



Catalogue 04-2014

35 New Arrivals

Milestones of Science and Medicine

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Milestones of Science Books

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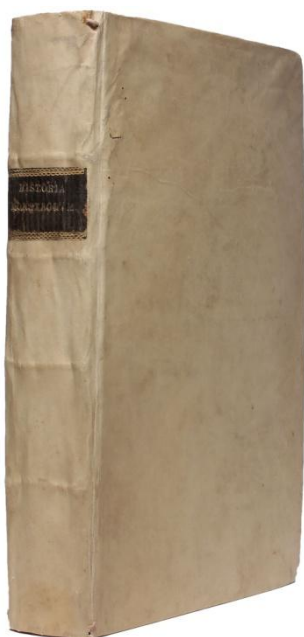
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Aldrovandi's book on "monsters"

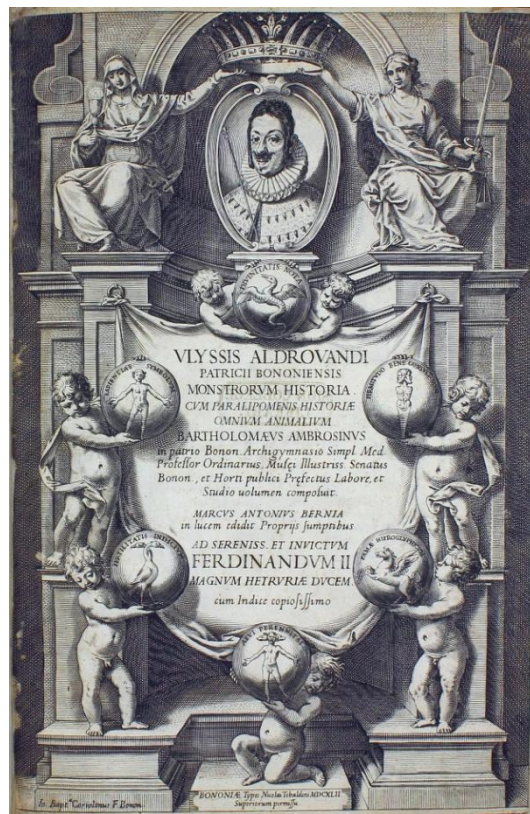
1 ALDROVANDI, Ulisse. *Monstrorum Historia cum paralipomenis historiae omnium animalium* Batholomaeus Ambrosinus... labore et studio volumen composuit. Marcus Antonius Bernia in lucem edidit proprijs sumptibus... [Bound with:] *Paralipomena accuratissima historiae omnium animalium,*



quae in voluminibus Aldrovandi desiderantur. Bartholomaeus Ambrosinus.. summo labore collegit. Marcus Antonius Bernia bibliopola Bonon. proprijs sumptibus in lucem edidit. Bononiae, Typis Nicolai Tebaldini, 1642. 2 parts in 1 volume. Folio (356x238 mm). Part I: [8], 748, [28] pp., signatures: +⁴ A-Z4 Aa-Zz4 Aaa-Ppp6 Qqq8 Rrr6 Sss8, including engraved title page showing portrait of Ferdinand II de Medici, Grand Duke of Tuscany, privilege leaf, index at end, and 414 woodcuts in text, most of which are full page. Part II: 159 [1], [6] pp., signatures 2A-N6 O5, lacking the final blank O6. Contemporary vellum with gilt label to spine (binding restored, re sewn and recased). Minor browning and marginal dust- and finger soiling to text, very little spotting in places, two pages with paper flaws not affecting text, closed tear to leaf 16. Provenance: Sion College Library, London (old ink stamp to verso of title page), Johannis Lawson (ex-libris on front pastedown, dated 1705). A fine copy, clean and unmarked, with ample margins and printed on strong paper. (#002051) sold

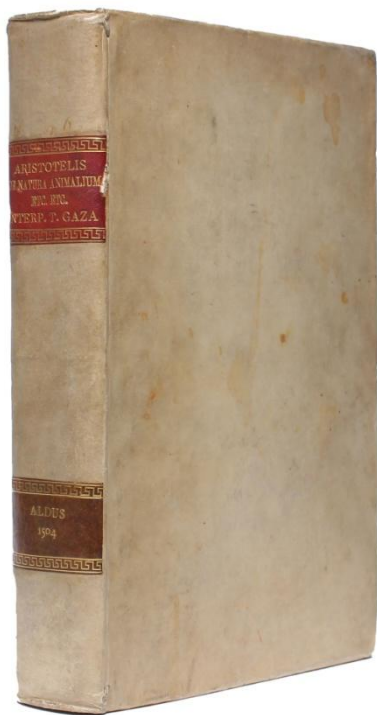
Garrison-Morton 534.53; Heirs of Hippocrates 330; NLM/Krivatsy 187; Nissen 74; Matagne (Namur) A-55; Rhodes (BL London).

First edition of a voluminous work on "monsters" by the Italian scholar Aldrovandi (1522-1605). The monsters illustrated and described include human, animal and botanical deformities, as well as celestial prodigies (comets, aurorae, etc.). There is a section on fetal development and deformity and a series of inter-uterine ills of difficult presentations. There is also a section on monsters of mythology and antiquity, incl. a series of ills of Egyptian objects depicting various animal-headed deities. This final vol. of Aldrovandi's 14-vol. natural history contains an appendix, the "Paralipomena" (here in first edition), by Bartholomeo Ambrosini, his successor as director of the Bologna botanic gardens, containing 111 illustrations of animals omitted in them. A mixture of the plausible (hairy people, giants, dwarfs and conjoined twins) and the fantastic (stories taken from Pliny of Cyclopes, Satyrs and Sciapodes). This copy with the privilege leaf +4 often missing.



The rare first Aldus edition of Theodorus Gaza's Latin translation

2 ARISTOTELES. Habentur hoc volumine haec Theodoro Gaza interprete. Aristotelis De natura animalium, liber IX. Eiusdem De partibus animalium, lib. IIII. Eiusdem De generatione animalium, libri V. Theophrasti De historia plantarum, liber IX Alexandri Aphrodisiensis Problemata duobus libris.

