



## Catalogue 02-2015

39 New Arrivals

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## Milestones of Science Books

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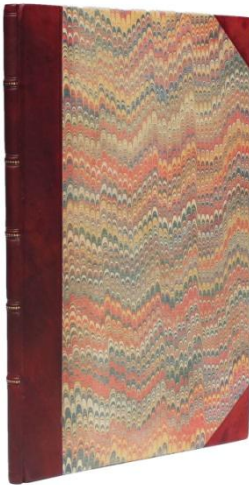
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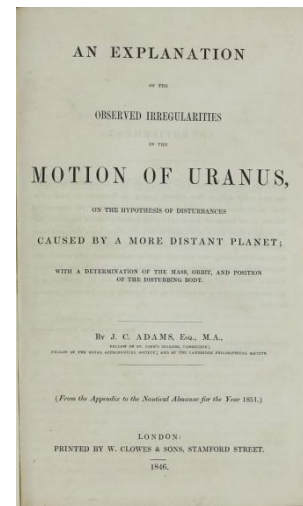
## The discovery of Neptune

- 1 ADAMS, John Couch.** *An Explanation of the Observed Irregularities in the Motion of Uranus on the Hypothesis of Disturbances Caused by a More Distant Planet; with a determination of the mass, orbit, and position of the disturbing body.* From the Appendix of the Nautical Almanac for the Year 1851. London: W. Clowes & Sons, 1846. 8vo (227 x 147 mm). [3] 4-31 [1] pp. Modern morocco, spine gilt. Internally only very little browned or spotted. A fine copy. (#002272) sold



Dibner 16; Sparrow 1; Norman 7; Evans 24; DSB I, pp. 53-4; Ley, Watchers, pp. 407-14. The RARE FIRST SEPARATE EDITION of the work that announced the discovery of Neptune and finally confirmed Newton's theory of gravitation.

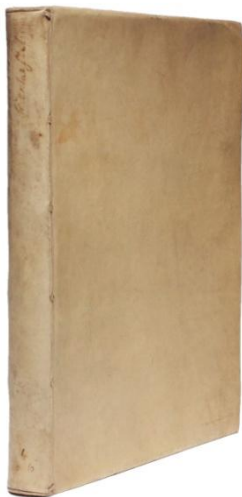
Adams began his investigation of Uranus in mid-1843, and in 1845 sent his calculations and observations to the Astronomer Royal, George Biddell Airey, who failed to recognise the importance of the paper. In 1846, Urbain Jean Joseph Le Verrier published his own research and reached the same conclusion, leading to the immediate identification of Neptune by J.G. Galle. Only then was Adams' work published, leading to a bitter dispute over priority (Norman 7).



"In retrospect Adams' many mathematical and astronomical achievements pale in comparison to his analysis of the orbit Uranus and his prediction of the existence and position of Neptune at the age of twenty-four. Much of his later work has been superseded, but as the co-discoverer of Neptune he occupies a special, undiminished place in the history of science." (DSB I, p.54).

## ...among the most excellent in Islamic astronomy

- 2 AL BATTANI, Abu Abdallah Muhammad ibn Jabir [Albategnius].** *[Kitab al-Zij]. Mahometis Albatenii de Scientia Stellarum Liber cum aliquot additionibus Joannis Regiomontani ex Bibliotheca Vaticana transcriptus.* Bologna: Typis Haeredis Victorii Benatii, 1645. 4to (223 x 160 mm). [16], 228, [4] pp., including half-title, fine engraved frontispiece with Medici arms by Coriolano, errata and imprimatur/colophon leaves at end, the latter with large printer's device. Numerous woodcut astronomical diagrams in text. Text within ruled borders throughout. Contemporary full vellum, spine titled in manuscript (covers faintly bowed). Internally very clean and crisp with no signs of spotting or markings. Provenance: Lieutenant Rafe? (illegible inscription to front pastedown, dated 1817). An outstanding copy of a rare and important work. (#002254) € 24,000



DSB I, pp.507-16; Riccardi II, 288. First separate edition of al-Battani's "great work on astronomy, ... among the most excellent in Islamic astronomy" (DSB). Al-Battani (858-929 A.D.) holds a place of honour among Islamic astronomers and historians. This is his principal work, the Kitab al-Zij, translated into Latin as De Scientia Stellarum by Plato of Tivoli

in the first half of the twelfth century, on which his fame in both the East and West rests. He tested many of Ptolemy's results by fresh observations, and obtained more accurate values of the obliquity of the ecliptic and of precession. He improved the moon's mean motion in longitude, used signs and cosines, and introduced new and elegant solutions into spherical trigonometry. He measured the apparent diameters of the sun and moon and their variation, and concluded that annular solar eclipses must be possible. The indebtedness of Copernicus to al-Battani is well known, he is frequently quoted by Tycho Brahe and Riccioli, and his observations were of

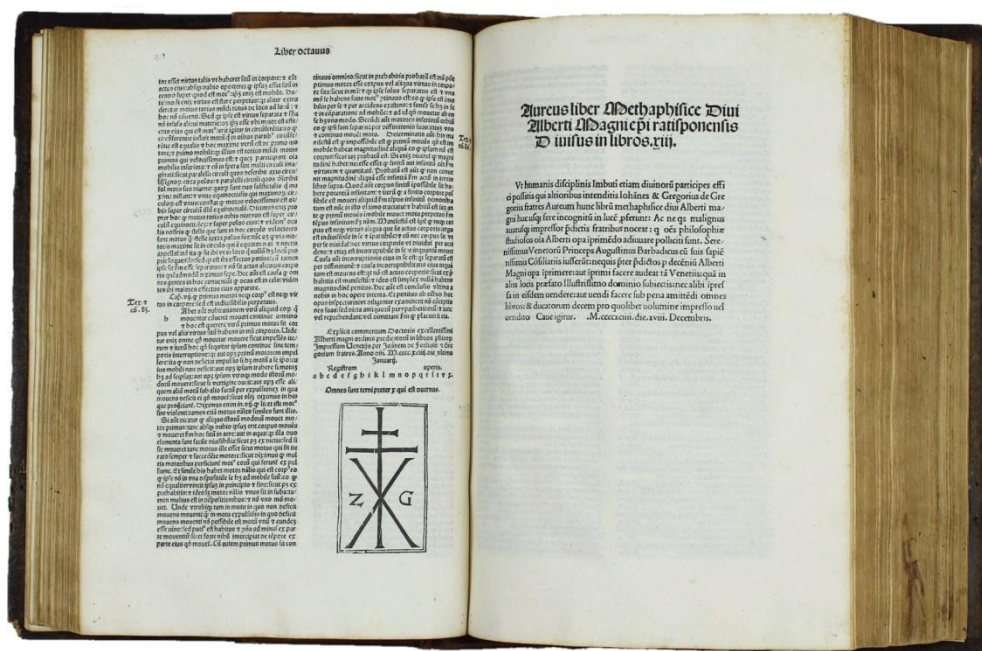


[illegible]



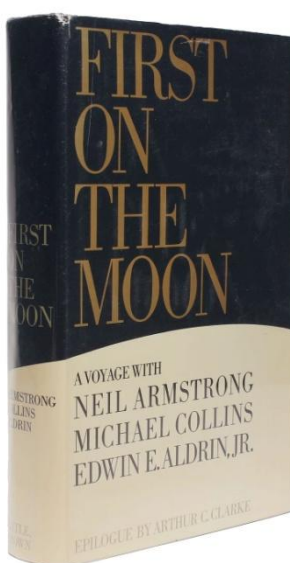
printed editions of the Logica (Goff A-270, 27 September 1494) and De animalibus (A-225, 21 May 1495). Another copy of these same seven editions bound together is in Herbert Hoover's library at Claremont College.

References: (1) Physica: Goff A-300, Hain-Copinger 519, GW 717; BMC V 346 (IB.21052), Polain 71; BSB-Ink. A163, CIBN A128; Klebs 24.2, Hoover 34. - (2) Metaphysica: Goff A-276, Hain-Copinger 501; GW 683; BMC V 345 (IB.21073), Polain 78; BSB-Ink. A161; Klebs 19.1, Hoover 41. - (3) De anima: Goff A-222, Hain-Copinger 494\*, GW 586; BMC V 345 (IB.21071), Polain 67; BSB-Ink. A142, CIBN A114; Klebs 13.2, Hoover 35. - (4) De meteoris: Goff A-278, Hain-Copinger 514\*=515, GW 685; BMC V 346 (IB.21053); BSB-Ink. A160, CIBN A121; Klebs 20.2, Hoover 42. - 5. De generatione: Goff A-245, Hain-Copinger 517\*, GW 613; BMC V 346 (IB.21081), Polain 72; Klebs 16.1, Hoover 37. - 6. De mineralibus: PMM 17 (for 1st edition), Goff A-281, Hain 522bis\*, GW 688; BMC V 346 (IB.21084); BSB-Ink. A151; Klebs 21.3, Hoover 38. - 7. De celo et mundo: Goff A-228, Hain-Copinger 512\*, GW 595; BMC V 347 (IB.21087); BSB-Ink. A146, CIBN A119; Klebs 15.2, Hoover 36.



**Signed by all 3 crew members**

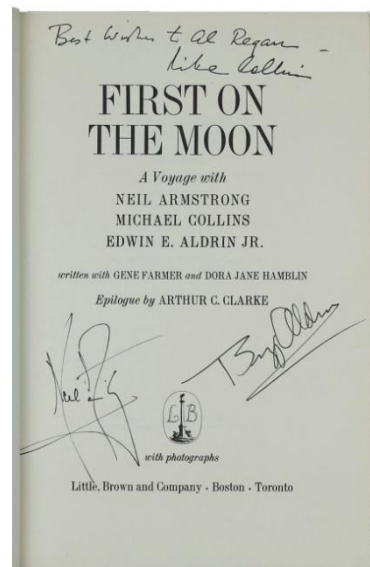
#### 4 [APOLLO 11]. ARMSTRONG, Neil; COLLINS, Michael; ALDRIN, Edwin E. Jr. *First on the Moon.*



*A Voyage with Neil Armstrong, Michael Collins, Edwin E. Aldrin Jr. Written with Gene Farmer and Dora Jane Hamblin. Epilogue by Arthur C. Clarke.*

Boston: Little, Brown and Company, [1970]. 8vo (235 x 154 mm). xiii, 434 pp. With 29 pages of black and white photographs. Publisher's black cloth, blindstamped title on front, gilt title on spine. In original dust jacket. The dust jacket with \$7.95 price intact is enclosed in a Mylar sleeve and an archival storage box for the book is included. Inscribed and signed on the full-title page: "Best Wishes To Al Regan/ Mike Collins", and signed "Buzz Aldrin" and "Neil Armstrong." A fine copy. (#002260) € 8,500

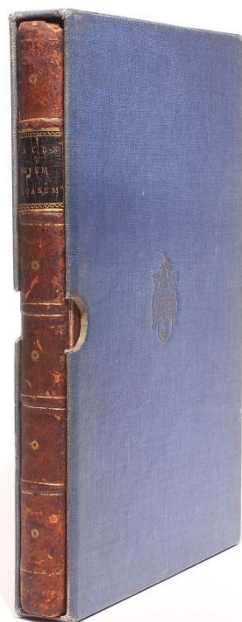
First edition of the Apollo 11 astronauts' own account of the first manned lunar landing. Inscribed and signed on the title page by all three crew members. Collectors of space memorabilia consider the autographs of the Apollo 11 astronauts an important and necessary acquisition, with all three signatures on one item the ultimate goal. This



original signed first edition, telling the inside story of this world-changing event in the words of the very participants, would make a handsome and worthy addition to any collection. The signatures were obtained in 1979 at the Apollo 11 Tenth Anniversary celebration at the Smithsonian, color photo enclosed.

*From the library of Sir Humphry Davy*

- 5 BACON, Francis.** *Instauratio magna [Novum organum]*. London: John Bill, 1620. Folio (283 x 175 mm). [12] 1-172, 181-360, 1-36 [2] pp., including engraved title by Simon van der Pass, woodcut headpieces and historiated initials. Signatures:  $\pi^2$  ¶<sup>4</sup> A-C<sup>6</sup> D-25<sup>4</sup> 2T<sup>6</sup>, a-d<sup>4</sup> e<sup>4</sup> (-e3). With the initial blank, colophon and errata on e4r, e3 cancelled as usual. *Parasceue, ad historiam naturalem, et experimentalem* with divisional title, separate pagination and register. Early 19th-century speckled calf (front board detached) with gilt spine and black letting piece gilt, marbled endpapers. Internally crisp and unmarked, which only very minor spotting in places. Provenances: Sir Humphry and Lady Jane Davy\* (armorial bookplate of Lady Jane to front pastedown); Edward Hilton Young, Lord Kennet of the Dene (armorial bookplate to front pastedown); B. Quaritch (collation note), Sotheby's sale June 4th 1935, lot 430. A fine copy with important provenance. (#002277) € 39,000



Dibner 80; Horblit 8b; PMM 119; Norman 98; Sparrow 17; Gibson 103b; DSB I, pp.373-5; Pforzheimer, App. 1. FIRST EDITION, second issue of Bacon's manifesto for a new philosophy of scientific method, relying on laws deduced from observation and investigation. Bacon originally conceived his revolutionary work in six parts, of which only the first and second parts, the *De augmentiis scientiarum* (1623, a greatly expanded version of the *Advancement of learning*) and the *Novum organum* were completed. More than a mere portion of the *Instauratio*, however the *Novum organum*, as its title implies, "contains the central ideas of Bacon's system, of which

the whole of the *Instauratio* is only the development" (Pforzheimer, p. XXI). Bacon's aim was to lay an entirely new foundation for science, "neither leaping to unproved general principles in the manner of the ancient philosophers nor heaping up unrelated facts in the manner of the 'empirics'" (DSB I, p.374).

He conceived a new method of acquiring knowledge of the world through observation, experiment and inductive reasoning, which he envisioned as a tool for the "total reconstruction of sciences, arts and all human knowledge... to extend the power and dominion of the human race... over the universe.. Bacon made no contributions to science itself, but his insistence on making science experimental and factual, rather than speculative and philosophical, had powerful consequences.... As a philosopher Bacon's influence on Locke and through him on subsequent English schools of psychology and ethics was profound. Leibniz, Huygens and particularly Robert Boyle were deeply indebted to him, as were the Encyclopedistes and Voltaire..." (PMM). His vision inspired the creation of the Royal Society and the other early scientific academies.

The celebrated engraved title shows a ship sailing through the pillars of Hercules with the motto 'Multi pertransibunt et augebitur scientia' (Many will pass through and knowledge will be multiplied). The second issue as here has the e3 cancelled, and previously blank e4 printed with errata and colophon omitting the name of Bonham Norton. Only a very few copies of the first issue are known.



