furnace designs. Körner then produced several hundred kilograms of glass in numerous high-profile experiments, but the material was not up to scratch. Most of it had a colored cloudiness; Körner was actually pleased with one glass, but it failed the quality control run by Joseph von Fraunhofer, the most respected expert in the field at the time. In 1822, Goethe was visited by Georg Friedrich von Reichenbach, who, along with Joseph von Utzschneider, was one of the directors of the Munich Optical Institute, where suitable glass was produced, and where Joseph von Fraunhofer also worked. During this visit, Goethe managed to elicit some production secrets from Reichenbach that helped Körner. In order to advance the experiments, the Grand Duke provided Körner with an assistant, Johann Wolfgang Döbereiner, who was a professor at the University of Jena. The chemist focused primarily on the stoichiometry, i.e., the correct ratio of all components. Their cooperation was a success. For example, the team was able to produce baryte glass in 1828. One journal reported that it was ‚clearer, harder and specifically heavier than the best crown glass – and had a greater refractive index‘. Körner produced, among some other optical devices, so-called simple microscopes, i.e. those consisting of only one lens or double lens and functioning similarly to a magnifying glass. These microscopes were described in more detail and praised by Matthias Jacob Schleiden in 1845, especially as dissecting microscopes. He described that magnifications of 15x to 120x could be achieved with various double lenses. Hugo von Mohl, on the other hand, found the more powerful double lenses to be only ‚very mediocre‘ in 1846. However Körner laid the foundations for Jena’s glass tradition. After his death in 1847 the operation of the Glashütte was discontinued.- Duncan 7259, Pogg. I, 1297; Gerlach. Geschichte Mikroskopie pp. 265-268; Paetrow / Wimmer. Carl Zeiss: A Biography 1816–1888. pp. 25 ff.

KOLENATI, Eduard.

Album Amicorum mainly with pressed plants and nature-printed (nature-pressed) butterflies (so called lepidochromes). The few written entries date from 1838 - 1861. (Prague, 1838 - 1861) oblong 8vo (98 x 160 mm) 38 leaves of which 14 leaves are with lepidochromes and 24 leaves are with handwritten text, drawings or mounted flowers. Contemporary half velvet box within original paper-card box. \$ 1.000.-

Album Amicorum with rarely seen lepidochromes, nature printed (pressed) butterflies. In this process, the butterfly specimen was pressed onto the paper like a stamp. In order to achieve this, the paper was first treated with a special fixing liquid. The butterfly was then placed on the sheet, which was folded and pressed together tightly so that the butterfly’s scales stuck onto the paper. The specimens were destroyed in this process and became worthless as collection objects.

Eduard Kolenati (1815 - after 1861) was a Maltese order priest in Prague and corresponding member of the natural history association Lotos in Prague. He might have been related (brother ?) to the botanist and entomologist Friedrich August Rudolph Kolenati (1812 – 1864) who in 1845 was named an Associate Professor of Natural History. In 1848 he played an active part in the revolutionary events of the time, for which he was subsequently arrested. After his release from prison, he gave lectures in mineralogy and zoology at the Prague Polytechnic Institute and worked as a

professor of natural history at the Lesser gymnasium. In 1848 he co-founded the Lotos Science Association. He published more than 50 entomological works, and was also considered an expert on bats. His collection of beetles from the first half of the 19th century has become one of the foundations of the National Museum's entomological collection in Prague.

Crop & Monoculture

KRAUSE, Johann Wilhelm.

Abbildungen und Beschreibung aller bis jetzt bekannten Getreidearten mit Angabe ihrer Kultur und Nutzen, in acht Heften. Zur Förderung der wissenschaftlichen Kenntniss, Gleichförmigkeit des Systems und der Benennungen dieser ersten ökonomischen Gewächse unternommen. 8 installments (Hefte) in one vol. (= all publ.).- Leipzig, Baumgärtner, 1835 - 1837. Large Fol. (440 x 290 mm). iv, (12), (24), (2), 13-32 pp., (2), 24 pp., (2), 16 pp., (2), 19 pp., (1), (2), 28 pp., (2) pp., 16, (2), 12 pp. each Heft (installment) with 6 plates, together 48 partly hand-colored engraved plates. Contemporary half cloth over paper boards, gilt printed title on spine, rubbed and soiled. Text partly foxed and at the beginning with faint water stain, plates partly browned, one plate with small ink stain, one plate with small tear in the white margin. The beautiful detailed illustrations each with stalk fruit and grain after „nature“ by Ernst Schenk.

\$ 4.000.-

Early and rare book on crop, showing 48 grains on hand-colored engraved plates; the book also describes the cultivation of grain as monoculture. The German botanist and agricultural writer Johann Wilhelm Krause (1764 - 1842) cultivated from 1826 to 1834 in his garden the varieties of the four main cereals known up to that time and published the findings (culture and benefits of these cereals) in eight installments with engravings that were engraved by the drawing teacher at the University of Jena, Ernst Schenk. The book describes all grain species (wheat, rye, barley, oats) known up to then: *Triticum vulgare*, *Triticum turgidum*, *Triticum durum*, *Triticum polonicum* and *spelta*, *Triticum amyleum* and *monococcum*, *Secale cereale*, *Hordeum*, *Avena sativa* and *Avena orientalis* and *fatua*. Krause was a teacher, then rector at the city school in Apolda and in 1807 rector of the city school in Jena. After his ordination, in 1820 he took over the Lutheran parish of Taupadel near Bürgel and in addition to his work as a pastor, Krause was an active promoter of the dissemination of known and new knowledge for the rural population. This concerned first the detailed description of the then known cereal varieties and later the publication of the „Allgemeine Encyklopädie“. These volumes, compiled by several scholars and practical farmers, were sold throughout Germany and thus had an important influence on further education in agriculture and home economics.

Monoculture farming is one of the most disputable topics in today's agriculture industry. As the world's population augments in number and the demand for food on the global scale keeps rising, many farmers deem monoculture agriculture to be the simplest solution for satisfying this constantly growing need for victuals. In crop monocultures, each plant in a field has the same standardized planting, maintenance, and harvesting requirements resulting in greater yields and lower costs. When a crop is matched to its well-managed environment, a monoculture can produce higher yields than a polyculture. Monocultures of perennials can lead to soil and environmental problems such as soil acidification, degradation, and soil-borne diseases, which ultimately have a negative impact on agricultural productivity and sustainability. Diverse rotations of crop monocultures can minimize the risk of disease and pest outbreaks. However, the shorter the rotation (fewer crops included) the higher the risk. There are examples of short, two-year rotations selecting for pests that are adapted to such rotations.- Nissen, BBI, 1101.

Holdings: outside Germany the book is quite uncommon as in trade (Stabi Berlin (lost); Coburg, München, Bamberg; Stockholm, Utrecht, Cambridge, NHM London, Paris, Strasbourg, van Pelt Library Pennsylv., Yale Univ., Lloyd Museum Library, Texas A & M)

LAUTENSACK, Heinrich.

Desz Circkelsz und Richtscheyts, auch Perspectiva, und Proportion der Menschen und Rosse, kurtze, doch gruendtlliche underweisung desz rechten gebrauchts.- Francfort: Egenolff Emmel for Simon Schamberger, 1618. Folio (303 x 192 mm) (8), 54 Bll., with title in black and red, 107 text woodcuts incl. 3 folding plates. Later red maroquin in style of Duseuil, gilt edges, carefully washed and newly bound copy (Devau-chelle).

\$ 7.500.-

A famous manual on perspective and draughtsmanship, prominently including the symmetrical proportions of men, women, children and horses with translated title: Brief yet thorough introduction to the correct use of compass and

ruler, and of perspective, and proportions in human and horses. First published in 1564 (Vagnetti mentions an edition of 1616 which we could not trace), this is a second edition in same size. A richly and beautifully illustrated, of a highly important drawing book: based on Albrecht Dürer's work on human anatomy, *Vier Bücher von menschlicher Proportion*, and his treatise on perspective, *Vnderweysung der Messung dem Zirkel*, with an added chapter on the anatomy of the horse with three woodcuts. The book is expressly composed for the use of goldsmiths, painters, sculptors, stonemasons, joiners, etc. The beautiful woodcuts are very original and forceful although based on those of Dürer and Beham. Heinrich Lautensack was a member of the celebrated Nuremberg family of artists and had settled in Frankfurt as a goldsmith, painter and engraver. The goldsmith and painter Heinrich Lautensack (1522-1590) followed Hirschvogel's style of making perspective images in his work and stressed the importance of knowing geometry and illustrated its use in, among other things, perspective constructions. He applied a simple method similar to Hirschvogel's. He also illustrated how the image of a pavement of square tiles can be used as (to apply a modern term) a coordinate system in the picture plane (Andersen. *The Geometry of an Art*, 222). The importance of this genre of books can be seen with similar books like: Sebald Beham's (1500-1550): *Wahrhaftige Beschreibung aller fürneme Künsten* (1552, with a sixth ed. in 1605) and Erhard Schön's *Underweissung der proportzion unnd stellung der possen* (1538 and 1540).- VD 16, L 728; Vagnetti, EIIb19; Kat. Berlin 4691 (1564 ed.); Adams, L-290; Rosenwald, 702; Choulant/Frank 358; not in Punkt, Punkt, Komma, Strich (2014).

origins of LCD's (mobile phone displays et al.)

LEHMANN, Otto.

Photo - Album with 31 original albumin photographs showing liquid crystals used by Otto Lehmann for his publications, especially in: *Neue Untersuchungen über flüssige Kristalle. I. Teil* (Heidelberg, 1911). The photographs are titled in pencil at the back. (Karlsruhe, before 1911) square Quarto (270 x 205 mm) 21 boards with 31 original albumin photographs in size 145 x 120 mm (two), 105 x 65 and smaller. Two boards with original envelopes and one with business card. 4 boards blank.

\$ 6.000.-

Unique set of original photographs from the property of Otto Lehmann, showing his microscope and different liquid crystals: landmark images in the history of Science. The images were used in different publications of Otto Lehmann and the original photos are titled by him (?) at the back in pencil and on two envelopes. 4 Off-Prints by Lehmann which include these images are coming with the album.

The basis of liquid crystal research that turned out to be most useful in our computer era was laid exactly 125 years ago by the physicist Otto Lehmann who in 1889 presented the first systematic scientific results about the new class of materials of liquid crystals in the *Journal for Physical Chemistry*.

The next 30 years of Lehmann's work were dedicated to liquid crystals. Lehmann developed the necessary scientific instruments, such as the heatable crystallization microscope (see here at the beginning), that allowed for a large number of individual observations while the time and material expenditure was reduced.

Between 1900 and 1910, the conception of matter having a state other than the three known since the ancient times, i.e. solid, liquid, or gaseous, caused fierce discussions of the experts. Meetings were called to decide on the nature of liquid crystals. Otto Lehmann frequently was the target of partly fierce criticism. In the end, however, his research was granted high importance. This is reflected by a statement of the member of the Nobel Committee, Carl Benedicks.

After the death of Lehmann in 1922, he wrote to Lehmann's son: "I consider his [Lehmann's] work the currently most important scientific achievement in the area of physics and chemistry that did not gain the recognition of a Nobel Prize." „Crystals are well-known since olden times. Since the work of Christiaan Huygens their optical properties, double refraction and polarization especially, have been well-understood in all details. Crystals have been merely known as solids, regardless whether they show the extreme temper of diamond or the plastic modification of iodine silver. In 1889 this utterly changed by the discovery and proof of liquid crystals. ... With his proof of the existence of liquid crystals on ammonium-oleate-hydrate and his immense work on more than 100 liquid crystal materials in close cooperation with the still today existing German chemical company E. Merck in Darmstadt, Lehmann founded liquid crystal technology. He opened the door for the work of others and for liquid crystal displays (LCD), finally. Certainly it took almost a century to the discovery of dynamic scattering of liquid crystals in 1968 by George Heilmeyer and the invention of the twisted nematic LCD by Martin Schadt and Wolfgang Helfrich in 1970. Today liquid crystals possess a continuously growing field of application and LCDs dominate the huge international market for displays, in particular laptops, tablets and flat-screen TVs.“ The German physicist Otto Lehmann (1855 - 1922) is called the „father“ of liquid crystal and in 1889, he succeeded Heinrich Hertz as head of the Institute of Physics in Karlsruhe.-

Lit.: Michel Mitov. Liquid-Crystal Science from 1888 to 1922: Building a Revolution, in ChemPhysChem, vol. 15 (2014), pp 1245–1250.

„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. \$ 15.000.-

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 percussio 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 percussio.

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 percussio, 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.- Lit.:

Provenance: Friderich (handwritten on front-fly), Königl. katholisches Gymnasium Glogau (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.

MEEKS, Raymond. Artist books

Pretty Girls Wander. Oct. 2011. one of 40 copies made, no. 36.

\$ 3.000.-

Raymond Meeks is renowned for his handmade unique editions. The American photographer Raymond Meeks (born 1963) received a Siskind Fellowship Grant and a 2020 Guggenheim Fellowship: "Much of his work focuses on memory and place, and captures daily life with his family." He has published a number of books including *Pretty Girls Wander* (2011) which „chronicles his daughter’s journey from adolescence to adulthood“ and *Ciprian Honey Cathedral*, which contains symbolic, figurative photographs taken in and around a new house, and of his partner just before waking from sleep. Parr and Badger include Meeks, along with Mark Steinmetz, Susan Lipper, Gregory Halpern, Deborah Luster, Ron Jude and Doug Rickard, in „an interesting new generation of US photographers – post-New Topographical, one might call them ... they are quixotic and individualistic, and are looking at America’s heartland with a collective fresh eye informed by both the country’s photographic heritage and a strong desire to tell American stories at a time when the country seems unsure of itself.“

His work is held in the collections of the BN Paris, the National Gallery of Art (Washington, DC), Light Work in Syracuse, NY, and the Museum of Fine Arts, Houston and others.