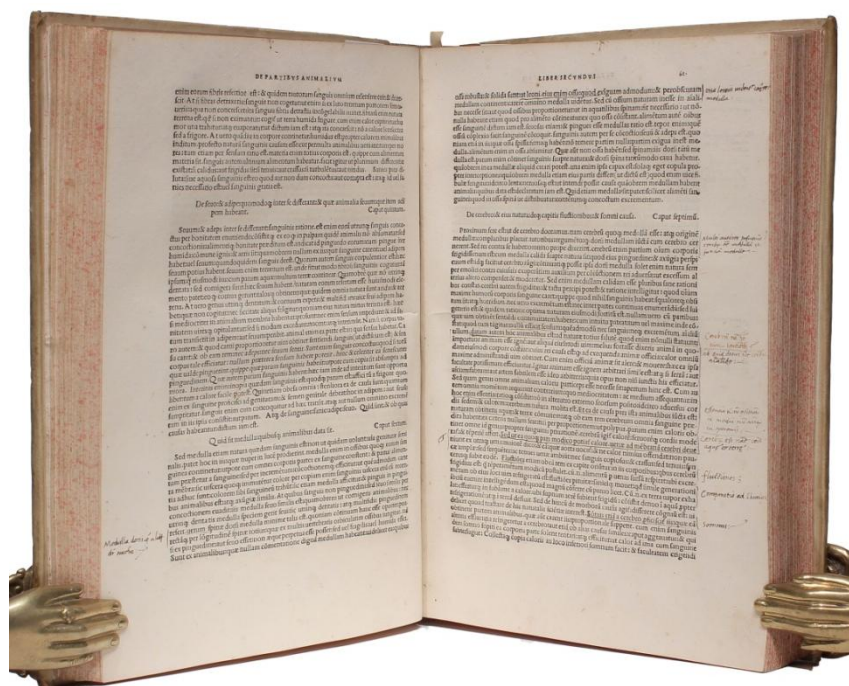


Venice: Aldus Manutius, 1504. Folio (308x212 mm). 12, [16], 273 [1] ff. Signature: [12], a-b8, a-p8, o-p6, r-u8, x8, v8, z8, &8, A-M8, N6. Woodcut Aldine device on [1]. Separate title to "Problemata Aristotelis" with Aldine device on E1r. Leaf p6r with colophon "Venetiis in Domo Aldi mense Maio M.DIII", last leaf N6r with colophon "Venetiis. mense Martio. M. D. IIII." 18th century plain vellum, spine with two red morocco labels titled in gilt (little edge chipping to one label). Title- and final leaf soiled, spotted and brown stained, otherwise bright with only light age-toning, few mainly marginal wormholes, occasional spotting. Extensive early ink marginalia in Latin (a few cropped at fore edge). A fine copy printed on strong paper. An outstanding, wide-margined copy. (#002037) € 14,000

BM STC Italian, 1465-1600, S. 43; Adams A 1761; Fock, p.18; Renouard 1504/2; USTC 810862; Dibner 18 and Norman 2066 (for 1st ed. of Theophrastus) - The rare first Aldus edition of Theodorus Gaza's Latin translation from Greek of Aristotle's works on animals and Theophrastus' works on plants. The original Greek manuscripts were brought from Constantinople to Italy by Giovanni Aurispa in the early 15th century and translated into Latin by Theodore Gaza around 1450. The editio princeps of the Greek came out only in 1497, but Gaza's translation, edited by Giorgio Merula, was first published in 1483. Gaza,

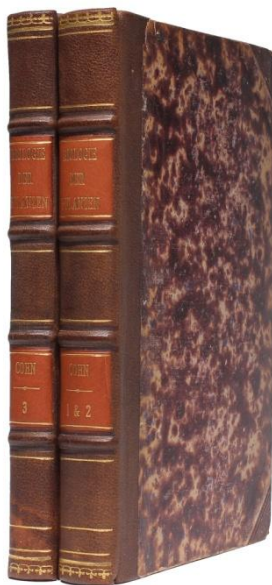
scholar, scribe and teacher from Thessaloniki, translated many works of Greek science, literature and theology into Latin. He was renowned for the style and accuracy of his translations. Contains the 3rd Latin (1st Aldine) edition of Theophrastus' work on systematic botany which was first published in Latin translation in 1483. "An observer and collector of botanical data rather than a profound theorizer, Theophrastus was handicapped by lack of scientific language. Yet his description of the formation of the plant in the seed, the earliest account known, was the best made for 2000 years; it demonstrated excellent observation" (Dibner).

This edition additionally contains Latin-Greek and Greek-Latin glossaries of technical terms found in Aristotle. The first edition is quite rare on the market. OCLC lists only 4 copies in US public libraries.



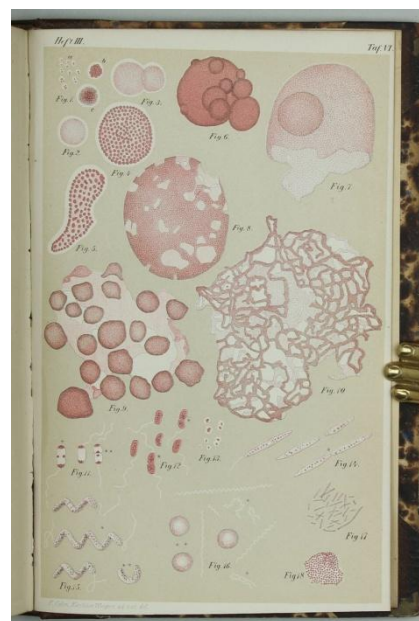
The foundation of bacteria classification

- 3 COHN, Ferdinand.** Untersuchungen ueber Bacterien. In: Beiträge zur Biologie der Pflanzen, Part I, 1872, 2. Heft, pp. [127]-224, 1 tinted lithograph plate, and part II, 1875, 3. Heft, pp. [141]-207, 2 plates (one tinted and one colored lithograph). Breslau: J.U. Kern, 1870-75. Three parts in two volumes. 8vo (224x141 mm). Whole volumes: [6], 131, [1]; [4], 224; [8], 224 pp., 15 plates (some chromolithographed). Contemporary half morocco, neatly rebacked retaining original endpapers. Light toning due to paper stock, otherwise clean and unspotted. Provenance: R.G.L. Dieffenbach M.D. (bookplates to pastedowns and title-page of first part); Smith College Bacteriology Library (bookplates to front pastedowns), small discrete withdrawal stamps. Fine copy. (#002060) € 1,500



Norman 494; Garrison-Morton 2483.
FIRST EDITION, FIRST ISSUE, very rare.
"Cohn's three papers, published in the journal that he founded and edited, are among the seminal works of bacteriology. The first paper (part I), originally published in 1872, effectively initiated the science: it contained Cohn's

new system of bacteria classification, in which he distinguished four groups of bacteria based on their constancy of external form and linked this constancy to certain physiological phenomena. The second paper (part II) announced Cohn's discovery of thermoresistant spores produced by certain bacteria, which could survive even prolonged intense heat in a sealed container; this discovery explained what had long been a puzzling anomaly, and dealt a convincing blow to the doctrine of spontaneous generation." (Norman 494).