\*Lady Jane Davy (1780-1855) was the wife of Sir Humphry Davy. Already once a widow at the age of 32, she married him in 1812 just two days after he was knighted following the proclamation of the Regency. Sir Davy, "now married to a wealthy woman, was able to resign all his positions at the Royal Institution, Royal Society and Board of Agriculture. In some ways their relationship sounds like an inverted plot of a Jane Austen novel and this may explain why Jane Davy did not like *Pride and Prejudice* published at the start of 1813. [Sir] Davy told a friend that after his marriage, 'I shall be able to devote my whole time to the pursuit of discovery'. This



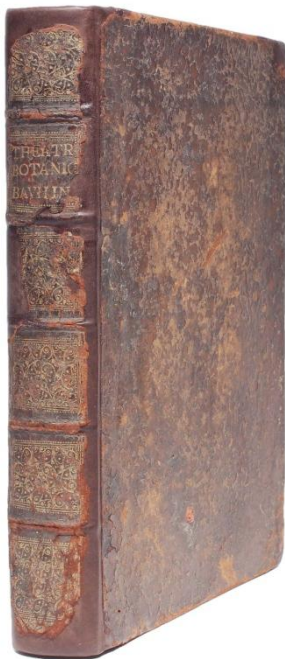
proved to be very far from the case, although he did invent the miners' safety lamp at the Royal Institution in 1815. The Davys toured the Continent between 1813 and 1815 and her domineering behaviour was memorably captured in Michael Faraday's letters. On their return the Davys purchased 26 Park Street, Grosvenor Square, which became their London house for the remainder of both their lives." (F. James, Royal Institution Blog, 2014). She and Davy established an important literary and scientific salon in London. Although there is no ownership signature by Humphry Davy in our copy, numerous copies of books are known that have been presented to him by their authors and which bear Lady Jane's bookplate. The bookplate depicts a simplified variant of the baronet coat of arms created by the Prince Regent and awarded to Humphry Davy in 1818. A central element of this coat of arms is a fire contained by chains.

Francis Bacon, or "Lord Bacon" as he was referred to by his eighteenth-century admirers was cited approvingly by many of the leading lights of the Enlightenment, including Diderot, Lavoisier, and Davy. Modern scholars seem agreed: Bacon was the most influential mind to regard knowledge as subject to constant growth and a practical enlightenment scientist such as Humphry Davy had no doubt that Bacon was the "first philosopher who laid down plans for extending knowledge of universal application; who ventured to assert, that all the science could be nothing more than expressions or arrangements of facts. (A. Q. Curzio & M. Fortis, Research and Technological Innovation, 2005, p.23).



### **Marks the beginning of a modern natural classification based on general morphology**

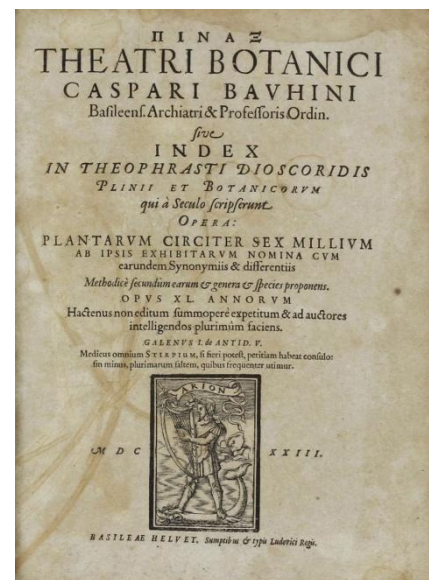
- 6 BAUHIN, Gaspard [BAUHINIUS, Caspar].** *Pinax (ΠΝΑΞ) theatri botanici sive index in Theophrasti, Dioscoridis, Plinii et botanicorum qui a seculo scripserunt*. Basel: Ludwig Konig, 1623. 4to (245 x 184 mm). [24], 522, [26] pp. Woodcut device on title, errata on on ZZ1, including final blank ZZ2. Contemporary mottled calf, spine with 5 raised bands gilt in compartments (spine and hinges repaired, extremities worn, rear endpaper renewed). Internally unevenly browned throughout, occasional dampstains to margins, a few smaller wormholes to blank margins, otherwise good copy. Complete, with the errata and final blank. (#002246) € 3,800



PMM 121; Norman 139; DSB I, p.145; Pritzel 509; Stafleu-Cowan TL2 367; Sachs, History of Botany, p.33. - FIRST EDITION of the work which marks the beginning of a modern natural classification based on general morphology. The work classifies over 6000 species based on affinities rather than the old alphabetical manner of enumeration. "Bauhinus realized the convenience of the binominal nomenclature which later became a central feature of Linne's system. He decisively differentiated genera and species, giving names to genera, but without descriptions, while distinguishing species by diagnostic phrases. Bauhinus' book is still our most important source for the investigation of the botanical literature preceding him, and from it the way leads

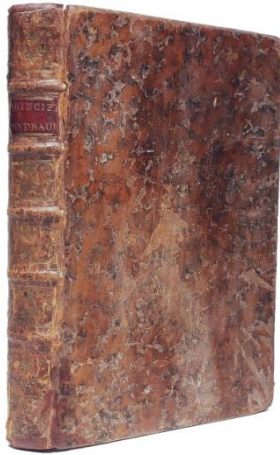
through Ray to Linne" (PMM).

Bauhin (1560-1624), professor of anatomy and botany at Basel, began a new era in botany, distinguishing it as a science in its own right and abandoning its herbal-medical associations, by creating a modern natural classification based on morphology. "The progress of botanical science ... reaches its highest point in the labours of Gaspard Bauhin, as regards both the naming and describing of the individual plants and their classification according to likeness of habit ... A still higher value



must be set on the fact, that in Gaspard Bauhin the distinction between species and genus is fully and consciously carried out; every plant has with him a generic and specific name, and this binary nomenclature which Linnaeus is usually thought to have founded, is almost perfectly maintained by Bauhin, especially in the 'Pinax'" (Sachs).

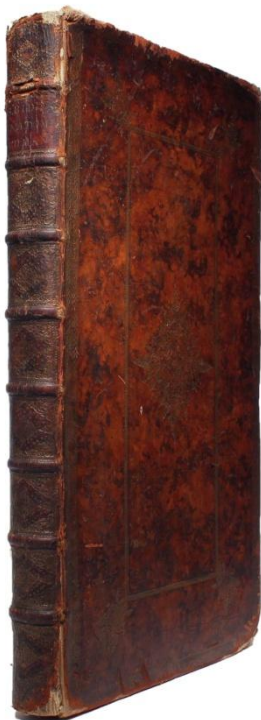
- 7 BERNARD, Pons-Joseph.** *Nouveaux Principes d'Hydraulique appliques a Tous les Objets d'Utilite, et particulierement aux Rivieres; precedes d'un Discours Historique et Critique sur les Principaux Ouvrages qui ont ete publies sur le meme Sujet.* Paris: Didot l'Aîné, 1787. 4to (253 x 190 mm). [4], lxvi, 331 [1] pp., 3 folding engraved plates. Contemporary French mottled sheep, spine with morocco letting piece and 5 raised bands gilt in compartments (wear to extremities, old repair to spine ends, corners bumped, joints rubbed and partially split but sound), marbled endpapers. Internally only very little age-toned, very minor spotting in places. Provenance: Marinens Bibliothek (small ink stamp on title and shelf mark in black ink, deaccession stamp on first preliminary leaf). A fine, crisp copy. (#002241) € 250



Roberts and Trent, *Bibliotheca Mechanica*, p. 34; Poggendorf III, 113. FIRST EDITION. "This textbook opens with an extensive historical survey of the history and theory of hydrostatics and hydrodynamics, quoting works by Galileo, Viviani, Castelli, and Guglielmini (whose monumental work is discussed in detail with the observations of Bossut), as well as Varignon, Newton, Daniel Bernoulli, Mariotte, and Bélidor. The first part is dedicated to hydrostatics [...] The second part deals with hydrodynamics with special reference to the works of Newton and Bernoulli, applying theory to 'all subjects of utility.' The third part is devoted to all aspects of the formation and behaviour of rivers, followed by sections on river management, the control of flooding and canals. This is succeeded by sections on draining of marshes, the construction of bridges and dikes, and on hydraulic machines of various sorts." (Roberts & Trent, p.34)

***Large paper copy of one of the finest anatomical atlases***

- 8 BIDLOO, Govard.** *Anatomia Humani Corporis, centum & quinque tabulis, per G. de Lairese ad vivum delineatis, demonstrata.* Amsterdam: For the Widow of Joannes van Someren, the Heirs of Joannes van Dyk, Henry Boom and Widow of Theodore Boom, 1685. Large Folio (625 x 345 mm). Collation \*6 (A-3Q)1, additional engraved title, engraved portrait by Abraham Bloteling after Gérard de Lairese, 104 (of 105, lacking plate 2 as often) numbered engraved plates after Lairese, probably by Bloteling, number 10 printed on two sheets and number 23 folding, woodcut printer's device on title, woodcut initials and tail-pieces, contemporary mottled calf, gilt, some spotting, tears to margins of some plates, binding worn at edges and corners, spine chipped at head and foot. Provenance: Jacob Drake, ex libris dated 1728 on pastedown; thence to S. Palmer, ex dono inscription on pastedown; Charles Richard Vaughan, bookplate; Royal College of Surgeons in Ireland; inkstamps and embossed library stamp. Interior clean, no browning or waterstaining, very minor foxing. A fine copy. (#002271) € 8,000



Norman 231; Choulant, pp. 250-3; Heirs of Hippocrates 667; Garrison-M 384; NLM/Krivatsy 1238; Russell, *British Anatomy*, 211; Roberts & Tomlinson pp. 309-17; Wellcome II, p.165; Waller 1039; Dumaitre, *La Curieuse Destinée des Planches Anatomiques de Girard de Lairese* (1982). -

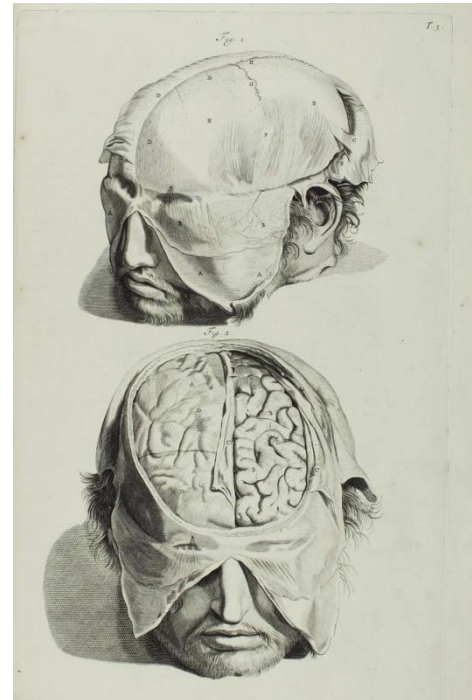
First edition and LARGE PAPER COPY of this striking anatomical atlas illustrated with plates considered among the finest illustrations of the Baroque period.



"Bidloo, professor of anatomy at The Hague, was at one time physician to William of Orange. An English contemporary, William Cowper, furnished his *Anatomy of humane bodies* almost completely with engravings plagiarized from this book by Bidloo, who promptly and publicly excoriated Cowper in a published communication to the Royal Society. Before the days of copyright, this is one of the most famous instances of plagiarism in the history of medicine...These plates are considered among the finest illustrations of the Baroque period,..." (Heirs of Hippocrates 667).

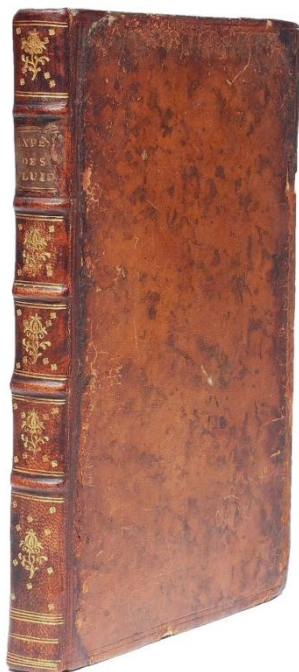
"The value of Bidloo's '*Anatomia*' lies chiefly in the 105 fine copperplate engravings drawn by Gerard de Lairesse, and engraved by Pieter van Gunst. These are masterpieces of Dutch baroque art" (Garrison-M).

"One of the finest anatomical atlases of the Baroque period. The 105 plates were drawn by the painter Gerard de Lairesse, under whose influence the French style of Poussin and Lorraine became dominant in Holland. For Lairesse, the anatomical illustrations Bidloo asked him to undertake were an occasion for an artistic meditation on anatomy: he displayed his figures in an emotional, almost tender manner, contrasting the raw dissected parts with the full, soft surfaces of uncut flesh, placing flayed, bound figures in ordinary nightclothes or bedding, setting ordinary household objects such as books, jars or cabinets in the same scene as cut-up torsos or limbs, and in one plate showing a fly crawling on an opened abdomen. His illustrations brought the quality of Dutch still-life painting into anatomical illustration, and gave a new, darker spiritual expression to the significance of the act of dissection. According to the most recent scholarship, the plates were probably engraved by Abraham Bloteling, inventor of the rocker tool for mezzoprint engraving." (Norman 231)



"The book took six years to make, and it was not a best seller, even by 17th-century standards. The publisher probably sold the plates to try to recoup some of his losses. But today, the 100 copies still in existence are the prized treasures of the world's great academic libraries, among them Oxford, Cambridge, Harvard, Yale and Vassar" (Vassar College Libraries).

**9 BOSSUT, Abbé; ALEMBERT, Jean le Rond d'; CONDORCET, Marie Jean Nicolas, le Marquis de. *Nouvelles Expériences sur la Résistance des Fluides*. Paris: Claude-Antoine Jombert, 1777. 8vo (202 x 130 mm). [4], 232 pp., 5 folding engraved plates bound at the end. Contemporary French calf, spine with 5 raised bands gilt in compartments (rebacked, preserving original morocco label, corners restored, wear to boards and extremities), cut edges red-dyed, marbled endpapers. Provenance: Bachelier, Libraire pour la Marine (bookplate to front pastedown, dated 1814). Internally only little browned, minor spotting in places. Very good copy with ample margins. (#002239) € 550**



Roller-G. I, 146; Roberts and Trent, *Bibliotheca Mechanica*, p. 9; Rouse, *Historic Writings on Hydraulics*, 136; DSB II, p. 335. First edition of an account of towing tank experiments on the resistance of bodies of various sizes in connection with inland navigation.

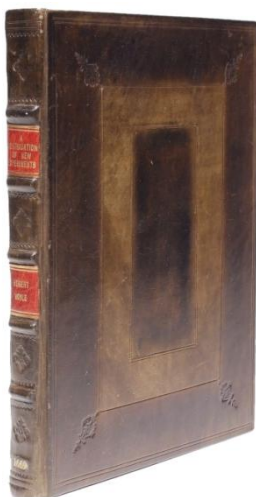
"Bossut was one of a very few whom d'Alembert took as students ... in 1775 he participated with d'Alembert and Condorcet in a well-known series of experiments on fluid resistance ... Bossut is one of the important figures in the history of physics and engineering education" (DSB II, p. 335).

