

# THE FIRST SIX BOOKS OF THE ELEMENTS OF EUCLID

# IN WHICH COLOURED DIAGRAMS AND SYMBOLS

### ARE USED INSTEAD OF LETTERS FOR THE

GREATER EASE OF LEARNERS



## BY OLIVER BYRNE

SURVEYOR OF HER MAJESTY'S SETTLEMENTS IN THE FALKLAND ISLANDS AND AUTHOR OF NUMEROUS MATHEMATICAL WORKS



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1 ALBERTUS MAGNUS. De animalibus libri vigintisex novissime impressi [emendati per M.A. Zimaram]. Venice: hires of Octavianus Scotus, 27 May 1519. Folio (315 x 215 mm). [6], 105 (i.e. 205) [1] leaves. Woodcut initials, colophon and printer's device on final leaf verso. Signatures: aa<sup>6</sup>, Aa-Zz<sup>8</sup>, Aaa-Bbb<sup>8</sup>, Ccc<sup>6</sup>. Bound without final blank leaf 3C6. Contemporary limp vellum, spine with old, hand-lettered vellum reinforcement (slight chipping and partial splitting of vellum at extremities, vellum somewhat soiled, spotted and wrinkled, straps gone, free endpapers removed). Text quite crisp and clean with only very little age-toning; upper margin of first gatherings brown-stained near gutter, outer margins with occasional minor dampstaining and spotting, c. 40 leaves with wormtrack near upper corner. Provenance: ownership signature on title page, old incription on front pastedown ("Iac. Ant. Tuscul.") (#003828)

FINELY PRINTED VENETIAN POST-INCUNABLE EDITION of "one of the outstanding works of scientific interest written between the time of Pliny and the sixteenth century" (Stillwell).



Albertus' De animalibus libri was widely used not only in the 13th and 14th centuries, but also in the age of Humanism, in the form of manuscripts and printed editions as well, and until the first half of the 16th century, it retained its status as an authoritative text. In the 15th and 16th centuries, it was available not only in latin editions, but also vernacular in translations, enriched illustrations with (Enekel & Smith, Zoology in Early Modern Culture. Leiden, Boston: Brill, 2014, p.212).

"The year 1249 marked a turning point in the intellectual career of Albert the Great. This was the year he finally acceded to the pleas of his Dominican confreres to compose a work explaining the natural science of Aristotle. The immediate product of this decision Albert's was paraphrastic commentary on the Physics, but there were long-term results as well. This work was but the first part of what was to become one of the major literary productions of the Middle Ages; a production which would establish Albert as, according to his envious contemporary Roger Bacon, an auctoritas on equal

footing with Avicenna, Averroes, and Aristotle himself. Albert's project, intended to 'make the new learning of Aristotle intelligible to the Latins,' was largely concerned with the natural sciences. He not only commented extensively on all of Aristotle's libri naturales; but also recorded his own extensive researches in several fields. By far the largest part of this vast compilation of the sciences is that devoted to zoology. Albert's massive *De animalibus libri XXVI* is not only the longest of his Aristotleian commentaries but also represents one of the most extensive records of empirical observation published before modern times." (K. F. Kitchell Jr., I. M. Resnick, On Animals: A Medieval Summa

Zoologica by Albertus Magnus, Review by M. W. Tkacz, *The Review of Metaphysics*, Vol. 55, No. 2, p.371).



Bibliography: Index Aurel. 102.543; Adams A 524; BM STC, *Italian Books* p. 12; Edit 16, CNCE 787; Stillwell, *Awakening* 566 rem.

#### Presentation copy to the 3rd Earl of Rosse, inscribed by the author:

**2 BABBAGE, Charles.** The Exposition of 1851; or, Views of the Industry, The Science, and the Government of England. London: John Murray, 1851. 8vo ( $221 \times 140 \text{ mm}$ ). xvi, 231 [1]; [3], 376-391 [1]; [3], 2-11 [1] pp., including half title and appendix of two reprints bound in by publisher, 1. The Eleventh Chapter of the History of The Royal Society, by C.R. Weld (London: Richard Clay, 1849) and Mr. Babbage Calculating Machine, by De Morgan (from: The Athenaeum, London, October 14, 1848); four pages of adverts by Babbage at end (undated). Original publisher's blindtooled green cloth, front board and spine lettered in gilt (binding weak, spine sunned with upper joint partially split at head, head of spine frayed, corners bumped), original yello endpaper, all pages uncut, a few pages crudely opened. The appendix smaller in size. Text with light even age-toning, half-title and advert pages with faint foxing, a few pencil marking in text. Provenance: William Parsons, 3. Earl of Rosse, Birr Castle (presented to him by the author and inscribed on half-title "To the Earl of Rosse K.P. & ... from the Author"); ticket of Remnant & Edmonds on rear pastedown. (#003833)  $\in$ 

RARE FIRST EDITION, PRESENTATION COPY INSCRIBED BY THE AUTHOR. The Great Exhibition of 1851, held in the famous Crystal Palace, was intended to showcase British arts and industry. "Babbage had been proposed to head the Industrial Commission for the Great Exhibition [. . .], but was rejected because of his early radicalism and his conflicts with the government over the Difference Engine. Resentful over this treatment, Babbage decided to publish a book on the Exhibition to set before the public the ideas that he otherwise would have presented to the Exhibition's governing committees.



Difference Babbage's Engine, although certainly one of the engineering marvels of the nineteenth century, was not included in the Exhibition, and Babbage had to content himself with reprinting the account of the project published in Charles Weld's History of the Royal Society (1848)" (Norman).

"In this polemic, Babbage not only criticized the policies of the organizers of the exhibition but also broadened his censure to include the low estate to which science in Great Britain had fallen. To remedy the Exposition Committee's failure to recognize the importance and value of the Difference Engine, Babbage included a chapter on the machine and its history (pp. 173-188) in the main body of the text. In an appendix he provided a copy of a previously published (1849) pamphlet containing articles by Charles Weld and Augustus DeMorgan that present Babbage and his work on the Difference Engine in an objective and factual light. Within a few years, this work inspired a reply in defense of the British establishment written by Richard Sheepshanks, A letter to the Board of Visitors of the Greenwich Royal Observatory in reply to the

calumnies of Mr. Babbage at their meeting in June 1853, and in his book entitled *The Exposition of 1851* (London, 1854)" (Tomash).

References: Norman 95; Hook & Norman *Origins of Cyberspace* 67; Van Sinderen 1980, 61; Tomash & Williams B24; Honeyman 177.

#### Author's Presentation Copy

**3 BESANT, Annie**. *Light, Heat, and Sound. Hall of Science Manuals. Specially adapted for the Elementary Examinations, South Kensington, on Sound, Light, and Heat*. London: Freethought Publishing Co., 1881. 8vo (183 x 124 mm). 144 pp., 2 folding lithographed plates. Original publisher's blindstamped red cloth, upper board lettered in black, original yellow endpapers, folding plate in pocket (spine and inner upper hinge repaired, spine ends scuffed, boards soiled and spotted). Even light browning internally, light dust-soiling to title-page and outer margins, occasional minor dumpsoiling, one detached plate placed in slip pocket at inner rear board. Provenance: Wigan Public Library (paper label to front pastedown with printed presentation, signed and dated April 1884 by the author; blind stamps to folding plate and title-page, shelf-mark stamp to verso of title-page). Still very good copy. (#003781) € 2800

EXCEEDINGLY RARE FIRST AND ONLY EDITION OF THIS EDUCATIONAL MANUAL, SIGNED



PRESENTATION COPY. Annie Besant (1847-1933) was a British socialist, theosophist, freemason, women's rights and Home Rule activist, educationist, and campaigner for Indian nationalism. Regarded as a champion of human freedom, she was a prolific author with over three hundred books and pamphlets to her credit. For fifteen years, Besant was a public proponent in England of atheism and scientific materialism. Besant's goal was to provide employment, better living conditions, and proper education for the poor.

In 1879 she became a student at the University of London. This was also through the intercession of her tutor, Edward Aveling, who taught comparative anatomy at the London Hospital. Aveling joined the National Secular Society and began fighting for secularisation alongside his students in Whitechapel, which soon cost him his teaching post at the hospital. Besant took as many courses as possible at the various institutes accredited by London University. "Besant chose a number of experimental science classes, without doubt hoping to put her as yet theoretical scientific knowledge into practice. She studied sound, light, and heat, as well as electricity and magnetism at Birkbeck Institute. She also took courses in acoustics, biology, animal physiology, botany, and mathematics at several other institutions. This demonstrates Besant's vast scientific curiosity, but also her sincerity, for such serious studies went beyond making a symbolic point. Moreover, she had chosen to

join the extreme minority of Victorian women who studied science: there were only three women out of the thirty-seven students in her animal physiology class, for instance. Besant proved an excellent student. The *National Reformer* adopted a Women's Rights habit of reporting her exam results, along those of other female students, in an openly feminist perspective. Besant took up the pen herself, in her 'Daybreak' editorial of 9 July 1882, to rejoice that 'in the awards made by UCL, it is gratifying to notice that where the women students have competed with the men, the women have taken a large proportion of the prizes.' The *National Reformer* announced that Besant came out of her first year having passed chemistry, mathematics, theoretical mechanics, electricity and magnetism, botany, biology, animal physiology, acoustics, and the study of light" (Muriel Pécastaing-Boissière, p. 112).