- 4 [COMETS].** *Dissertations sur la théorie des comètes qui ont concouru au prix proposé par l'Académie Royale des Sciences et Belle lettres de Prusse, pour l'année 1777, & adjudgé en 1778.* Utrecht: Barthélémy Wild, 1780. 4to (257x202 mm). [4], 239 (recte 237) [1] pp., including 3 engraved plates and 7 folding tables. Contains the following contributions: - 1. **CONDORCET, Jean-Antoine-Nicolas de Caritat, marquis de.** *Essai sur la théorie des comètes.* - 2. **TEMPELHOFF, Georg Friedrich von.** *Essai sur la solution du problème : déterminer l'orbite de la comète par trois observations.* - 3. **HENNERT, Johann Friedrich.** *Dissertation sur le problème où il s'agit de déterminer l'orbite parabolique d'une comète.* - 4. **HENNERT, Johann Friedrich.** *Mémoire sur la théorie des comètes.* Contemporary French calf, spine with 5 raised bands gilt in compartments (extremities and spine ends scuffed, boards rubbed, corners bumped), marbled endpapers, title page with crease, folding tables with crease and somewhat frayed and soiled at fore-edge. Internally only very little age-toned and spotted. A clean, crisp copy of a very rare work on comets. (#002033) € 1,200

LaLande, *Bibliographie Astronomique*, p.574. FIRST EDITION. There are two issues known, one with correct collation (e.g. the copies of Bayerische Staatsbibliothek and ETH Zürich) and another with M4 and pp. 103/104 omitted (this copy). It can be assumed that pp. 95 to 102 in our copy are cancels with the text reset.

The finest anatomical atlas of the baroque period

5 COWPER, William. *The Anatomy of Human Bodies, with Figures Drawn after the Life...*

London: Sam. Smith & Benj. Walford [printed at the Sheldonian Theater, Oxford], 1698. Folio (567x355 mm). [72] ff, including mezzotint frontispiece, allegorical engraved title with pasted-on English title in cartouche as usual, second engraved title with large vignette and 114 engraved plates (2 folding), of which 105 were designed by Gérard de Lairese and probably engraved by Bloteling, 9 mostly drawn and engraved by M. van der Gucht. Contemporary paneled calf (rebacked, corners repaired, endpapers renewed, some rubbing and wear to boards). Portrait, which is often missing, mounted as always, tears in folding plates and a few other plates repaired, a couple plates with closed tear (one touching image), marginal dust-soiling (especially to portrait and folding plates), occasional finger-soiling, some fraying to first flyleaf, portrait and first folding plate, scattered foxing throughout. Provenance: Robert Lynch; George LeGrand (early ownership inscription: "Olim liber Rob. Lynch / Nunc autem Geo. LeGrand"). Good copy, complete with the rare portrait (lacking in the Norman copy). (#002058) € 8,800



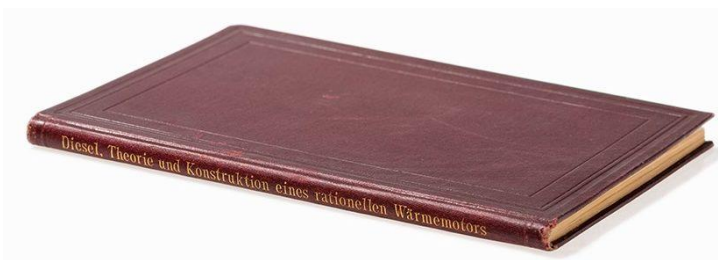
FIRST EDITION IN ENGLISH of the original plates designed for Govard Bidloo by Gérard de Lairese, a painter who rivaled

Rembrandt in popularity in his time. Bidloo's text was widely criticized, and possibly because of this Cowper obtained 300 sets of the original plates to illustrate an entirely new text in English. This reissue was limited to 300 copies. The new English text was clearly superior, and the basis for later Latin editions, and Cowper commissioned nine new plates for the edition. However, Cowper did not acknowledge Bidloo, even going so far as to paste over Bidloo's name with his own in the cartouche on the engraved allegorical title. This action resulted in a bitter plagiarism dispute between the two, one of the most famous in medical history. "Elegantly done and artistically perfect" (Choulant-Frank 250), the atlas is considered the finest of the Baroque period, and one of the greatest artistic anatomies of all time. Despite imperfections from the point of view of dissection, the anatomical studies reflect much that is good, including early depictions of skin and hair from observation with a microscope. Considered as an artistic meditation on anatomy, Lairese's designs are a total departure from the idealistic tradition inaugurated by Vesalius. Lairese displayed his figures with every-day realism and sensuality, contrasting the raw dissected parts of the body with the full, soft surfaces of undissected flesh surrounding them; placing flayed, bound figures in ordinary nightclothes or bedding; setting objects such as a book, a jar, a crawling fly in the same space as a dissected limb or torso. He thus brought the qualities of Dutch still-life painting into anatomical illustration, and gave a new, darker expression to the significance of the act of dissection.



Rudolf Diesel's own copy

6 DIESEL, Rudolf. *Theorie und Konstruktion eines rationellen Wärmemotors zum Ersatz der Dampfmaschinen und der heute bekannten Verbrennungsmotoren.* Berlin: Julius Springer, 1893. 4to (235x158 mm), vi, [2], 96 pp., 3 folding lithogr. tables and 13 text illustrations. Publishers original cloth. Text very little age-toned. Provenance: Rudolf Diesel (ownership stamp to head of title page: "R. Diesel, Ingenieur, München, Schackstrasse 2" and shelf number "31" in manuscript). A fine copy. sold (#002077)

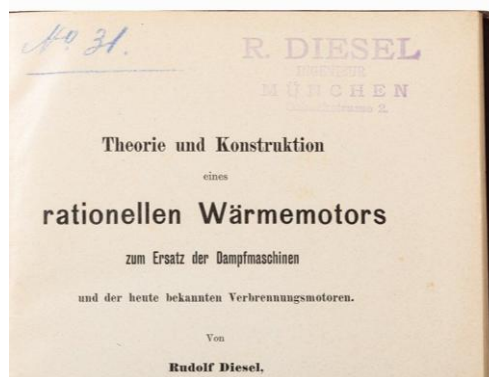


NDB III, 660f; Darmstaedter, p. 914.