"These towing tank experiments were preceded only by those of Benjamin Franklin... In the present work, Bossut reports on the experiments on the resistance of bodies in connection with inland navigation, which were conducted in 1775 by d'Alembert, Condorcet, and himself at the request of the

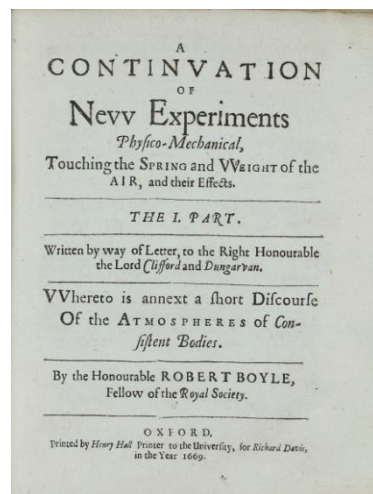


government. Using a towing tank constructed under Bossut's supervision, it was determined that the resistance increases as the relative area of the canal diminishes. The text describes the preparations for the experiments and supplies numerous tables of the result." (Roberts & Trent, p. 9)

**10 BOYLE, Robert.** *A Continuation of New Experiments Physico-Mechanical, Touching the Spring and Weight of the air, and their Effects. The I. Part. Written by way of letter to the Right Honourable the Lord Clifford and Dungarvan. Whereto is annex a short Discourse Of the Atmospheres of Consistent Bodies.* Oxford: Printed by Herny Hall for Richard Davis, 1669. 4to (198x156 mm). [22], 198, [12], including leaf with longitudinal title and 8 engraved plates bound at the end. Modern panelled calf, spine with 5 raised bands blindstamped in compartments and with two red morocco labels lettered in gilt. Internally only very little age toned. One plate partly shaved at lower margin due to offsetting (first four plates just touching platemarks). A fine, crisp and unmarked copy. (#002256) € 2,200



Wing B 3934; Fulton 16; NLM/Krivatsy 1662; Wellcome II, 220. RARE FIRST EDITION of the first continuation. The plates show the single



barrelled air-pump devised by Boyle and Hooke. Plate V, fig. I, shows the experiment in which Boyle sucked water up with his pump to the top of the Sheldonian Theatre in Oxford.

**The first work in English on determining specific gravity.**

**11 BOYLE, Robert.** *Medicina hydrostatica: or, Hydrostaticks Applyed to the Materia Medica. Shewing, How by the Weight that Divers Bodies, Us'd in Physick, Have in Water; one may Discover Whether they be Genuine or Adulterate. To which is Subjoyn'd, a Previous Hydrostatical Way of Estimating Ores.* London: Samuel Smith, 1690. 8vo (162 x 100 mm). [24], 217, [7]; [2], 14 pp.,

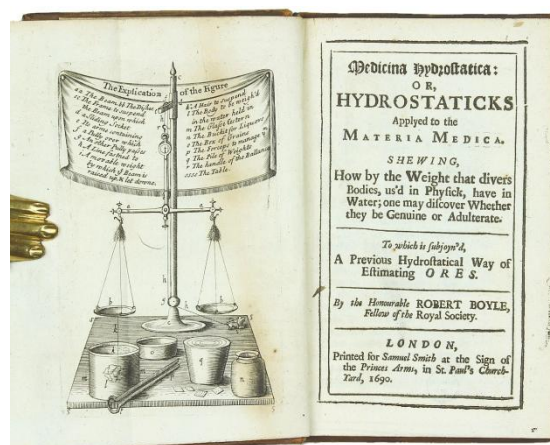


including half-title, folding engraved frontispiece, and with the 'Catalogue of the Philosophical Books and Tracts' at end. Internally clean and crisp, slight printer's ink smudges to leaves N3-4. 18th century panelled sheep, spine with morocco label (spine rubbed, corners bumped and scuffed). Provenance: Mountstuart bookplate of the Earls of Bute to front pastedown. A fine copy of one of the rarest of Boyle's works. (#002223) € 12,000

Fulton 189; Wellcome II, p.224; Wing B3928A; Neville, Historical Chemical Library I, 2006, p. 200. - "One of Boyle's last writings and important as the first work in English on determining specific gravity. The catalogue at the end is rare and was added to only a few copies." (Neville). "The book is not common and has not been reprinted except for the Geneva edition" (Fulton).

It "was written by Boyle the year before his death. He explains in the preface that he borrowed the title from Santorio's *Medicina Statica*, and he might have

apologized for the term 'medicina', for, in modern parlance, the book is essentially a monograph devoted to a special branch of physics... it was Boyle who first directed the attention of physicists and chemists to the importance of specific gravity. Pages 145 to 224 are of considerable interest in the history of mineralogy showing the specific gravities of various ores.



### Boyle's most important medical contribution

- 12 BOYLE, Robert.** *Memoirs for the Natural History of Humane Blood, Especially the Spirit of that Liqueur.* London: Samuel Smith, 1683/4. 8vo (159 x 94 mm). [xvi], 289, [7] pp., including cancel

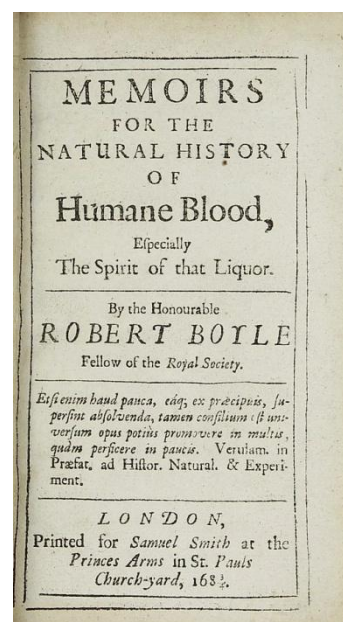


title, title within 2-line rule border, with the 3 final advertisement leaves. Contemporary calf (upper hinge repaired). Internally only little browned. Provenance: The library of Hugh Selbourne (small stamp to title verso). A fine, crisp and unmarked copy. (#002222) € 7,500

Norman 308; Heirs of Hippocrates 565; Wing B3993; Fulton 146b; Garrison-Morton 861; NLM/Krivatsy 1708; Waller 1388; Wellcome II, p.223 (1684 ed.); Cushing B579. - FIRST EDITION, second issue of "the first analysis of blood, Boyle's Memoirs may be considered the first scientific study in physiological chemistry, exhibiting methods which have become universally adopted." (Garrison & Morton).

"The present work is Boyle's most important medical contribution and is one of the first to deal with the scientific analysis of the blood. Bloodletting was still quite common at the time, so Boyle had little

difficulty obtaining blood for his experiments. In his analysis of the blood, Boyle includes its properties of taste, temperature, combustibility, and weight and also mentions its serous and red portions, volatile and fixed salts, oil, mucus content, etc. He discusses human and animal blood, and describes a series of experiments to test the anticoagulating properties of various substances. Boyle also provides a series of remedies prepared from blood for a wide variety of ailments from hysteria and epilepsy to coughs and other respiratory complaints." (Heirs of Hippocrates 565)



- 13 BRUNDSCHWIG, Hieronymus.** *Das distillierbuch. Das buoch der rechten kunst zu Distillieren vnnnd die wasser zû brennen, mit figuren angezögt ... auch dabei vo Marsilio Ficino, ... des lange vnnnd gesunde lebens, als er an im selb bewert, vnd hundert vnd zehen iar ruewigklich engelebt hat.*



Strassburg: Johann Grüninger, 1515. Folio (309 x 210 mm). [1-3], 4-7, [8-9], 10-11 [12] 13-19, 19, [20-27], 33-130, [55] (of [56]) II, lacking the final leaf of the Ficino appendix. Signatures: A<sup>8</sup> B-C<sup>6</sup> D<sup>8</sup> E-T<sup>6</sup> V<sup>8</sup> a-c<sup>6</sup> d<sup>8</sup> e-j<sup>6</sup> (-j6). Title page with large woodcut illustration of a herb garden and a still, 239 (1 double page) woodcut illustrations in text. Contemporary blind-stamped pigskin over wooden boards with two brass catches and clasps (one closure band renewed). Light browning throughout, occasional spotting and ink smudges, title-leaf expertly restored in lower blank margin, 12 formerly loose text leaves refixed (frayed at margins), the fore-margins of the oversize double-page woodcut trimmed just into platemark, closed tears to lower margin of a few leaves, occasional marginalia and markings in early hand. Provenance: Joseph Antoni (signature on front pastedown), illegible signature dated 1700 on title-page. Generally a very good copy with ample margins. (#002253)

€ 9,000

Dibner 37 (first edition); Benzing, Brunschwig 13; Choulant, Graph. Inc., p.84; Kristeller, Strassb. 98, 150; Schmidt I, 148; Nissen, BBI 266.

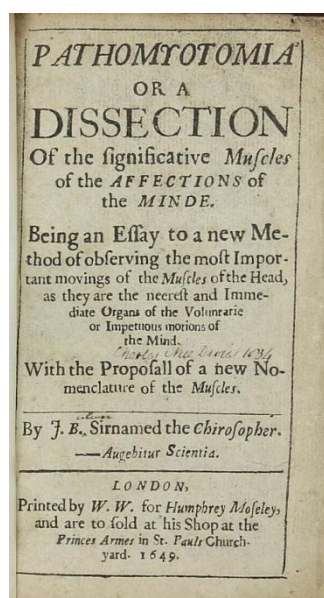
The very rare fourth edition of Brunschwig's *Liber de arte distillandi* or *Kleines Distillierbuch*, first published 1500 by Grüninger in Strassburg,



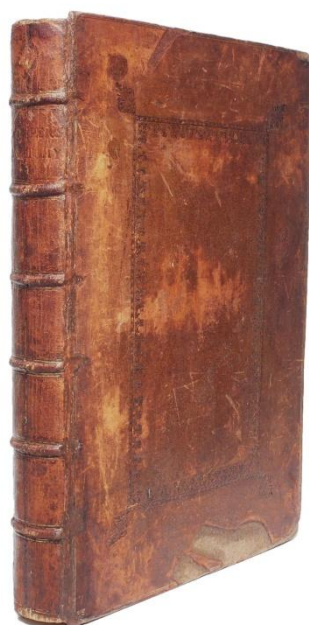
which includes a medical treatise by Ficino. This edition not in Durling, Duveen, Waller, or Wellcome. This is the third appearance of this collection (first, with the title *Medicinarium*, in 1505), comprising the fourth edition of the first two parts of Brunschwig's *Kleines Distillierbuch* and the second edition of Johannes Adelphus's translation of Ficino's *De triplici vita*. The first two parts are nearly identical with the corresponding parts of Brunschwig's *Kleines Distillierbuch*, 1500, the first book devoted to distillation. In this work the traditional herbal met the emerging technology of chemistry, as Brunschwig describes the methods and apparatus for extracting by steam distillation the essential oils and essences of a wide variety of plant (and some animal and mineral) products. The first part of the work is devoted to distilling techniques. The second part is an alphabetical catalogue of plants, with woodcut illustrations, synonymy, medicinal properties and specifications, and information on how they are to be distilled. The third part comprises a German translation by Johannes Adelphus of the first two books of Ficino's *De triplici Vita*.



- 14 BULWER, John.** *Pathomyotomia or a Dissection of the significative Muscles of the Affections of the Minde. Being an essay to a new method of observing the most important movings of the muscles of the head, as they are the neerest and immediate organs of the voluntarie or impetuous motions of the mind. With the proposall of a new nomenclature of the muscles.* by J.B. Sirnamed the Chiroosopher. London: WW. for Humphrey Moseley, 1649. 12mo (136 x 78 mm). [36], 240 pp. Errata on A6r. 19th-century calf (extremities worn, corners bumped, portion missing from top of spine; inner hinges cracked, short margins). Internally little browned throughout, title-page somewhat soiled and with 19th-century owner's signature. Provenance: Anglican clergyman and hymn writer Henry Francis Lyte (1793-1847), Armorial bookplate to front pastedown. (#002237) € 4,600



Norman 371; NLM/Krivatsy 1931; Wellcome II, p.270; Wing B-5468. - VERY RARE FIRST EDITION of this anonymously published treatise on the expression of the emotions, in which Bulwer treats the relationship between muscular action and psychology. "Bulwer was the first Englishman to write about the teaching of deaf-mutes" (Garrison- M. 3347, note).



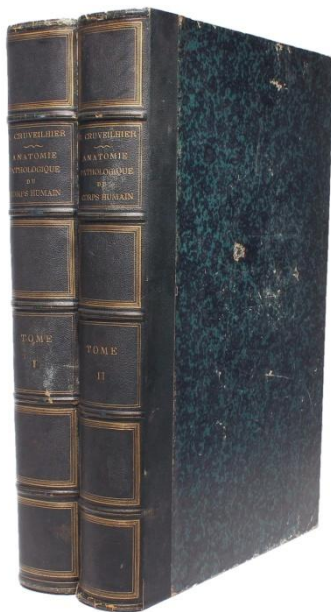
- 15 COWPER, William.** *Myotomia Reformata: Or an Anatomical Treatise on the Muscles of the Human Body. Illustrated with Figures After the Life... To Which is Prefix'd an Introduction Concerning Muscular Motion.* London: Robert Knaplock, William and John Innys, and Jacob Tonson, 1724. Large folio (460 x 322 mm). [12], lxxvi [1], 194 pp. Signatures: [\*A]<sup>2</sup> \*B-\*C<sup>2</sup> a-t<sup>2</sup> v1 B-Ddd<sup>2</sup>. Engraved frontispiece, title printed in red and black, double-page engraved table of the *Syllabus musculorum* bound after v1, and 67 engraved plates after Rubens and Raphael numbered 1-66 (with plate 13 in two states), engraved text illustrations, diagrams, head- and tail-pieces and initials. Blank leaf v2 removed but final blank 3D2 present. Internally only very little browned, scattered light spotting. Contemporary calf (hinges repaired, boards, spine and extremities worn, corners heavily scuffed, lettering piece partly gone). A fine copy with ample margins. (#002224) € 6,800



Norman 530; Choulant-Frank, p.253; Garrison-Morton 392.1; Wellcome II, p.401; Roberts & Tomlinson pp. 415-17; Russell 210; Heirs of Hippocrates 723. The first folio edition, remarkable not only for the quality of the large plates but for "the ingenious historiated initials wittily decorated with myotomical motifs" (Norman). The first edition of Cowper's treatise on the muscular system of the human body was published in 1694 as a modest octavo with 10 plates. Cowper worked until his death on this greatly expanded edition, which was published 13 years later under the supervision and at the expense of the physician Richard Mead (1673-1754). With its 66 plates, some after Rubens and Raphael, its witty engraved initials and dramatic head- and tail-piece illustrations, this first folio edition ratlks among the most artistically inventive anatomical atlases of the 17th and 18th centuries.