Presented to hors annie april

"Besant stopped trying for a BSc. when she realized that her chemistry teacher had unjustly failed her, even though she had received a First Class ranking in this subject during her first year. Anyway, by then, she had joined the socialist cause: so this was more a matter of priorities to her than really giving up on a struggle. After being dismissed from the London Hospital, Edward Aveling organized adult classes in the even more aptly named Hall of Science of the NSS. In 1883, no fewer than thirteen weekly science and Latin classes were offered there over thirty weeks, under the Science and Art Department at South Kensington, as well as London University matriculation classes. Besant had taken advanced certificates and qualified as a science teacher in eight different topics. From 1880, she taught some of these classes, soon joined by Alice and Hypatia Bradlaugh, who also took teaching certificates. Over eight

years, Besant taught weekly science classes to up to thirty working or lower-middle-class young men and women. She taught elementary animal physiology, advanced chemistry, acoustics, light and heat, electricity and magnetism, and published textbooks. Her students' results stand as proof that Besant must have been an excellent science teacher: in June 1881, the *National Reformer* proudly announced that two of her fourteen students in elementary animal physiology had received a First Class ranking in South Kensington examination" (Muriel Pécastaing-Boissière, pp. 115-16).

This book is of great rarity. OCLC locates only eight copies in public libraries (two in Europe at British Library and Göttingen University and five in the USA). No copy is recorded at auction. Reference: Muriel Pécastaing-Boissière, *Annie Besant (1847-1933) - Struggles and Quest,* Theosophical Publishing House, London, 2017, pp. 112-16. Bibliography: OCLC 1467691.

**BERNOULLI, Daniel.** *Hydrodynamica; sive, de viribus et motibus fluidorum commentarii.* Strassburg: Johann Heinrich Decker for Johann Reinhold Dulsecker, 1738. 4to (240 x 185 mm). [8], 304 pp. Title and first text page with large engraved vignette, first dedication leaf verso with large woodcut



intitial, 12 folding engraved plates by I.M. Weis bound at end. Signatures:  $[pi]^4 A-2P^4$ . Modern full vellum, gilt-lettered morocco spine label, brown-sprinkled edges, new endpapers. Text and plates with light uneven browning and pale staining in places, occasional minor spotting, title-leaf with longer clean tear (no loss) and torn blank portion at fore-margin just touching the engraved vignette repaired with paper. Generally crisp and clean throughout. (#003840)  $\in$  4800

Roberts & Trent, Bibliotheca Mechanica, pp. 34-35. Norman 215, PMM 179 (mentioned). - FIRST EDITION of Daniel Bernoulli's most important work, the foundation of modern hydrodynamics (a term first employed in this book), and containing his formulae for calculating the velocity, duration and quantity of liquid issuing from an opening in a container. Other chapters deal with water oscillations, a theory of machinery (including an extensive treatment of the screw of Archimedes) and an

important section which introduces his kinetic gas theory.

#### Author's presentation copy

**5 BISHOP, George**. Astronomical Observations taken at the Observatory, South Villa, Inner Circle, *Regent's Park, London, during the Years 1839-1851*. London: Taylor, Walton, and Marberly, 1852. 4to (285 x 225 mm). xxi, 251 [1] pp., lithograped frontispiece, text illustrations, pages uncut and mostly unopened. Original publisher's blindstamped green cloth, gilt-lettered front board and spine, original yellow endpapers (spine sunned, boards little soiled, corners bumped, binding a bit weak) Provenance: Birr Castle Estate; title inscribed, "Earl of Rosse, Pres. R.S., with Author's Compts." Provenance: Birr Castle Estate. (#003835) € 2800

VERY RARE FIRST EDITION AND PRESENTATION COPY BY THE AUTHOR TO THE EARL OF ROSSE, of this important catalogue chiefly of double stars observed by William Rutter Dawes and John Russell Hind. The work also provides a detailed description of the South Villa Observatory and its equipment, and concludes with observations of minor planets and comets discovered by Hind and others. George Bishop (1785-1861), was a noted English astronomer and member of the Royal Astronomical Society. In 1836 Bishop was able to realise a long-held intention by erecting an astronomical observatory near his residence at the South Villa of Regent's Park, on which he spared no expense in order to ensure that it would be of practical use. "I am determined," he said when choosing its site, "that this observatory shall do something." A testimonial was awarded to Bishop by the Royal Astronomical

Society in 1848 "for the foundation of an observatory leading to various astronomical discoveries" and presented to him with a warmly commendatory address by Sir John Herschel (cf. Howard-Duff).



Content: Introduction; Description of the observatory -- Catalogue of double stars -- History of doublestar astronomy -- Historical and descriptive notes on the double stars -- Observations of the planets Iris and Flora, discovered at Mr. Bishop's observatory -- Observations of the other newly-discovered planets: Astræa, Neptune, Hebe, Metis -- Cometary observations -- Observations of a new or variable star in Ophiuchus, discovered at Mr. Bishop's observatory, 1848 -- Appendix: On the planets Victoria and Irene, recently discovered at Mr. Bishop's observatory, by Mr. Hind.

References and literature: I. Howard-Duff, George Bishop (1785-1861) and His South Villa Observatory in Regent's Park. In: *Journal of the British Astronomical Association*, Vol. 96, No.1, 1985, pp. 20-26.

6 BODE, Johann Englert. Allgemeine Beschreibung und Nachweisung der Gestirne nebst Verzeichniss der Geraden Aufsteigung und Abweichung von 17240 Sternen, Doppelsternen, Nebelflecken und Sternhaufen (zu dessen Uranographie gehörig) / Description et Connoissance Generale des Constellations avec Un Catalogue del'Ascension Droite et de la Declinaison de 17240 Etoiles, Doubles, Nebuleuses et Amas d'Etoiles, (Pour Servir de Suite a son Uranographie). Berlin: Selbstverlag / chez l'auteur, 1801. Large Folio (428 x 260 mm). viii, 32, 96 pp. Text in two columns in German and French, list of subscribers fo the Uranographie on pp. vii-viii. Bound in contemporary full tree calf, double gilt fillet borders, spine richly gilt-decorated and with black morocco label lettered in gilt (wear to extremities, joints partly split toward spine ends, corners bumped and scuffed, minor worming to inner boards and free endpapers). Text generally clean and bright throughout, small dampstain to upper margin of pp. 45-48, small faint ink stain to fore margin of pp. 73-88. Provenance: William Parsons, 3rd Earl of Rosse, Birr Castle. A very good copy. (#003831) € 3900

EXCEEDINGLY RARE FIRST AND ONLY EDITION of the mostly missing text volume to Bode's great

ALLGEMEINE . BESCHREIBUNG UND NACHWEISUNG DER GESTIRNE VERZEICHNISS GERADEN AUFSTEIGUNG UND ABWEICHUNG VON 17240 STERNEN, DOPPELSTERNEN, NEBELFLECKEN UND STERNHAUFEN. VON J. E. B O D E, Non, Metalado der Armenin und Societaten der Misikkenerster zu Berlin, London, Peterseurg, Stockholm und Utricht, wie auch der Berlinscher Gesellichaft natheforscherbar Freunde. (ZU DESSEN URANOGRAPHIE GEHORIG.) BERLIN 1801. BEYM VERFASSER. DESCRIPTION ET CONNOISSANCE GÉNÉRALE DES CONSTELLATIONS AVEC UN CATALOGUE DE L'ASCENSION DROITE ET DE LA DÉCLINAISON DE 17240 ÉTOILES, DOUBLES, NÉBULEUSES ET AMAS D'ÉTOILES. PAR J. E. BODE, RAL, MENERE DES Academies et Socifiés des Sciences de Berlin, Londres, St. Pétersbourg, Stockhoem et Utrecht, et de la Société des Scrutateurs de la Nature a Berlin. (Pour servir de suite a son URANOGRAPHIE.) A BERLIN. CHEZ L'AUTEUR. 1 8 0 1.

*Uranography* published the same year. Compared to the great star atlas by Bode, the text volume which was published separately, is surprisingly rare. We know of only 3 copies that have come to auction in the past 50 year including one copy owned by the famous lady astronomer Caroline Herschel (Sotheby's 1984, lot no. 22).

Johann Englert Bode (1747-1826), a native of Hamburg and astronomical autodidact, was director of the Berlin observatory and - among numerous other publications - editor of the Astronomisches Jahrbuch. The inaccuracies in the maps of the Uranographia, which could not be avoided due to the variety of private and scientific observational contributions, were compensated by Bode by a corrective index published already one year later. "Among the astronomical authors of the 18th century, he occupies the first rank." (cf. ADB III, 1).

"Bode's two sky atlases were for a long time indispensable tools for astronomers. His 'Uranographia' surpassed all its predecessors by listing over 17,000 stars and containing, for the first time, the nebulae, star clusters, and double stars discovered by William Herschel" (Kenney).

References: DSB II, p.220; Warner p. 39; Poggendorff I, 217f; Schroder I, 289, 25; Kenney 24 (all for the atlas).

#### "The most attractive edition of Euclid the world has ever seen"

**7** BYRNE, Oliver [EUCLID]. The First Six Books of the Elements of Euclid, in which Coloured Diagrams and Symbols are used instead of Letters for the Greater Ease of Learners. London: Charles Whittingham for William Pickering, 1847. 4to (236 x 186 mm). [7] viii-xxix [1], 268 pp. Including half-title, four-line woodcut initials, color diagrams throughout printed in red, blue, yellow and black. Contemporary three-quarter calf over cloth, spine-ends and raised bands with gilt-decoration, gilt-lettered red morocco spine-label, original blue endpapers (extremities rubbed, corners bumped). Some pale brown spotting of text as usual\*, minor age-toning of paper, but in all a better-than-average, crisp and clean copy. (#003806)  $\pounds$  14,000

FIRST AND ONLY EDITION OF BYRNE'S SPECTACULAR RENDERING OF EUCLIDEAN GEOMETRY USING FOUR-COLOR PRINTING, AND "THE MOST ATTRACTIVE EDITION OF EUCLID THE WORLD HAS EVER SEEN" (Oechslin). The stark use of primary colors was envisaged by Byrne as a teaching aid. "Each



proposition is set in Caslon italic, with a four line initial engraved on wood by Mary Byfield: the rest of the page is a unique riot of red, yellow and blue... attaining a verve not seen again on book pages till the days of Dufy, Matisse and Derain" (McLean).