MEEKS, Raymond. Artist books

Ciprian Honey Cathedral, 2018. one of 40 copies made, no. 31.

\$ 2.800.-

Raymond Meeks is renowned for his use of photography and the book form to poetically distill the liminal junctures of vision, consciousness and comprehension. In *Ciprian honey cathedral*, he brings this scrutiny close to home, delicately probing at the legibility of our material surroundings and the people closest to us. Meeks has long been fascinated by the way we construct the world around us; how we carry our possessions, these accumulated comforts, inheritances, markers of material success; how we adorn homes with trees and shrubs, a mantle clock to count the hours. Stumbling across an abandoned house or unkempt lawn becomes a search for common clues to tiny hidden transgressions. This question of knowledge and understanding is perhaps most drastic in our solipsistic reality. Meeks also photographed his partner, Adrianna Ault, in the early mornings before she awoke, on the threshold at which daily domestic life converges with the deepest state of sleep. This plight of supine trance is a place of reprieve beneath the surface of consciousness, free from the chaos and uncertainty of the sentient world above, and alludes to the veiled threat that, ultimately, we are utterly unknowable to one another.

His work is held in the collections of the BN Paris, the National Gallery of Art (Washington, DC), Light Work in Syracuse, NY, and the Museum of Fine Arts, Houston and others

optical instruments

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.

\$ 3.600.-

Rare trade catalogue of the optician and lawyer Joachim Friedrich Meyen (1707 - 1772) with an introduction into the optical sciences & 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.

early Graffiti - „Sprayer of Zürich“

(NAEGELI, Harald)

Mein Revoltieren. Meine Spraybomben. Mein Aufstand mit Poesie. (cover title: Mein Revoltieren, mein Sprayen.) Dokumentation von Fotos, Zeichnungen und Texten, ausgewählt u. zusammengestellt vom Zürcher Sprayer.- Bern: Benteli Verlag, 1979. 8vo (210 x 150 mm). 308 pp. Original printed paper-card boards with traces of age. (coming with:) Album with 16 Original silver gelatin photographs (175 x 130 mm), stamped at the back, but undated, showing Harald Naegeli's graffiti in public spaces, probably made in the late 1970's in Zürich. Well preserved.

\$ 1.600.-

First edition of a rare photo-book / artist book and an original documentation of early graffiti, an album with photographs by Thomas Schmid of graffiti from the Swiss artist Harald Naegeli (* 1939), best known as the „Sprayer of Zurich“ after the graffiti he sprayed in the late 1970s onto walls, public spaces and buildings in Zürich, Switzerland. Harald Naegeli has had a classic education as an artist, having studied at the Kunstgewerbeschule of Zürich and at the Ecole des Beaux-Arts in Paris. Naegeli's graffiti appeared beginning in September 1977 on the walls of Zürich. He used black spray-paint to paint wireframe figures on the walls of public and private buildings alike. He painted his graffiti anonymously at night, in places all over the city. The figures provoked a heated controversy in Zürich and indeed in Switzerland in general. Intellectuals and artists recognized the artistic value of Naegeli's works early on, but the general public and the Swiss authorities saw it only as an illegal and malicious defacement of property. Naegeli himself later said that he saw himself as a political artist and his graffiti were a political statement against the increasing anonymity in the city. The authorities issued an arrest warrant for him, but he was apprehended only in June 1979 when he returned to one of his paintings to collect his glasses that he had forgotten there. Until then, he had painted some 900 graffiti in Zürich. He evaded the trial by fleeing to Germany to his confidant, journalist and author Hubert Maessen, yet was sentenced *in absentia* to nine months in jail and a fine of CHF 206,000. Since Naegeli had left the country, the authorities of Zürich issued an international arrest warrant for him. 72 Swiss artists signed a petition demanding that this arrest warrant be retracted, to no avail. Even the authorities of Zürich at long last recognized Naegeli's graffiti as art. The city restored one of the very few of his surviving graffiti in Zürich: *Undine* was created in 1978 on a building of the University. When the building was renovated from 1995 to 2004, the graffiti was considered "valuable art" by the building department and covered to protect it for the duration of the work. In October 2004, *Undine* was restored and other graffiti added later were removed.

Moon invented

NASMYTH, James Hall; CARPENTER, James.

The Moon: Considered as a Planet, a World, and a Satellite.- London: John Murray, Albemarle Street, 1874. 4to (275 x 210 mm). XVI, 189 pp., (1, blank) including half-title, without advertising leaf dated December 1873 at end. With 46 text illustrations, and 25 plates on 24 leaves, comprising 12 mounted Woodburytype of lunar models, 6 photogravures, 4 autotypes, 2 lithographs, and one chromolithograph. Contemporary red morocco binding, gilt spine in compartments, fine gilt printed covers, gilt edges, minor soiling. Text little age-toned, some spotting and foxing to plates, marbled endpaper at back removed, but a very fine copy.

\$ 4.000.-

First edition of James Nasmyth (1808–1890) and James Carpenter classic & influential text on lunar geology. It was due to Nasmyth's superior talent in visual communication, that this book unfortunately perpetuated a misconception - that lunar craters were volcanic - for almost 100 years. It was not until 1969, when the Apollo 11 space mission brought back geologic samples from the moon, that the impact theory gained credibility and the volcanic hypothesis was finally abandoned.

At the time of their publication, Nasmyth's illustrations were held in the highest regard by both the public and the scientific community: „perfectly enchanting photographs, which one could never be tired of looking at.“ (Isabella Herschel)

Nasmyth's first drawings of the moon were made as early as 1842, and were first exhibited in Edinburgh in 1850. The first public presentation of photographs of Nasmyth's models took place in 1856 at Manchester Photographic Society Exhibition, entitled: „Portions of the moon's surface, from models by James Nasmyth, Esq.“; the photographs are attributed to Joseph Sidebotham (1824-1885), known for his mastery of the waxed paper negative process. Two years later, in 1858, Nasmyth learnt the wet-collodion process and began making his own salted paper prints from glass plate negatives. In 1864, John Herschel and his daughter Isabella visited Nasmyth, where Nasmyth entertained them with his many demonstrations that aimed to explain the formation of the lunar surface. The tedious tasks of photographing the models and sending the glass plate negatives to the various printmakers were all done by Nasmyth, the writing of the book was completed with the help of the astronomer James Carpenter.

This edition includes seven different printmaking processes from six print companies, incl. two different variants of the Woodburytype. The first edition sold out quickly at a price of GBP 1.10s (approx. 1300 \$ today), resulting in a second edition published within a month (1874).

The book was among the first to be illustrated with photo-mechanical prints, which were lauded by a contemporary reviewer as among the most 'truthful and striking representations of natural objects' ever encountered by a student of science. However 'truthful' they may appear, though, the illustrations are not real photographs of the moon - they are curious, hybrid objects in which manual, mechanical and indexical processes are densely layered. The book was the culmination of decades Nasmyth had spent studying the moon through a large telescope of his own design. During that time Nasmyth, a retired industrial engineer and amateur astronomer, produced numerous studies and maps of the moon, which recorded its topographical features with extraordinary lucidity and precision. In order to reproduce the variegated textures and luminous dimensionality captured by his drawings, Nasmyth and Carpenter looked not to expensive steel engraving but rather to photography. And they aimed the camera not at the lunar surface itself but, instead, at a series of hand-made plaster models based on Nasmyth's drawings. Technical limitations meant that, while it was already possible to photograph the moon, the kind of closely framed, intensely magnified views Nasmyth and Carpenter sought could only be achieved from a model. The finished plaster models were photographed outdoors in raking light, which served to both recreate the oblique angle of the sun's rays on the lunar surface and reveal the subtle topographical variations of the model's surface.

„Photographers sometimes adopted realism over naturalism in order to render motifs more literally. On occasion, however, the reverse was true: photographers attempted to deceive through extremely literal treatment. The artist Les Levine once claimed iconoclastically that the folksaying 'the camera never lies' is a lie. Nasmyth and Carpenter's *The Moon* presents an elaborately devised model photographed with the clarity of a subject at an arm's distance. The deception was necessary because successful astronomical photographs of sharp definition and good contrast were not possible until the twentieth century with the advent of sensitive films and efficient lenses. The Woodburytype proved to be exceptionally effective illustrations and, doubtless, many readers were misled to think that they were seeing the face of the moon itself.“ (Truthful Lens, pp. 38). „The Woodburytype has no grain whatsoever, because it does not use cracks or dots to reproduce tone. Instead, a relief mold is made of the image in lead, so that the areas of dark tone are deep and light tone shallow. Ink suspended in gelatin is cast in the mold, and the resulting print produces contrast by the thickness or thinness of the ink.“ (Ashworth, 20) The first three editions reveal the aesthetic variations in the illustrative plates due to reproduction and print processes used. These processes include: engraving, photogravure, heliotype, lithograph, chromolithograph, and four different variations of the Woodburytype. In the third edition of the book, printed in 1885, many of the heliotypes from the first edition were reproduced as woodburytypes, and some were noticeably altered. The resulting images offered greater tonal contrast and were able to capture even more of the models' textural details. It is perhaps fitting that these woodburytypes took on a kind of topography of their own - the dark expanses and inky lines that play across their surface are subtly but noticeably raised up from its more muted passages.- The Photobook, p.51; Ashworth, *The face of the moon*, Linda Hall, 20; Laura Margaret Ramsey. *Phases of the Moon. ... Theses*, 2009.

a key document
whether Newton or Leibniz had priority
in discovering differential calculus
(Norman)

NEWTON, Isaac.

The Method of fluxions and infinite series with its application to the Geometry of curve-lines to which is subjoin'd a perpetual comment upon the whole work.- London: Henry Woodfall, 1736. Quarto (264 x 209 mm). Contemporary paneled calf, re-backed and re-cornered with orange morocco label, red speckled edges. Engraved plate (facing p. 273), errata, woodcut diagrams throughout. Light toning to title, contents clean; a very good copy, complete with the sometimes - wanting plate. One page with repair.

\$ 30.000.-

First edition of Isaac Newton's work on fluxions, one of his greatest Mathematical works, an interesting copy with some early corrections or notes in ink and pencil. This is Newton's fullest exposition of the calculus; though the last of his works on calculus to be published, it was the work which he himself intended to publish first, in Latin, in 1671. The first page of the manuscript (preserved in Cambridge University Library) is lost and the title *De Methodus Fluxionum* was supplied by John Colson when he first published it in this translation, with his own extensive commentary. Written in 1671, Newton's Fluxions is a key document in the controversy over whether Newton or Leibniz had priority in discovering differential calculus. Newton did not publish anything on the calculus until after 1700, whereas Leibniz began publishing papers on the subject in 1684; however, Leibniz's manuscript notes on the calculus date back only to 1673, eight years after Newton began investigating the subject. By 1671, Newton was in a position to give his clearest statement to date of the fundamental problem of the calculus, and to present a successful general method (Norman Catalogue). In the Method, Newton gives the solution of a series of problems in illustration of this analytical art, mainly problems of maxima and minima, tangents, curvatures, areas, surfaces, volumes and arc lengths. With qualities represented as generated by continuous flow, all of these problems can be reduced to the following two (one the inverse of the other). 1. Given the length of the space at every time, to find the speed of motion at any proposed time. 2. Given the speed of motion at every time, to find the length of the space described in the proposed time. This is among the greatest generalizations in the history of mathematics, reducing the great majority of problems faced by mathematicians of the time to two basic problems (Cambridge Companion to Newton). It was often lamented that the world had had to wait for so many years to see Newton's masterpiece on fluxions. It is astonishing to realize that publication sixty years beforehand would have changed the history of the calculus and would have avoided for Newton any controversy over priority. In 1736 all the results contained in Newton's treatise were well known to mathematicians. However, it was too concise for a beginner, and Colson added almost 200 pages of commentary. His commentary contributed to the establishment of a kinematical approach to the problem of foundations (N. Guicciardini, *The Development of Newtonian Calculus in Britain 1700-1800* pp. 56-57). Provenance: contemporary corrections and a few side notes by an unidentified reader to several equations or text on pages 50, 53, 60, 68, 79, 87, 93, 94, 95, 96, 107, 108, 110, 111, 112, 113, 114, 119, 120, 132, 135, 138, 157, 275; twentieth-century bookplate of the physicist and writer Edward Neville da Costa Andrade (1887-1971) on front paste-down.- Babson/Newton 171; ESTC T18629; Gray p. 46; Lowndes p. 1674; Norman 1595 (misdated 1734); Wallis 232.

collecting minerals for Abraham Gottlob Werner

ODELEBEN, Ernst Gottfried Freiherr von.

Beiträge zur Kenntniß von Italien, vorzüglich in Hinsicht auf die mineralogischen Verhältnisse dieses Landes, gesammelt auf einer im Jahr 1817 unternommenen Reise nach Neapel und Sizilien. 2 parts in two vols.- Freiberg, Craz und Gerlach, 1819. 8vo (180 x 105 mm) VI, (2), 320 pp.; IV, (4), 343 pp. with two lithogr. maps of the Euganean fields on one sheet and a map of Elba and 4 fold. plates. Brown paper-card boards with green lettering piece, green edges, little rubbed and soiled, partly little spotted, else a very fine copy.