FIRST EDITION. A description of the diesel engine named after his inventor, which converts the calorific power of the fuel into useful mechanical work, twice as efficient as the conventional steam engine. It was not until 1897-98 that Diesel, after many setbacks and with the support of the Maschinenfabrik Augsburg

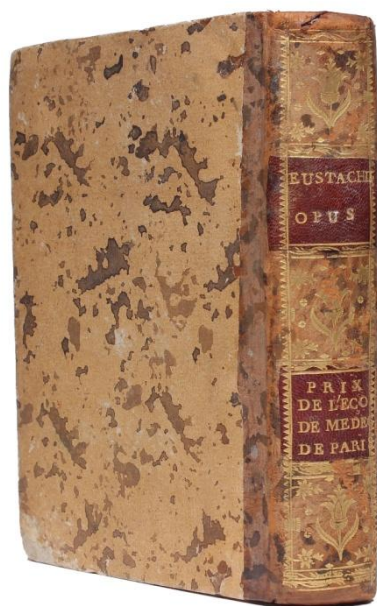
and Krupp Company, could achieve a working engine. On 27 February 1892 Diesel filed with the Imperial Patent Office in Berlin a patent on a new efficient heat engine, which he received on 23 February 1893 under No. DRP 67207 with the subject "Arbeitsverfahren und Ausführungsart für Verbrennungskraftmaschinen" (work process and version for Internal Combustion Engines). This patent doesn't describe today's diesel principle, but Diesel's initial idea. This consisted of an "ideal heat engine" according to the theory of the ideal cycle of Sadi Carnot. In light of the prevailing state of the art, the feasibility was questioned from a practical perspective. In particular, Diesel's first calculated high pressures were not considered manageable (but they are today). With the aid of the present book, Diesel made contact with Heinrich von Buz, General Director of the Maschinenfabrik Augsburg which, in 1908, emerged into the company MAN AG. There, from 1893 on and under financial support of the Friedrich Krupp Company, Rudolf Diesel developed the diesel engine. On August 10, 1893 the first prototype of the new engine run their on its own.

ERSTAUSGABE. Beschreibung des nach Diesel benannten Motors, der die Heizkraft des Brennmaterials etwa in doppeltem Betrage wie die Dampfmaschinen in nutzbare Arbeit umsetzt. Erst 1897/98 konnte Diesel dann nach vielen Fehlschlägen mit Unterstützung der Maschinenfabrik Augsburg und der Firma Krupp den beschriebenen Motor verwirklichen. Am 27. Februar 1892 meldete Diesel beim Kaiserlichen Patentamt zu Berlin ein Patent auf eine neue rationelle Wärmekraftmaschine an, das er am 23. Februar 1893 unter der Nr. DRP 67 207 mit dem Betreff „Arbeitsverfahren und Ausführungsart für Verbrennungskraftmaschinen“ erhielt. Dieses Patent beschreibt aber nicht das heutige Dieselp Prinzip, sondern Diesels Ausgangsidee. Diese bestand in einer „idealen Wärmekraftmaschine“ nach der Theorie des idealen Kreisprozesses von Sadi Carnot. Vor dem Hintergrund des damals herrschenden Standes der Technik wurde die Machbarkeit aus praktischer Sicht angezweifelt. Insbesondere die von Diesel zuerst berechneten hohen Drücke galten als nicht beherrschbar. Durch vorliegendes Buch fand Diesel Kontakt zu Heinrich von Buz, dem Generaldirektor der Maschinenfabrik Augsburg, aus der 1908 die Firma MAN AG hervorging. Unter finanzieller Beteiligung der Firma Friedrich Krupp entwickelte Rudolf Diesel dort ab 1893 den Dieselmotor. Am 10. August 1893 lief dann der erste Prototyp des neuen Motors aus eigener Kraft.



One of the most important of all anatomical books

- 7 EUSTACHI, Bartolomeo [EUSTACHIUS].** *Opuscula anatomica*. Venice: Vincenzo Luchino, 1564. [bound with] *Libellus de dentibus*. Venice: Vincenzo Luchino, 1563. 4to (196x147 mm). [52] 1 [1] 2-4 [1] 5-8 [1] 9-12 [1] 13-15 [1] 16-17 [1] 18 [1] 19 [1] 20-323 [1]; [4], 1-95 [1]; [164], [4 blank] pp., ff. C1, C2 and C4 misbound. Signatures: *6, a8, b8, k4, *4, A-Z4, AA-II4, KK2, LL-SS4, a-h4, I-N4, A-X4. Printer's woodcut device on titles and at end, 8 full-page copperplate engravings by Giulio de Musi after drawings by Eustachi and Pier Matteo Pini, separate title-leaf to the *Libellus de dentibus* dated 1563. The 164 unnumbered pages of the "*Annotationes horum opusculorum ex Hippocrate...*" are bound at the end. 18th-century half calf with two morocco labels titled in gilt, red-dyed edges (extremities scuffed, spine ends repaired). Light mould at top margin of first 15 leaves not affecting text, first title- and preliminary leaf repaired at top edge not affecting text. Text and plates are bright and unspotted, with only little browning to the final few leaves. Provenance: Jacobins R. S. Honore (old stamp and ms. shelf mark on first title-page), Edme-Francois Arrault* (inscription "*Premier prix de l'école pratique, an six, décerné par l'école de médecine de Paris au citoyen François Arrault...*" on first title-page) and book plate to front pastedown. A fine, crisp copy. (#002040) sold



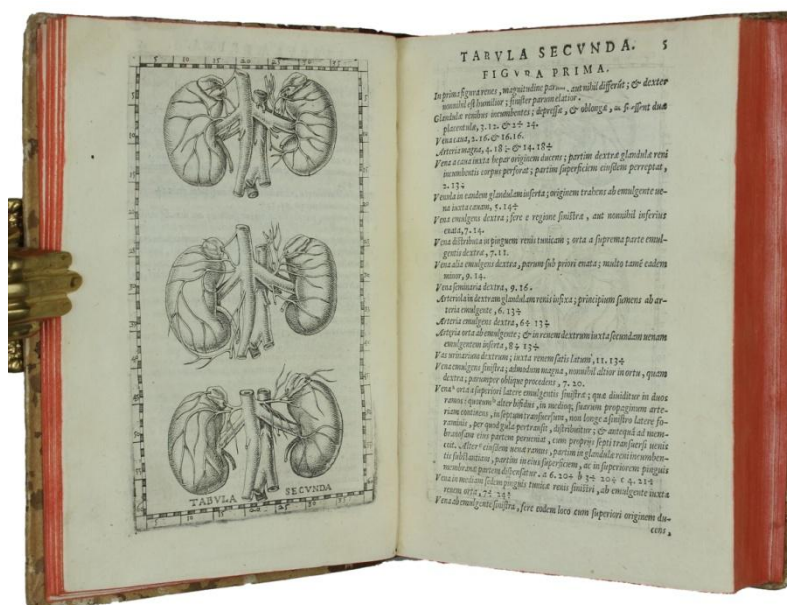
Adams E-1103; Choulant-Frank pp. 200-201; Garrison-Morton 801; Grolier Medicine 21; Heirs of Hippocrates 322; NLM/Durling 1408; Norman 739; Herrlinger, p.133-4; Cazort et al., *The Ingenious Machine of Nature*, p.135-6.