### *One of the greatest works of its kind*

**16 CRUVEILHIER, Jean.** *Anatomie pathologique du corps humain*. Paris: J. B. Bailliere, 1829-1842. 2 volumes of text and plates bound together, large folio (480 x 320 mm). Half-titles to each volume,



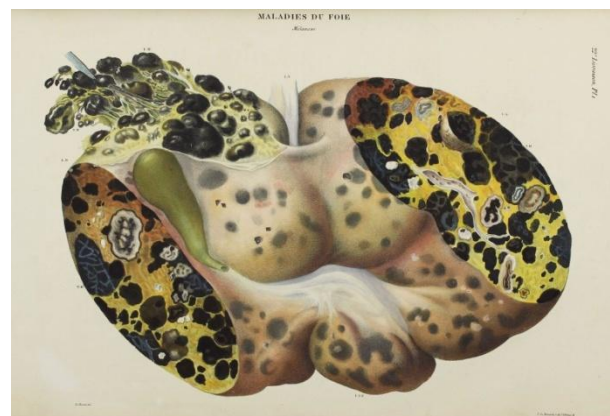
list of subscribers in vol. 1, tables and lists of plates at end of each volume, general index at end of vol. 2., 233 lithographed plates on 231 sheets (2 folding, 171 hand-colored) by J. G. Martin and A. Chazal. Occasional slight toning and spotting (one plate discoloured), one or two short marginal tears or repairs. Contemporary roan-backed boards, spine with 5 raised bands gilt in compartments (rubbed, minor wear to extremities, corners bumped). An outstanding, clean copy. (#002225) sold

Norman 538; Garrison-Morton 2286; Heirs of Hippocrates 1479; Wellcome II, p.412; Goldschmid pp. 11-15 & 137-39; Long, History of Pathology, pp. 85-87; Spillane, The Doctrine of the Nerves (1981) pp. 205-20.

FIRST EDITION OF THE MOST COMPREHENSIVE OF THE EARLY ATLASES OF PATHOLOGY, monumental in size and scope, and unsurpassed in the beauty and clarity of its plates. It was published over thirteen years, in forty separate parts, with a total of 233 mostly hand-colored lithographed plates. "The significance of [Cruveilhier's] work cannot be

overestimated," Goldschmid wrote in the introduction to his bibliography of pathology illustration (p. 12).

"The fine hand-coloured lithographs of gross pathology make this one of the greatest works of its kind. Cruveilhier, first Professor of Pathological Anatomy in Paris, gave the first description of multiple sclerosis and an early description of 'Cruveilhier's palsy'" (Garrison-Morton).





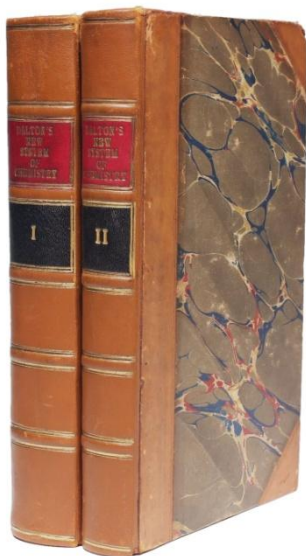


Cruveilhier's atlas continued the grand tradition of anatomical illustration, and marked a great advance in graphics with its hand-colored folio lithographed plates. It preserved a record of a superb collection of pathology specimens, many of which are seldom seen today. Among the many original observations are the first descriptions of hypertrophic pyloric stenosis and ulceration of the stomach due to hyperacidity (both known as "Cruveilhier's disease"), and of disseminated sclerosis; there is an early description of "Cruveilhier's palsy" (the progressive muscular atrophy also known as "Aran-Duchenne disease,") and some remarkable plates of the brain and spinal cord. The fine quality of the book made the reputation of Baillière as a medical publishing house, and the illustrations served as models into the early 20th century. Spillane called Cruveilhier's atlas a "treasure-chest of neurology" (p. 206) noting its original illustrations of multiple sclerosis, auditory neurinoma, intracranial epidermoid, intracranial and spinal meningiomas. Thanks to the accuracy of the fine illustrations, Cruveilhier's atlas "has become less dated than some more recent ones that make the most use of the microscope. That is why Virchow called himself Cruveilhier's disciple and why many of his findings remain valid" (DSB). Only one other edition of the atlas was

published, an Italian translation published in four volumes from 1837 to 1841, illustrated with copies of the original lithographs, the original stones having apparently been destroyed.

### *The complete set of all three parts*

**17 DALTON, John.** *A New System of Chemical Philosophy*. Part I. ... [Part III.]. Manchester: S. Russell for R. Bickerstaff, 1808 [vol. 1, part I]; Russell and Allen for R. Bickerstaff, 1810 [vol. 1, part II]; the executors of S. Russell for George Wilson, 1827 [vol. 2]. 8vo (208 x 125 mm). Vol. 1: vi, [2], 220 pp., with four leaves of plates; [8], 221-560 pp., with four leaves of plates. Vol. 2: xii, 357, [3] pp., but without the half title. Contemporary uniform three-quarter calf with morrocco lettering pieces (spines expertly rebaked, extremities little rubbed), internally very little toned, occasional very light spotting. Provenance: Frederick Lewis Maitland-Pattison (1923-2010), Scottish chemist and medical doctor (his ex-libris to inner cover of each vol.). A fine, bright and crisp set, wanting just the half title in vol. 2 as often. (#002133) £ 14,500

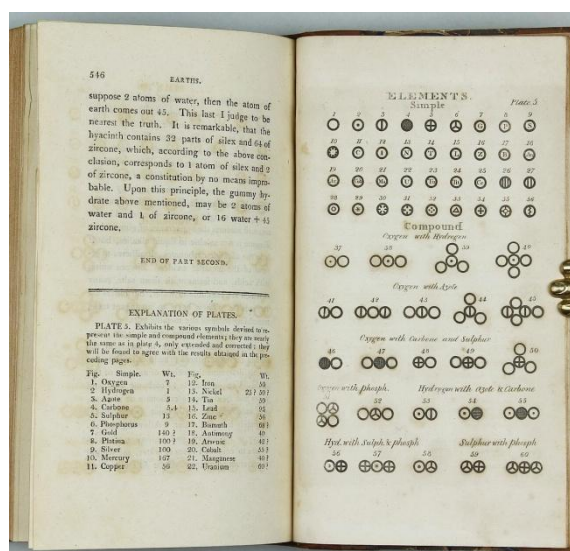


Dibner 44; Horblit 22; PMM 26; Sparrow 47; Norman 575. – First edition. Very rare when complete with the tree parts and the half title to volume 2 present. While the idea that all matter is composed of singular, indestructible particles goes back to speculative philosophers and scientists (Democritus and Lucretius among the ancients, Newton among the moderns), the great exposition of such a theory and its physical implications is by John Dalton (1766-1844), as

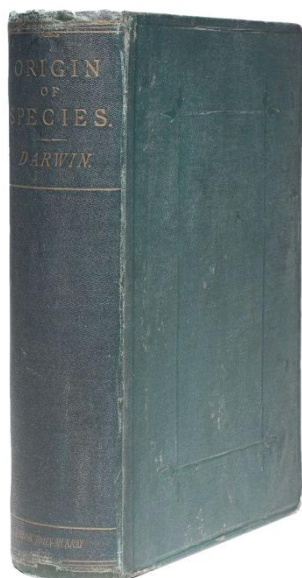
presented in his *New System of Chemical Philosophy*. Here, for the first time, Dalton argued that each of the *éléments* of Lavoisier – as defined in 1789 – 'is composed of atoms all alike ... the composition of each being constant' (PMM 261), the identity of each atom being established by its particular weight. Taking the lightest atom (hydrogen) as his integer, Dalton found that oxygen weighed 6.5 times as much, sulphur thirteen times as much, and so on, providing here (also for the first time) a 'periodic table' of the then-known elements: see pp. 213-15, and p. 219 and the facing plate. He proposed to express the age-old problem of chemical composition in terms of the number of atoms of each contributing element that combined into the smallest unit (later termed a 'molecule') of any compound substance; this model of all physical matter proved confirmable through experiment, and has dominated chemical theory (with modifications) ever since. Dalton's emphasis on the indestructibility of matter was also 'new' in 1808: 'we might as well attempt to introduce a new planet into the solar system, or to annihilate one already in existence, as to create or destroy a particle of hydrogen' (p.212, see DSB III, p.537ff).

Dalton explains the publication strategy of his *New System* in his Preface: he first intended 'to publish it intire in one volume', but changed his mind in order to 'exhibit and elucidate ... those primary Laws, which seem to obtain in regard to heat, and to chemical combinations' as swiftly as possible, being warned by colleagues that

'the interests of science, and his own reputation might suffer by delay'. Since his exposition of 'the doctrine of heat, and the general principles of Chemical Synthesis, are in a good degree independent of the future details, there can no detriment arise to the author, or inconvenience to his readers, in submitting what is already prepared, to the inspection of the public'. Hence Dalton put into print the essential 'Part I' of his *New System* in May 1808, reserving the 'details' of his experiments and analysis for two years: that supplement, entitled 'Part II', appeared in 1810, with a prefatory apology for its two-and-a-half year delay, and with its pagination continued from that of Part I. A very belated third part (described as 'Volume II, Part I', but effectively a new work under the old title) saw print only in 1827, by which time 'the theory had borne such widespread fruit that Dalton's own conclusions were almost all out-of-date' (PMM).

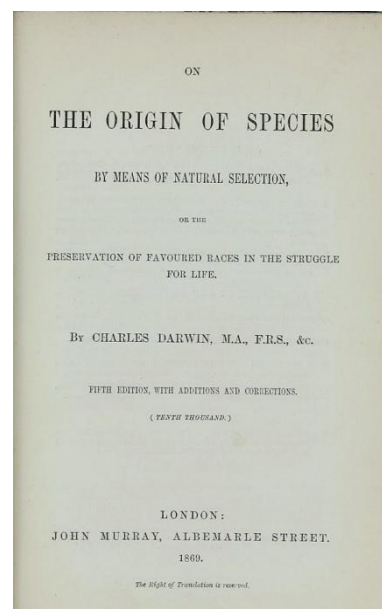


- 18 DARWIN, Charles.** *On The Origin of Species by Means of Natural Selection.* Fifth Edition, Tenth thousand. London: John Murray, 1869. 8vo (190 x 128 mm). xxxiii, 596 pp., 1 folding lithographed diagram. Uncut in original green cloth [Freeman's variant 'c' binding], covers stamped in blind, spine lettered and ruled in gilt, black glazed endpapers (unobtrusive repair of spine ends, corners bumped, extremities rubbed especially at corners, inner hinges partly cracking). Bound without the publisher's adverts in this copy as issued. Little foxing to endpapers, half-title and final leaf, otherwise clean and unmarked. All in all a very good copy. (#002275) € 1,900



Freeman 387. - THE FIFTH AND RAREST OF ALL EARLY EDITIONS OF "THE MOST INFLUENTIAL SCIENTIFIC WORK OF THE NINETEENTH CENTURY. This edition sees the first use by Darwin of Herbert Spencer's phrase 'survival of the fittest', appearing in the heading of Chapter IV. Its publication aroused world-wide criticism and controversy, both religious and

scientific" (Grolier/Horblit). The first edition of 1250 copies was sold on the day of publication. Though the work was initially prompted by observations, made during his travels aboard the Beagle from 1831 to 1836, of the biology and geology of isolated islands, Darwin spent nearly 25 years after his return to England accumulating evidence and considering his theory before publishing. "Although the theory of evolution can be traced to the ancient Greek belief in the 'great chain of being,' Darwin's greatest achievement was to make this centuries-old 'underground' concept acceptable to the scientific community by cogently arguing for the existence of a viable mechanism -- natural selection -- by which new species evolve over vast periods of time. Darwin's influence on biology was fundamental and continues to be felt today" (Garrison-Morton).





### *The rare first German edition of the Origin of Species*

**19 DARWIN, Charles.** *Über die Entstehung der Arten im Thier- und Pflanzen-Reich durch natürliche Züchtung, oder Erhaltung der vervollkommeneten Rassen im Kampfe um's Daseyn. Nach der zweiten Auflage mit einer geschichtlichen Vorrede und andern Zusätzen des Verfassers für diese deutsche Ausgabe aus dem Englischen übersetzt und mit Anmerkungen versehen von H. G. Bronn.* Stuttgart: E. Schweizerbart'sche Verlagshandlung und Druckerei, 1860. 8vo (220x150 mm). viii, 520, [6] pp. including one lithographed plate. Contemporary marbled paper card board binding with red letting piece to spine (extremities little rubbed). Internally little browned and spotted as usual. (#002245) € 2,200



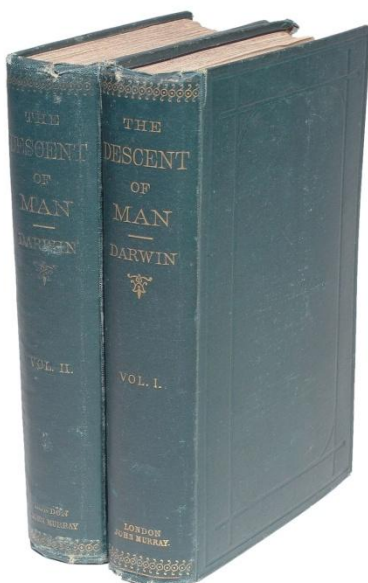
Freeman 672 (2nd edition); PMM 344b and Horblit 23b (both first English ed.). THE RARE FIRST GERMAN EDITION OF "THE MOST INFLUENTIAL SCIENTIFIC WORK OF THE NINETEENTH CENTURY. Its publication aroused world-wide criticism and controversy, both religious and scientific" (Grolier/Horblit). The whole edition of 1250 copies was sold on the day of publication. Though the work was initially prompted by observations, made during his travels aboard the Beagle from 1831 to 1836, of the biology and geology of isolated islands, Darwin spent nearly 25 years after his return to England accumulating evidence and considering his theory before publishing. "Although the theory of evolution can be traced to the ancient Greek belief in the 'great chain of being,' Darwin's greatest achievement was to make this centuries-old 'underground' concept acceptable to the scientific

community by cogently arguing for the existence of a viable mechanism -- natural selection -- by which new species evolve over vast periods of time. Darwin's influence on biology was fundamental and continues to be felt today" (Garrison-Morton 220)

Erste deutsche Ausgabe, übertragen vom großen Paläontologen Hch. Gg. Bronn (1800-1862), der "trotz der Verschiedenheit der Meinung der erste war, der, die eminente Bedeutung von Darwin's Buch richtig einschätzend, demselben in einer vorzügl. Übersetzung die weiteste u. rascheste Verbreitung verschaffte u. dadurch nicht wenig beitrug zu dem raschen Siege der Theorie" (ADB III, 360).