\$ 1.600.-

Rare work on a mineralogical travel account to Italy to study geological structures and mineralogical deposits in Southern Italy undertaken by the military man, mineralogist and mineral collector Ernst Gottfried von Odeleben (1773-1828) on advice of the geologist Abraham Gottlob Werner who provided him with instructions what to collect and look for (precise information about the real and supposed volcanoes of Italy; collect sample fossils and minerals where possible). In the first part, he reports on his journey via Vienna to Trieste, Venice, Verona, Parma, Bologna, Florence, the island of Elba and until his arrival in Rome. In the second part of his work, von Odeleben reports on his stay in Rome, the journey to Naples and observations about Vesuvius. An intended third part on Sicily was never published due to the death of the publisher.

Odeleben was from 1789 - 1805 and 1812 - 1815 in Saxon military service, discharged as cavalry captain, later living on his estate in Kleinwaltersdorf near Freiberg. At the age of 35, he took part in the college on geognosy and oryctognosy at the Royal Saxon Mining Academy with Abraham Gottlob Werner (1749 - 1817), who became a friend, and since 1814 Odeleben was in contact with Goethe whom he supplied with minerals. After his travel to Italy he established himself as mineral dealer at his estate and sold minerals to other geologists incl. Johann Wolfgang von Goethe via the chief miner Friedrich Wilhelm Heinrich von Trebra. His Mineral-Collection was sold in 1828: „Verzeichniß der im Nachlasse des Baron von Odeleben zu Freyberg vorgefundenen Mineralien, welche den 6. Octobr. 1828 u. folgende Tage, von Nachmittags 2 Uhr an, im Teuchertschen Hause am Erbsichen Thore allhier zu Freyberg gegen sofortige baare Bezahlung öffentlich versteigert werden sollen.“ - Hamberger/Meusel XIX, 7; Tresoldi II, 117; Kraemer/Gendolla 168; Oswald. Italienbilder. pp. 198; Karhof/Köhne pp. 184; Schmid. Goethe und die Naturwissenschaften. pp. 556; not in Schuh.

Dream of a perfect Exotic World

ORLOWSKI, Hans.

Der blaue König. (The blue King, an Exotic Fairy tale). Series of eight original watercolors from the estate of the artist, some heightened with gold paint and with mounted transparencies paper in different colors. Each sheet with handwritten titles and text. (Berlin, around 1922/23). Sheet sizes from 190 x 135 mm to 285 x 185 mm. Mounted under passe-partout, within modern cloth folder. Well preserved in strong colors.
\$ 14.000.-

Immensely charming original watercolors in expressionism style of an unknown fairy tale cycle (Der blaue König) from the expressionist phase of the then young Berlin artist Hans Orlovski (1894-1967), who later turned away from expressionism during a trip to Paris in 1924.

The images might have been intended to illustrate a version of „Bluebeard“ (*Barbe bleue*), a French folktale, the most famous surviving version of which was written by Charles Perrault in 1697. The tale tells the story of a wealthy man in the habit of murdering his wives and the attempts of one wife to avoid the fate of her predecessors. This version of the fairy tale is located within the black community in Germany (or German Southwest Africa), speaking of „Negern“ and one image with text: „Made in Germany“.

In one version of the story, Bluebeard, is a wealthy and powerful nobleman who has been married several times to beautiful women who have all mysteriously vanished. When Bluebeard visits his neighbor and asks to marry one of his daughters, the girls are terrified. After hosting a wonderful banquet, the youngest daughter decides to be his wife and she goes to live with him in his rich and luxurious palace in the countryside, away from her family. Bluebeard announces that he must leave for the country and gives the keys of the château to his wife. She is able to open any door in the house with them, each of which contain some of his riches, except for an underground chamber that he strictly forbids her to enter lest she suffer his wrath. He then goes away and leaves the house and the keys in her hands. She invites her sister, Anne, and her friends and cousins over for a party. However, she is eventually overcome with the desire to see what the forbidden room holds, and she sneaks away from the party and ventures into the room. She immediately discovers the room is flooded with blood and the murdered corpses of Bluebeard's former wives hanging on hooks from the walls. Horrified, she drops the key in the blood and flees the room. She tries to wash the blood from the key, but the key is magical and the blood cannot be removed. Bluebeard unexpectedly returns and finds the bloody key. In a blind rage, he threatens to kill his wife on the spot, but she asks for one last prayer with her sister Anne. Then, as Bluebeard is about to deliver the fatal blow, Anne and the wife's brothers arrive and kill Bluebeard. The wife inherits his fortune and castle, and has the dead wives buried. She uses the fortune to have her other siblings married then remarries herself, finally moving on from her horrible experience with Bluebeard.

With Hannah Höch, Rudolf Bredow and Nikolaus Sagrekov, the German artist Hans Orlovski (1894 - 1967) was trained before the First World War by Harold Bengen at the Arts and Crafts Academy in Berlin-Charlottenburg. Together with Georg Tappert and Max Pechstein, Harold Bengen was a co-founder of the New Secession artists' group. Orlovski's studies were interrupted by the First World War where he served as a soldier in Serbia and was wounded early on. He was employed, from 1915, as a draftsman in the War Ministry and produced his first lino- and woodcuts then. He returned to art school in 1918, now studying under Philipp Franck, and obtaining his degree in 1919. In 1918 he was part of the Berlin Secession of „alternative“ artists. Between 1921 and 1945 Orlovski taught at the Decorative Arts Academy at the Charlottenburg. During these years he also created numerous woodcut images and illustrations. In 1924 he undertook a trip to Paris and turned away from Expressionism, to the point of personally

destroying more than sixty of the paintings he had produced between 1920 and 1924. In 1934 Orłowski's first solo exhibition was presented at the Gallery of Fritz Gurlitt.- Provenance: From the estate of Hans Orłowski.

Female print-maker

PARASOLE, Elisabetta (Isabetta) Catanea (ca. 1575-1617)

Teatro delle Nobili et Virtuose Donne, dove si rappresentano varij disegni di Lauori / nouamente Inuentati, et disegnati da Elisabetta Cattanea Parasole.- In Roma: si vendono da Mauritio Bona, 1616. oblong 4to (280 x 215 mm) Engraved title page, with a copperplate engraving attributed by Giovanni Baglione to Francesco Villamena (1566 - 1624), one dedication leaf to Donna Elisabetta Borbona d'Austria, and 44 woodcut plates, numbered 3 - 46. A comparison of the various copies shows that each volume had a different number of plates (from 40 to 50), our copy corresponds to the one in Berlin Kupferstichkabinett. Contemporary full calf binding with fillets on the covers and central decoration on both covers, gilt decorated spine, with occasional light marginal tears, red edges. Book-block cracked and weak in binding, old ties in red/green missing. Else a fine copy. \$ 10.000.-

One of the most important early books on embroidery, containing a plethora of embroidery and lacework designs, the work of the most famous woman textile designer of her time and one of the first female artists & printmaker to be admitted as a member to the Accademia di San Luca in Rome.

She was working in the tradition of Federico di Vinciolo (fl. 1592-1599) and Cesare Vecellio (1521-1601). Her first publication, *Spechio delle Virtuose Donne*, published by Antonio Facchetti, was the first full pattern book to be designed by a woman. She had learned to make lace at the Conservatio di S. Caterina della Rosa in Rome, where she grew up as the illegitimate daughter of Baron Cattaneo of Bergamo. In 1593 she married the widower Rosato Parasole, who came from a family of successful printmakers for generations. Her brother-in-law Leonardo (c.1570 - c. 1630) and his wife Girolama probably taught her to print. In 1610, Elisabetta Catanea Parasole published the lace pattern book, printed by Antonio Facchetti in Rome under the title „Fiori d'ogni virtu“, of which no copy is known to have survived. In 1616, a new edition was published by Mauritio Bona under the title „Teatro delle nobili et virtuose donne“ with a title page, dedication and up to 50 woodcuts with lace patterns. As a pioneer in her field, Parasole's work was astonishing. She demonstrated immense understanding of the composition of the lace with which her readers would work and follow her original designs. She was the only woman known to have created pattern books for this predominantly feminine craft. Her works were distinguished by their precision in depicting a variety of sewing and bobbin types of botanical motifs. Many of her designs in *Teatro delle nobili et virtuose donne* have been used in forms of elegant decorations such as carpets and tapestries. The small, practical format of these manuals made them particularly easy to use but their popularity made them equally susceptible to damage as the plates were frequently taken out to be copied. Parasole's woodcarvings were unique for her time period in that Parasole used a dark background for the designs. This was created by carving the lace design into the wood block rather than carving away everything but the lace. The overall effect was that the white lines of the lace against the dark background mirrored the delicate appearance of the actual fabric. Many of her designs in the lace books consisted of floral patterns, likely from Prince Frederico Cesi's garden. She designed illustrations for Castoro Durante's *Herbario Nuovo* with creativity and extreme attention to detail, as well as the illustrations for the book on the results of Francisco Hernández's expedition to New Spain (Mexico) referred to as *Tesoro Messicano* (1613), but published as „Rerum medicarum Novae Hispaniae thesaurus“ (1651). „There has been a lot of speculation about who the artists and engravers were for the *Novae Hispaniae Thesaurus*, but two names show up in the literature repeatedly. In his *Le Vite de' Pittori, Scultori, Architetti, ed Intagliatori...* (1642), Giovanni Baglione, a 17th-century artist and historian, mentioned that Isabella Cattani Parasole's engravings could be observed in Prince Cesi of Acquasparta's „book of plants.“ Castore Durante commissioned her to make the illustrations for his *Herbario Nuovo* (1585). Her husband, Leonardo, engraved those woodcuts. If she was involved with the *Novae Hispaniae Thesaurus*, it is unclear if she was an artist, an engraver or both. Contracts and receipts dating from 1618 to 1619 in the Lincean records confirm that the Lincei paid the engraver, Giovanni Giorgio Nuvolstella, and his assistant, Nicolo Martini, for their work on the Mexican woodcuts. Baglione confirms Nuvolstella's involvement, saying he finished those woodcuts that Parasole could not complete. It cannot be said for certain that Parasole was involved at all with the *Novae Hispaniae Thesaurus*. However, a comparison of the woodcuts in Durante's *Herbario Nuovo* and those in the *Thesaurus* shows a striking similarity in aesthetics, suggesting that Parasole was at least an influence.“ (Hunt Botanical Library). Italy, especially Venice, is considered the home of lace. Due to influences from the Orient, both sewing and bobbin lace had already developed

in the 15th century. In the 16th century, the country was a leader in the production of lace made of linen, silk or metal. Patterns ranged from the geometrically strict of reticella lace to the free design in „air stitch,“ which was made using outlines and templates on parchment. The motifs consisted of flowers, vines, leaves, animals or people. Italian lace lived from the lines, from its graphic nature, to which the clarity of the patterns contributed. In the 17th century, the hitherto leading production of lace in Italy faced strong competition from France and especially from Flanders. This inevitably led to a decline in production. Elisabetta Catanea Parasole's lace pattern book is the last significant Italian of its kind.- Lotz 143b (52 leaves ?); Lucia Tongiorgi Tomasi. *La femminil pazienza: women painters and natural history in the 17th and early 18th cent*; in: *Studies in the history of art* 69 (2008); Femke Speelberg. *Fashion & Virtue. Textile Patterns and the print revolution 1520-1620*. (2015); Kupferstichkabinett Berlin. *Muse oder Macherin ? Frauen in der italienischen Kunstwelt 1400 – 1800*.- Berlin, 2023.

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.
\$ 5.000.-

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.

**from the Russian Tsar
„Zarskoje Selo“ Library**

PIRANESI, Giovanni Battista (1720 - 1778).

Diverse maniere d' Adornare i Cammini ed ogni altra parte degli edifizii desunte dall' architettura Egizia, Etrusca e Greca, con un Ragionamento Apologetico in difesa dell' Architettura Egizia, e Toscana [...] Opera del cavaliere Giambattista Piranesi architetto. Roma, Stamperia di Generoso Salomoni, MDCCLXIX (1769). Imp. folio (565 x 420 mm) Printed title in three languages (Italian, English and French), a magnificent engraved illustrated frontispiece on a double sheet, with dedication to Monsignor G. B. Rezzonico Gran Priore in Roma della Sacra Religione Gerosolimitana. This is followed by two pages of dedication, 35 pages of descriptive text in three languages, one final sheet with an Index of engravings. Four introductory plates within introductory text, one engraved tail- and one end-piece, and 66 full-page plates offering all the elegant decorations carved on fireplaces from the Egyptian, Etruscan and Greek periods. A total of 71 beautiful engravings by the great artist. Watermark: Lily in a double circle. 18th cent. full calf with splendid gilt decoration on cover and spine of the Papal bindery. In a modern calf and gilt printed preservation box.
\$ 75.000.-

Piranesi's celebrated chimneypiece designs very effectively demonstrate the imaginative application of the past to the present since this interior feature had no precedent in antiquity. This work, in three languages, was conceived and offered to Europeans with new designs and styles of interior decoration for their homes. A lesser known and rarer work by Piranesi than others that are more common. Magnificent copy of the first edition with full margins on strong paper. Giovanni Battista Piranesi (1720-1778), an Italian architect, designer, antiquarian and engraver, created