FIRST EDITION OF ONE OF THE MOST IMPORTANT OF ALL ANATOMICAL BOOKS, second state of the *Opuscula*. This very rare and important work includes the first specific treatise on the kidney, the first account of the Eustachian tube in the ear, the first description of the thoracic duct, and the Eustachian valve, as well as the first systematic study of teeth. In 1562 and 1563 Eustachi produced a remarkable series of treatises on the kidney, *De renum structura*; the ear, *De auditus organis*; the venous system, *De vena quae azygos graccis dicitur*; and the teeth, *De dentibus* (with a separate title-bearing a 1563 date). These were published together with two earlier *de enses o Galen* as *Opuscula anatomica* in 1564. Eustachi was among the first to study the teeth in any detail, and his treatise *De dentibus* contains an early and important description of

the first and second dentitions based on his observations from dissections of fetuses and stillborn infants. He described the tooth's hard outer tissue and soft inner structure, and attempted to explain the problem of the sensitivity of the tooth's hard structure. The fine etchings illustrating the edition "were the first 8 in an intended series of 47 anatomical plates engraved by Giulio de'Musi after drawings by Eustachi and his relative, Pier Matteo Pini, an artist. These were prepared in 1552 to illustrate a projected book entitled *De dissensionibus ac controversiis anatomicis*, the text of which was lost after Eustachi's death. Had the full series of plates been published at the time of their completion, Eustachi would have ranked with Vesalius as a founder of modern anatomy." (Grolier Medicine 21).

Pini also prepared the 168 pages of annotations to Eustachi's anatomical treatises from the writings of Hippocrates, Aristotle, Galen and other authorities published at the end of the book. Pini's published dedication of these *Annotaciones* to Eustachi is dated July, 1561, suggesting that the genesis of *Opuscula anatomica* was several years in duration. There are two states of the *Opuscula anatomica* known. The privilege granting rights to the publisher Vincenzo Luchino is dated May 6, 1563. Copies of the second state, like this one, bear the imprint *Venetiis: Vincentius Luchinus excudebat, 1564*. From the setting of the type on the title page of those copies, it is evident that the original

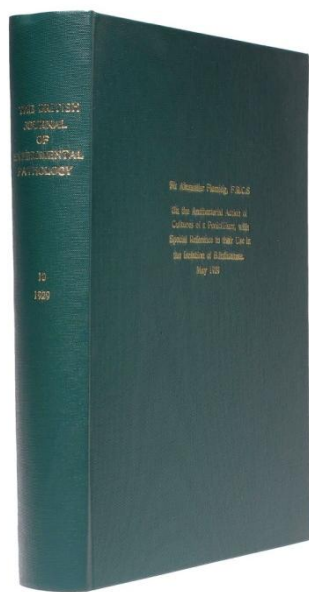


imprint date was 1563 and that an additional "I" was added to the roman numeral MDLXIII to turn that number into MDLXIII (1564) - a contrivance since the correct roman numeral for 1564 would have been MDLXIV. According to OCLC, there are four copies listed in European libraries as having the first state (1563) of the title page. The first state of the *Opuscula anatomica* has a title page dated 1563, and is without the name of the publisher, confirming that some copies were issued with a 1563 date. (<http://blog.historyofscience.com/2010/11/first-state-of-eustachiuss-opuscula.html>).

*Edme-Francois Arrault, a surgeon from Auxerre, France, studied at the School of Health in Paris. Good results opened him the post of a medical doctor, and he was sent to Montpellier in 1801. Incorporated as a second class doctor in the army of the East, he was chosen as Physician-in-Chief to replace the so-called Ribière, déserteur (F. Trépardoux, *Hist. Sci. Médicales*, 39, no. 2, 2005, p.172).

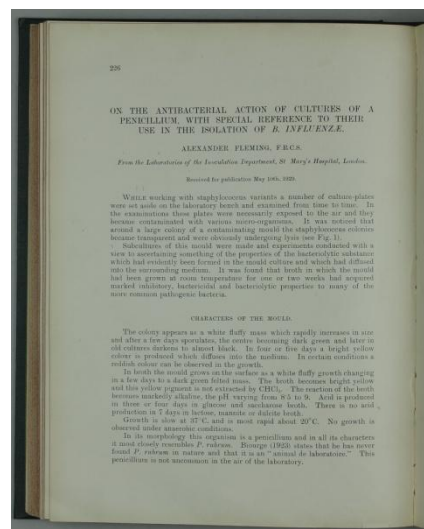
First announcement of the discovery of the antibacterial properties of Penicillin

8 FLEMING, Alexander. On the Antibacterial Action of Cultures of a *Penicillium*, with Special Reference to Their use in the Isolation of *B. Influenzae*. In: *The British Journal of Experimental Pathology* (eds. DODDS, E.C. DRUMMOND, J.C. et al.), vol. 10, pp. 226-36. London: H. K. Lewis & Co., 1929. 4to (242x182 mm). Whole volume: vii [1], 407 [1] pp. Paper flaw to fore-edge of p.333/334 not affecting text. Rebound in green cloth with Sir Alexander Fleming gilt title on upper board. Paper very little age-toned, otherwise clean and unmarked. Fine copy of a very rare paper. (#002063) sold



PMM 420a; Norman 798 (journal extract); DSB V, p.30; Garrison-M. 1933; Grolier Medicine 96; Heirs of Hippocrates 2320. **FIRST ANNOUNCEMENT OF THE DISCOVERY OF PENICILLIN.** This first printing of Fleming's announcement of the antibacterial properties of penicillin marking the dawn of the age of antibiotics. Fleming, however, was unable to stabilise the drug, but when, in 1940, Ernest Chain and Howard Florey succeeded in doing

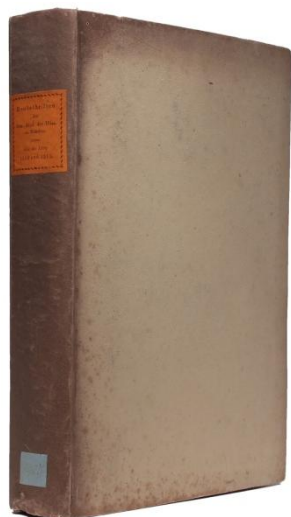
so, the full benefit of the drug was appreciated. Fleming, Chain and Florey shared the Nobel Prize for medicine in 1945. An offprint of the original article was published in 150 copies; but after Chain and



Florey's later work, Fleming was so inundated with requests for copies of his original article that in 1944 he had privately printed a second edition of about 250 copies. The original offprint is rarely seen at auction, one copy sold for \$126,750 in 2001 at Sotheby's.