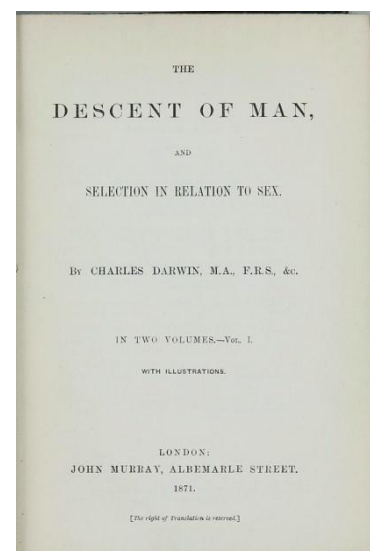
### *A first edition, first issue of Darwin's second most important work*

**20 DARWIN, Charles.** *The Descent of Man, and Selection in Relation to Sex.* 2 volumes. London: John Murray, 1871. 8vo (189 x 129 mm). viii, 423 [1], 16; viii, [2], 475 [1], 16 pp., including half-titles, publisher's catalogue dated January 1871 at end of each volume, and several woodcut illustrations in text. Original publishers green cloth (spine of vol. II somewhat rubbed, corners bumped, boards of vol. II little spotted/stained, cloth at extremities and spine ends a bit worn), front endpapers cracked and with tears in vol. II, rear endpapers partly cracked, binding weak, a few gatherings in vol. I loosening but holding. Vol. II partially unopened. Internally very little age-toned, occasional weak pencil annotations throughout. Provenance: Mary and Henry Hotchkiss (bookplates to front pastedowns of both volumes). A good, unsophisticated set overall. (#002274) € 4,500



Freeman 245, Norman 599, Sparrow 48; Garrison-M. 170 - First edition, first issue of both volumes (with the errata on verso of title-leaf in vol. II and with the first word of p.297

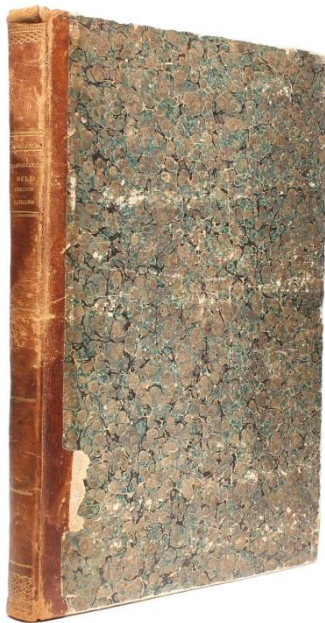
"transmitted" in vol. I). Twelve years after the publication of the Origin, Darwin made good his promise to "throw light on the origin of man and his history" by publishing the present work, in which he compared man's



physical and psychological traits to similar ones in apes and other animals, and showed how even man's mind and moral sense could have evolved through processes of natural selection. In discussing man's ancestry, Darwin did not claim that man was directly descended from apes as we know them today, but stated simply that the extinct ancestors of *Homo sapiens* would have to be classed among the primates. This statement was (and is) widely misinterpreted by the popular press, however, and caused a furor second only to that raised by the *Origin*. Darwin also added an essay on sexual selection, i.e. the preferential chances of mating that some individuals of one sex have over their rivals because of special characteristics, leading to the accentuation and transmission of those characteristics (Norman). 2500 copies of the first issue were published on February 24. The second issue was published the following month.

### *Moving the obelisk*

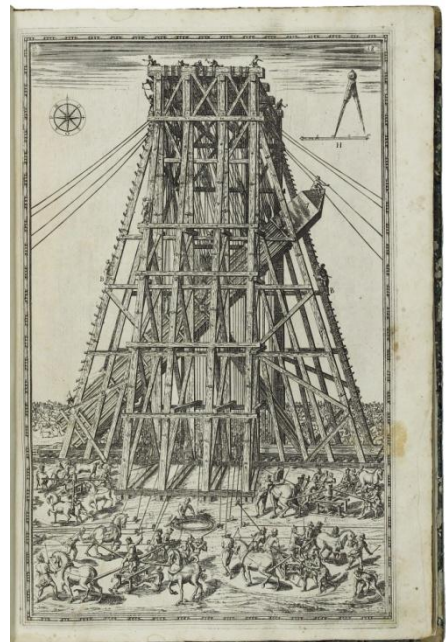
- 21 FONTANA, Domenico.** *Della trasportatione dell'obelisco Vaticano et delle fabbriche di Nostro Signore Papa Sisto V.* Rome: Domenico Basa, 1590. Folio (412 x 275 mm). [1], 108 (i.e. 112), [4] ll., including engraved title-page, additional engraved title-page with portrait of Fontana (by Natale Bonifazio da Sebenico), woodcut initials, 38 etched and engraved illustrations by Natale Bonifazio da Sebenico (including 3 double-page, 1 folding), and 3 diagrams in text. Title-page slightly soiled, fol. 49 supplied, light spotting in places, a few small waterstains to blank margins, old paper repairs to margins of 6 leaves (one just affecting plate mark on fol. 66-2), upper margin of fol. 75-2 trimmed to plate border, pencil marginalia throughout. Early 19th century half calf over marbled boards, flat spine gilt (extremities worn, corners bumped). 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 copy overall, collated complete. (#002262) € 15,000



Dibner 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 of architectural 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).





**22 FONTENELLE, Bernard le Bovier de.** *A Plurality of Worlds. Written in French by the Author of the Dialogues of the Dead. Translated into English by Mr. Glanvill.* London: for R. Bentley and S.



Magnes, 1688. 8vo (162 x 102 mm). [12], 152 pp. Signatures: A<sup>6</sup> B-K<sup>8</sup> L<sup>4</sup>. E4 is a cancel leaf. Contemporary mottled calf, elaborate gilt spine (upper joint neatly repaired, head of spine slightly chipped), preserved in cloth slipcase.

Internally only slightly browned, a little faint dampstaining, marginal paper flaw in H3.

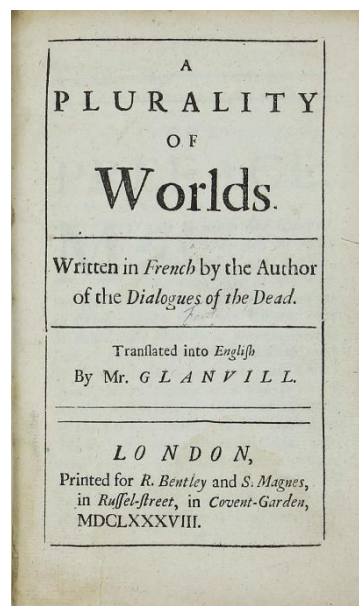
Provenance: J. Borole(?), Oriel College, Oxford (inscription "J Borole(?) / Oriensis Oxon. / Apr. 24, 1949" to first free endpaper). Fine copy.

(#002282)

€ 4,500

Wing F1416; Hodgson, p.399. - THE RARE FIRST ENGLISH EDITION. One of the first major works of the Age of Enlightenment. "Fontenelle's treatise ... marks a true watershed in the history of the idea of the plurality of worlds ... written in a language that the normal educated person

could understand, and ... see the basic concepts of the new Copernican astronomy as supplemented by Descartes" (Steven J. Dick, *Plurality of Worlds*, p. 126).



**The rare off-print of the milestone work on the radiation of stars**

**23 HERTZSPRUNG, Ejnar.** I. Zur Strahlung der Sterne. Offprint from: *Zeitschrift für wissenschaftliche Photographie, Photophysik und Photochemie*, Vol. 3, no. 11, pp. 429-442, 5 tables. II. Eine Annäherungs- formel für die Abhängigkeit zwischen Beleuchtungshelligkeit und Unterschieds-



empfindlichkeit des Auges. Offprint from: *Zeitschrift für wissenschaftliche Photographie, Photophysik und Photochemie*, Vol. 3, no. 12, pp. [1] 468-472, 1 figure and 2 tables. Leipzig: Johann Ambrosius Barth, 1905. 8vo (237x165 mm). Library stamp on both inner end papers. Both offprints bound with the original orange wrappers in contemporary half calf with morocco labels lettered in gilt to front cover. Internally very little age-toned. Provenances: Carlsbergfondets Bibliotek (ink stamp to inner front covers), Anke Kryster (small ink stamp to top of flyleaves). Fine copies.

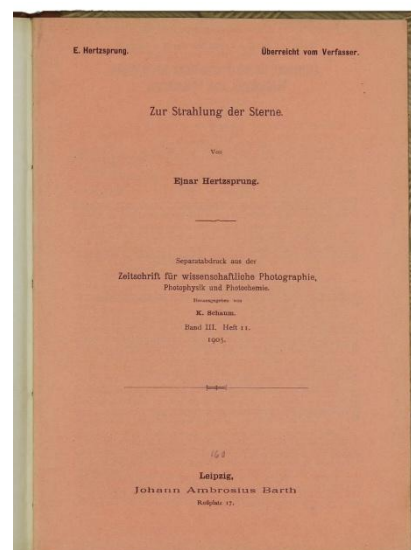
(#002255)

€ 4,000

I. DSB VI, pp.350-3; A.J. Wesselink, *Ejnar Hertzsprung*, Quart. J.

Royal Astron. Soc. 9 (1968) pp.337-341; A.V. Nielsen, *Ejnar Hertzsprung, measurer of the stars*, *Sky & Telescope* 35 (1968) pp.4-6; K.Aa. Strand, *Ejnar Hertzsprung, 1873-1967*, *Publ. Astron. Soc. Pacific* 80 (1968) pp.51-56. - FIRST EDITION and presentation copy of the very rare offprint with "Überreicht vom Verfasser" printed on front wrapper upper right. In 1905 Hertzsprung published the article "Zur Strahlung der Sterne", unfortunately in the - astronomical and academically - obscure journal "Zeitschrift für Wissenschaftliche Photographie, Photophysik und Photochemie" in which he positioned his observations and the results in tables, not in figures and diagrams.

In his paper *Zur Strahlung der Sterne (on the radiation of stars)*, "Hertzsprung showed, first, that stars with very sharp absorption

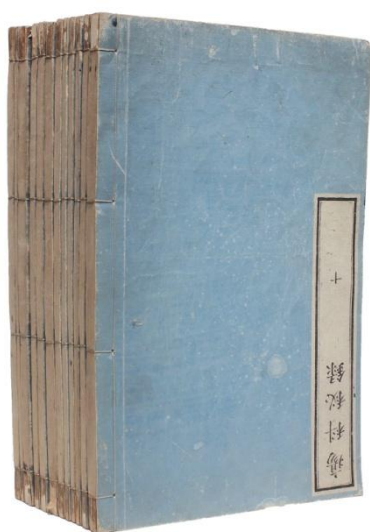


lines in Antonia Maury's classification system were more luminous than others - a discovery that became the foundation of the method of stellar parallax - and, second, that stars could be classified in two series, the main sequence (in modern parlance) and the high-luminosity giant stars when plotted in a diagram of intrinsic luminosity vs. temperature. Because of the appearance of these results in a photography journal, it had little impact in the astronomical community, and it was not until the same relationship had been discovered by Henry Norris Russell, several years later, that Hertzsprung's discoveries were recognized. The diagram became known as the Hertzsprung-Russell diagram." (K. van Berkel et al., *The History of Science in the Netherlands*, 1999, p.460).

Hertzsprung's work on the radiation of stars was reprinted in *Oswalds Klassiker der exakten Wissenschaften*, Vol. 255.

### Important early Japanese work on medicine

**24 HOMMA, Gencho [HONMA, Soken].** *Yohka hiroku (Secret records of surgery)*. 10 Parts in 12 Volumes. Edo: Izumiya Kinemon, Kôka, 4 [= 1847] (postscript date: Tenpô 8 [= 1837]). 255 x 165 mm.

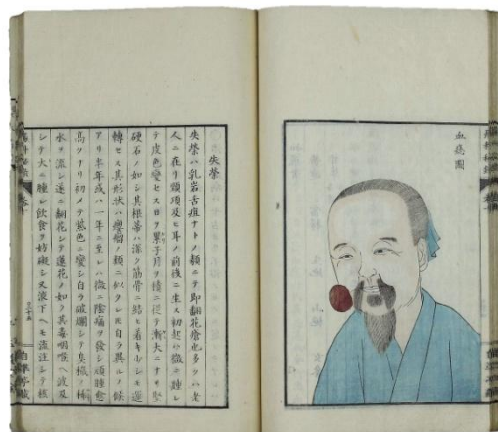


With numerous, mostly coloured woodcut illustrations by Kimura Kahei. Xylographically printed and stack-folded double leaves in Japanese stitched binding. Blue original wrappers with xylographic title tag (little soiled and rubbed, stitching renewed, title tag of part 9 partly detached). Internally crisp with only very little paper browning. Two red ownership seals to vols. 1, 4 and 6. (#002248) € 7,500

Kerlen 1877; Kraft IV, 309; Hirsch-H. III, 289; G. E. Mestler, *A Galaxy of Old Japanese Medical Books With Miscellaneous Notes on Early Medicine in Japan*, p.154, pl. IV. - FIRST EDITION of Gencho (or Soken) Homma's most important work, a treatise on surgical diseases and particularly in inflammatory tumors. Contains remarkable illustrations, including impressive woodcuts of various tumor types and illustrations of

surgical instruments, surgeries, bandages etc. Includes the first clinical and epidemiological description of tularemia (rabbit fever, here vol. 9) in modern times, described as 'hare meat poisoning' (cf. Naoyoshi Hatchome & Mitsuo Sato, On the 'Yatobyô' Exanthem [Tularemia], in: *The Tohoku Journal of Experimental Medicine*, vol. 60, no. 1, 1954, pp. 59-66)."

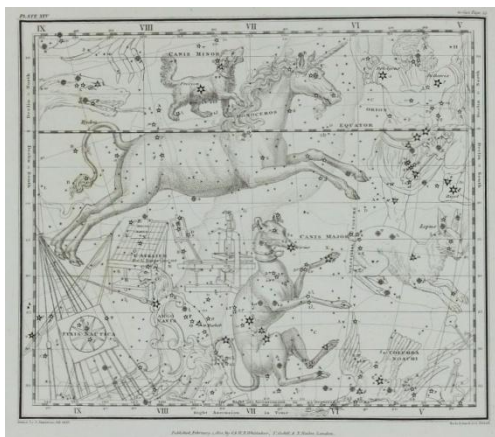
Particularly meritorious ... for the prevailing conditions great surgical work " (Hirsch-H).



**25 JAMIESON, Alexander.** *A Celestial Atlas, comprising a Systematic Display of the Heavens in a Series of Thirty Maps*. London: G. + W. B. Whittaker, 1822. Oblong 4to (240 x 302 mm). [3] 4-64 pp. With engraved title, engraved dedication, tissue guards, errata slip at end, and 30 engraved charts by Neele after Jamieson. Modern calf, spine with morocco lettering piece and 5 raised bands gilt in compartments, boards ruled in blind, cut edges sprinkled blue, new endpapers. Occasional light foxing, otherwise clean and only very little browned. A fine copy. (#002281) € 1,750

Warner, *The Sky Explored*, p.39. - Jamieson's Celestial Atlas first appeared in February 1822 with a second edition in September of the same year ... Jamieson claimed that his atlas 'differs essentially' from Bode's *Vorstellung der Gestirne*, but a glance at the two reveals a strong family resemblance. Jamieson's charts are reproduced at the same size as those of both Bode and Fortin, i.e. approximately 9 inches wide by 7 inches deep ..., there are the same number of them (26 plus hemispheres) and each covers the same area of sky.