Diversi maniere d'adornare I cammini: ed ogni altra parte degli edifizii (Various ways of decorating chimneypieces and other parts of the house) in 1769. This work is considered to be one of the greatest contributions to interior design promoting the neoclassical style. His essay, presented in Italian, English and French, advocates the idea that ornament inspired by classical Egyptian, Tuscan, Roman, and Grecian architecture can be adapted for use in the 18th-century interior. Piranesi supports his theories visually with 70 etched and engraved images of his neoclassical inspired designs for more than 60 patterns for chimneypieces and fireplace mantels, along with other motifs for sedan chairs, clocks, tripods, tables, coaches, and vases. The visual impact of these illustrations is the greatest strength of the book: the highly detailed and aesthetically appealing designs reveal Piranesi's remarkable skill as an artist and engraver. The designs themselves are visionary, and they introduce dramatic, ornate, and innovative patterns inspired from the classical antiquity. Piranesi, formally trained as an architect in Venice, became fascinated by the decaying antiquities of Rome and the study of archaeology after he moved to the city in the 1740s and later visited Naples and Herculaneum. He collaborated on guidebooks of Rome in response to traveling to the city on the Grand Tour and later published detailed archaeological studies, notably *Antichità Romane de tempo della prima Repubblica...* (Roman Antiquities of the time of the First Republic...) in 1756. His study of these ancient ruins became the inspiration for his designs in *Diversi maniere*. *Diversi maniere* was an effective way for Piranesi to promote his fantastic, neoclassical designs for a modern-day interior, primarily to those requiring designs for chimneypieces and mantelpieces outside of Italy. Private homes of the English upper class, such as Burghley House in Lincolnshire, directly employed Piranesi's designs.- Hind, Piranesi, pp. 86; Focillon, no. 854 - 926; Brunet IV, 672; Wilton-Ely pp. 886 ff. „The text of his book on chimney ornament, *Diverse maniere di adornare le cammini*, published in 1769, is mainly known for its large-scale adoption of Egyptian forms and its polemical defence of Etruscan architecture as the cradle of classical architecture, but it also argues in favour of what we would now probably call stylistic eclecticism. According to Piranesi, the architect should draw not only on the remaining buildings of Roman antiquity, but also on the entire range of classical art: medals, intaglios, statues, reliefs, etc. Ornament, in other words, should be closely studied, and in particular the ways in which Egyptian and Etruscan ornament was transformed and adapted by the Greeks and Romans. In the *Diverse maniere* Piranesi shows how this was done. He begins with Graeco-Roman, Egyptian and Etruscan furniture and ornament and adapts it to a new typology, that of the chimney, a new genre of its own. Typical of what he calls *la piccola architettura*, and very close to furniture, this new genre calls for its own laws of decoration, and by its very dimensions prevents the automatic transfer of large-scale architectural ornament such as used in temple porticos, etc. A chimney is closer in fact to dress than to building, and made, like clothes, not just for usefulness, but for pleasure and enjoyment. Because of mankind's innate pleasure in and desire for variety, the grotesque is also a fitting style for this kind of object, for its mixture of the serious and the gay, the frightening and the pathetic. In this truly revolutionary text Piranesi not only opens up the range of styles to be used by the designer of chimneys and furniture; he also sets out the rudiments of a natural history of the architecture of the Mediterranean, and he tries to understand the laws governing its design, particularly that of the orders, by an analogy with shell formation (Hyde Minor 2015).“ (C. van Eck, 2018. *The Style Empire and its Pedigree: Piranesi, Pompeii and Alexandria. Architectural Histories*, 6 (1), p.16)

Provenance: On the title page stamp of the Tsar's library in Tsarskoye Selo. It cannot be ruled out that the present volume was acquired by Tsarevich Paul Petrovich, later Tsar Paul I of Russia (1754-1801), when he visited Rome in 1782 with his wife Maria Fedorovna (b. as Princess Sophie Dorothee of Württemberg, 1759-1828); Tsar's library in Tsarskoe Selo, auction Sothebys London, December 1, 1994, lot 116; Buch- und Kunstantiquariat Hans Marcus, Düsseldorf; private collection West Germany; private collection South Germany; present owner.

Binding: Auction H. Gilhofer / H. Ranschburg, Precious Books and Manuscripts from the Libraries of the Russian Tsars in Tsarskoye-Selo, Duke Albrecht v. Saxe-Teschen, Dr. Albert Figdor, Vienna [...], Lucerne, 14/25 June 1932, lot 359: a collection of 32 architectural printed works in uniform binding. On plate 26 of the catalog illustration of a comparable binding in terms of ornamental design. Other bindings of this type can be traced in the libraries of Landgrave Frederick II of Hesse-Kassel, Maximilian Franz Archduke of Austria, as well as in the Royal Library, Windsor Castle; see Pierre Bergé, 15 Nov. 2019. no. 285; then Shapero, London.

PYTHON (or Pithon), Joao Bento (Jean Benoit).

Descricao do novo pantómetro de arta e explicao das operacoens q(ue) com elle se podem fazer. ...

Portuguese manuscript on paper. No date or place (Porto, Lisboa early 1750 - 1760's). 4to (210 x 170 mm). (5) leaves (3 blanks), 17 numb. leaves with manuscript text and 7 finely executed wash-colour and ink drawings with the instrument, its parts and function. Contemporary red morocco, gilt spine, ruled borders. All edges gilt. Binding soiled, extremities worn. \$ 8.000.-

A fine Portuguese manuscript on a newly designed instrument called 'pantometro' by Jean Benoit Pithon (fl. 1755 - 1766) for the use in surveying and gunnery, dedicated to Joseph I. of Portugal. Pithon was commander of an artillery regiment in Porto (as mentioned on the title), later in 1752 he participated in a cartographical expedition to the northern part of Brazil (Rio Iguacu) to establish the exact course of the new border between Portugal and Spain according to the treaty of 1750. Pithon's instrument combines three distinct devices in one. A gunner's quadrant, a sight and a gauging device. A very fine copy, the text in a professionally calligraphed script, with exceptionally fine water - color drawings of the instrument. The Frenchman Michel Connette (Michael Coignet) invented a pantometer in 1626, consisting of a proportional compass with a magnetic compass attached to one of the legs. The instrument was mounted on a tripod like a modern pantometer. The invention is also attributed to the German Jesuit Athanasius Kircher in 1631.- see: Escola do Exercicio (Lisbon). Catalogo alphabetico ... das obras que possui a Bibliotheca (1859) pp. 104 for a copy of the same manuscript (?).

„Türkengerät“

REGIOMONTANUS (Johannes Schöner, ed.)

Scripta de torqueto, astrolabio armillari, regula magna Ptolemaica, baculo(ue) astronomico, & observationibus cometarum, aucta necessariis, Ioannis Schoner Carolostadii additionibus.- Nuremberg, J. Montanus (Johann Berg) and Ulrich Neuber, 1544. 4to (190 x 142 mm) [4], 84, [5] Bll. / leaves incl. full-page woodcuts and geometrical diagrams (bound with:)

PLINIUS Secundus. (Jacob Millich, comm.) Liber secundus de mundi historia, cum commentariis Iacobi Milichii diligenter conscriptis & recognitis.- Schwäbisch Hall: Peter Braubach, March (colophon: September) 1538. 210 num., 7 nn. Bll./leaves with Italic, roman and greek types, woodcut initials and headpiece, 20 woodcut diagrams of celestial orbits, of which six are full-page. Missing the last blank. Fly - leaves removed; both works with slight water staining in the upper margin and small worming (six perpendicular worm tracks), slightly soiled and minimally browned. Wooden boards with a wide blind-tooled pigskin spine (clasps missing, back wooden board with damaged corner, slightly soiled and scuffed.

\$ 8.000.-

First edition of unpublished smaller works written by the German mathematician & astronomer Johannes Regiomontanus (1436 - 1476), edited from manuscripts by the mathematician Johannes Schöner (1477-1547) who at the same time was concerned with the publication of Copernicus' *De revolutionibus orbium coelestium* (Nuremberg, 1543) and who also adds his own contributions. Bound with Jacob Milich's astronomical commentary on Plinius second book of the *Natural History* based on Regiomontanus' astronomy.

The subject of the first two papers by Regiomontanus and Schöner is the „Torquetum“, a medieval (Turkish or Arabian ?) complex and sophisticated astronomical instrument designed to take and convert measurements made in three sets of coordinates: Horizon, equatorial, and ecliptic. It is said to be a combination of Ptolemy's astrolabon and the plane astrolabe; in a sense it is an analog computer and was already depicted in print by Peter Apian. Then follows Regiomontanus' paper on the armillary sphere, Schöner's on the large Ptolemaic rule, Regiomontanus' tables of solar observations, and Schöner's short piece on the astronomical radii. Peurbach's *Quadratum geometricum* forms a significant part of the long final section on eclipses, comets and planetary observations by Regiomontanus and Bernhard Walther. Regiomontanus is known for his *Epitoma in Almagestum Ptolemaei* (1496), the first appearance in print of Ptolemy's *Almagest* in any form (Dibner Heralds 1; Grolier/Horblit 89; PMM 40) and his contributions were instrumental in the development of Copernican Heliocentrism in the decades following his death. A student and heir to Peurbach's efforts, who developed applications of solving problems by triangulation. Accurate charting of the stars would benefit from both mathematical method and improved sighting instruments (sextants, quadrants, and compass-like tools) and their use. Regiomontanus established a workshop for the construction of astronomical instruments and wrote detailed descriptions of these. Johannes Regiomontanus died in 1475, leaving behind a printing press, instruments and a library containing printed books and his and others manuscripts. Most of the library was bought by his friend Bernhard Walther (1430 - 1504), the merchant-astronomer at Nuremberg and then ended up in the possession of Willibald Pirckheimer (1470 - 1530), the patrician friend of Albrecht Dürer. Pirckheimer sold on several of Regiomontanus' works to Johannes Schoener, who taught mathematics at the Gymnasium in Nuremberg. Regiomontanus' work on comets, which was listed in his own printing advertisement, was first edited and published by Schoener in 1531 as in English: *Sixteen Problems on the Magnitude, Longitude and True Position of Comets*. It was printed again, with several other works of Regiomontanus in 1544 but then with new improved diagrams to the text which were faulty before. One of the foremost scholars in mathematics and astronomy during this

period, Regiomontanus was professor of astronomy at the University of Vienna before being appointed astronomer to King Matthias Corvinus of Hungary. With funds from his patron and fellow scientist Bernard Walther, he built an observatory in Nuremberg in 1471, and in 1472 erected his own private press in order to publish his discoveries satisfactorily. One of the first to realize the impact printing would have in disseminating scientific knowledge. His press was maintained until 1475 when he was summoned to Rome by Pope Sixtus IV to assist in the reform of the Calendar; his death at the age of 40 a year later brought his work to a premature end, a great loss to the developing science of astronomy.- Lit.: Steele, J. M. & Stephenson, F. R. Eclipse observations made by Regiomontanus and Walther; in: *Journal for the History of Astronomy*, Vol. 29, Part 4, p. 331 - 344 (incl. an English translation & commentary of the eclipse observations by Walther and Regiomontanus printed in the book); Richard L. Kremer. How Did the Turquetum (or Torquetum) Get Its Name ? in: *Scientific Instruments between East and West* (2019), pp. 70-105; Dekker, Elly; Kristen Lippincott. The Scientific Instruments in Holbein's Ambassadors: A Re-Examination. *Journal of the Warburg and Courtauld Institutes*. The Warburg Institute. 62 (1999) pp. 93-125. Reference: Adams R-279; Houzeau / Lancaster I, 2266; Lalande 62; Zinner 1857; VD 16 M 6569; STC 632 (see Mueller). II.) Second edition (after the Hagenau 1534 edition) of the German mathematician, physician and astronomer Jacob Milich's most extensive and important commentary on the second book of Pliny the Elder devoted to the structure of the cosmos. Pliny starts with the known universe, roundly criticizing attempts at cosmology as madness, including the view that there are countless other worlds than the Earth. He concurs with the four (Aristotelian) elements, fire, earth, air and water, and records the seven „planets“ including the sun and moon. The earth is a sphere, suspended in the middle of space. He considers it a weakness to try to find the shape and form of God, or to suppose that such a being would care about human affairs. He mentions eclipses, but considers Hipparchus' s almanac grandiose for seeming to know how Nature works. He cites Poseidonius' estimate that the moon is 230,000 miles away and he describes comets, noting that only Aristotle has recorded seeing more than one at once. Book II continues with natural meteorological events lower in the sky, including the winds, weather, whirlwinds, lightning, and rainbows. He returns to astronomical facts such as the effect of longitude on time of sunrise and sunset, the variation of the sun's elevation with latitude (affecting time-telling by sundials), and the variation of day length with latitude. The author of this commentary, Jacob Milich (1501-1559), was a learned scholar and humanist, professor of mathematics and astrology at Wittenberg, friend and collaborator of Melanchthon. During his stay in Vienna, he devoted himself with zeal to the mathematical disciplines under the followers of Johann Peurbach and Johann Regiomontanus, which he introduced as the first, together with H. Volmar, at Wittenberg, where he settled permanently in 1524. Best known as the teacher and mentor of the mathematician Michael Stifel, the greatest German algebraist of the 16th century, and the astronomer Erasmus Reinhold, Jacob Milich became Dean of the Wittenberg university's philosophical and medical branches. „The author regards the second book of Pliny's Natural History as an admirable brief compendium, comprising the elements of astronomy and meteorology, to prepare students for more advanced studies in physics and astronomy.“ (Thorndike V, 387/88).- VD 16 P 3539. Adams P 1565. Thorndike V, 385-390. Zinner 1691; not in STC.

world of Parrots - Parrots of the world

REICHENOW, Anton.

Vogelbilder aus fernen Zonen. Abbildungen und Beschreibungen der Papageien. Mit 33 getönten beikolorierten lithographierten Tafeln nach Aquarellen von G. Mütze.- Kassel, Fischer, 1878 - 1883. Folio (390 x 280 mm). [42] Bll. / leaves. Green original embossed cloth, upper cover with decorative border blocked in black and gilt lettering, gilt title on spine. Minor foxing as often, but overall a nearly mint copy with bright coloring.