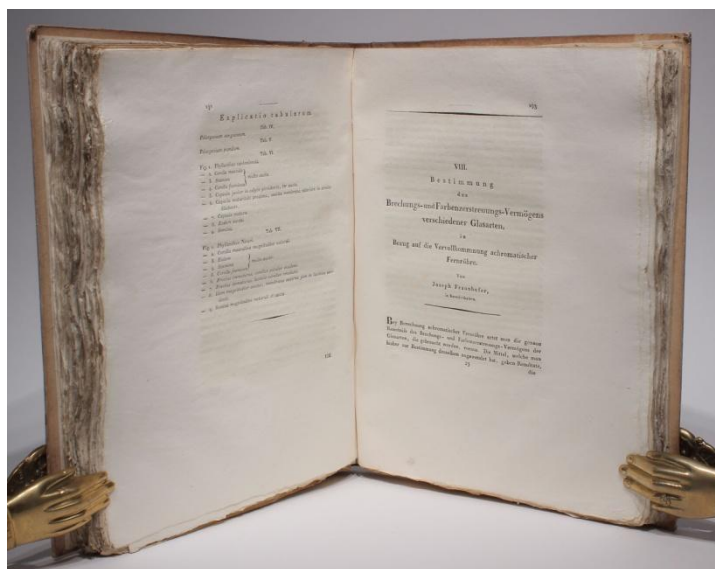
Discovery of the solar absorption lines by the founder of astrophysics

9 FRAUNHOFER, Joseph. *Bestimmung des Brechungs- und Farbenzerstreuungs- Vermögens verschiedener Glasarten.* In: Denkschriften der königlichen Academie der Wissenschaften zu München für die Jahre 1814 und 1815, vol. 5, pp. 193-226, 3 engraved plates (2 folding). München:



Lentner, 1817. 4to (305x230 mm), whole volume [8], xlii, 62, 226, 91 [1] pp., including half-title, general title page, 4-page index and 13 engraved plates (4 hand-coloured). Contemporary card board with printed spine label (little dust-soiled), untrimmed, occasional very minor spotting, otherwise crisp and clean. An outstanding, wide-margined copy. (#002068) sold

Dibner 153; PMM 278a; Sparrow 70; Norman 836 (offprint); DSB V, p.143. - FIRST EDITION AND OF GREATEST RARITY, of a fundamental paper in astrophysics. Fraunhofer, a skilled optician and designer of precision optical instruments, described in this paper, read before the Bavarian Academy in 1815, his accidental discovery of the absorption lines of the solar spectrum. In 1814, while conducting tests on the dispersion and refractive index for different kinds of optical glass, Fraunhofer "observed the effect of the refracting medium on light, comparing the effect of light from flames with light from the sun, and found that the solar spectrum was crossed with many fine dark lines, a few of which William Hyde Wollaston had observed and reported upon in 1802. [Wollaston had incorrectly interpreted the lines as borders between the colors]. Designating the more distinct lines with capital letters... he mapped many of the 574 lines that he observed between B on the red end and H on the violet end of the spectrum. Sometime later he noted that some of these lines appeared to correspond to the bright doublet of lines in many flame spectra; yet he noted further that while the pattern observed for the sun and planets [being reflected sunlight] appeared identical, the patterns for the sun, Sirius, and other bright stars differed from one another. He concluded that the lines originated in the nature of the light source. "These observations stimulated considerable interest for the next half-century among natural philosophers, whose speculations culminated in the classical explanation of absorption and emission spectra made by Kirchhoff and Bunsen in 1859" (DSB). The dark lines, whose exact explanation has never been explained, are still known as Fraunhofer lines. Their discoverer continued to explore and map them during the following years; using a grating device of his own invention he eventually was able to determine the wavelengths of specific colors of light and to make highly precise measurements of dispersion (see below). Although his research was conducted with the purely practical aim of producing the finest possible optical instruments, Fraunhofer's achievements "justify describing him as the founder of astrophysics" (PMM). Plate 2, reproducing Fraunhofer's map of the lines of the solar spectrum, is the FIRST ILLUSTRATION OF THE SOLAR SPECTRUM.



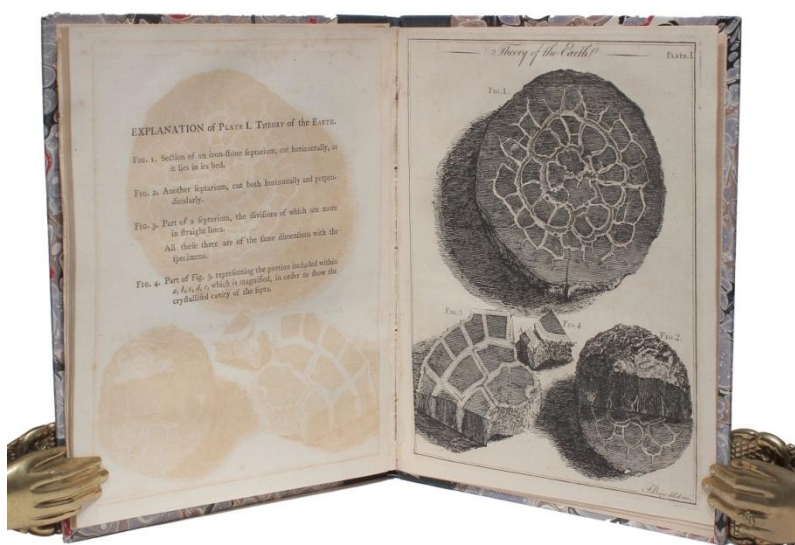
The famous Fraunhofer paper is rare as the journal was printed in a small run. Only two copies appeared at auction in the past 30 years (Richard Green Library sale, Christies 2008, and the Norman Library Sale, Christies, 1998).

The foundation of modern geology

10 HUTTON, James. *Theory of the Earth; or an Investigation of the Laws Observable in the Composition, Dissolution and Restoration of Land upon the Globe.* Extracted from: Transactions of the Royal Society of Edinburgh, Vol. 1, 1788. Edinburgh: J. Dickson, 1788. 4to (282x225 mm), vii, [1], [1] 210-304, [2] pp., including half title and general title with engraved vignette (and ms. shelf number) and two engraved plates. Text only very little age-toned, a few very light spots, p.285 lower corner torn away not affecting text. Modern cloth-backed marbled boards, paper label to front cover. A fine copy with ample margins. (#002047) € 2,800

Dibner 93; Sparrow 107; Norman 1130 (offprint); PMM 247 (note); Challinor 40; Ward & Carozzi 1161.

FIRST PUBLICATION OF HUTTON'S FAMOUS PAPER NOW REGARDED AS THE FOUNDATION OF MODERN GEOLOGY. Hutton's paper was expanded into a three-volume work, *Theory of the Earth* in 1795, published shortly before his death.



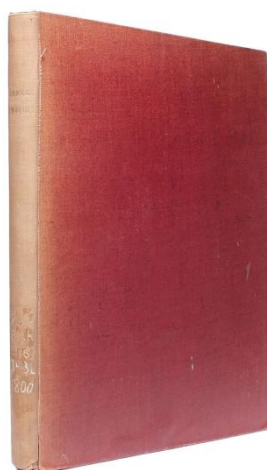
His fundamental conception - now accepted as a matter of course, but then entirely new - was the doctrine of uniformitarianism. The formation of the surface of the earth is one continuous process which can be studied entirely from terrestrial materials without cosmological or supernatural intervention (PMM).