"This truly visual Euclid discards the letter-coding native to geometry texts. In a proof, each element names itself by consistent shape, color, and orientation; instead of talking about angle DEF, the angle is shown - appropriately enough for geometry" (Tufte). Byrne's depiction of Pythagoras is a classic, with the squares being visually interpreted so in vivid blocks of colour. In a technical tour-de-force, Whittingham skillfully aligned the different color blocks for printing to produce "One of the oddest and most beautiful books of the whole century" (McLean).

"According to Julie L. Mellby, graphic arts librarian at Princeton University, in her online article

"Euclid in Color," Byrne's *Euclid* was exhibited in London at the Great Exhibition of 1851. Praise was given for its beauty and the artistry of the printing, which may have influenced future publications and artwork. However, the book was sold for an extravagant price by contemporary standards, placing it out of the reach of educators who were supposed to make use of this new way of teaching geometry"

\*Virtually all copies of this print show more or less heavy brown spotting (or foxing) due to the used paper stock, but this copy is less affected than most copies we have seen.

References: Janet Ing, *Charles Whittingham, Printer*, 46; Keynes, *Pickering*, pp. 37, 65; R. McLean, *Victorian Book Design and Colour Printing* p. 50-51 (illustration facing p. 53); E. R. Tufte, *Envisioning Information*, p.84; P. Lynch, *That's Maths: The rebel who brought Technicolour to Euclid*, Irish Times, February 20, 2014; W. Oechslin, ed., *Oliver Byrne: The Elements of Euclid* (Cologne, Germany: Taschen America LLC, 2013), p.15; J. L. Mellby, *Euclid in Color*, Princeton University Library, Princeton, New Jersey, 2008.

#### Cardano's most celebrated book

8 CARDANO, Girolamo. *De subtilitate libri XXI*. Nürnberg: J. Petreius, 1550. Folio ( $309 \times 201 \text{ mm}$ ). [36], 371 [1] pp. Roman type, italic marginalia. Woodcut printer's device on title, woodcut portrait of the author on title verso, numerous woodcut illustrations and diagrams in text, blank leaf D6. Signatures: A-C<sup>4</sup> D<sup>6</sup> a-z<sup>4</sup> aa-yy<sup>4</sup> zz<sup>6</sup>. 204 leaves. Bound in 20th-century half-vellum and pastepaper boards. Text quite crisp and clean throughout with only minor occasional spotting. Last 10 gatherings with light waterstaining to inner margins; small marginal tears to title; p. 195 with text corrections in contemporary hand. Provenance: old ownership entry at head of title-page; Former Redemptorist order, Hennef-Geistingen\* (ink stamp "Bibl. Prov. Germ. Inf. C.SS.R" on title page). A very good, tall copy. (#003813)  $\in 28,000$ 

EXCEPTIONALLY RARE FIRST EDITION OF CARDANO'S MOST CELEBRATED WORK. This encyclopaedia of natural science "represents the most advanced representation of physical knowledge up to his time and the idea that all creation is in progressive development" (Dibner). It contains a wide variety of subjects and facts, both real and imaginary, which include: cosmology, the construction of machines,



of the mechanics, laws cryptology, alchemy, and various branches of the occult. De subtilitate went through many editions in the sixteenth century, and as well numerous editions of the French translation. A supplement to De subtilitate was published in 1557, entitled De rerum varictate, and was equally popular in its day. "It is a mine of facts, both real and imaginary; of notes on the state of the of sciences; superstition, technology, alchemy, and various branches of the occult" (DSB). The woodcuts show geometric figures, chemical experimental arrangements, physical apparatuses, etc.

This first edition is quite rare. RareBookHub records only two copies at auction in the past 50 years: one copy at Sothebys sold for €18,000 in 2007 and the Norman copy at Christies for \$8050 in 1998.

\* The Redemptorists officially named the Congregation of the Most Holy Redeemer (Latin: Congregatio Sanctissimi Redemptoris), abbreviated CSsR is a Catholic clerical religious congregation of pontifical right for men (priests and brothers). It

was founded by Alphonsus Liguori at Scala, Italy, for the purpose of labouring among the neglected country people around Naples. It is dedicated to missionary work and they minister in more than 100

countries. Members of the congregation are Catholic priests and consecrated religious brothers. The Redemptorist library in Hennef was sold and dispersed in the early 2000s.



References: Dibner 139; Duveen pp. 116-117; Norman 401; DSB III, p.66; Wellcome I, 1290; Sinkankas 1145; Adams C 668; Riccardi I/I, 252, 6.1.

**9 CHARLETON, Walter**. Exercitationes de differentiis & nominibus animalium, quibus accedunt mantissa anatomica et quaedam de variis fossilium generibus, deque differentiis & nominibus colorum. Editio secunda, duplo fere auctior priori, novisque iconibus ornata. Oxford: Sheldonian Theatre, 1677. Folio (355 x 220 mm). Three parts in one volume. [20], 119 [1], 106, [2], 78, [20] pp. Title with engraved vignette, woodcut initials, engraved illustrations in text, 2 engraved plates, separate half-titles to second and third part, bound without blank leaf dd\*2. Signatures: Signatures: a-e<sup>2</sup> A-Z<sup>2</sup> Aa-Gg<sup>2</sup> a\*-z\*<sup>2</sup> aa\*-dd\*<sup>2</sup> (Aa)-(Zz)<sup>2</sup> (Aaa)<sup>2</sup>. Bound in slightly later full vellum, spine with earlier morocco label, original



endpapers (joints partially split at spine ends, hole at foot of spine, dust-soiling of vellum, corners bumped). Text very little browned at outer margins, occasional minor spotting, title-page a bit dust soiled, short clean tears to outer margins of some leaves, occasional minor finger-soiling. Provenance: Boston Society of Natural History (Benjamin D. Greene bequest label dated 1863 on front pastedown). Very good copy in untouched binding. (#003836) € 1600

SECOND, ENLARGED, EDITION, first published in 1668 as *Onomasticon zoicon*. Charleton's work gives a list of all the known animals at that time by their respective English, Latin, and Greek names. Of interest in the history of ornitholgy, it is the first work by an English author to add illustrations to a list of birds.

The title bears the vignette of the famous Sheldonian Theatre. Physician to Charles I, anatomist and philosopher, Walter Charleton (1619-1707) was one of the first to embrace his contemporary William Harvey's new theory of blood circulation. He distinguished himself by extensive knowledge in the various branches of medicine, and his writings are commended for their method and clarity.

References: Cole 508; Nissen ZBI 872; Wing C3672; Osler 2292; Garrison-Morton 292, Norman 461 (for first editon).

#### The rare first edition of this epochal work on celestial mechanics

**10 CLAIRAUT, Alexis Claude.** Théorie de la lune déduite du seul principe de l'attraction réciproquement proportionelle aux carrés des distances. St. Petersburg: Imprimerie de l'Académie Impériale des Scienes, 1752. 4to (239 x 205 mm). [5] 6-92 pp., folding engraved plate bound at the end. Contemporary marbled paper wrappers (paper over spine with ca. 5 cm split and slightly chipped). Text with even light age-toning, unobtrusive faint dampstaining in places, small hole in blank foremargin of leaf E2. Provenance: Bureau de Longitude (faint inkstamp to title page), small shelf-mark sticker on front wrapper. A very good, unsophisticated copy. (#003805)  $\in$  12,500

**EXCEPTIONALLY RARE FIRST EDITION of Clairaut's epochal work on the lunar orbit, "the first approximate resolution of the three-body problem in celestial mechanics"** (DSB). The treatment of



the movement of the moon's apogee in Newton's Principia was deficient, with the result that doubts were cast on the validity of Newton's system as a whole. Clairaut, along with d'Alembert and Euler, sought to complete the analytical description. "In 1849 Clairaut established that the difference between theory and observation was due to the fact that he and others solving the corresponding differential equation had restricted themselves to the first approximation. When he calculated the second approximation, it was satisfactorily in accordance with the observed data. Euler did not at once agree. To put his doubts at rest, he advised the St. Petersburg Academy to announce a competition on the subject. Euler soon determined that Clairaut was on right, and Euler's recommendation, his

composition received the prize of the Academy" (A.P. Youschkevitch in DSB IV under Euler).

The book is very rare. Athough there are 15 copies listed in OCLC/WorldCat, no other copy has sold at auction since 1936 according to RareBookHub.

References: Poggendorff I, 447; DSB III, p. 283; not in Norman; Honeyman 701 (2nd edition only).

#### In the original printed wrappers

**11 DUNANT, Jean-Henry**. *Un souvenir de Solferino*. Geneva: Imprimerie Jules-Guillaume Fick, 1862. 4to (276 x 178 mm). [4] [1] 2-115 [1] pp., including half-title and double-page chromolithograph map drawn by B. Müller from the author's instructions and lithographed by Pilet & Cougnard, Geneva. Original publisher's printed wrappers, all pages uncut (slight wear of paper over spine with little chipping at spine ends, very light spotting and soiling, lower wrapper with slight chipping of brown paper coating and partial splitting of fold). Internally only little age-toned at outer margins, otherwise crisp, clean and without any markings. Provenance: from a French private collection. An extremely well preserved, completely unsophisticated copy. (#003830)  $\in$  12,000

**FIRST EDITION, AND EXCEPTIONALLY RARE IN THE ORIGINAL PRINTED WRAPPERS**. "On 24 June 1859 the Battle of Solferino - one of the bloodiest of the nineteenth century - was fought between the Austrians and the French-Piedmontese alliance. Dunant, a Swiss philanthropist, witnessed the battle



and its dreadful aftermath, in which the nearly 40,000 casualties were left to die with no medical treatment except what he and the local inhabitants could provide them. Upon returning to Geneva Dunant published Un souvenir de Solferino, an account of the horrors he had seen coupled with an appeal for "some international principle, with the sanction of an inviolable convention, which. . . might constitute a basis for the relief of the wounded in the various countries of Europe." The wide interest generated by Dunant's book led in 1863 to the formation of a committee which later became the International Red Cross, and in 1864 to the establishment of the Geneva Convention. Dunant shared with Frédéric Passy the first Noble Peace Prize in 1901" (Norman 670). "The first edition of Un Souvenir de Solferino consisted of sixteen hundred copies printed in November 1862 for private distribution. Only four hundred of these were actually distributed; these copies, constituting the original issue, have a title page stating 'Ne se vend pas' above the imprint. A month later, in December 1862, Dunant had another thousand copies bound with a title page indicating 'deuxième édition'. The third edition, in which Dunant suggested the extension of Red Cross services to victims of natural disasters, appeared in 1863. An English translation was published by the American Red Cross in 1939." (Haskell Norman, One Hundred Books Famous in Medicine 73, p. 269).