\$ 4.800.-

First edition, of „A series of colored plates illustrating the known parrots, accompanied by short descriptions of each and notes on their distribution.“ (Zimmer).

The German herpetologist and ornithologist Anton Reichenow (1847 - 1941) worked at the Natural History Museum of Berlin from 1874 to 1921 and was an expert on African birds, making a collecting expedition to West Africa in 1872 and 1873, and writing *Die Vögel Afrikas* (1900-05). He was also an expert on parrots, describing all species then known in his book *Vogelbilder aus Fernen Zonen*, illustrated by artist Gustav Mützel (1839-1893) who was famous for his mammal and bird paintings, including the illustrations for the second edition of Alfred Edmund Brehm's *Thierleben* and Richard Lydekker's *The Royal Natural History*. He created a large number of illustrations for the German Ornithological Society, having been a member since 1874. Mützel's diverse interests led also to his membership of the German Society for Anthropology, Ethnology and Prehistory and the Association of Berlin artists.

A number of birds are named after Reichenow, including Reichenow's woodpecker and R.'s firefinch. Reichenow is known for his classification of birds into six groups, described as „shortwings, swimmers, stiltbirds, skinbills, yoketoes, and treebirds“. This system was not adopted by any other ornithologists, but is used in the Dewey Decimal System.- Fine Bird Books, pp. 102; Nissen IVB 767; Zimmer, 514; Sitwell-B. 133.

The extinct Great Auk and rare flowers incl. tulips

ROBERT, Nicolas (engr.; 1614-1684).

Diverses oyseaux dessinées et gravées d' apres le naturel par N. Robert. A Paris F. Poilly excudit... (after 1673 ?). 31 leaves with engraved birds

(bound with:)

ROBERT, Nicolas. *Variae ac multiformes Florum species appressae ad Vivum et aeneis tabulis incisae.*

Authore N. Robert. Diverses fleurs dessinees et gravees s'apres le naturel. Paris, F. Poilly, (after 1665).

Folio (290 x 215 mm). Engraved title and 30 engraved plates of flowers by Nicolas Robert.

(bound with:)

VA(U)QUER, Jean. 5 series with engravings of flowers titled: *Livres de fleurs.* (Paris: Poilly) (ca. 1680).

10 engraved plates incl. title by Jean Vauquer (Ornamentstichkat. Bln. 4432, 4; Dunthorne 317) and 48 engraved plates of flower bouquets (ca. 1680), probably all in 18th century prints. Mild browning

throughout, some staining here and there; restored tear to one plate, small marginal tear to another. 18th century mottled calf, gilt spine in compartments, soiling and rubbing to boards, spine damaged at head and tail. Overall fine copy. Two bookplates: C. R. Richmond and L. Gidel. Rear free endpaper with note: „Vient de la bibliotheque de Mr de la haye fermier general“ (i.e. Martin de la Haye, 1684-1753).

\$ 19.000.-

Fine Sammelband, including a copy of the third edition of the famous „florilegium“, first published in Rome in 1640, showing anemones, lilies, daffodils, roses, tulips, etc., each with the names of the flowers in Latin and Robert's monogram; this is the most common edition of the book published by François de Poilly (1623-93) in Paris after 1669. Robert's volume was already copied early on. These copies attest to the popularity of and demand for his compositions, and in turn helped to spread them widely. The plates were adapted by Maria Sybilla Merian as illustrations for her *Histoire des Insectes de l' Europe* (Amsterdam, 1730).

The prints are all in reverse of the Rome edition, which was the prototype for the Paris prints. This is odd, given the fact that Robert lived in France and was in the King's service at the time that the book appeared in Paris with the King's privileges. Moreover, the monogram suggests Robert's involvement. Perhaps the artist took initiative for plagiarizing his early work some thirty years after it first appeared.

The French painter Nicolas Robert (1614 - 1685) was one of the greatest French natural history artists of the seventeenth century. Early he published a collection of flower engravings entitled *Fiori diversi* (1640), later called „Florilegium“. He became famous for his drawings of flowers, which combined botanical accuracy with superb craftsmanship. Some time after, Robert was called to the service of Gaston (1608-60), Duke of Orleans, and brother to the French king Louis XIII (1601-43). Gaston had a garden, an aviary and a menagerie in which he grew exotic plants, birds and animals, and Robert was commissioned to depict these in gouache on vellum. When Gaston died, the vellums were passed on to Louis XIV, who in turn expanded the collection. They are in the library of the Musée d' Histoire Nat. in Paris today. In 1666, Robert entered the service of the King as a miniature painter, producing more watercolours on vellum of natural history subjects for the royal collection. He produced thousands of watercolours for the king, today known as „les velins du Roi“. One of the images of birds show the extinct Great Auk (*Pinguinus impennis*), a species of flightless alcid that became extinct in the mid-19th century: a puffin swimming in a pond is figured in the foreground and in the background there are three Great Auks, two of them swimming and one standing on the bank. This is one of the few surviving images of this extinct bird.- Nissen, BBI 1646 and Vol. I, 96 f.; Hunt 282 (ed. 1660). Ornamentstichkat. Berlin 4423 (incptl. copy); Thieme-B. XXVIII, 423; de Belder 306 (only 29 plates); Oak Spring Flora 42; II. Magnificent and very rare set of bird prints: Nissen, IVB, 787; Ronsil 2599; Bradley Martin 1837. Arturo Valledor de Lozoya; David Gonzalez Garcia. A great auk for the Sun King; in: *Archives of natural history* 43 (2016), 41-56.

Editio princeps

of Theodosius' Sphaerics

SACRO BOSCO, Johannes de (and others).

Sphera Mundi novit recognita cu(m) co(m)me(n)tariis & autorib(us) in hoc volumine co(n)te(n)tis vz. Cichi Eschulani cum textu / Ioannis Baptiste Capuani. Jacobi Fabri Stapulensis / Theodosii de spheris cum textu / Michaelis Scoti questiones / Petri de Aliaco cardinalis q[uaesti]ones / Roberti Linconiensis Compendium. Theodosij iterum de spheris cum textu / Tractatus de sphaera solida. Theorice planetarum conclusiones cum expositione / Campani Tractatus de sphaera. Eiusdem tractatus de computo maiori / Joannis de monte regio in cremone[n]sem disputatio / Theorice textus cu[m] Joa[n]nis Baptiste Capuani exp[ositi]one / Ptolomeus De speculis / Theorica planetarum Joannis Cremonensis, plurimum faciens ad disputationem ioannis de monte regio, qua[m] in aliis hactenus i[m]pressis non reperies. (colophon at the end:) Venetiis: impensis nobilis viri dni Luce Antonii de giuta Florentini, die ultimo junii 1518. Folio (300 x 220 mm). 233 leaves / Bll. With numerous text woodcuts incl. one full-page depicting of an armillary sphere, printer's device at end. (= Sign: A6, B-z8, Aa-Ff8, Gg6) Errors in foliation: number 5 repeated and leaves 181-231, 233 mis-numbered 201-251, 253. Bound in contemporary limp overlapping vellum, back cover restored with another board in early times, later endpapers, water-stained and wavy, extremities frayed. Inside quite fresh, but some page have a small worm-track touching two letters at its most, but a nice copy in its first binding. \$ 7.500.-

First Giunta edition, to include the editio princeps of Theodosius' Sphaerics.

One of two slightly different collections of astronomical works published in Venice in 1518 at the heirs of Ottaviano Scoto and here by Lucantonio Giunta (1457-1538) which includes the important commentaries on Sacrobosco's *Tractatus de sphaera* and on the *Theoricae novae* written by Francesco Capuano da Manfredonia and first printed toward the end of the year 1499 in Venice. Capuano was professor of Astronomy at Padua and had already published a commentary on Peurbach's *Theoricae planetarum* in 1495. He subsequently entered into the ranks of the Lateran Canons Regular, taking the name Giovanni Battista. Later editions of his commentary on Sacrobosco's *Tractatus* were published under the name Giovanni Battista Capuano and contain a revisited text of that work. Capuano's work was juxtaposed, although it might be more appropriate to say 'counterposed,' to the commentary on the *Sphaera* written by Cecco d'Ascoli (Francesco Stabili) (1257-1327), the author of an exposition steeped in astrological thought. It is worth recalling that this author had been brought to trial by the Inquisition precisely on account of certain statements based on astrology, first in Bologna in 1324 and then in Florence in 1327, when he was sentenced to death.

Compared to this text, Capuano's commentary must have been perceived as a far more rigorous exposition, from both a philosophical and astronomical standpoint. In Capuano's work, Aristotle's texts on natural philosophy, Ptolemy's (ca. 100-ca. 170) *Almagest* and Al-Farghānī's (ca. 800-870) *Compendium of the Science of the Stars* serve as the basis for explicating Sacrobosco's work. Only very rarely are other sources mentioned. The *Compendium sphaerae* written by Robert Grosseteste and especially Pierre d'Ailly's *Quaestiones subtilissimae* on Sacrobosco's work are highly relevant and make up a very interesting text, touching upon some of the most widely debated issues in basic medieval astronomy: e.g. the number of heavenly spheres, the variation of the inclination of the ecliptic, and whether eccentric orbits and epicycles are necessary in order to 'save the appearances of planetary motions'.

In the 1518 editions, the *Expositio* of the *Sphaera* attributed to Michael Scot and Campanus of Novara's (ca. 1220-1296) *Tractatus de sphaera* made their first appearance in this collection. The volume includes: Cecco d'Ascoli's *Commentarius*, Francesco Capuano's *Commentarius* or *Expositio*, Lefevre d'Étaples. *Commentarius* or *Paraphrases*, Pierre d'Ailly. *Quaestiones subtilissimae* XIV, Michael Scot. *Quaestiones*, Robert Grosseteste's *Compendium* or *Tractatus*, Campanus of Novara. *Tractatus de Sphaera*, de *Sphaera solida* and *Computo maiori*, Francesco Capuano's *Expositio Theoricae novae* (Peurbach), Regiomontanus *Disputatio contra...*, Gerard of Cremona's *Theorica Planetarum*, Theodosius Bithynia's *De spheris* and Ptolemy's *De speculis*.

„In 1499, while Copernicus studies in Bologna, the commentary on Sacrobosco's Sphere by the Padua master Francesco Capuano da Manfredonia first appears in print. It will be revised and reprinted several times thereafter. Like Copernicus, Capuano has a high view of astronomy and mingles astronomical and physical considerations (flies moving on wheels, men on ships, impetus, comets, raptus). Also, Capuano offers a flawed argument against a two-fold (diurnal and zodiacal) motion of the Earth. Multiple thematic resonances between Capuano's commentary and *De revolutionibus*, I, 5-11, suggest the hypothesis that Copernicus is answering Capuano, whose work was owned by Joachim Rheticus, if not Copernicus himself.... The authors who Capuano chooses gives us a good picture of the state of teaching Astronomy in the late 15th century.” (M. Shank. Setting up Copernicus? Astronomy and Natural Philosophy in Giambattista Capuano Da Manfredonia's 'Expositio' on the Sphere; in: *Early Science and Medicine*,

vol. 14 (2009), pp. 290–315). EDIT 16, 29259; Hamel 64: „Neudruck, der sich jedoch in der gesamten Ausführung eng an 1518 ([d.i. die im Januar bei Scotus in Venedig erschienene Ausgabe]) anlehnt, einschl. eines Paginierungsfehlers... Die Figuren wurden offenbar nach neuen Holzschnitten ausgeführt“; Houzeau-L. 1642; vgl. Sander 6671 (Scotus ed. of 1518); not in Adams and Renouard; Riccardi I, 447–49 (rara collezione); Sotheran Supp. II, 3790 (unknown to Lalande); Lynn Thorndike, *The Sphere of Sacrobosco and Its Commentators* (Chicago, 1945), p. 343 (...distinctly superior to the incunabulum of 1499...rare). - Lit.: Elio Nenci. Francesco Capuano di Manfredonia in: Matteo Valleriani (ed.) *De sphaera* of Johannes de Sacrobosco in the Early Modern Period ... pp. 91 ff.

**„Mit Fried und Freud fahr ich dahin“
Presentation binding for Sophie of Brandenburg, Electress of Saxony**

SCHLEE (SLEIDANUS), Oswald.

Die Selige Sterbkünst Von dem heiligen Geiste/ in des alten Simeonis lobgesang/ gleich wie ein kurtz Compendium, der Christenheit zu heilsamen nutz und trost/ zusammen gefasset.- Hamburg: Mollerus 1601. 4to (200 x 150 mm) [12], 455 pp. [12]. Bound in contemporary full calf with gilt decorations, two clasps and all edges punched gilt. Fly leaf inscribed in manuscript in German and dedicated by the author to Sophie von Brandenburg (1568 – 1622). Very fine provenance copy in its first binding.

\$ 6.500.-

Ars bene moriendi by the German Lutheran clergyman and theologian Oswald Schlee (Sledanus, Sleidanus, Slede) (1553 - 1613) from Rostock / Northern Germany.

Dedicated on the front-fly to Sophie von Brandenburg (1568 – 1622), Electress of Saxony for her eldest son, from 1591 to 1601: “Der durchleuchtigsten hochgebornen Fürstin und Frauen, Frauen Sophia, gebornen Marggraffin zu Brandenburgh, Hertzogin und Churfürstin zu Sachsen, Landgraffin zu Thuringen, Marggraffin zu Meissen, und Burggraffin zu Magdeburg, wittiben, seiner gnädigsten Churfürstin und Frauen verehret diese Selige Sterbe Kunst Oswaldus Sledann, unterthanighst”.