The paper is divided into four parts: the first demonstrates that the Earth is a unique creation by a divine Creator consisting of core, water, crust and air, all of which in turn are governed by basic powers such as centrifugal forces, light, heat, cold and condensation, all of which keep the Earth in balance; part II deals with the

consolidation of strata, refuting the theory of aqueous solution and crystallization, substituting heat and fusion as the relevant processes; the third part investigates land production above sea level, demonstrating subterranean heat is universal and sufficient to achieve uplift; and finally, Hutton rejects catastrophism, and embraces a uniformitarian view whereby processes observable in the present have always been at work in the past, and will continue to do so in the future. "It firmly established the conception of the geological cycle and insisted on the length of geological time." (Challinor p.69).

One of the greatest triumphs in the history of medicine

11 JENNER, Edward. *An inquiry into the causes and effects of the variolae vaccinae: a disease discovered in some of the western counties of England, particularly Gloucestershire, and known by the name of the cow pox.* II. *Further Observations on the Variolae Vaccinae.* III. *A continuation of Facts and Observations...* 3 parts in 1 volume. London: Sampson Low for the author, 1800. 4to (275x221 mm). vii, [1], 182, [2] pp., including half titles to all parts, titles to part I and III, and 4 hand-coloured engraved plates by William Skelton after Skelton and Edward Pearce, printed in sepia. Retaining errata leaf 2B2 at end, duplicate sheets T1-2 bound in, K2* and S* cancels. Contemporary library cloth, spine with gilt title and shelf mark (upper hinge cracked, spine faded and worn at foot). Leaves partly untrimmed, little age-toning and occasional foxing, occasional faint pencil annotations in text, extensive pencil annotations to second flyleaf. Provenance: George Dock*, M.D. (bookplate to front pastedown), Los Angeles County Association (stamp at foot of title-page and P2r). A fine,



wide margined copy. Complete. (#002043)

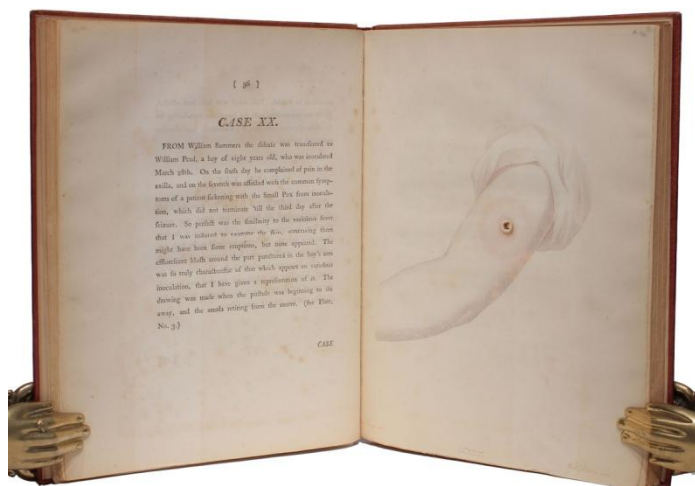
€ 5,500

Lefanu, Jenner 24; Norman 1163; NLM/Blake p. 235; Waller 5138; Wellcome III, p. 351.

Second edition (THE FIRST COMPLETE OF ALL THREE TEXTS). This edition is the first collected edition of Jenner's first three treatises on vaccination, published between 1798 and 1800: the first announcing 'one of the greatest triumphs in the history of medicine' (Garrison-Morton 5423); the second containing Jenner's first reply to critics, explaining common mistakes (such as the failure to recognise the symptoms of true cowpox, leading to ineffectual inoculations), and considering differences between inoculations in London and in the countryside; the third including further reports of successful inoculations.

"Edward Jenner, who discovered that it is possible to vaccinate against Small Pox using material from Cow Pox, is rightly the man who started the science of immunology. However, over the passage of time many of the details surrounding his astounding discovery have been lost or forgotten. Also, the environment within which Jenner worked as a physician in the countryside, and the state of the art of medicine and society are difficult to appreciate today. It is important to recall that people were still being bled at the time, to relieve the presence of evil humors" (Kendall A. Smith, *Edward Jenner and the Small Pox Vaccine*).

* George Dock (1860-1951), student of William Osler, pathologist and medical professor at University of Southern California.



The first illustrated medical book in the Netherlands

12 KETHAM, Johannes de. *Fascicul[us] Medicine houdende in hem dese navologhende tractaten Die allen Cyrurginen ent andere menschen te wetene seere profitelijc ent nootsakelijc zijn.*

Antwerpen: Claes de Grave, 1512. Folio (275x210 mm). ci [i.e. xcix, 5] ff. including 8 full-page woodcuts, large woodcut ornamental initials at the beginning of each tract, printed paragraph marks



and printed initials within each tract. Signatures: a-p6, q4, r6, s4. Text printed in 2 columns with 41 lines and headline.

Printer's device (coat of arms) and colophon at leaf r6r: "*Ende is voleyndt in dye v[er]maerde stadt van Antwerpen bi Claes die Graue in onser vrouwe[n] pant. Int iaer ons here[n] M.*

CCCCC. ende xij. op den xxvisten Dach van Meye." Errors in foliation: Numbers xxxviii-xl omitted in sequence and a leaf numbered xlvii appears between leaves numbered xlix and 1. Also, leaves xlv, lvi, and lxxxviii are misnumbered xl, lvii, and xcxi respectively. Original wooden boards, spine repaired with old leather, one catch plate, two remnants of wooden clasp plates and one brass corner still present, no flyleaves present. Leaves are untrimmed, fore-edges mostly frayed, a few annotations present in contemporary hand. The paper is lightly browned throughout with marginal soiling and occasional spotting. Few leaves have short closed tears, some leaves with paper repairs at gutter and fore-margin (not affecting text or images). An outstanding copy of an impossibly rare work, printed on strong paper. Complete.

(#002039)

€ 60,000

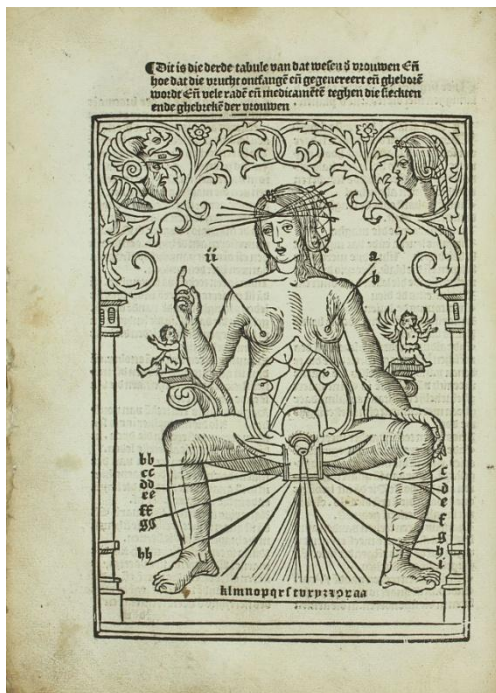
Nijhoff-Kronenberg 1223; Coppens, Quaerendo 39, 2009, p.168-205;

Panzer VI, 5, 17; PMM 36 (first Italian ed.); Dibner 121 (2nd Latin ed.); Heirs of Hippocrates (1522 Lat. ed.); Norman, Grolier Medicine 10 (1st Latin and Italian eds.); not in Wellcome or Durling/NLM.