References: PMM 350; Norman 670; Garrison-M 2166; Grolier/Medicine 73; Waller 2639; Heirs of Hippocrates, 1945; *En Français dans le Texte* 284.

#### Einstein criticizes England and France for their appeasement policy

EINSTEIN, Albert. Autograph letter in German signed ('Papa') to his son Hans Albert, n.p., 11
 October 1938, 1-2/3 pages. 8.5" x 11", pen. Except for marginal punch holes and folds in fine condition.
 (#003466)

In this remarkable letter, Einstein clearly condemns Great Britain and France for their "rascally" rule in the Munich Agreement. On September 30, 1938, France and Great Britain signed a treaty that betrayed their alliance with Czechoslovakia and allowed Adolf Hitler to annex the Sudetenland. Albert Einstein had left Nazi Germany in 1933 to emigrate to the United States, and his son, the physicist Hans Albert Einstein, who specialized in hydrodynamics, had just done the same in 1938 by moving to South Carolina:

" ... Es ist gut, dass du von Zürich weg bist. MAN SIEHT AN DER TSCHECHOSLOWAKEI ALLZU DEUTLICHER WIE MORSCH DAS EUROPA GEWORDEN IST. DIES ALLES BETRÜBT MICH SEHR, HAUPTSÄCHLICH DIE SCHUFTIGE HALTUNG ENGLANDS UND FRANKREICHS, DIE SICH OFFENBAR ZU EINER ART AUSVERKAUF DES FREMDEN GUTES ENTSCHLOSSEN HABEN.

(It is good that you are away from Zurich. One can see all too clearly from the case of Czechoslovakia how rotten Europe has become. All this saddens me very much, mainly the rascally attitude of England and France, who seem to have decided on a kind of selling out property of others).

Einstein also evocates to his ongoing work on the Unified field theory:

"... WISSENSCHAFTLICH GEHT ES TROTZ ALLEM SEHR SCHÖN VORWÄRTS. ICH HABE HOFFNUNG, DASS WIR DAS RÄTSEL DER ELEKTRISCHEN ATOMISTIK WIRKLICH LÖSEN WERDEN. Dies wird sich in den nächsten Monaten entscheiden.

(Scientifically, in spite of everything, things are progressing very nicely. I have hope that we will really solve the riddle of electric atomistics. This will be decided in the next few months).

After his success in the field of general relativity, Albert Einstein carried out numerous works, in particular on a unified field theory which was to allow him to reconcile general relativity and quantum physics, i.e. his theory on gravitation and the question of electromagnetism. For this purpose he had recourse to various collaborations, in particular with Peter Bergmann.

Further, he asks how he is doing in his new home and if the children have already made friends with colored as well as the white locals.

Was machen die Buben? Können sie schon ein wenig englisch und raufen sie sich mit den weissen und schwarzen Southcarolinern? Denkst du noch daran, dir selber deine Bude zu bauen? Ist der Wagen noch gesund? Habt ihr schon viel von der Gegend gesehen?

(What are the boys doing? Do they already know a little English and do they scuffle with the white and black South Carolinians? Are you still thinking about building your own place? Is the car still healthy? Have you seen much of the area yet?)

Albert Einstein opens his letter with talks about his son's work in hydrodynamics, as well as about possible solutions to keep his first wife Mileva Maric (mother of his children) his house in Zürich:

Hoffentlich hast Du dem aus Deutschland vertriebenen Hydrodynamiker pünktlich geantwortet. Kennst Du etwas von seinen Arbeiten? Er kennt Publikationen von Dir. Deine Mutter schrieb sehr verzweifelt. Ich werde wohl, wenn es noch möglich ist, das Haus in der Huttenstr. auf meinen Namen übernehmen müssen. Dies ist mir gar nicht recht, weil es meine Hinterlassenschaft gefährdet. Es können doch auch in Zürich hässliche Dinge passieren. Die Hypotheken sind nämlich weniger zerstörbar als das Haus und ausserdem können die Mieten heruntersausen. Andererseits möchte ich aber Deiner Mutter ihre letzten Jahre erleichtern. Besser wäre es wohl, wenn ich das Haus auf einen amerikanischen Strohmann übertragen lassen könnte, der nichts besitzt. Aber das geht nicht, weil nur eine Übertragung auf mich als den Besitzer der dritten Hypothek ein Schritt wäre, der nicht einfach als Umgehung der Schuldverpflichtungen gedeutet werden könnte.

(Hopefully you answered the hydrodynamicist expelled from Germany on time. Do you know any of his work? He knows about your publications. Your mother wrote very desperately. If it is still possible, I will

have to take over the house in Huttenstr. in my name. This does not suit me at all, because it endangers my legacy. After all, ugly things can happen in Zurich, too. The mortgages are less destructible than the house and besides, the rents can hurtle down. On the other hand, I would like to make your mother's last years easier. It would be better if I could have the house transferred to an American straw man who owns nothing. But that is not possible, because only a transfer to me as the owner of the third mortgage would be a step that could not simply be interpreted as a circumvention of the debt obligations.)

11. X. 38. Luba Albert! Tetz & habt The socher Wasser in Euren Hismen, das Esugaye, was Dir zu Deinen Glick noch gefehlt heit. Hoffenderch hast In den aus Deutsichland vertriebenen Hydrody nausker ponkolich geans wordet. Kennet Du etwas von server trocation? "Er hernes Publichationen von Tir, Deine Mutter selviceb selve very weifelt. Ich werde wohl, wenn es moch moglish ist, des Hans un der Huttenstr. and meanen Numer inbernehuer unissere, Dies ist mor your wicht recht, well as meane Hinterlassenschaft geföhrdet. Es könne doch auch in Turich hänliche Dringe passieren. Die Hypotheken und näulich weniger zerstörbar als das Hans und ansverden können die Weters hermiters ansea. Andererseits mochte ich aber Deiner Mutter she letyten Jahre erleichton, Besser mare es wahl, mens ich das Hans auf einen amons handschen Strohmann isbertragen lassen kömste, der nachte besityt. Aber does yeht wicht, weel mor eine Whertraquing auf miscle ils chen Besit ger der dritten Hypothek ein Tehritt ware, der miche unfach als Vingehing der Tehndetverseftschtungen gedentet werden könnte. Es sit gut, dass The van Estroch weg bist. Man meht an tor Trebechorlowakes ally deutlich mie morsele der Europa gewareten ist. Ites allos betrisht midde selve, hangetsedchlack dae schuftige Halting Englands und Trankretch, dre rich offenber zu einer tro tusverkauf des fremden gutes entrellossers haben, Wirsenschaftlich jeht es trotz allern sehr schön vorwärts. Ich habe Hoffing, dass wer das Ristael der elektrischen Stomistik wirkliele Ben nurden. Dier wird sich in den mächsten

With Einstein's Nobel Prize money, Mileva Einstein, who had been divorced since 1919, was able to buy the house at Huttenstrasse 62 in Zurich.

Caltech's Einstein Papers Project has registered this letter under archival no. 75-946.

#### Preceeding Robert Burton's Anatomy of Melancholy by 11 years

**13 FERRAND, Jacques.** Traicte de l'essence et guerison de l'amour, ou de la melancholie erotique. Toulouse: Veuve de J. Colomiez & R. Colomiez, 1610 [1612]. 12mo (140 x 80 mm). [16], 222, [2] pp. Woodcut headpieces and initials; errata on recto of final unnumbered leaf L4; the printing date "M DC X" on the title-page changed to 1612 by addition of a hand-printed "II". Signatures: A<sup>8</sup> B-K<sup>12</sup> L<sup>4</sup>. Pages 137, 200-216 mispaginated 136, 100-116. Bound in 18th-century full calf, spine with richt gilt tooling and gilt-lettered morocco label, red-dyed edges, marbled endpapers (rehinged and recornered, extremities slightly rubbed). Preserved in custom clamshell box. Light even browning internally, occasional minor spotting, short fore-margin with printed marginalia just touched on several pages and on ca. 7 pages shaved up to one letter (pp. 123, 128, 134, 178-180, 204), tiny hole in leaf E7 costing two letters each side, signatures on pp. 219 and 221 partly shaved. Provenance: De Gironcourt (old ownership inscription to title, engraved armorial bookplate to front pastedown). In all a very good, clean and crisp copy. (#003814)  $\qquad$ 

FIRST EDITION, AND OF UTMOST RARITY, of Jacque Ferrand's treatise on the psychiatry of lovesickness and obsessional pathologies, published 11 year before Robert Burton's Anatomy of Melancholy. This



is the second issue, in which only the original date of publication (1610) was changed by hand to 1612.

William Osler in his *Bibliotheca Osleriana* remarks on p. 435 for Ferrand's 1623 edition that "Burton was probably accused of plagiarizing the work since he explains that it did not come to his hands before 1628" (Osler).