Oswald Schlee had studied at the University of Rostock from 1568 and at the University of Jena around 1572 with Justus Lipsius. In 1579 he was awarded a doctorate in philosophy in Rostock. He was a deacon at the Petrikerche in Rostock from 1577 to 1589. From 1589 he worked at the Marienkirche in Rostock, until 1609 he was archdeacon and from 1609 to 1613 pastor, from 1610 also city superintendent.

The Ars moriendi (The Art of Dying) are texts dating from about 1415 and 1450 which offer advice on the protocols and procedures of a good death, explaining how to „die well“ according to Christian precepts. It was written within the historical context of the effects of the macabre horrors of the BlackDeath. There was nothing more important in life than to prepare for dying so that one could then go in peace. A flood of books on the „Ars bene moriendi,“ the art of dying well, sold like hot cakes from the late Middle Ages onward. Death was depicted in the form of dances of death, sequences of dancing or musical skeletons painted on church or cemetery walls. Funeral sermons and death songs in large numbers were intended to give comfort, and everyday objects were sometimes quite drastically reminded of the omnipresence of death through appropriate decoration or painting. People wanted to say goodbye consciously; a sudden death was considered a misfortune. While people were certainly turned towards this world, they did not suppress the view of the hereafter. The goal of all this preoccupation with death was to be able to die with complete trust in God and to free oneself from all earthly ballast. As a result of the Enlightenment, the decline of the art of dying began in the middle of the 18th century. Death became a private matter, the great funeral procession through the city had to give way to burial „in silence“. Speechlessness set in, which can still be felt today.

Like Schlee, Johann Sebastian Bach refers in the solo cantata „Ich habe genug“, to the biblical passage Luke 2:29, in which the aged Simeon joyfully looks forward to his death at the presentation of Jesus in the temple after seeing the Messiah (Nunc dimittis).- Provenance: With the book plate of the Danish statesman, court official, and councillor, Carl Juul (1706–1767), Valdemar’s Castle, Tasinge.

Underground Female artist

SCHLEIME, Cornelia (artist); ANDERSON, Sascha (text).

Artist book without title by the German female artist Cornelia Schleime. Probably unique copy or produced in the GDR in very small number. With colored over-painted original engravings by Cornelia Schleime. (without date or publisher, probably Berlin around 1983). square small folio. 9 leaves. Original Binding

(block binding), slight marginal tears in modern cloth folder with photographs on covers showing Cornelia Schleime probably in the 2000's at a Fair. Each sheet with overpainted etchings with erotic motifs and handwritten annotations and texts. Sheet two with dedication: „die dich umarmen Fische die zu dir sprechen bis du sie liebst“. Signed by Schleime and Sascha Anderson, 27. III. (19)83.

\$ 4.500.-

Probably an unique artist's book by GDR female artist Cornelia Schleime (1953 -), at least not mentioned in her Oeuvre catalogue. Cornelia Schleime is a German painter, performer, filmmaker and author, born in East Berlin under the GDR, she studied painting and graphic arts at the Dresden Academy of Fine Arts before becoming a member of the underground art scene. She was awarded the Hannah Höch Lifetime Achievement Award from the State of Berlin in 2016.

After graduating, she moved from University in Dresden back to East Berlin's Prenzlauer Berg, where she came into contact with the civil rights movement and Sascha Anderson, a close friend of hers who was later revealed to be part of the Stasi that was spying on her. In 1984, five years before the fall of the Berlin Wall, Schleime was permitted to leave for West Germany. This move meant, however, that she had to leave all her work behind in East Germany. Almost her entire body of works up to that date remained in the GDR and has disappeared. Schleime recalls „I went to the West with four or five pictures under my arm, a duvet, and my son. After I had found an apartment, the transport of my works was supposed to be organized. In the 24 hours, a girlfriend came and made a list of everything: 95 oil paintings, sculptures, and the photographic documentation of my actions. When she arrived, the apartment had been broken into and there was only garbage lying around.“

A number of artists, including Schleime, were contributing to a strong feminist voice within East German underground art, working with a clear feminist idiom and feminist content, without realizing they were or actively participating in a larger international feminist debate.

local fish fauna

SCHONEFELD (Schönfeld), Stephan von.

Ichthyologia et nomenclaturae animalium marinorum, fluviatilium, lacustrium, quae in florentissimis ducatus Slesvici et Holsatiae et celeberrimo emporio Hamburgo occurrunt triviales.- Hamburg, Bibliopolio Hering, 1624. 4to (240 x 180 mm). 87 pp., (1, blank) with seven engraved plates depicting fishes from the North and Baltic Seas. Slightly later vellum with handwritten title on spine, some browning and foxing due to paper quality, sprinkled edges, reminiscing paper labels on inner covers, faint waterstain and tiny lesion to lower outer corner of plates. Fine copy.

\$ 6.000.-

Extremely rare book on ichthyology, a significant contribution to the taxonomy of fishes and the local fauna of Northern Germany. The German physician and naturalist Stephan von Schönefeld (- 1632) partly worked with already existing sources, but also used the Hamburg fish market to study extensively offered species there. Von Schönefeld made several first descriptions of species and provided a first systematic German naming system for fishes. The author assigned the whales to the mammals. He may not have been the first, but certainly one of the first researchers to do so. He described a total of 425 species of aquatic life and thus created an important early document of northern German eco system. Some images were copied by Willughby and Ray.

He was the son of a physician and surgeon of the same name who died on 19 January 1600 in Hamburg, where he had previously practiced. His matriculation entry as Stephanus Schoonuelt at the University of Rostock dates from June 1581. He studied under Pieter Paaw and took the position of responder at one of his disputations on the origin of milk in 1588, his dissertation (1589) under Heinrich Brucaeus dealt with scurvy. Von Schönefeld then had a practice in Hamburg. Due to his good healing results, he was soon regarded as a renowned physician. In the 1590s, he travelled for a long time with his friend Hieronymus Vogeler, who later became mayor of Hamburg. Both visited Italy, Austria and France. Johann Adolf of Schleswig - Holstein - Gottorf appointed him one of two personal physicians in 1603. In 1603 he was appointed again with a considerably higher salary. Since he sold most of his father's property in Hamburg in 1610 and 1614, he probably expected to live permanently at the Gottorf court. The Duke asked von Schönefeld to research the fish world of the region. Von Schönefeld worked intensively on this, but was unable to complete the studies before the Duke's death in 1616. His son and successor Friedrich III judged von Schönefeld to be a faithful personal physician to his father and granted him several exemptions. However, he himself chose other personal physicians and allowed von Schönefeld to leave the duchy. The physician went to Hamburg again in 1616 or

a short time later. He became a partner in five major dyke construction projects on the North Sea coast of Schleswig-Holstein between 1612 and 1623.- VD 17 23:289167Z; Nissen, ZBI 3741; Hirsch-H. V, 127 f; Nissen. Fishes no 116.

**The ‚de THOU‘ copy
of Schooten’s work on conic sections a work 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.

\$ 10.000.-

‘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.

‚a Genteel pastime‘

Miss SMITH of Adwick - Hall (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, 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.

\$ 6.500.-

„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.

SOCIO, Nobile.

Tractatus de temporibus, et modis, recte purgandi in morbis. Nobilis Socij Salodiensis medici. Omnia prius qua'm iudices perpensa.- Venetiis (Venice): Bartholomaeus Caesanus (Cesano) excudebat, 1550. 8vo (165 x 108 mm) 141 Bll., (3), (3, blank) (Sign.: A-S8) with title woodcut showing a standing woman holding a broken column under her arm, with the other she leans on the base trunk: "Fortitudo mea dominus", decorative initials and woodcut printers mark on last page showing a gushing fountain in the shape of an amphora with a woman on top and cherubs' heads around it, supported by satyrs. Minimal, old handwritten notes in ink. Flexible vellum, wrapped, with handwritten title on spine, traces of old ties, . partly little water-stained, but fine copy in its first binding.

\$ 2.800.-

Exceedingly rare first edition of the best-known work by the physician Nobile Socio (fl. 1533-1556), a native of Salò, who practiced mainly in Constantinople and Syria, especially as the personal physician of the ,Bassa of Damascus'. This work examines and comments Galen's work with same title, including commentaries by Rhazes, Avicenna and Averrois (ff. 31 ff.) Quite famous as a doctor in his time, he is credited with the treatise „Praecertatio ad veram medicinam pro Arabum et proborum medicorum tutela“ (Venice, 1554; Durling 4227), in which he advocates for Avicenna's writings. In his youth he wrote a book on lovesickness (Haym, III, 44), „Miserie degli amanti,“ in imitation of Boccaccio and Sanazzaro's Arcadia. This pastoral tale in prose and verse is set along the shores of Lake Garda and is composed in a series of dialogues on love: what is it, how does it manifest itself, and how does it feel? Sexual love is not ignored in the discussion, which may be why the book was feverishly pursued by the youth of the 16th century, and only few copies survive. Otherwise not much is known about his life. The book here is dedicated in print to Gian Battista da Monte (1498-1551), one of the leading Renaissance humanist physicians, who promoted the revival of Greek medical texts and practice, producing revisions of Galen as well as of Islamic medical texts by Rhazes and Avicenna. He was a friend of the pioneering anatomist Andreas Vesalius and introduced autopsies as a means of acquiring anatomical data, and established the first permanent anatomical theatre, where Vesalius, Falloppio, Fabricius and others carried out studies. Montanus became a professor of practical medicine at the University of Padua and in 1545, he helped establish the first botanical garden in Padua. He probably had know him.- Adams, II, S 1367 (Lyon 1555) KVK: only Leipzig; Bibl. Casanatense; Yale, NY Acad. Med., NLM, Wisconsin-Madison.

first botanical field-guides

(JAKOB THEODOR) Iacobus Theodorus, called Tabernaemontanus.

Eicones plantarum seu stirpium, arborum nempe, fructicum, herbarum, fructuum, lignorum, radicum, omnis generis; tam inquilinorum, quàm exoticorum : quae partim Germania sponte producit, partim ab exteris regionibus allata in Germania plantantur; in gratiam medicinae reique herbariae studiosorum, in tres partes digestae; adiecto indice gemino locupletissimo.- Francofurti ad Moenum: [Nicolaus Bassaeus], 1590. oblong 4to (192 x 250 mm) [8], 1128 pp., [16] p. with 2255 text woodcuts of herbs, flowers, plants, trees etc. Contemporary vellum, bent, rubbed and soiled, hinges little cracked, but holding, front fly with old colored portrait in pen and ink, color oxidized. Partly browned, little stained; few woodcuts slightly colored but a little later hand. Inner cover with old colored hand drawing of a woman.

\$ 8.500.-

First edition of this smaller format pictorial album or botanical field - guide by one of the fathers of botany.

The Frankfurt print - shop of Nicolaus Bassée (Basse) decided to print a herbal without text in a size which could be used to take into the field to identify plants. Further research could then be done in the studio with more books. On the other hand the book could also be used by artists as a model-book to copy certain plant illustrations. The illustrations here were later used by Gerard for his Herball.

Already in 1581, the publisher Plantin published an album containing all the plant illustrations of the *Kruydtboeck* by Mathias Lobelius, but the horizontal quarto of 1581 were accompanied only by the name of the plant. Plantin was probably aware that the botanical commentaries of Lobelius were not such a high order as those by Dodoens, Clusius and others. This album was issued at the behest of Severinus Gobelius, physician to the Elector of Brandenburg. Gobelius bought 150 copies at 36 st. each (Voet. Plantin press no. 1580). The pictorial album had minimal text, just plant-names and references to Lobelius' *Folio Plantarum* and the index had plant-names in Dutch, French, German, Italian, Spanish and English, which made the Plantin album saleable across Europe.

Nicolaus Basse was using *Lobelius Plantarum seu stirpium icones* (1581) as a model for his printing effort and participate with the selling success of the Plantin pictorial album.

Moretus published in 1591 a second edition of this botanical atlas by Lobelius, again a collection of plant pictures unaccompanied by commentaries, intended to make it possible to identify the plant solely with the aid of the picture. The field botanist and the general public found such smaller, lighter books more convenient and they were considerably cheaper. A small plant guide based on the herbals written by Fuchs was also very successful.

The „last of the botanists of the 16th century“ and one of the most influential, Iacobus Theodorus (1522-1590), also known as Tabernaemontanus, produced two extensive works on botany. Educated as a physician at Padua and Montpellier, Theodorus was an associate of Hieronymus Bock and Otto Brunfels. His *Neuw Kreuterbuch* (1588 - 1591), sometimes considered the most important work of botany of the 16th century, includes descriptions of numerous plants brought back to Europe from the colonization of the New World, including Indian corn and the potato. Theodorus' intention was to make knowledge about the medical uses of plants available to a wide audience, and to that end, he included an index in twelve languages that included the common, as well as learned names of plants. Based partly upon illustrations from earlier works, the woodcuts from the *Neuw Kreuterbuch* were reissued in 1590, without the text, as the *Eicones plantarum seu stirpium*. The majority of these engravings enjoyed a life long after 1590. The plates were acquired in Frankfurt by John Norton, printer to the King of England, and were re-used in John Gerard's famous *Herball or Generall Historie of Plantes* (1597), one of the most influential English herbals of the 17th century. Only 16 text woodcuts were new. The enlarged edition of 1631 of Gerard's *Herball* used then the woodblocks of the Plantin - Moretus print-shop.— VD 16, T 829; Isphording 86; Nissen, BBI 1932; Pritzel 9094; Alden-L. 590/66; Heilmann 297: “Da der voluminöse Wälzer sehr unhandlich war, ließ der Verleger Bassaeus nach dem Muster von Fuchs und Egenolph für den täglichen Gebrauch einen textlosen Band im Quartformat mit 2255 Holzschnitten drucken ... Die Holzstöcke von Tabernaemontanus wurden von John Norton, England, angekauft und 1597 zur Illustration von Gerards Herball verwendet.“

Fraenkel's copy

TARSKI, Alfred.