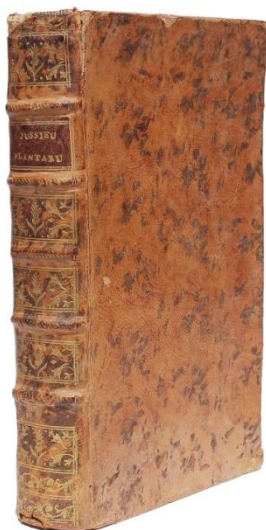




Jameson also followed Bode's innovation of drawing boundary lines snaking between the constellation figures. Where Jamieson differs noticeably from his predecessors is in his modelling of the constellation figures. Fortin and Bode closely followed Flamsteed's depictions, but Jamieson allowed himself greater artistic freedom. His figures were more realistically drawn, as in his improvements on Flamsteed's unconvincing portrayals of Lacerta, Lynx, Cancer and Scorpius and the frankly ugly Canis Major. Overall, Jamieson's figures are simply more appealing" (I. Ridpath, *Alexander Jamieson, celestial map maker*. Astronomy & Geophysics, 2013, vol. 54, pp. 1.22-1.23).

### *A landmark in the history of botany*

**26 JUSSIEU, Antoine Laurent de.** *Genera plantarum secundum ordines naturales disposita, juxta methodum in Horto Regio.* Paris: Herissant und Barrois, 1789, 8vo (203x125 mm). [24], lxxii, 498, [2]



pp. Errata on final leaf. Contemporary French mottled sheep, spine with 5 raised bands richly gilt in compartments, marbled endpapers (top of spine little chipped, light wear to extremities, boards bowed slightly outwards), marbled endpapers. Text little age-toned, very little occasional foxing. A nice, clean and unmarked copy.

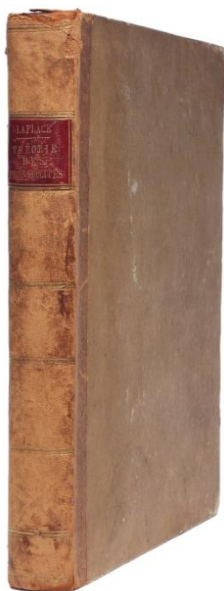
(#002244)

€ 1,500

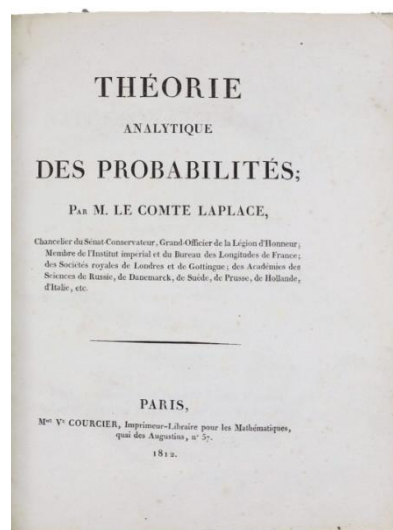
Horblit 68b; Norman 1194; Hunt 703; Stafleu TL2 3468. See also Morton, History of Botanical Science, pp.311-3 and Stafleu, Linnaeus and the Linnaeans, pp.321-2. - FIRST EDITION OF A LANDMARK IN THE HISTORY OF BOTANY. In this "revolutionary work" (Hunt) A. L. de Jussieu (1748--1836) set up a complete natural vegetable system, which superseded Linnaeus' classification and became the starting-point for all subsequent systematic improvements.

### *The foundation work on probability theory*

**27 LAPLACE, Pierre Simon de.** *Theorie analytique des probabilités.* Paris: Imprimerie Veuve Courcier, 1812. 4to (255 x 201 mm). [6], 464, [2] pp, including half-title, errata leaf bound at end. Contemporary half calf with gilt morocco label (corners bumped, extremities rubbed, top of spine chipped). Internally crisp and unmarked, very little foxing in places, pp 8-9 somewhat (ink?) soiled. A fine copy with ample margins. (#002266)



DSB XV, 367-376; Evans 12; Stigler, History of Statistics, pp. 146-148; PMM 252 (note). - THE RARE FIRST EDITION of the foundation work on probability theory, 'the first full-scale study completely devoted to a new specialty,' written by the astronomer who 'was among the most influential scientists in all history' (DSB). This represents Laplace's most important work in pure mathematics. In later editions (1814, 1820), he extended his insights into non-mathematical areas to 'analyze the credibility of witnesses and the procedure of judicial panels, and in the increasing sophistication of the statistical treatment of geodesic and

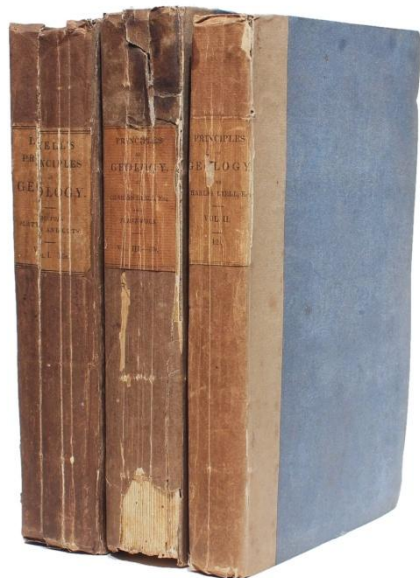


meteorological data' (DSB).

The work is divided into two books. The first deals with mathematical methods, while the second applies those methods to a variety of problems in error theory, decision theory, judicial probability and credibility of witnesses. The first chapter opens with the famous characterization of probability as a branch of knowledge both required by the limitation of human intelligence and serving, in part, to repair its deficiencies.

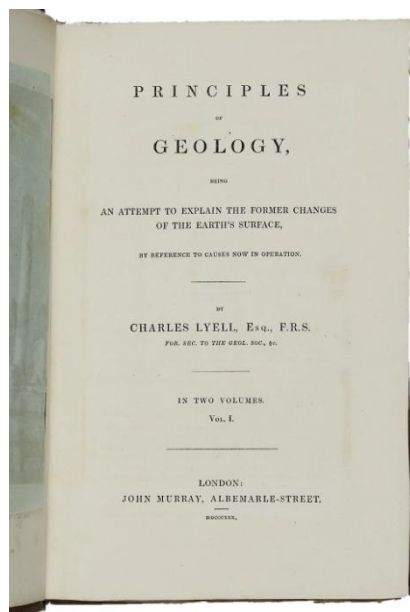
### ***A highly unsophisticated copy of Lyell's masterpiece***

**28**     **LYELL, Charles.** *Principles of geology, being an attempt to explain the former changes of the Earth's surface, by reference to causes now in operation.* London: John Murray, 1830-1832-1833. 3 volumes, 8vo (224 x 144 mm). [iii]-xv, [1], 511, [1]; xii, 330; [iii]-xxviii, [4], 398, 109, [1] pp. Half titles



in volumes I and III as called for, 3 aquatint frontispieces (2 coloured), 3 maps (2 folding and 2 coloured), 5 engraved plates, 135 wood-engraved illustrations in text, 16pp. of publisher's advertisements dated November 1830 at front of vol. I, leaf 16 in vol. II a cancel. Occasional very light spotting and staining, frontispiece in vol. III detached. Original brown paper spines with original printed paper spine labels over blue boards, uncut, large portions of text block unopened (vol. I with splits to spine, vol. II with minor chipping to label, vol. III spine chipped at tail, extremities lightly rubbed and corners bumped to all vols.), housed in a 20th-c slipcase. Provenance: Culley of Coupland Castle (inscription on flyleaf in vol. II); Lord Kennet of the Dene (armorial bookplates to inner pastedowns and embossing to sides of slipcase). Apart from the opening of a few gatherings, a completely unsophisticated set, which we haven't seen so far on the market (the Horblit set had the spines rebaked). (#002264) sold

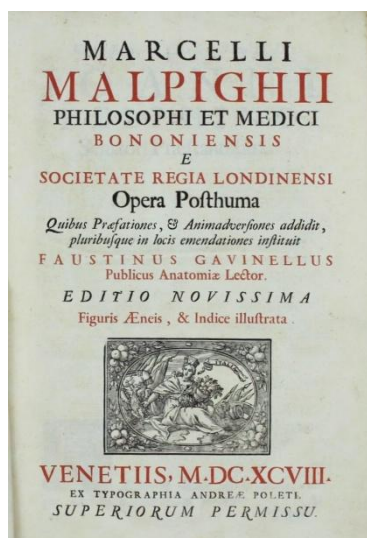
Dibner 96; Horblit 70; Sparrow 140; Norman 1398; Challinor 125; Ward & Carozzi 1407; cf. PMM 344. FIRST EDITIONS. "Lyell had established once and for all the uniformitarian theory of geology, which dispensed with the notion of supernatural intervention. The second volume of Lyell's book reached Darwin in Montevideo and his constant references to the enormous influence on his thinking of this great work are typified by a letter from him to Leonard Horner saying 'I always feel as if my books came half out of Lyell's brain.' Both Haeckel and Huxley regarded the Origin as a necessary corollary to Lyell's Principles" (PMM).



The work had two major and controversial goals: first, and most important, to establish a strict uniformitarian theory of the earth based upon a knowledge of the existing causes and effects of geological change; and second, to give a specific meaning to the term 'geology'; and establishing its proper position relative to the other physical sciences. Lyell's work had profound influence upon Charles Darwin, who read the Principles aboard the Beagle. Not only did the work shape Darwin's understanding of geology, but it served Darwin as a guide in scientific method generally, and its thorough discussion of the problems of evolution stimulated Darwin's thinking on the subject. The first edition was published in an edition of 1,500 copies and sold for fifteen shillings a copy. Lyell received 200 guineas for the work. The title page of Vol. I indicates that the work was originally intended to be published in two volumes (Norman 1398).

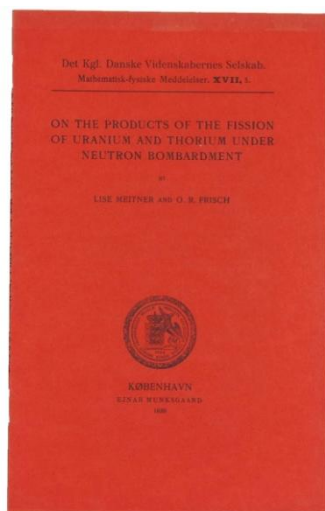


**29 MALPIGHI, Marcello.** *Opera posthuma, quibus praefationes, & Animadversiones addidit, pluribusque in locis emendationes instituit Faustinus Gavinellus Publicus Anatomiae Lector. Editio Novissima.* Venice: Andreas Poletus, 1698. Folio (350x243 mm). [26], 334, [2] pp., including half-title, engraved frontispiece, portrait of the author, title printed in red and black, final blank Z4, and 19 engraved plates bound at the end. Signatures: [\*]<sup>7</sup> \*\*<sup>6</sup> A-T<sup>8</sup> V-Z<sup>4</sup>. Pages 111-193 and 201-288 printed in two columns in Italian and Latin translation. Internally only very little age-toned with very minor occasional spotting. Contemporary vellum (little soiled and rubbed, corners bumped). Provenance: inscription to front flyleaf "Monsbruck Rietfeldae(?) 1790." A fine, crisp copy. Collated complete. (#002265) € 950



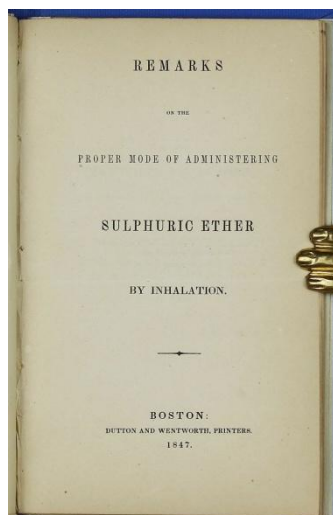
NLM/Krivatsi 7324; Wellcome IV, p.38; C. Frati, Bibliografia malpighiana, no. 6. - SECOND EDITION of Malpighi's posthumous works (first published 1697 in London). The Venice edition is much rarer than the Amsterdam edition published the same year. Malpighi was the founder of histology and the greatest of the microscopists. In 1660 he was the first to see the capillary anastomosis between the arteries and the veins, thus helping the completion of Harvey's work on the circulation. He was a great embryologist; his name is perpetuated in the "Malpighian bodies", "Malpighi's layer" of the epidermis, "Malpighi's (splenic) corpuscles." (Garrison-Morton 66).

**30 MEITNER, Lise & FRISCH, Otto Robert.** On the products of the fission of uranium and thorium under neutron bombardment. Offprint from: *Det Kgl. Danske Videnskabernes Selskab. Matematisk-fysiske meddelelser* Vol. XVII, no. 5. Copenhagen: Munksgaard, 1939. 4to (245 x 154 mm). [3] 4-13 [1] pp. Original publishers printed red wrappers (slight fading to top margin). Pages untrimmed and unopened. Title page with slight red stains from inner wrapper, otherwise a fine copy. (#002251) € 900



DSB IX, p.262-3; PMM 422 (cf.) First separate printing. In this paper Meitner and Frisch confirmed experiments and interpreted Hahn and Strassmann's report of detecting barium after bombarding uranium with neutrons. Their conclusion was that the reaction represented Nuclear Fission. "Fission" was a term that Frisch had coined earlier in the year in a report in 'Nature' to define a type of transmutation in which the nucleus divides into two smaller moities which can be compared with the division of such a drop [of liquid] into two smaller droplets.

### *One of the scarcest of Morton's works on anaesthesia*

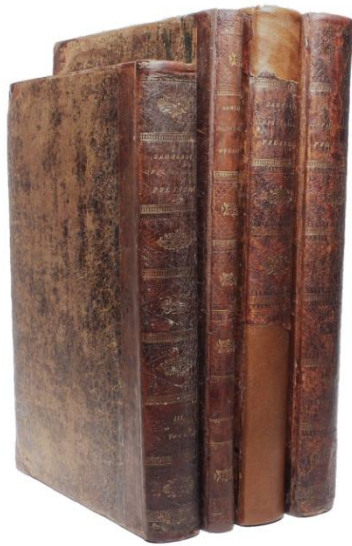


**31 MORTON, William Thomas Green.** *Remarks on the Proper Mode of Administering Sulphuric Ether by Inhalation.* Boston: Dutton and Wentworth, 1847. 12mo (169x107 mm). [7], 8-44 pp. including half-title, but without the unnumbered leaf "Opinions of the Press" found in some copies. 20th-century blue cloth, edges gilt, spine faded, remnant of gilt letting on spine. Internally little age-toned, blank lower margin of two leaves repaired (not affecting text). Good, well-margined copy. (#002236) € 16,000

Norman 1556; Grolier Medicine 64c; Faulconer-Keys, pp. 296-309; Fulton-Stanton, Anesthesia 1V22; Garrison-Morton 5653. - EXTREMELY RARE FIRST EDITION OF "ONE OF THE SCARCEST OF MORTON'S PAMPHLETS ON ETHER" (Norman). Morton issued his first formal statement on the technique of etherization in the Lancet (July 1847). "Morton announced that his method of producing anaesthesia was obtained by the inhalation of sulphuric ether. He subsequently gave up a lucrative practice in order to devote himself to the

study of surgical anaesthesia and the dissemination of information concerning it" (Garrison-Morton). Like the Norman copy, this copy is without the unnumbered leaf at the end.