Jacques Ferrand (1575-ca.1623) is considered a pioneer of French psychiatry. His treatise on erotic melancholy was banned and burned by the Inquisition in 1620. It was rewritten by Ferrand in order to conform the wishes to and viewpoint of the inquisitional tribunal and the second edition appeared in 1623 under the title "De la maladie d'amour ou melancholie erotique". From philosophical definitions of love to pharmaceutical remedies, the work is also considered a veritable encyclopedia of love melancholy during the Renaissance."

While the medical description of love melancholy in the late sixteenth and early seventeenth centuries remained faithful to its predecessors, the volume of writings increased dramatically, with such writers as Ferrand or Burton devoting hundreds of pages to its specific aetiology, symptoms, diagnosis, prognosis and, of course,

therapy. Predisposition to the disease, according to the medical literature of the period, is linked to



the dominance of blood (a sanguine tendency), which means the body is inclined to moisture and heat. This high level of blood in the human body was believed to produce a natural inclination to all the passions, especially erotic love. A natural inclination of the body to melancholy, however, cannot in itself bring about love melancholy. [...] Love melancholy has both physical and psychological symptoms, which Ferrand lists briefly (before providing details of each): pale and wan complexion, joined by a slow fever ... palpitations of the heart, swelling of the face, depraved appetite, a sense of grief, sighing, causeless tears, irresistible hunger, raging thirst, fainting, oppression, suffocation, insomnia, headaches, melancholy, epilepsy, madness, uterine fury, satyriasis, and other pernicious symptoms. . ." (Altbauer-Rudnik)

The first edition is extremely rare, probably due to the fact that the work was placed on the index of the Inquisition (and printed copies destroyed accordingly) until a corrected version appeared in 1623. No copy is recorded at auction according to RBH. We can trace only a single copy of the first issue in public libraries (Médiathèque José Cabanis, Toulouse, USTC no. 6807985) and 4 copies of the second (1612) issue (Bibl. municipale, Rouen; Médiathèque José Cabanis, Toulouse; BnF Paris; Houghton Library of Harvard Univ.).

References: M. Altbauer-Rudnik, *Love, Madness and Social Order: Love Melancholy* 

*in France and England in the Late Sixteenth and Early Seventeenth Centuries*. In: Gesnerus 63 (2006), pp. 33-45; Brunet II, 1228 f.; Cioranescu, 17e siècle 29965; Gay-Lemonnyer I, 802 (ed. vague); Semeleigne, I, 47; Hunter-M. 118 (English ed.. 1640); NLM/Krivatsy 4024 (1623 ed. only), Osler 4804 (1623 ed. only, with remark of Burton's plagiarism case), Wellcome 2219 (1640 English ed. only), Waller 2999 (1623 ed. only).

**14 FONTANA, Domenico.** *Della trasportatione dell'obelisco Vaticano et delle fabriche di Nostro Signore Papa Sisto V.* Rome: Domenico Basa, 1590. Folio (415 x 275 mm). [1], 108 (i.e. 112), [4] II., including engraved title-page, additional engraved title-page with portrait of Fontana (by Natale Bonifazio da Sebenico), woodcut initials, 38 etched and engraved illustrations by Natali Bonifazio da Sebenico (including 3 double-page, 1 folding), and 3 diagrams in text; 4 unnumbered leaves of index, errata and colophon. With the additional leaves 66bis, 75bis and 76bis, f. 65 is a double sheet. The leaves 7 to 13 bound out of sequence after f. 18 and the last gathering S after final unnumbered leaf. Bound in 17th century sheepskin, spine with 6 raised bands, decorated and lettered in gilt in



compartments, without free endpapers (joints partially split, spine ends damaged, extremities rubbed, corners worn and bumped). Light browning internally, occasional staining, spotting and paper softening, several mostly marginal paper restorations. Provenance: Angel Maria de Barcia y Pavón (1841-1927), librarian and painter (bookplate to front pastedown with motto"Inter utrumque volitans" and long inscription on flyleaf); Gerardo Olivares James (Cordoba, 1978). Good сору overall, collated complete. (#003775) € 8000

Dibner, Heralds of Science 174; Norman 812; Brunet II:1329; Cicognara 3736; Fowler 124; Millard Coll. 40; Mortimer, Italian 193; Olschki 16955. - FIRST EDITION, RECORDING AND ILLUSTRATING ONE OF THE GREAT ENGINEERING FEATS OF THE RENAISSANCE. Fontana organized and directed this successful attempt to move the Vatican obelisk. Over 900 men, 150 horses and 47 cranes were required, and the project took four and a half months to complete (from 30 April to 10 September 1586). The plates "are important examples in the development architectural of

drawing" (Fowler), and are considered by Olschki to be "remarquables au point de vue artistique autant que technique." Some plates towards the end illustrate the buildings designed by Fontana for Sixtus V.

"Besides its great graphic virtues, then, this book by Fontana is an important source for the history of architecture. It is differentiated from contemporary theoretical publications by its dominant technical and pragmatic approach to architectural problems, and specifically by its interest in the organization of the construction site, its vast vision, and its research in architectural typology" (Millard).

15 HUMBOLDT, Alexander von. Kosmos. Entwurf einer physischen Weltbeschreibung. Volume 1 to 5. Stuttgart und Tübingen: Cotta, 1845-1862. 8vo (210 x 129 mm). Atlas zu Alexander von Humboldt's Kosmos. Stuttgart: Krais & Hoffmann, [1851]. Oblong folio (283 x 337 mm). Text volumes: xvi, 493 [1]; [2], 544; [2], 644, [2]; [2], 649 [1]; [2], 1297 [1] pp. Vol. III with folding letterpress table facing p. 570 and final errata leaf. Atlas volume: [6], 136 pp. With 42 numbered plates, including 39 hand-colored lithographs (nos. 1-34, 38-42), 3 steel-engravings (nos. 35-37) and few text illustration. Text volumes uniformly bound in contemporary half calf over percaline boards, spines lettered and ruled in gilt and with raised bands, corners reinforced with brass caps, yellow endpapers (minor wear of extremities with partial chipping of cloth over board edges, corners bumped and scuffed). The text generally quite clean and bright with some minor occasional foxing as usual; title of vol. II creased. The atlas bound in contemporary percaline cloth, upper board lettered in gilt (minor wear to extremities, joints partially split). The atlas bright and clean throughout with only minor pale spotting to first 3 leaves. Provenance: Friedrich Riedl von Riedenstein (ink stamp to first flyleaves); occasional bookseller's stickers to pastedowns. Very good set, collated and complete. (#003839) € 3500

PMM 320; Norman 1112; Sparrow 106. First edition of the work that, in Humboldt's words, was intended "to represent in one work the whole material world, everything we know today of the phenomena in the celestial spaces and of life on earth, from the nebulae to the geography of mosses on granite rocks ... It is meant to describe a chapter in the intellectual development of mankind" (PMM).



"Humboldt's survey of contemporary knowledge of the physical world and the cosmos - the last such scientific survey undertaken by a single individual - occupied him for the last three decades of his life. The first two volumes, in which Humboldt described the entire material world from the galaxies to the minutiae of the various mosses, proved enormously popular. The later three volumes, containing Humboldt's special research findings, were less successful, but the fifth volume, completed after Humboldt's death, cites over 9,000 sources to which he felt indebted, and is thus a valuable reference for the history of science" (Norman).

#### First appearance of seven papers by Le Verrier on the discovery of Neptune

**16 LE VERRIER, Urbain Jean Joseph.** Recherches sur le mouvements d'Uranus. In: *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences,* Vol. XXII, no. 22, June 1846, pp. 907-918. Paris: Bachelier, 1846. Two volumes. 4to (283 x 226 mm). Entire volumes 22 (Jan. - June 1846) and 23 (July - Dec. 1846). [4], 1208; [4], 1219 [1] pp., including half-title and general title-page in each volume. Original plain brown paper wrappers with printed paper label to spines; pages untrimmed and mostly unopened. Some minor foxing in places (first gatherings including half-title and title of vol. 22 stronger), light browning and occasional dust- and finger-soiling mostly to outer margins, half-titles browned stronger; a few leaves frayed. Provenance: from the collection of late Dr. Samy Mizrahi, Bouillargues. A very good, unsophisticated set. (#003846) € 1800

Sparrow, *Milestones of Science* 132; Evans 25; Norman 1343 (book form). - In 1845 the astronomer and physicist Francois Arago encouraged Le Verrier to examine observed anomalies in the movements of the known planet Uranus. Le Verrier began by establishing a precise theory of Uranus which he demonstrated in his memoir "*Recherches sur les Mouvements d'Uranus*" published in Volume 22, number 22. He showed that the discrepancies in the orbit of Uranus could not be explained by the gravitational effects of the Sun, Jupiter or Saturn, but were in fact caused by the presence of an as yet unknown planet within its orbit.

"In 1846, John Couch Adams, an English astronomer, and Urban J. J. Leverrier, a French astronomer,



simultaneously and independently determined the location of a possible new planet. Adams put Newton's theory of attraction to a test by studying the causes of the irregularities in the motion of the planet Uranus. In 1845, he wrote of his findings of the mathematical location of the new planet to Sir George Biddell Airy, Astronomer Royal. Because Adams was unknown, his letter was put aside. Meanwhile these same perturbations of Uranus had become of interest to Leverrier. On July 1, 1846, he presented a paper Recherches sur les movement d'Uranus (1846) to the Académie des Sciences in Paris... When Airy realized that Leverrier and Adams had reached the same conclusions, he hastened to suggest that a search be made for the new planet. Shortly thereafter it was seen but not recognized. About a week before it was found in England, it was discovered by Galle in Berlin on information supplied by Leverrier. Thus, the honor of priority of discovery, or even co-discovery of the new Planet, Neptune, was lost to Adams and credited to Leverrier. Adam's paper On the perturbations of Uranus was read before the Royal Astronomical Society, November 13, 1846, and was published in 1847" (Sparrow, p.40).