Der Wahrheitsbegriff in den formalisierten Sprachen. (Off-Print:) *Seorsum impressum ex vol. I. commentariorum Societatis Philosophicae Polonorum.*- Leopoli (Lviv): Studia Philosophica, 1935. 4to (240 x 170 mm) (2), pp. 261 - 405, (3, blank) Simple contemporary black half cloth, spine weak, title with author's

dedication: Herrn Prof. Dr. Adolf Fraenkel mit besten Grüßen des Verfassers“ (18. XII. (19)35). A few pencil annotations, one citing Gödel.

\$ 4.000.-

Dedication copy of the first German translation of Tarski's epoch-making „Projecie Prawdy w Jezykach Nauk Dedukcyjnych“ (1933), the foundation stone of modern logical semantics written by the Polish American mathematician and logician Alfred Tarski (1901 - 1983). Tarski's publication is a landmark event in 20th cent. analytic philosophy, and it ranks as one of the most important contributions to symbolic logic, semantics and philosophy of language and ranks him among Frege, Russel and Gödel. This epoch-making publication was published in a very small number of copies, many of which have been lost or destroyed: this copy is dedicated to the German-born Israeli mathematician Abraham Fraenkel (1891-1965), editor of Georg Cantor's papers, and known for his contributions to axiomatic set theory, partly with his pencil annotations.

The German edition was translated by the Polish - Jewish philosopher Leopold Blaustein (1905 - 1942/1944) who's own philosophical works are based on a combination of phenomenology and the analytical approach of the Lviv - Warsaw School of logic. The exceedingly rare german printing of Tarski's most important and influential work, „The Concept of Truth in Formalized Languages“, which founded modern logical semantics. The work appeared in an extremely small number, in Polish, and shortly after in German, and many copies of the article have later been destroyed, thus, the work is of the utmost scarcity. With this work the face of logic was changed forever. The „Concept of Truth“ constitutes a landmark event in 20th century analytic philosophy, and it ranks as one of the most important contributions to symbolic logic, semantics and philosophy of language. In this work Tarski develops the semantic theory of truth for formal languages and determines the fact that no language can contain its own truth predicate. Tarski thus concluded that the semantic theory could not be applied to any natural language. The problems solved by Tarski are some of the same that Russell and Whitehead struggled to solve in their „Principia Mathematica“. Tarski has contributed seminaly to the fields of mathematics and logic in a number of ways, and together with Frege, Russell and Gödel, he now ranks as one of the most important contributors to the field of modern logic.

(TOURNON de la Chapelle, Antoine)

La vie et les mémoires de Pilatre de Rozier, écrits par lui - même, & publiés par M. T.- A Paris: Alexandre Tournon, Belin, Bailly, Mérigot, 1786. sm.8vo (165 x 100 mm) 4 Bll., 148 pp. with four woodcut engravings on one large fold. sheet, often cut down to four leaves. Late 19th cent. half calf binding (monogr. V. J. V.), bound with **five leaves of 19th cent. handwritten notes** regarding the biography of Rozier (citing letters from Rozier in the Archiv of Arras). Overall fine copy.

\$ 1.400.-

Early biography of the first pioneer of aviation, the French chemistry and physics lecturer Jean-François Pilâtre de Rozier (1754 - 1785) who made the first manned free balloon flight with Francois Laurent d' Arlandes on 21 November 1783, in a Montgolfier balloon. He later died when his balloon crashed near Wimereux in the Pas-de-Calais during an attempt to fly across the English Channel. His companion Pierre Romain and he thus became the first known fatalities in an air crash.

In June 1783, he witnessed the first public demonstration of a balloon by the Montgolfier brothers. On 19 September, he assisted with the untethered flight of a sheep, a cockerel, and a duck from the front courtyard of Versailles. de Rozier and d'Arlandes made their first untethered flight in a Montgolfier hot air balloon on 21 November 1783 in the presence of the king. Their 25-minute flight travelled slowly about 5½ miles (some 9 km) to the southeast, attaining an altitude of 3,000 feet, before returning to the ground at outskirts of Paris. Along with Joseph Montgolfier, he was one of six passengers on a second flight on 19 January 1784, with a huge Montgolfier balloon *Le Flesselles* launched from Lyon.

UNGER, Franz.

Neu - Holland in Europa. Ein Vortrag, gehalten im Ständehause im Winter des Jahres 1861.- Wien: Wilhelm Braumüller, 1861. 8vo (220 x 148 mm) 72 pp. with 19 woodcuts and 41 nature printed illustrations in text, many in colour and printed by k.k. Hof- und Staatsdruckerei (as stated in the colophon). Contemporary cloth, used copy with minor spots.

\$ 1.000.-

First book with nature prints related to Australia. This work is a lecture delivered by the naturalist Franz Unger in Vienna in 1861 in which he outlines the similarities between the structure of plants existing in Australia and fossil specimens from the Eocene era in Europe. Unger proposed the theory that European plants had originated in Australia, which in turn proved that the landmasses were connected in the Eocene period. Unger had previously opposed this thesis, first postulated by Constantin von Ettinghausen, but in this lecture he claims it as his own. This lecture was translated, but without the nature printed illustrations contained in the original work. Franz Unger (1800-1870), Professor of botany and zoology in Graz, was one of the pioneers of paleobotany. Between 1841 and 1847 he published *Chloris Protogaea. Beiträge zur Flora der Vorwelt*, in which more than 120 new species of tertiary flora are described, illustrated and classified under existing genera. In 1862 Ettinghausen published a rebuttal in the strongest possible terms of Unger's claims of priority of discovery of the connection between Australian and European plants of the Eocene era.- Ferguson 17490; Cave pp. 100.

Star pupil of Redouté

VINCENT, Mme Henriette Antoinette.

Studies of fruits and flowers, painted from nature. [with:] The elements of flower and fruit painting; illustrated with engravings. 12 original parts / installments.- London: R. Ackermann, [1813] - 1814. Folio (375 x 300 mm) 16 leaves text and with 47 plates after Henriette Vincent by T. L. Busby, 23 of the plates stipple - engraved, printed in colors by B. McQueen, and finished by hand (the other plates printed in outline or in flat color). Original printed brownish wrappers, preserved in a cloth clamshell case, this copy without aquatint frontispiece (see Dunthorne) and one plate (?), as issued in installments.

\$ 18.000.-

First English edition of an exceptionally rare and lovely botanical work, a magnum opus, based on Henriette Vincent's *Études de Fleurs et de Fruits* of 1810, which Dunthorne says contains some of „the most exquisite of all flower prints in their beauty and delicacy of execution.“

The plates were engraved in reverse by Thomas Lord Busby (1782-1838) from the Lambert the elder - Vincent illustrations used in the French edition. Dunthorne says that his work is notable for containing „the only English stipple engravings printed in color, by a printer whose name is recorded.“

The work was dedicated to „young women“, presumably those who might follow in Madame Vincent's footsteps. The work is putatively a manual for students, and there is some text here that describes the plates in such a way as to be helpful to the aspiring painter. The book is a collection of outstanding botanical images. The subjects of the watercolors included common flowers like tulips, pinks, narcissus, hyacinths, carnations, and anemones; the fruits depicted included grapes, cherries, plums, and strawberries. The finely detailed, naturalistic images typically show clusters of flowers and fruits with their leaves against a plain background and may be further particularized by such details as water droplets, a ladybug sitting on a leaf, or butterflies flitting nearby. Although not notable for scientific exactitude, Vincent's paintings continue to be appreciated as masterpieces of delicacy and beauty from the heyday of the florilegium.

Henriette Antoinette Vincent born Rideau du Sal (1786-1834) was one of the group of painters, among them Redouté, Prevost, and Turpin, who at the turn of the 19th century brought France preeminence in the genre of botanical paintings. Like her fellow artists, Vincent had studied with the great flower painter of the Jardin des Plantes, Gerard van Spaendonck, and later trained with Redouté, whose influence is unmistakable in the rose pictured in this work. Under their tutelage, she developed into an exceptional artist who rivaled Redouté in her handling of color. Her connection with Redouté led to a number of opportunities for commissioned work, and she was able to exhibit her work in the Paris Salon in 1814, 1819, 1822, and 1824. These accomplishments were rare for women artists of the period, who had few opportunities to gain the kind of advanced training that would lead to commissions and allow them to become self-supporting. She married Ambrose Vincent who became superintendent of the Empress Josephine's garden at Malmaison and later at Compiègne. Madame Vincent's work was included in the 2013 show „The Feminine Perspective: Women Artists and Illustrators“ organized by the Lenhardt Library of the Chicago Botanic Garden.

The work is bibliographically confusing to begin with, and the present copy makes matters worse by having no frontispiece (as Dunthorne states), but two title-pages, different authorities calling for different numbers of plates. The un-colored states of the plates are printed in outline only, before the addition of stipple, and are not simply un-colored impressions. (de Belder). A slip in part 7 advises the subscriber to bind the parts into two works, and two title-pages are issued (in parts 7 and 12). The slip also says that “on or after the 20th July each Subscriber, by producing

this acknowledgement, will be entitled to the Frontispiece for the Studies from Nature". The presence of the slip in the part, and the absence of a frontispiece, seems to indicate that the first owner of this work did not see this offer. Only five copies of the book are now known to exist; institutions holding copies include the British Museum and the Chicago Botanic Garden.- Dunthorne 320 and 321; Nissen BBI 2067 and 2068; Sitwell. Great Flower Books, pp. 147-48; Nissen BBI 2067 and 2068; De Belder no. 376; vgl. Blunt 181f.; not in Lack, Plesch and Pritzel.

Wallis on Etymology, Sound Production & Universal Language

WALLIS, John.

Joannis Wallis, Geometriae professoris Saviliani ... Grammatica linguae Anglicanae cui praesigitur De loquela sive sonorum formatione tractatus grammatico - physicus ... - Oxoniae (Oxford): excudebat Leon. Lichfield ... 1653. 8vo. (mm) (24), 128 pp. Contemporary sheep, rubbed and soiled. Traces of use.

\$ 3.500.-

Rare first edition of the famous mathematician John Wallis „English Grammar“ to include his treatise on Speech („De loquela...“) in which he speculated on the production of sound through speech, paying particular attention to the physical process involved. The **foundations for the pedagogical development of deaf education** in Britain were being laid here, although in later years Wallis had a bitter debate with his fellow of the Royal Society, William Holder, about the question of who was the better phonetician. More interesting than their rivalry in this respect is the fact that they agreed on the principle that teaching speech to a person born deaf should be based on a correct theory about the production of speech sounds.

„In 1669, Holder published his ‘Elements of Speech’, which contained a sophisticated analysis of speech sounds according to articulatory principles. It also contained ‘an appendix concerning persons deaf and dumb’, in which Holder explained how a deaf person could be instructed to produce speech sounds. It is not completely certain, but extremely likely that it was in reaction to Holder’s publication that Wallis felt it necessary to point publicly at his own achievements both in articulatory phonetics and in teaching language to deaf persons. In 1670, he published, in the Philosophical Transactions, the Royal Society’s journal, a letter written by himself in 1662, when he was teaching Whaley, in which he explained to Robert Boyle what progress he had made in this. He added a short but unsigned postscript, mentioning that ‘Dr. Wallis’ had later also successfully taught ‘a young Gentleman of a very good family’, who was born deaf, clearly intending Popham (Wallis 1670, p. 1098). The postscript also drew attention to the fact that Wallis had given a thorough analysis of speech sounds in his ‘De Loquela’, published in 1653.“

John Wallis (1616–1703), Oxford’s Savilian Professor of Geometry from 1649 to 1703, was the most influential English mathematician before the rise of Isaac Newton. Prior to taking up the Savilian Chair John Wallis had little mathematical experience and enjoyed no public reputation as a mathematician. The Grammatica Linguae Anglicanae, which was published in 1653, was one of Wallis’s earlier works. Although written in Latin for the sake of foreign learners, Wallis’s Grammar is one of the first analyses of English not to force the vernacular into a traditional Latin mould. The work was enormously successful, going through many editions within Wallis’s lifetime. It set the pattern for grammar writing throughout the eighteenth century. The English grammar prefaced to Samuel Johnson’s Dictionary of the English Language (1755) is essentially a digest of Wallis’s grammar. Modern scholars have focused largely on Wallis’s inductive and distributionalist approach, a primary example of which is his original analysis of the English tense system in terms of a small number of primary underlying elements. Less familiar and more uncomfortable to modern theorists is his treatment of ‘etymology’, which combines derivational morphology with notions about sound symbolism. This key element in Wallis’s work is intimately connected with contemporary schemes for the construction of a philosophical language, as pursued by Wallis’s colleague John Wilkins under the auspices of the Royal Society.- see: Jaap Maat. ‘Teaching language to a boy born deaf in the seventeenth century: the Holder - Wallis debate’. *History and Philosophy of the Language Sciences*. <https://hiphilangsci.net/2013/11/06/teaching-language-to-a-boy-born-deaf-in-the-seventeenth-century-the-holder-wallis-debate>

„Fat Booty“

(WHITE Shark)

Single leaf print on a caught white shark in 1823 in the Adriatic Sea. „Questo pesce si chiama Squalo Lamia Abitator dell’ Oceano, e d’ altri Mari, è terribile in ogni sua qualita, e stato preso nelle Tonere del Quarner dal Patron Leonardo Bertoli con altri ventiquattro marinaj il. 10. 7bre dell’ anno 1823. Pesa Libbre duemilla grosse Venete, e fu fatto vedere in Venezia sulla Riva di Schiavoni a tutto il popolo per grande ammirazione.“ (no printer, without place). 4to (360 x 255 mm sheet size). Print size: 290 x 215 mm.