**32 NEES VON ESENBECK, Theodor Friedrich Ludwig.** *Plantae officinales oder Sammlung officineller Pflanzen*. Düsseldorf: Arnz & Co., [1821-] 1828-1833. 4 volumes (1 text volume, 2 plates



volumes and one supplement volume). Large folio (plate vols. 480 x 310 mm, text vols. 415 x 370 mm). [406], [96] ff. Lithographed title-pages in plates- and supplement volumes. 558 plates by M. F. Weihe, J. W. Wolter, P. W. Funke after A. Henry in total (of which 550 in fine hand-colouring and 8 in black and white): plate vol. 1 with 220 plates, plate vol. 2 with 218 plates and suppl. vol. with 120 plates. Internally somewhat browned as usual, the plates mostly spotted and foxed (some plates stronger), closed tears to a few plates, most plates with additional plate description in script, plate numbering added in pencil. Contemporary leather (spines and hinges repaired). Collated complete. Good set, the supplement volume plate less browned and spotted due to better paper stock quality. (#002232) sold

Johnston 945; Great Flower Books p.69; Nissen, BBI 1442; Plesch p. 347; Pritzel 6662; Wellcome IV, 219; Stafleu/C. 17391; Cf. Graesse IV, 655.

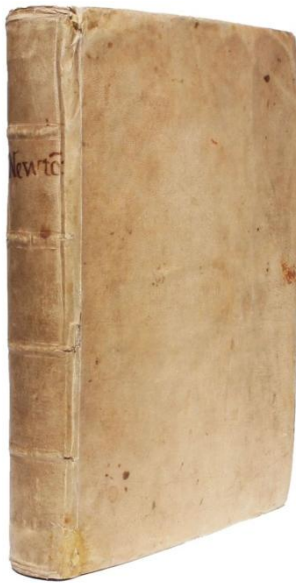
FIRST EDITION INCLUDING THE RARE SUPPLEMENT VOLUME. Theodor Friedrich Ludwig Nees von Esenbeck (1787-1837) was the inspector of the Leiden Botanical Garden, and Director of the Bonn University

Botanical Garden. His systematic research concerning the medicinal properties of plants places him among the most important botanists of the 19th century. In Great Flower Books, Sitwell and Blunt note that "variations are found in the title pages and [the] title is sometimes found as *Plantae medicinales*"; Wellcome calls for the plate volumes with the *Plantae medicinales* title, as here. Originally published in 18 parts, from 1821-1828; the supplement was issued in 5 parts from 1829-1833.

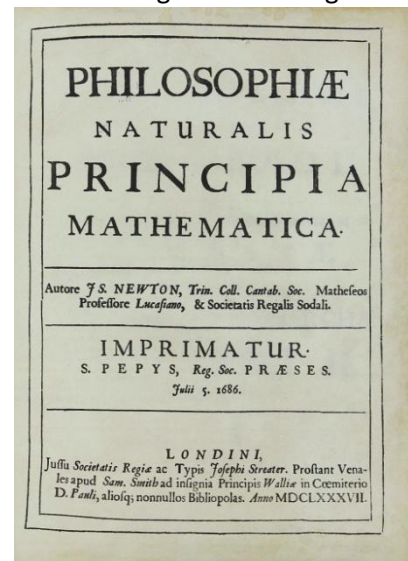




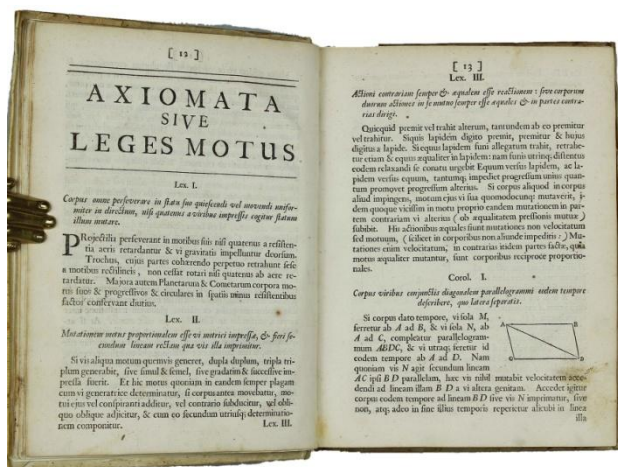
**33**     **NEWTON, Isaac.** *Philosophiae Naturalis Principia Mathematica*. London: Joseph Streater, 1687. 4to. Contemporary full Dutch vellum with four raised bands and "Newton" in ink on spine. This fully contemporary binding, presumably the one that the book was given before it was released in



leaves a fine and attractive copy. (8), 510, (1, -errata) (recte: (8), 494 pp., i.e. pp. 1-383 + 400 - 510 - Gray: "Then there is the omitted paging between the Second and Third Books, though the last page of the Second Book was altered from 384 to 400 to show the omission was known, and the \*\*\* used as signature to the last sheet of the Second Book, to avoid the overlapping of signatures.", (1, -errata) + 1 folded plate. Numerous woodcut diagrams in the text. (#002138) € 40,000



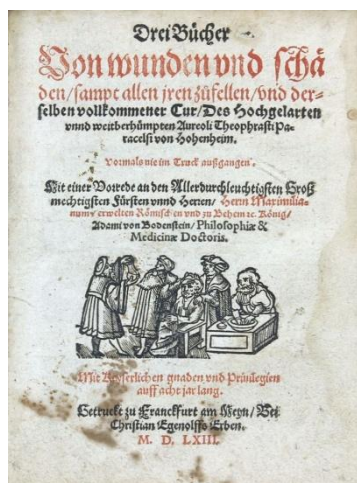
PMM 161; Gray pp. 5-7; Babson, pp. 9-10; Dibner 11; Neville, p. 224; Sparrow 151; Horblit 78; Norman 692. - Neville: "During the printing of the "Principia" various corrections were made, but when the sheets were gathered for binding, no attention was paid to those corrected or uncorrected, and no particular group of variants can be associated with either issue"). First edition, in the extremely scarce "Export issue" (meant for distribution on the Continent) with the cancel title-page bearing the three-line Sam. Smith imprint, of "the greatest work on exact science that human mind has ever conceived" (Babson). "The first edition comprised only three hundred to four hundred copies. Macomber traced 148 extant copies of the two-line imprint, but



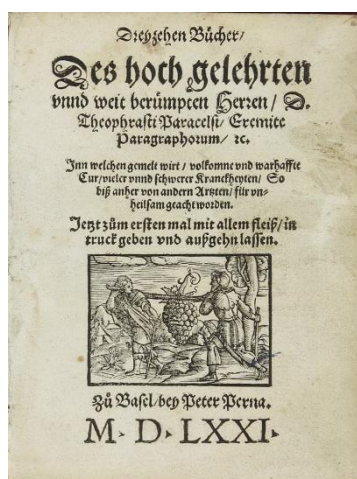
only 47 of the three-line" (Neville). Perhaps no other scientific book has changed the thought of man as profoundly as Newton's magnum opus, the "Principia", which is generally considered the most important book within the field of science. The work stands unparalleled in the history of scientific thought. "The monumental achievement of Newton (1642-1727), it is the foundation work on dynamics and gravitation. Generally regarded as the greatest work in the history of science, Laplace described it as "pre-eminent above any other production of human genius". (Neville). "The "Principia" is "the greatest work on exact science that human mind has ever conceived" - H. Zeitlinger. "A work which will be memorable not only in the annals of one science or

of one country, but will form an epoch in the history of the world and will ever be regarded as the brightest page in the records of human reason." - Brewster. "It is one of the most consistently original books ever written." - Brodesky. "Newton's conclusions on gravity and the motion of the planets established a conception of the universe that was unchallenged until Einstein." - Reichner." (Babson). "[T]he scientific revolution of the seventeenth century culminated in the massive achievements of Newton in dynamics and gravitational astronomy. The "Principia" is generally described as the greatest work in the history of science." (PMM).

**34 PARACELSUS, Theophrastus (Bombast von Hohenheim).** I. *Dreyzehnen Bücher des hoch gelehrten und weit beruempten Herren D. Theophrasti Paracelsi inn welchen gemelt wirt volkomne und warhaffte Cur vieler und schwerer Kranckheyten so bis anher von andern Artzten fuer unheilsam*



geacht worden. Basel: Peter Perna, 1571. 48 unnumbered leaves. Signatures: A-M<sup>4</sup>. Title with woodcut illustration. Internally little browned, a few faint dampstains, closed tear to E4, final 4 leaves folded-in to protect catchwords. II. *Drei Bücher von wunden und schäden, sampt allen jren zufellen, und derselben vollkommener Cur.* Frankfurt: Heirs of Christian Egenolph, 1563. [16], 68 pp. Signatures: a-b<sup>4</sup> A-R<sup>4</sup>. Colophon on R4r. Title printed in red and black with woodcut vignette, 2 fine full-page woodcut illustrations on recto and verso of leaf b4 (one depicting a surgeon's equipment), a few leaves folded-in to protect marginals, margins timmed close affecting touching two marginal letters on p.2. Internally little browned, faint dampstains to fore-margin. III. *Archidoxorum des Hochgelehrten und weit berümpften Herrn D. Theophrasti Paracelsi X. Bücher...* Basel: Peter Perna, 1572. 43 (of 121) unnumbered leaves only (signatures H2-F3), lacking the 8 preliminary leaves (including title), 78 unnumbered leaves. Little browning, one leaf with underlings in ink. 4to (172x133 mm). Later plain half leather, spine titled in manuscript (rubbed, soiled and chipped at extremities), rear pastedown with recipe in contemporary hand. Provenance: Selbourne library (small stamp on J4r). The first two works collated complete, the third work a fragment of two tracts which are complete in itself. (#002230) € 6,500

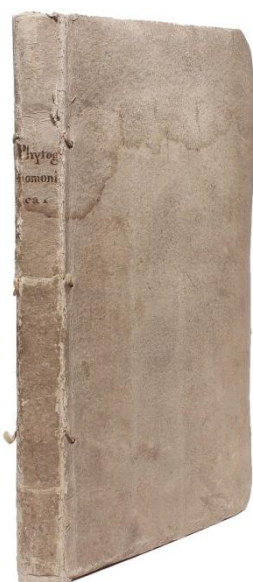


I. Sudhoff 130; Wellcome 4784; not in NLM/Durling. First Edition. This book contains medical works, he writes about cures of serious illness which "up to now have been considered incurable by the physicians".

II. Sudhoff 53; NLM/Durling 3459 (imperfect); not in Wellcome. First edition. Deals mainly with the surgical treatment of military wounds.

III. Sudhoff 142; not in Wellcome or NLM/Durling. Here present a fragment of the *Archidoxorum* comprising the first two tracts "De Tempore" and "De Imaginibus", both in first edition.

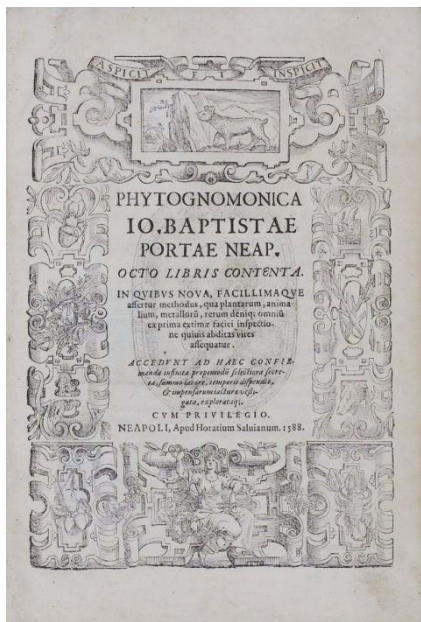
**35 PORTA, Giambattista.** *Phytognomonica...octo libris contenta.* Naples: Orazio Salviani, 1588.



Folio (300 x 208 mm). [1-2] 3-320, [22] pp. Signatures: A-2R<sup>4</sup>, A-C<sup>4</sup>. Colophon and imprimatur on 2R4v. Woodcut title-border with the lynx emblem of the Accademia dei Lincei; author's portrait on verso title, 32 text woodcuts. 18th century paste-paper boards, spine lettered in ink (hinges and extremities rubbed, dampstain at top, corners bumped). Internally only little browned (final two leaves of index stronger), professional repairs to small worming at gutter, small hole in 2A1 and 2B2 (affecting two letters on 2A1r), faint dampstain to inner margin of first leaves. Includes index, which is often absent. Provenance: Krown & Spellman. A clean and virtually unspotted copy in very good condition. (#002285) € 4,500

Norman 1724; Adams P1938; Hunt 158; Nissen BBI 463; Mortimer (Italian) 399; Wellcome 5203; Thorndike VI: pp. 422-3. - First edition, first issue with the title dated 1588 (many others with 1589), and with the index, which is lacking in more than half the copies existing. "Porta expanded upon his theory of the correspondence between external form and internal character in this treatise on plant physiognomy. Porta claimed that plant physiognomy

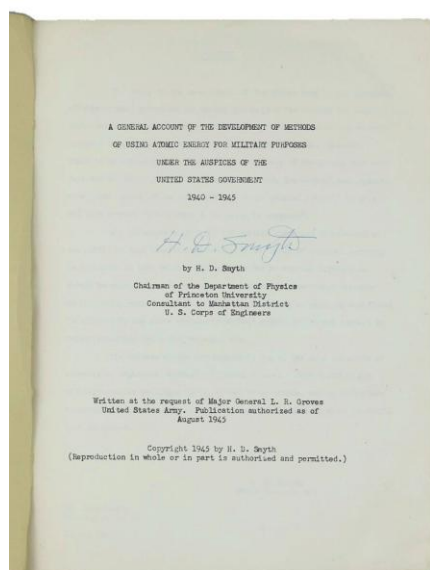




was the theoretical side of agriculture; however, his doctrine of signatures - that the exterior form of a plant indicates its medicinal qualities - was more akin to sympathetic magic than to science and led to some bizarre claims, e.g., that herbs growing in rock clefts will help break up bladder stones, and that plants resembling flies and butterflies promote fecundity. Porta's doctrine of signatures was opposed by believers in astrological medicine, and the two factions often quarrelled. There are two issues of this edition, the second with a title-page dated 1589. Some copies have additional signatures A-C<sup>4</sup> (C4 blank), containing the index." (Norman, 1724).