The other papers by Le Verrier and coworkers contained in volume 23 are:

1. Extrait d'une lettre de M. Schumacher à M. Le Verrier, p. 106.

2. Sur la planète qui produit les anomalies observées dans le mouvement d'Uranus - Détermination de sa masse, de son orbite et de sa position actuelle, pp. 428-438.

3. Sur la planète qui produit les anomalies observées dans le mouvement d'Uranus - Cinquième et dernière partie, relative à la détermination de la position du plan de l'orbite (with) Planète de M. Le Verrier (letter from Galle to Le Verrier), pp. 657-663

4. *Planète de M. Le Verrier* (letter from Challis to Le Verrier), pp. 715-716.

5. Comparaison des observations de la nouvelle planète, avec la théorie déduite des perturbations d'Uranus (with) LE VERRIER & ARAGO, Planète Le Verrier. Examen des remarques critiques et des questions de priorité que la découverte de M. Le Verrier a soulevées, pp. 741-755.

6. LE VERRIER & BINET, Note sur la détermination approximative de la distance du soleil à la planète Le Verrier, pp. 798-800.

**17 LEIBNIZ, Gottfried Wilhelm**. Protogaea sive de prima facie telluris et antiquissimae Historiae Vestigiis in ipsis naturae monumentis dissertatio ex schedis manuscriptis. Göttingen: Johann Wilhelm Schmid, 1749. 4to (240 x 190 mm). [4], xxvi, [2], 86, [2] pp., title printed in red and black and with engraved armorial vignette, engraved headpiece, 2 woodcut initials and tailpiece, 12 folding engraved plates, final blank leaf L4. Contemporary German half-calf over prinkled boards, spine with 5 raised bands, original endpapers (outer joints partly split but cords folding firmly, head of spine chipped, light wear to extremities, corners scuffed and bumped). Internally quite crisp and clean throughout with just some light browning of text block of 5 pages, occasional minor dust-soiling at upper blank margin of 4 pages, rare light spotting in places, two plates creased at fold. Provenance: R. Cambier (bookplate to front pastedown and inscition on first flyleaf dated 1895), a further sheet with handwritten remarks in French about this book loosely inserted. Very good, wide-margined copy in untouched binding. (#003820)



FIRST EDITION of this posthumous publication regarding the origin of the earth, originally written by the German polymath Gottfried Wilhelm Leibniz in 1691-93 and edited by Christian Ludwig Scheidt, which led to further study on fossils and the evolutionary history of the earth. "Leibniz's 'Protogaea', along with Woodward's 'Essay toward a natural history of the earth', was the lineal descendent of Stensen's theories of sequential stratification and the organic origin of fossils" (Norman "Adopting 1328). Cartesian а explanation of the origin of the Earth as an incandescent globe, Leibniz postulated the consolidation of an original crust, the condensation of an initially universal ocean, and the subsequent deposition of a sequence of strata containing fossils, with the simultaneous diminution of the ocean by evaporation. The bulk of the essay was in fact devoted to the description and illustration of fossils, and to the demonstration of their organic origin,

as a crucial part of his whole synthesis. The posthumous publication of '*Protogaea*' in 1749 proved highly influential, for it provided a model of Earth-history that allowed for the organic origin of fossils, preserved Steno's and Woodward's understanding of strata as sequential deposits, and was conformable to both Scripture and reason. Its most important effect, however, was to make it possible for the different fossils embedded in successive strata to become evidence of the history of life itself, although that conclusion was not at first drawn in any detail" (Rudwick M.J.S., *The Meaning of Fossils, Episodes in the History of Palaeontology*. University of Chicago Press, 1976, p. 91).

References: Norman 1328; Nissen BBI 2428; Ward & Carozzi 1358; Wellcome III, 482; Ravier 440; Hoover 521; Bibl. Dt. Mus., *Libri rari* 167.

#### From the library of Jean-Etienne Dominique Esquirol

18 LEIBNIZ, Gottfried Wilhelm. Opera omnia, nunc primum collecta, in classes distributa, praefationibus & indicibus exornata, studio L. Dutens. Geneva: de Tournes, 1768. 6 volumes. 4to (245 x 201 mm). Each volume with general title and index bound at the end; each part with separate titlepage and pagination. Woodcut head- and tailpieces, author's portrait by Pierre Savart, 2 folding letterpress tables, woodcut text illustrations and diagrams, and a total 41 copper-engraved plates (several folding). Bound c. 1830 for Esquirol in uniform half-calf over marbled boards, spines with gilt lettering and decoration, marbled edges, marbled endpapers (light rubbing of extremities and leather over spines). Light uneven browning and very minor occasional spotting of text and plates, vol. IV with light waterstaining to a few pages. Provenance: Esquirol library, Maison de Charenton (ink stamps to flyleaves, title of vol. I and a few text pages). A fine, virtually unread set; exceptionally crisp, clean and wide-margined. Vol. I: [2], iv, [2], ccxliv, 790 pp. including half-title, frontispiece portrait of the author separated from title by tissue paper. Vol. II: [2], viii, 400, 291 [1] pp., 14 engraved plates (12 folding), woodcut text illustrations and diagrams. Minor browning of plates. Vol. III: [4], viii, lv [1], 663 [1] pp., woodcut diagrams, folding letterpress table facing p.375 and 25 engraved plates. Plates a bit browned and spotted, minor spotting of text, leaf Xx2 with clean tear at upper blank margin; pp. 61-64 misbound after p. 56. Vol. IV: viii, 216; 285 [1]; [2], 647 [1] pp., woodcut text diagrams, part III with engraved plate facing p. 512 and folding letterpress table facing p. 169. Light browning of text, a few leaves with light waterstaining towards lower corner. Vol. V: viii, 632 pp. Vol. VI: vi, [2], 334; 344 pp., woodcut diagram, 1 folding engraved plate facing p. 80. Bound without blank leaf Tt4 after p. 334 of part I. (#003847) € 4500



The most important early edition of the complete works of Leibnitz. Edited by Louis Dutens, it covers a large part of the sciences and letters. Leibnitz is considered the last "universal genius" and is best known for his work in rationalist philosophy and his ontological proofs of the existence of God. His contributions to mathematics are also notable with the development of the binary system and infinitesimal calculus. "The position of Leibniz at the beginning of modern science is analogous to that of Aristotle at the beginning of ancient science" (DSB VIII, p.151). Content of the volumes: T.I Theology, T.II: Logic, Metaphysics, Physics, Chemistry, Botany and Natural History. T. III: Mathematics. T. IV: Philosophy, History and Antiquities, Law. T.V and VI: Philology and Linguistics.

References: Ravier 473; Faber du Faur 1544; Roller-G. II, 93; Cantor IV, 17; Zeitlinger 2531.

#### The first textbook of mechanical flight

**19** LILIENTHAL, Karl Wilhelm Otto. Der Vogelflug als Grundlage der Fliegekunst. Ein Beitrag zur Systematik der Flugtechnik. Auf Grund zahlreicher von O. und G. Lilienthal ausgeführter Versuche. Berlin: R. Gaertners Verlagsbuchhandlung, 1889. 8vo (227 x 154 mm). viii, 187 [1] pp., colour lithographed frontispiece of storks in flight, 8 folding lithographed b&w plates bound at the end, illustrations and diagrams in text. Original publisher's decorated brown cloth, front board and spine gilt-lettered, printed endpapers (spine-ends lightly bumped, minor ubbing to extremities). Text generally clean and crisp, light offsetting from frontispiece to title, very light mostly marginal browning, frontispiece working loose. Provenance: illegible ownership signature to title-page. A near fine copy. (#003804)



Norman 1353. FIRST EDITION of the first textbook of mechanical flight. An early practitioner of gliding flight, Lilienthal pioneered a hang glider design that allowed him to make sustained flights of up to 250 metres distance from jumping-off places around Berlin. Working in conjunction with his brother Gustav, Lilienthal made over 2,000 flights in gliders of his design starting in 1891 with his first version, the Derwitzer. His total flying time was five hours. Lilienthal's valuable experiments were cut short when he crashed on 9 August 1896 while gliding and sustained a serious cervical break that ended his life prematurely at the age of forty-eight.

"Lilienthal's book [became] one of the chief bibles for the aeronautical world after he demonstrated that his theories could be put into practice . . . It was the basis on which the Wrights first started building their aerodynamic work, and they were always high in praise of its pioneering value, even when they were led to modify Lilienthal's findings" (Gibbs-Smith, The Invention of the Aeroplane 1799-1909, London, 1965). "The Wrights themselves, and virtually all their biographers, date the beginning of their serious adult consideration of the flying problem from their reading of the work" (McFarland, The Papers of Wilbur and Orville Wright, London, 1953). Brockett Bibliography of Aeronautics p. 520.

#### Messier's famous catalogue of nebulae and star clusters

20 MESSIER, Charles. Catalogue des Nebuleuses et des Amas d'Etoiles Observees a l'Observatoire de la Marine, hotel de Clugni, rue des Mathurins. In: *Connaissance des Temps, Pour l'Annee commune 1783*, pp 225-251. Paris: l'Academie Royale des Sciences, 1780. 12mo (198 x 125 mm). 3 folding engraved plates (including 1 map). Original marbled wrappers, spine with modern hand-lettered paper label (slight edge fraying and dust soiling). All pages uncut. Text crisp and clean throughout with just a little marginal dust-soiling and age-toning of paper, very minor spotting in places. Provenance: from the collection of late Dr. Samy Mizrahi, Bouillargues. A fine, unsophisticated copy, uncut and unpressed. (#003845)

VERY RARE FIRST EDITION, containing Messier's initial catalogue of 45 objects M1-45 and the first supplement of objects up to M68. It includes the most celebrated nebulae and clusters, including M1 (the Crab Nebula), M13 (the globular star cluster in Hercules), and M31 (the Andromeda Galaxy). First published in 1774 in *Mémoires de l'Académie Royale des Sciences pour 1771*, the catalogue contains additional 23 new objects observed by Messier since its publication.