\$ 2.000.-

Very rare single leaf print (broadside, newspaper) on a white shark, which was caught by Leonardo Bertoli in September 1823 in the Kvarner Gulf (Croatia) and shown in Venice to the public. Printed in Venice in 1823. Print size: 290 x 215 mm, on a sheet: 360 x 255 mm and titled in Italian which reads in English: „This fish is called Lamia Shark, Inhabitor of the Ocean, and of other Seas, it is terrible in every quality, and was caught in the Quarner Toneris by Patron Leonardo Bertoli with twenty-four other fishers on 10. (sep)t(em)bre of the year 1823. It weights 2000 Libbre grosse Venete (about 900 kg), and was shown in Venice on the Riva di Schiavoni to all the people with great admiration.“

In 1823 two sharks were caught in Italy: „the earliest record in the data bank from the Adriatic Sea was on September 16, 1823, when a 490 cm TLn female shark was caught in an unknown location of the Adriatic Sea. The specimen is preserved as a skin-mount in the Museo Zoologico in Padova (cat. no. P25E), making it the most ancient taxidermied white shark preserved in Italy.“ (Canestrini 1874; Alessandro De Maddalena; Walter Heim. Mediterranean Great White Sharks pp. 68/69). A set of jaws from a specimen caught also in 1823 is preserved in the Museo di Anatomia Comparata in Bologna (cat. Alessandrini 811).- KVK: no institutional Holdings.

“I took care to get the true character of the animal”

WOLF, Joseph.

Zoological Sketches by J.W. made for the Zoological Society of London, from animals in their vivarium, in the Regent's Park, edited with notes by Philip Lutley Sclater. 2 Vols. London: Henry Graves and Company, (1856 -)1861-1867. Folio (584 x 435 mm) Vol. 1: hand-colored lithographic title, lithographic title, letterpress title, list of subscribers, preface and list of plates; vol. 2: hand - colored lithographic title mounted, letterpress title, preface and list of plates. Some temporary letterpress leaves to the second series present. Together, 100 fine hand-colored lithographic plates, drawn on stone by Joseph Smit after the drawings of Joseph Wolf, each plate cut to the edge of the image and mounted on thin card in imitation of watercolors (ca. 350 x 240 mm on boards: 580 x 440 mm), with captions printed in gilt, one text leaf to each plate. The text leaves to the first series are smaller as those for the second series, light spotting throughout, predominantly affecting text, leaves frayed at margins or with small marginal closed tears, not affecting illustrations or text, loosely inserted in contemporary red morocco - backed box, boxes bumped at extremities, box for volume I becoming fragile.

\$ 24.000.-

„Without exception, the best all-round animal painter that ever lived.“ (Sir Edwin Landseer)

An exceptional collection of 100 plates after Joseph Wolf's drawings, commissioned by the Zoological Society in 1852 and depicting particularly rare animals from the Society's Vivarium in Regent's Park.

The work was commissioned by the Council of the Zoological Society in 1852, to provide „an accurate artistic record of the living form and expression of the many rare species of animals which exist from time to time in the menagerie“. The council chose Wolf, already well-known for his work for the ornithologists Rüppell and Gould. Joseph Wolf captured the animals in watercolors and on the basis of which Joseph Smit made lithographs. The plates were issued monthly with the accompanying temporary text for parts I-VII written by David William Mitchell, secretary to the society. On Mitchell's death in 1859, Philip Lutley Sclater undertook the completion of the work, selecting the subjects and writing both the temporary letterpress and the permanent text which was issued with the thirteenth and final part.

Joseph Wolf was already established as the illustrator of choice for figures including John Gould and David Livingstone and Charles Darwin, and the brief given was to produce “an accurate artistic record of the living form”. Regent's Park, now London Zoo, was founded in 1828 for the purpose of scientific observation of wild animals from all parts of the British Empire. “In the year 1852 the Council of the Zoological Society [...] resolved to commence the formation of a series of original water-color drawings [...]. For this purpose the Council were fortunate enough to secure the services of Mr. Joseph Wolf, who may be fairly said to stand alone in intimate knowledge of the habits and forms of Mammals and of Birds. ...“

Joseph Wolf was born on 22 January 1820 in Mörs (Germany). He was trained as a lithographer in Münster, but also mastered the work with pencil, water and oil paints, and coal. He worked in different places in Europe before coming to London in 1840 to work at the British Museum as an animal illustrator. By that time, he had already made a name for himself with his illustrations, especially of birds. Sir Edwin Landseer described him as “... without exception, the best all-round animal painter that ever lived. ...” (Palmer 1895, p. 283).

In 1843, Wolf illustrated the famous falcon book „*Traité de Fauconnerie*“ for the Leiden zoologist Hermann Schlegel. The twelve large-format lithographs of hawks and falcons launched his career as an animal illustrator. He used not only bird skins as models, but also live animals that he had caught especially for this commission. The young artist succeeded in capturing the characteristic behavior of the birds of prey without neglecting the anatomical details. The shape and drawing of the plumage are reproduced with photographic accuracy. The Zoological Society appointed Wolf as its resident artist in 1861. Wolf, who until then only sketched animals in the wild, always dealt with the self-assertion of the individual and incorporated this into his works. The housing of the animals in the zoo in which they did not show their natural behavior was therefore a challenge for him.

Animals that came to Regent's Park in the 19th century often had a long, exhausting journey behind them. Wolf wrote "... for sometimes, when they arrived, they were in a miserable state, and hardly I knew what to make of them. I used to do two or three of these drawings in a day, if the material were good. All these were vignettes only; but I took care to get the true character of the animal" (Palmer 195, p. 110). In addition to the embellished depictions of the individuals, most of the 100 plates show the zoo animals in an ideal, natural environment. A few, however, provide insights into zoo life and depict the animals in their enclosures or provide a view of the visitors. Although the animals are described anonymously by Mitchell and Sclater, the records of the Zoological Society allow us to deduce which individuals of Regent Park's Wolf drew.

The hippopotamus bull Obaysh came to Regent's Park as a calf on 25 May 1850 and quickly became a crowd puller. In 1854, he got a companion, Adhela. On plate 27 (part II) are two adult hippos, as well as a herd in the background, a mother with a calf and a western swamphen in a natural habitat. Since Joseph Wolf himself never visited Africa, he relied on third party sources for the design of the environment. For all the hippopotami depicted, especially the two individuals in the foreground, Obaysh and Adhela were probably models. Their names are not mentioned in the text and the representation of the right side of the body makes it impossible to identify Obaysh by a characteristic scar on his left side. As Obaysh and Adhela were the only hippos in the zoo, Wolf used different sketches of them for the herd to show different behaviors of the species. The situation is similar with plate 24 (part II), where a herd of elephants shows up in a supposedly natural environment. Probably Jumbo, who came to Regent's Park on 26 June 1865, and Alice were depicted. This plate makes it clear that Wolf's depiction of zoo animals does not show their natural behavior. The picture of the bull elephant together with the cow and a calf rather reflects the ideal of a Victorian family, as bull elephants are rouges. Furthermore, in African elephants, both females and males have tusks but the cow elephant shown here does not seem to have any. This can be explained by the fact that Alice was only 2 years old when Wolf made his sketches, and her tusks were apparently not yet fully developed. Plate XVII (part I) is one of the few that shows an animal in its zoo enclosure. The almost portrait-like drawing shows a Syrian Bear on straw in front of a board wall. It is not possible to take a closer look at the surroundings, e.g. to determine whether he lives together with other animals of the same species or to measure the dimensions of the enclosure. By depicting the bear in its actual accommodation, Wolf focuses on the animal's personality; the bear no longer remains anonymous. The accompanying text also mentions that the bear was a gift from the Persian Gulf and arrived in London in August 1851. Despite their idealization and partial embellishment, they remain true to their scientific purpose and are an outstanding example of 19th century European animal painting.

Palmer, A. H. *The life of Joseph Wolf; animal painter*. London: Longmans, Green, 1895; Nicole Ricarda Susset. *Lebendigkeit im Bild: Joseph Wolf und die Tiermalerei im 19. Jahrhundert* (2013); Karl Schulze-Hagen. *Joseph Wolf (1820-1899), Tiermaler*. Marburg an der Lahn: Basilisken-Press, 2000; Anker 539; *Fine Bird Books* (1990), pp. 158; Nissen IVB 1012; Wood, p. 633; BM(NH) V, pp. 2349.

Proto-Modernity

WOOLSEY, Edward J. (attr.)

Specimens of fancy turning executed on the hand or foot lathe; with geometric, oval, and eccentric chucks, and elliptical cutting frame. By an Amateur (e.g. Edward J. Woolsey). Illustrated by thirty exquisite photographs.- Philadelphia: Henry Carey Baird, 1869. 4to (221 x 187 mm) (2, blank), title-page, 1 leaf introduction (sign. in print: E. J. W.) and 30 hand-numbered sheets each with a single small photograph (approx. 65 x 65 mm) pasted onto the middle of each sheet. Some photographs with slight silver mirroring. Publisher's dark green embossed cloth, lettered in gilt on cover, extremities slightly bumped and rubbed, a few small tears to cover. Original endpapers, the pages are slightly foxed, but generally in good shape. This copy bearing the label of B. T. Batsford Scientific Booksellers to the front pastedown, showing the address of 52 High-Holborn (from 1854 - 1894). \$ 12.000.-

A very rare proto-modernistic photo-book with 30 photographs of patterns made by using a lathe and spring-loaded tool on india ink coated enameled cards, with brief introductory explanation.

Fancy wood turning being a popular pastime among the upper class in Britain and the continent since the 18th cent. The authorship, while not absolutely certain, seems fairly well established. Woolsey is known to have been both a keen photographer and a wealthy land owner in the town Lenox, Mass..

A well preserved copy of this important American photo-book, devoted to promoting and furthering the advances in science and technology and showing the beauty and aesthetic pleasure of scientific endeavors.

**First complete history of early microscopes and optical instruments
incl. the moon map not present in the first edition**

ZAHN, Johannes.

Oculus artificialis Teledioptricus sive Telescopium. Editio secunda, auctior. Nuremberg, Johannes Ernst Adelbulner for Johann Christoph Lochner, 1702. In-folio (320 x 192 mm) 20 leaves, 1-414, 399-402, 419/20, 405-778, 796, 770-797 pp., (1), 8 Bll. with additional engraved title, title printed title in red and black, 6 folding or double-page engravings, 7 double-page letterpress tables, many full-page and half-page engravings and woodcuts. Complete copy. Contemporary German blind tooled pigskin, sides paneled with rolls, episcopal armorial with IPSN gilt on front cover, title lettered on spine, blue edges, clasps gone missing. The Portrait of the dedicatee sometimes present in copies sold to the dedicatee, is not present here. Minor marginal worm track in blank margins of first several leaves. Good copy, with trace of browned leaves (better than normal), otherwise a very clean and fine copy in its first binding.

\$ 14.000.-

Second edition of Johann Zahn's (1641-1707) treatise on the microscope and the telescope. The work is particularly valuable for its illustrations of both simple and compound microscopes of the period, including the type of compound instrument used by Robert Hooke. It contains many descriptions and diagrams, illustrations and sketches of both the camera obscura and magic lantern, along with various other lanterns, slides, projection types, peepshow boxes, microscopes, telescopes, reflectors, and lenses.

Johann Zahn (1631-1707) was a canon of the Premonstratensian monastery in Oberzell (Bavaria) and taught mathematics at the University of Würzburg. A great specialist in optics and astronomy, he substantially improved the rectifying telescope developed in 1676 by Johann Sturm by equipping it with an achromatic eyepiece using doublets of convex and concave lenses. He concentrated the radiation by painting the walls of the reflection chamber black, which is now considered the first step towards the camera.

His *Oculus artificialis* is divided into three large books, or *Syntagma*. The first is devoted to astronomy in general, giving a historical overview and discussing the perception of color, the different qualities of convex and concave lenses, their refraction, their qualities, etc. The second part deals with the production of lenses, their use, optical devices and instruments. The third and last part contains the results of his research and their various applications. The first chapter is preceded by a bibliography of the cited authors (Leeuwenhoek, Maignan, Galilei, Hevelius, Kepler, Camerarius, Hooke, and others)

„Zahn's treatise contains the first complete history of early microscopes. The work is particularly valuable for its illustrations of both simple and compound microscopes of the period, including the type of compound instrument used by Robert Hooke.“ (Norman). Richly illustrated with 6 double plates (3 of them folding twice), 17 full-page copper engravings, 9 full-page woodcuts, 7 double letterpress tables out of the text, and numerous copper and woodcuts in the text. Among the beautiful plates one can notice the terrestrial map, the celestial map, and a map of the moon inspired by Hevelius. The numerous engravings (on wood and copper) reproduce experiments, lenses and their refractions, magic lanterns, telescopes, perspective instruments, etc. The engraved portrait by Fleischmann is not present in this copy. The number of folding resp. double-page engravings varies among copies, with our the most possible.- Blake, 498; Poggendorff, II, 1390; Garrison-Morton, 263 & Norman 2278 (for the first edition of 1685/86); NLM/Krivatsy 13208.



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