**One of just a few copies of the rare lithoprint version signed by Smyth**

**36 SMYTH, Henry DeWolf.** *A General Account of the Development of Methods of Using Atomic Energy for Military Purposes under the Auspices of the United States Government 1940-1945.* Written at the request of Major General L. R. Groves United States



Army. Publication authorized as of August 1945. Washington DC: War Department, 1945. Preface dated July 1, 1945. 4to (263 x 199 mm). [8], I:1-19 [1], II:1-10, III:1-7 [1], IV:1-15 [1], V:1-9 [1], VI:1-14, VII:1-15 [1], VIII:1-17 [1], IX:1-13 [1], X:1-10, XI:1-13 [1], XII:1-12, XIII:1-3 [1], A1:1-6, A2:1-2, A3:1-3 [1], A4:1-5 [1], A5:1 [1]. Leaf IV-9/10 a duplicate. With the printed version of page VI-12. Original printed cream paper wrappers, staple-bound as issued. Front wrapper somewhat buckled at edges and with light water, a few leaves with short tear to blank fore-margin, otherwise clean and unmarked. Added is the first printed edition of the General Account by the Government Printing Office, Washington DC (Coleman No. 5), stapled and pasted into printed cardboard case as issued, 8vo (229 x 148 mm), vii, 182 pp. The set is housed in a custom-made clamshell box. A fine copy.

(#002249) € 11,000

PMM 422e; Norman 1962; Coleman, The "Smyth Report": a Descriptive Check List, No. 3. This is the rare lithoprint version of the Smyth Report on the creation of the atomic bomb and one of Henry DeWolf Smyth's own copies, signed by him on the title page, complete and in original wrappers, one of only 1000 copies printed, accompanied by a copy of the first printed edition of this work in octavo format (Coleman No. 5).

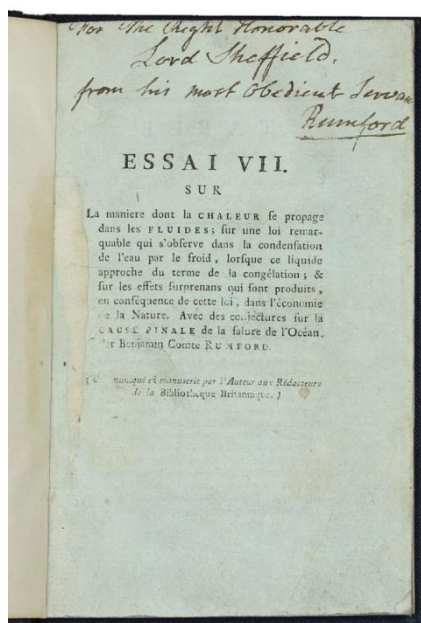
The Smyth Report is renowned for its "remarkably full and candid account of the development work carried out between 1940 and 1945 by the American-directed but internationally recruited team of physicists, under the code name 'Manhattan District,' which culminated in the production of the first atomic bomb" (PMM).

This is a copy of the lithoprint version, preceding the first printed edition and intended for press release distribution immediately after the atomic bombings of Hiroshima and Nagasaki in August of 1945. The lithoprint version was produced from stencils made by several typewriters in the Adjutant General's Office, along with a virtually unobtainable 12-chapter mimeograph version (Coleman No. 1) and a very small number of 'ditto' printings with text in purple (Coleman No. 2), sent out to project leaders and a few others belonging to the Manhattan District work. All copies of the mimeograph version were probably destroyed. It is not yet determined if the Ditto version precedes the Lithoprint version or not, and it might be just a proof copy.

This copy includes the secret page VI-12 which is left blank in most copies, because it deals with production rates of plutonium. Since the leaves were gathered for binding in great haste and under tight security, surviving copies often contain missing and/or repeated leaves. No leaves are missing in this copy.

***Dedication copy, signed by Rumford***

**37 THOMPSON, Benjamin [COUNT RUMFORD].** *Essai VII. sur la manière dont la chaleur se propage dans les fluides.* Offprint from: *Bibliothèque Britannique, Sciences et Arts*. Vol. 5 [Geneva, 1797]. 8vo (199 x 127 mm). iv, 104 pp. One folding engraved plate. Printed on blue paper. Inscribed and signed by Rumford on title-page ("to the right honorable Lord Sheffield, from his most obedient servant Rumford"). Provenance: Lord Sheffield (dedication by Rumford on title-page); Walter Scott Thompson (his bookplate to front pastedown). Later cloth (extremities little rubbed). Internally only little age-toned, title page with glued residue of flyleaf paper at gutter margin (not affecting text), inscription slightly trimmed at top and fore-margin. (#002242) € 1,400



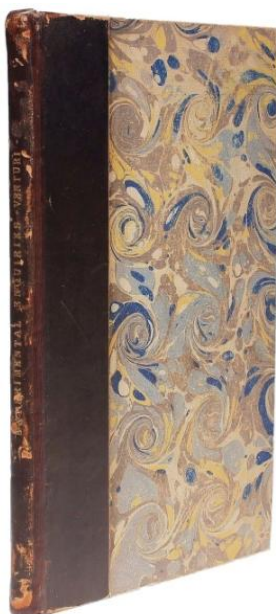
DSB XIII, p.351. FIRST EDITION of Rumford's essay on the propagation of heat in fluids. Rumford is best known for his contributions to the theory of heat. At the end of the 18th century the predominant theory of heat was the so-called caloric theory, according to which heat was a fluid substance that flowed into bodies when they were heated and flowed out of them as they cooled. The success of this theory in explaining then known phenomena is reflected in many terms, such as "heat flow" and "calorie," still used by physicists today. "In 1797 he published the description of a device for proving gunpowder, which was generally accepted as the standard method by both the British and the Bavarian armies. It was during his investigations of cannon that he was impressed by the large amount of heat generated in cannon barrels by the explosion of gunpowder even when no ball was being fired. He was thus led to accept the vibratory theory of heat, which he championed actively all his life. Thompson's most famous experiment in this area was his demonstration of the process of boring cannon with a dull drill, which he carried out in the arsenal at Munich. Because the heat generated in this process seemed limitless, he reasoned that a fluid caloric did not exist. Thompson carried out many other experiments

to demonstrate the reasons for his disbelief in the caloric theory. He unsuccessfully attempted to determine whether heat had weight, which would be an attribute of a fluid; he weighted, at different temperatures, fluids that had markedly different specific heats and heats of fusion. He studied the anomalous expansion of fusion. He studied the anomalous expansion of water between 4°C and 0°C to show that the concept that thermal expansion is caused by fluid caloric taking up space was false. He never realized the connection between heat and energy, although he did carry on experiments to demonstrate spontaneous interdiffusion of different density liquids at constant temperature, and he postulated that fluids are in constant random motion." (DSB)

**38 VENTURI, Giovanni Battista.** *Experimental Enquiries concerning the Principle of the Lateral Communication of Motion in Fluids Applied to the explanation of various hydraulic phenomena...* Translated by W. Nicholson. London: J. Taylor, 1799. 8vo (206 x 127 mm). viii, 75 [1] pp. 2 folding engraved plates. Contemporary half calf over marbled boards, flat spine lettered in gilt (little rubbing to spine). Internally only little browned, title-page and plates slightly spotted. Provenance: The E.N. da C. Andrade (bookplate to front flyleaf); The Stanitz Collection of Science and Technology (Sotheby's sale April 25, 1984). A fine copy of a rare and important work on fluid mechanics. (#002243) sold

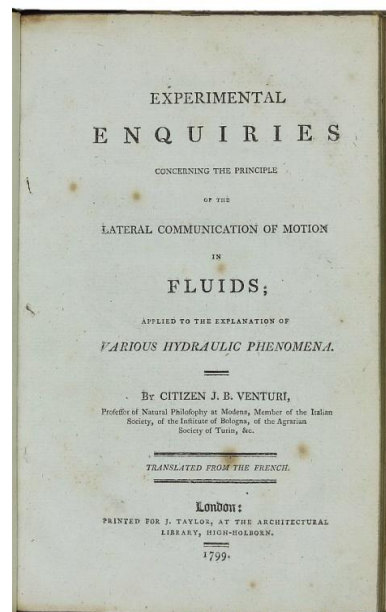
Roberts and Trent, *Bibliotheca Mechanica*, pp. 339-40; Rouse and Ince, *History of Hydraulics*, pp. 136-137. The very rare FIRST EDITION in English. Venturi's work in which he first describes the Venturi effect was originally published in French in Paris, 1797 under the title *Recherches experimentales sur le principe de la communication laterale du mouvement dans le fluides applique a l'explication de differens phenomenes*





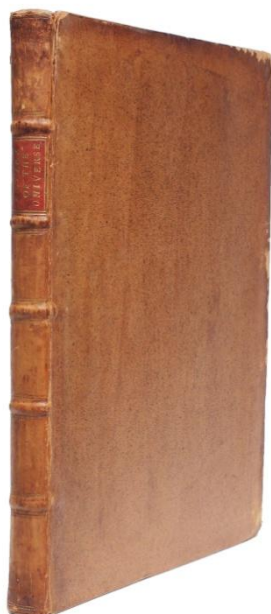
*hydrauliques*. J.-B. Venturi (1746-1822) was appointed professor of geometry and philosophy at the University of Modena in 1774, and later became professor of physics. His research concentrated on the flow of fluids, and he kept in close touch with the work of Bernoulli and Euler in fluid mechanics. He is best remembered for his discovery of the Venturi effect, the decrease in the pressure of a fluid in a pipe where the diameter has been reduced by a gradual taper.

This work is exceedingly rare. OCLC lists no copy in public libraries in the US and only two copies in libraries in the U.K. Only this copy has appeared at auction in the last 50 years.



### *An almost perfect copy of Wright's landmark work on cosmology*

- 39 WRIGHT, Thomas.** *An original theory or new hypothesis of the universe, founded upon the laws of nature, and solving by mathematical principles the general phaenomena of the visible creation; and particularly the Via Lactea*. London: Printed for the Author, and sold by H. Chapelle, 1750. 4to (275 x 220 mm). viii, [4], 84, [2] pp. Title printed in red and black, 32 engraved plates (2 folding, 8 in mezzotint), wood-engraved head- and tailpieces and initials, with the errata- and list of subscribers leaves, final blank present. Contemporary sprinkled calf (extremities lightly rubbed), boards with edges gilt, spine with 5 raised bands and morocco letting piece, cut edges red-sprinkled. Provenance: James Murray, 2nd Duke of Atholl, 1690-1764 (bookplate to front pastedown dated 1737). Internally only very little age-toned, very minor spotting to a few leaves only, little browning to outer margins of flyleaves due to binders glue. An outstanding, bright and crisp copy, the finest on the market we have seen so far. (#002250) sold



Norman 2265; DSB XIV, p.518-9; Honeyman 3143; Gingerich, *Rara Astronomica* 53; Hoskin, *J. for the History of Astronomy*, 1, pp.44-52. RARE FIRST EDITION of this attempt at reconciling religion and science and establishing an understanding of the Milky Way. A book of considerable importance in the history of science. Wright first explained the Milky Way and

the nebulae as external galaxies and provided the basis for the theories on the universe by Kant, Herschel and Laplace.

Wright, a teacher of navigation and a land surveyor by profession, "hypothesized a 'divine center' of the universe, corresponding to a gravitational center around which the sun and other stars orbited. He also proposed, as a possible explanation for the visual phenomenon of the Milky Way, a model of the universe in which the orbiting stars formed a flattened ring, this hypothesis caused Immanuel Kant, who did not realize that Wright's 'center' was supernatural, to credit Wright with originating a disk-shaped model of the galaxy" (Norman).

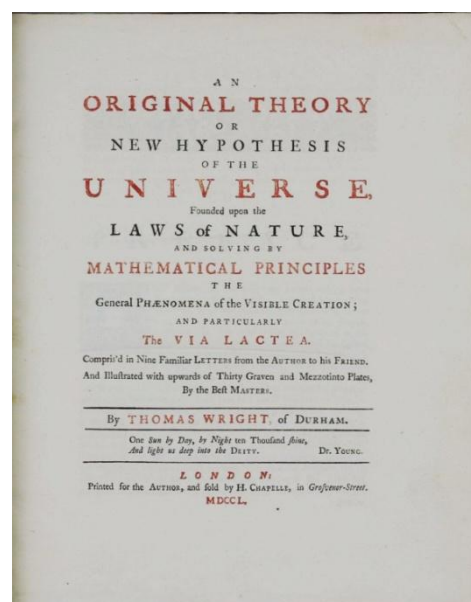
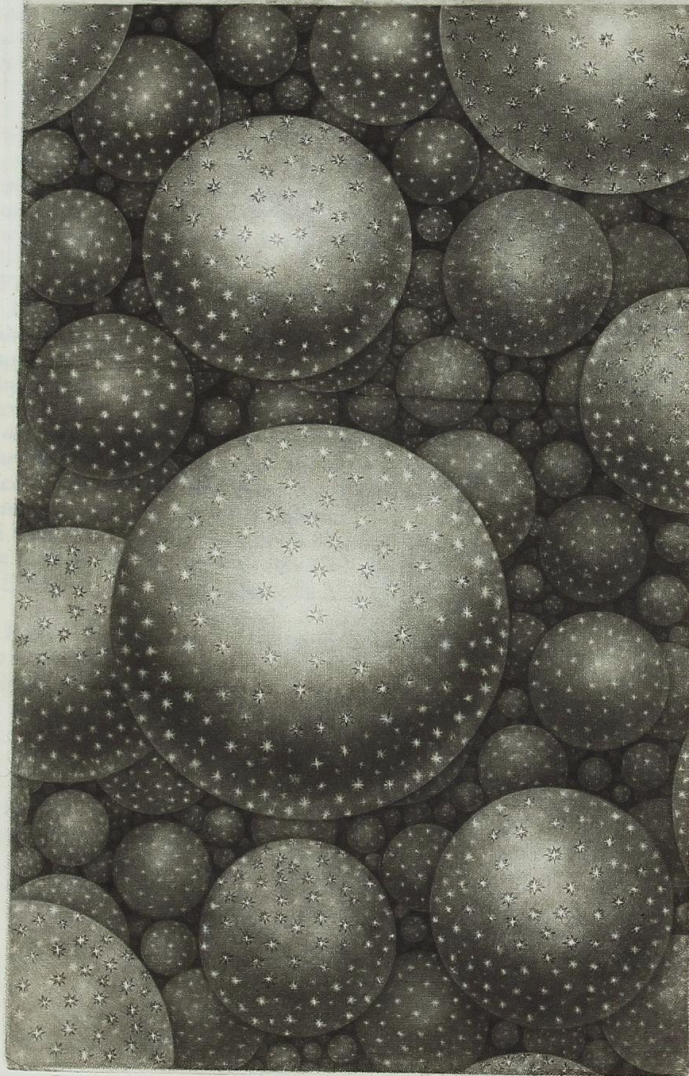


PLATE. XXXI.





## TERMS of SALE

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Milestones of Science Books  
Joern Koblitiz  
Schulstrasse 18A  
27721 Ritterhude, Germany  
info@milestone-books.de

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