224 225 TABLE des Inclinaifons de l'horizon visuel avec l'horizon vra. CATALOGUE DES de la Mer PH NÉBULEUSES ET DES AMAS D'ÉTOILES Obfervées à Paris, par M. Meffier, à l'Obfervatoire de Dif 0. 44 28 26 26 37 48 58 10 58 11 9 10 94 98 102 106 110 la Marine, hôtel de Clugni, rue des Matharins. 17 12 11 12 12 12 30 32 34 36 M. MESSIER a ob'ervé avec le plus grand foin les Nébulentes & les amas d'Étoiles qu'on decouvre fur l'horizon de Paris; il a déterminé leur alcention droite, leur déclination, é donné leurs diamètres, avec des détails circontlanciés fur chacune : ouvrage qui manquoit à l'Attronomie. Il entre aufi dans des détails fur les recherches qu'il a faites des différentes Nébulenés qu'i ont dù être découvrets par différens Attronomes, mais qu'il a cherchés inuitiment. 38 40 42 44 46 19 114 118 122 126 130 1.47 34.56 57 11 16 10 4 43 11 des différentes Nebuleufes qui ont dú être découvertes par différens Aftronomes, mais qui la cherchées intuillement. Le Catalogue des Nébuleufes & des anns d'Étoiles, de M. Mellier, eti inféré dans le volume de l'Académie des Sciences, année 1771, fagre4351 la lipaporté à la fin de fon Mémoire, un defin trace avec le plus grand foin de la belle Nébuleufe de l'épée d'Orion, avec les étoiles qu'èlle contient. Ce defin pourra fervir à reconnoitre fi dans la fuite des temps elle n'elle pas fujeite à quelque changement. Si l'on compare désà-préfent ce defin avec ceux de M.<sup>15</sup> Huyghens, Picard, de Mairan & le Gentil, on fera étonné d'y trouver un chan-gement tel qu'on auroit peine à le figurer que c'ell la méme residelline, donnés par M. le Gentil dans le volume de l'Aca-demie , de 1759, page 470, plander XX1. Au Catalogue imprimé de M. Meffier, que nous donnons letrés & d'amas de toiles qu'il a docouvertes depuis l'imprefilon de fon Mémoire, & qu'il nous a communé. 2. 54 54 10 4 10 14 10 24 10 34 10 48 5 2 4 3 5 4 5 6 134 99 14 24 34 12. 13. 58 60 62 64 66 7. 50 7. 57 8. 5 8. 12 8. 20 154 158 162 166 170 44 9 53 10 7 8 7 8 7 14 174 178 182 186 31 41 50 4. 21 4. 28 8. 10 9 9 70 72 74 76 4. 35 4. 4<sup>2</sup> 4. 49 7 7 11 49 56 59 190 14. 1 0 5 2 0 0 2 0 5 2 1 0 2 1 5 2 2 0 4. 55 5. 2 5. 8 9.9.9.9. 23 792 858 14. 14. 10 10 11 10 10

Most interested in comets, Messier is attributed with the initial discovery of twelve or thirteen from the appearance of Comet 1759 III to Comet 1798 I and three additional independent discoveries. His famous catalogue of objects which retain his M for Messier numbers to this day came about only because "the nebula I discovered above the southern horn of Taurus on September 12, 1758, while observing the comet of that year.... This nebula had such a resemblance to a comet, in its form and brightness, that I endeavored to find others, so that astronomers would not confuse these same nebulae with comets just beginning to shine. I observed further with the proper refractors for the search of comets, and this is the purpose I had in forming the catalog" (DSB). References: DSB IX, p.330.

#### Oersted's announcement of the electromagnetic effect

**21 OERSTED, Hans Christian**. Experimenta circa effectum conflictus elecrici in acum magneticam. In: Journal für Chemie und Physik (Schweigger's Journal), vol. 29, pp. 275-281. Nürnberg: In der Schrag'schen Buchhandlung, 1820. 8vo (199 x 118 mm). Entire volume: viii, 1-50, [4], 55-96, [4]; 101-204; 245-256, [4]; 261-384, [4]; 389-520, [4] pp., folding table facing p. 50 and 2 folding engraved plates; pp. 205-44 are skipped (pagination error). Contemporary sprinkled half calf over marbled boards, spine with some gilt tooling and gilt-lettered paper label, red-dyed edges (rebacked, corners slightly bumped, minor rubbing). Text with even light browning, occasional minor spotting. Provenance: Act. Ges. f. Anilin-Fabrikation\* (ink stamps to front and rear pastedowns, title and a few text pages). A very good copy. (#003816) € 3800

VERY RARE FIRST PUBLISHED EDITION of the announcement of the electromagnetic effect, preceded ony by a half-sheet of text privately printed on behalf of the author the same year in a very small number and which is of utmost rarity. Also included in this volume is "Neuere electro-magnetische

Versuche

German

Nationalphilosophie,

von

isolation of piperine (pp. 80-82).

Kopenhagen" (pp. 364-369), and Oersted's report on the first

"Oersted was a disciple of die

believed in the unity of physical

forces. He had predicted the existence of the electro-magnetic

effect as early as 1812, in defiance

school

Oerstedt

in

of

which

275 Experimenta circa effectum Conflictus electrici in Acum magneticam \*). Prima experimenta circa rem, quam illustrare aggre-

dior, in scholis de Electricitate, Galvanismo et Magnetismo proxime-superiori hieme a me habitis instituta sunt. His experimentis monstrari videbatur, acum magneticam ope apparatus galvanici e situ moveri: idque circulo galvanico clauso, non aperto, ut frustra tentaverunt aliquot abhinc annis physici quidam celeberrimi. Cum autem haec experimenta apparatu minus efficaci instituta essent, ideoque phaenomena edita pro rei gravitate non satis luculenta viderentur, socium adscivi amicum Esmarch, regi a consiliis justitiae, ut

\*) Der Absicht des Hrn. Verfassers gemäß wird diese wichtige Anzeige in der Ursprache abgedruckt, worin er sie mittheilt. Ohnehin wäre zu wünschen, daß von der nnter den Gelehrten aller Völker geltenden Gemeinsprache öfters Gebrauch gemacht würde, als es neuerdings geschieht.

d. H.

of current scientific doctrines disallowing the possibility of conversion of forces and despite Coulomb's apparent proof that electricity and magnetism were distinct phenomena. He set out to deduce from the nature of electricity the conditions under it was converted which to magnetism, and to prove their existence by experiment. His efforts were unsuccessful until, in die winter of 1819-1820, he placed a

magnetic needle parallel to a current-carrying wire and saw that the needle was disturbed. Resuming his experiments in the summer of 1820, Oersted ascertained that a circular magnetic field surrounded his current-carrying wire, and that a magnetic needle brought into this field would set itself tangent to the circle. Oersted's discovery opened up a new epoch in the history of physics, making possible Ampère's creation of electrodynamics, and Faraday's demonstration of the

unity of all forms of electricity" (Norman).

"In 'Experiments and Observations on Electricity', first published in London, 1751, Benjamin Franklin stated his theory that the nature of lightning is electrical. In 1752, with his kite experiments he proved

it and was on the way to demonstrating the identity of all forms of electricity. In 1760, however, J. H. van Swiden dismissed the possibility of an affinity between electricity and magnetism (De Attractione, Leiden). In 1802, on the other hand, Adam Walker in the second edition of his A System of Familiar Philosophy (first edition, 1799), among many striking opinions on the monistic nature of electricity, light and heat, declared categorically 'I think we have infinite data in favour of an electro-magnetic fluid'. Oersted, the son of an impoverished apothecary in Rudkjoping, in 1812 discussed in his Ansicht der chemischen Naturgesetze ('View of the Natural Laws of Chemistry') the identity of chemical and electrical forces. [. . .] It was after lecturing to students in his own rooms in the Noerragade, Copenhagen, in 1819 or 1820 that he invited a few of them to stay on to witness an experiment - the possible deflection of a compass-needle by an adjacent electric current. The experiment was successful; but only just; and Oersted repeated it many times before venturing on 21 July to proclaim the identity of magnetism and electricity in this four-page paper entitled 'Experiments relative to the Effect of the Contiguity of Electricity to a Magnetic Needle'. The results were as important as they were widespread. Oersted's paper was within the year reprinted in England, France, Germany, Italy and Denmark, In 1823 Ronalds and in 1833 Gauss and Weber constructed the first practical electric telegraphs. Faraday's momentous experiments with the sequels by Clerk Maxwell, Hertz and others bore further witness to its significance" (PMM).

The page count in our copy jumps from 204 to 245, but the text is complete; page 373 is erroneously paginated as page 337; the copy corresponds to the copy of the Bayerische Staatsbibliothek and is complete.

\*Our copy has been in possession of the original house of Agfa-Gevaert, the Aktiengesellschaft für Anilinfabrikation, founded by Felix Mendelssohn Bartholdy's son Paul Mendelssohn Bartholdy and Carl Alexander Martius; with their stamps on the title page and the upper outer page corner of three other pages and the back of the first table.

References: Sparrow 152 and Evans 36 (both for this journal issue); DSB X, p.185. Dibner 61, PMM 282 and Norman 1606 (for the private print).

#### Uncut and in the original drab boards

22 PRIESTLEY, Joseph. Experiments and Observations on different kinds of Air. Three volumes. London: J. Johnson, 1774-1777. 8vo (228 x 140 mm). 6 engraved plates including frontispiece to each volume (3 plates folding). Vol. I with half-title, 2 unnumbered leaves with 1 p. errata and 3 pp. adverts at rear; vol. II and III with 1 p. errata, index and 2 advert leaves at rear. [2], xxiii, [5], 324, [4]; xliv, 399, [21]; xxxiv, [6], 411, [13] pp. Publisher's uniform paper-backed drab boards, all edges uncut (vol. III partly unopened), spines with hand-lettered paper label added by early owner (some fraying and chipping with some loss of paper over spines and boards, minor dust-soiling and spotting, corners of vol. II bumped). Internally quite crisp and clean throughout with occasional very minor spotting and browning of paper, little fraying and dust-soiling to outer margins, dog-earing in places; vol. I with small pale brown stain near outer corners, light offsetting from face-to-face folding of frontispiece, errata corrected in ink to pp. 260, 306 and 311; vol. II with clean tear near center of title (w/o loss), p. 219/20 with tear at upper margin not affecting text; vol. III with single narrow wormtrack to upper margin of gatherings S-T and X extending into text area and affecting a few letters. Provenance: from a private French library. A highly unsophisticated and unrepaired, clean and bright copy; absolutely complete with the rare half-title leaf to first volume. (#003854) € 19,000

EXCEPTIONAL SET IN FIRST EDITION. Joseph Priestley's "Observations on different kinds of air" were first published in the *Philosophical Transactions* in 1772. As the experiments themselves were performed at such a prolific rate, it was decided to publish them in book form. "During this period - in addition to his discovery of oxygen - Priestley described the isolation and identification of ammonia, sulfur dioxide, nitrous oxide and nitrogen dioxide, and silicon terafluoride. He discussed the properties of mineral acids; further extended the knowledge of photosynthesis; defined the role of blood in respiration: and noted, unknowingly, the differential diffusion of gases through porous containers" (DSB).



"Priestley's hundreds of experiments on different types of 'air' led to the identification of numerous gases, including ammonia, nitrogen dioxide and (most importantly) oxygen, which he obtained by heating mercuric oxide. Although the Swedish chemist Scheele [...] had succeeded in isolating oxygen at least two years before Priestley, Priestley was long credited with the discovery of oxygen, as he was the first to publish his discovery. Priesdey's experiments with gases led Cavendish and Watt to discover

the compound nature of water, and it was this revelation, coupled with Priestley's isolation of oxygen, that formed the experimental basis of Lavoisier's new oxidation chemistry" (Norman).



Complete sets with all the three parts in first edition are quite rare. An uncut set in uniform original boards however is of utmost rarity. We know of no other set that has come to market in the past 50+ years. The Norman copy was a mixed set with volumes II and III in original boards only.

References: Duveen p. 484; Grolier/Horblit 85; Norman 1750; DSB XI, pp. 145-146

23 [RÖNTGEN, Wilhelm Konrad]. W.C. Röntgens Original-Mitteilung über eine neue Art von Strahlen. In: Photographische Mitteilungen. Illustrierte Zeitschrift für Wissenschaftliche und Künstliche Photographie (H. W. Vogel, editor), vol. 32, no. 21, pp. 335-340, 1 plate of photograph. Vol. 32, 1895-1896, numbers 13-24, bound in one volume. Berlin: Robert Oppenheim (Gustav Schmidt), 1896. xv [1], (201)-408 pp.. Contemporary half cloth over marbled boards, spine gilt lettered (extremities somewhat rubbed). With numerous art supplements, pictorial plates and illustrations in the text. Provenance: Emil Krüger (inscribed and dated "Meran 1895" on first flyleaf). (#003824) € 1200

FIRST AND ONLY EDITION of an authentic documentation of one of the most important discoveries in medical history. Complete set of the second half of the 1895-1896 volume of the important journal on



photography, with issues 13 (October 1895) to 24 (March 1896), documenting the "cometary impact" of C. W. Roentgen's discovery for photography. - With the headline "Ein neues Jahr, ein neues Licht" (a new year, a new light) the editors begin the editorial of January issue No. 20 of the 1896 volume, and end it with the statement "Die Naturwissenschaft ist die Leuchte unserer Tage" (Natural science is the light of our - The focus of issue 21 dav) (February 1896) is then the new discovery including a reprint of "W.C. Roentgen's Original-Mitteilung über eine neue Art von Strahlen (W.C. Roentgen's original communication about a new kind of rays), which he had published in 1895 December in the Sitzungsberichte der Würzburger Physikalisch-medizinischen Gesellschaft. Among other things, a ringed hand is shown, made by Dr. Kärger, Dr. Mendelsohn, S. Jaffé and Fr. Behrens in Posen. - However, the dispute about the "priority claims

This discussion continues until the end of the half-yearly volume.

**24** SNEL, Willebrord van Roijen [SNELLIUS]. *Tiphys batavus, sive histiodromice, de navium cursibus, et re navali*. Leiden: Elzevier, 1624. Three parts in one volume. 4to (183 x 141 mm). [60], 109 [1]; [2], 62, [2] pp. Printer's woodcut device on title-page, final errata leaf, 3 full-page engraved illustrations, woodcut diagrams in text; woodcut initials. Signatures:  $*^{6} 2^{*}-7^{*4} A-O^{4}$ ,  $a-c^{4} d^{2} e-h^{4} i^{2}$ . Light browning and occasional minor spotting, oversized illustration on p.100 slightly shaved at outer margins. Bound in contemporary mottled calf, gilt-decoated spine with 4 raised bands and red morocco lettering piece, mottled edges, brocate pastedowns. Provenance: private library of the Bordonaro family, Palermo (shelf-mark lable to front pastedown); cancelled illegible ownership entry on title page. (#003837)  $\notin$  1600

FIRST EDITION. Named after the pilot of the mythical ship Argo, Snel's navigational treatise was mainly a study and tabulation of Pedro Nunez's "rhumb lines," which Snel named "loxodromes." Pedro Nunez Salaciense (1502-1578) made a significant discovery based on on observations reported to him in 1533 by Admiral Martim Afonso de Sousa. They related to rhumb line sailing and to great circle sailing. He demonstrated for the first time the spiral nature of these lines, which denote the quarters of the wind on navigational charts. Snel's "consideration of a small spherical triangle bounded by a loxodrome, a parallel, and a meridian circle as a plane right triangle foreshadows the differential triangle of Pascal and later mathematicians" (DSB).



Snel (1580-1626) was one of the most important Dutch mathematicians of his time. He studied with Brahe, Kepler and Mastlin. "In 1624 Snel published his lessons on navigation in *Tiphys batavus*. The work is mainly a study and tabulation of Pedro Nunez' so-called rhumb lines (1537), which Snel named 'loxodromes'. His consideration of a small spherical triangle bounded by a loxodrome, a parallel, and a meridian circle as a plane right triangle, foreshadows the differential triangle of Pascal and later mathematicians" (DSB).

References: DSB XII, pp. 499-502; Norman 1964; Willems 224.

**25** VIVES, Juan Luis / GESNER, Conrad [GESSNER, Konrad]. De Anima & vita Libri tres. Eiusdem argumenti Viti Amerbachii de Anima Libri IIII. Philippi Melanthonis Liber unus. His accedit nunc primum Conradi Gesneri De anima liber, sententiosa brevitate, velutique per tabulas & aphorismos magna ex parte conscriptus, philosophiae, rei medicae ac philologiae studiosis accommodatus: in quo de tactilibus qualitatibus, saporibus, odoribus, sonis, & coloribus, copiose accurateque tractatur. Zürich: Jacob Gesner, [February 1563]. 8vo (168 x 107 mm). [16], 718, [2]; [2], 719-951, [53] pp. Text in Latin and Greek. Woodcut initials; separate title-leaf to Gesner's work, dated February 1563. Signatures: [alpha]<sup>8</sup> a-z<sup>8</sup> A-2R<sup>8</sup>. Numerous mispaginations. Blank leaf T8 present after p.718. Bound in contemporary pigskin richly tooled in blind, spine with 4 raised bands, brown dyed edges, original endpapers (small defect at spine ends, lower corners worn, ties gone). Text with light even browning throughout, occasional minor spotting, a few pages with faint dampstaining, short tear at lower blank margin of leaf B4. Provenance: owner stamp on title-page (crowned monogram). A very good copy in untouched binding. (#003829)

RARE FIRST EDITION, FIRST (ADAMS) ISSUE OF THIS COLLECTION of three texts on Aristotle's *De Anima* in one volume. Part of the curriculum of medical students was that they were expected to have studied and written about Aristotle's *De anima*. Conrad Gesner, who had studied medicine and was deeply



interested in the human soul, wrote his *De* anima in this tradition. It is the fourth of the works contained in this book and is published here for the first time.

A friend of Erasmus and Thomas More and tutor to Queen Mary I of England, Vives has been called "the father of modern empirical psychology. . ." (Zilboorg & Henry). "Vives Bacon and Descartes in anticipated devoloping an empirical psychology in which the mind was to be studied both through introspection and observation of others. From his exhaustive analysis of memory he developed a theory of association of ideas, which recognized the emotional origin of certain associations, as well as the link between associations, emotions and memory. He was also the first to describe the physiological effects of fear" (Garrison-Morton). Vives maintained that the essence of the human mind was indescribable but could be known through the mind's actions.

The title page to Vives's *De anima & vita libri tres* bears no date of publication. Gesner's *De anima liber* has its own full title page dated February 1563. "Adams lists three issues of this edition, with no priority stated. The second and third issues both have signature alpha reset: in the second, an inverted fleur-

de-lys appears above the imprint, while the third has 'Cum index duplici' in place of the fleur-de-lys. Both the second and third issues have the misprinted headline 'Inddx' on leaf [alpha]5r; this headline is correctly spelled in the first issue" (Norman).

References: Norman 2161; A.-S. Goeing, in: *Gessner-Katalog Zürich*, 2016, p. 50); VD16 V 1805, G 1694 (Gesner) and M 2768 (Melanchthon); Adams V 941; Vischer K 67; Leemann-van Elck, *Gessner* 74; Garrison-Morton 4963.2; Zilboorg & Henry, pp. 180-195.

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