Exceedingly rare with only 9 copies known to date, of which 2 are incomplete. According to C. Coppens, 2 are in The Netherlands (Amsterdam Univ. Lib. and a fragment in the Koninklijke Lib., The Hague), 2 in Belgium (Royal Lib. Brussels and an incomplete copy at Univ. Lib. Leuven), 2 in Copenhagen and 1 with the College of Physicians of Philadelphia. According to USTC, a further copy is at Houghton Library, USA. No copies are in Wellcome Library or the National Library of Medicine. No copies in Germany, Italy or the U.K.

In January 1512, the printer-bookseller and bookbinder Claes de Grave was granted the privilege by the Council of Brabant in Brussels to print in the vernacular, among others, Ketham's *Fasciculus Medicine* and Cube's *Den groten herbarius* [The great Herbal]. Ketham's work has evidently been compiled from two editions of the *Fasciculus*; the colophon appears on the last leaf of the penultimate gathering. (Nijhoff-Kronenberg 1223).

As is suitable for books in the vernacular, a considerable number are illustrated or at least have a richly adorned title page. The woodcuts are by various artists and differ in quality. Some have clearly been taken over from elsewhere. For his first production he certainly made a huge effort and had new woodcuts made for the *Fasciculus* based on the cycle first published by De Gregori. De Grave followed in the footsteps of the



Venetian publisher who produced the first illustrated medical book in Italy, when, so many years later, he brought the first illustrated medical book in the Netherlands on to the market. It is no slavish copy of the Italian model. In the first place the Italian Renaissance has not yet reached the Netherlands apart from some small decorative elements. As the Latin text is translated into Dutch, so too the Italian illustrations are translated, but the order is changed. Some illustrations are not included, for one a different model is used, and a diagram not found in the Venetian cycle is included (Coppens, p.177).

Contains the texts of Joannes Jacobi's *Regimen contra pestilentiam*; Pietro da Tossignano's *Consilium pro peste evitanda*; and Mondino dei Luzzi's *Anatomia*, edited by Petrus Andreas Morsianus. Woodcuts included are: Vein man (leaf a5r), zodiacal man (leaf d2v), pregnant woman (leaf d3v), wound man (leaf f3r), disease man (leaf g5r), scene at the bedside of a plague patient (leaf h4v), human skeleton (leaf l1v), urinoscopy scene (leaf r6v) and Flask Wheel, divided into two wheels (s1r-v). The frontispiece woodcut of the Latin and Italian editions with Petrus de Montagnana and the anatomy class are not included.

Content: (From title leaf:) Inde[n] eerste[n] Een tractaet om die viere naturen en[t] complectien der mensche[n] En[t] alderha[n]de siecheden te kennene --

Een tractaet van die adere[n] te latene oft te flobothomerene teghen alderhande ghebreken --

Een tractaet van die Juditien der aderen en[t] des bloets met vele schoone cautelen --

Een tractaet om te latene van dye Astronomie --

Een tractaet teghen die ghebreken der vrouwen --

Sommighe problemumata en[t] natuerlike vraghe[n] van die lede[n] der generation --

Een tractaet vander Cyrurgie teghen alderhande quetsuere[n] en[t] contusien en[t] onghuallen --

Een tractaet om veelderhande nootskelijcke saluen en[t] plaesteren te componerene --

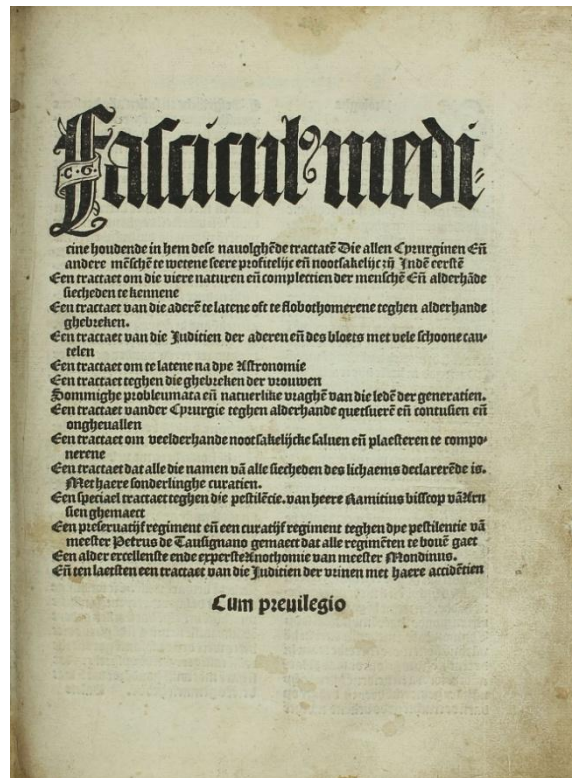
Een tractaet dat alle die namen va[n] alle siecheden des lichaems declarere[n]de is. Met haere sonderlinghe curatien --

Een speciael tractaet teghen die pestile[n]cie van heere Kamitius bisscop va[n] Arusien ghemaect --

Een preseruatijs regiment en[t] een curatijs regiment teghen dye pestilentie va[n] meester Petrus de Tausignano gemaect dat alle regime[n]ten te boue[n] gaet --

Een alder excellenste ende experste Anothomie van Meester Mondinus --

En[t] ten laetsten een tractaet van die Juditien der vrinen met haere accide[n]tien.



13 LANFRANC, Guido of Milan [LANFRANCO MEDIOLANENSIS]. *Ein nützliches Wundartzney Büchlein, des Hochberümpften Lanfranti, auß fürbitt des wol erfahren Meisters Gregorii Fleugauß, Chyrurgen und Wundartzt zu Straßburg. Dabey vieler bewerter Recepten, heylsamer Salben vnd Ertzneyen, ein außzug ... Durch Othonem Brauenfelß verdeutscht.* [Frankfurt am Main: Hermann Gülfferich], 1552. 4to (173x139 mm). 30 ff. Signatures: A-F4, G6. Title-page in red and black with engraved vignette depicting surgical instruments, one woodcut within text and one elaborate full-page illustration on G6v, very minor occasional light spotting and soiling, faint marginal dampstains. Modern vellum-backed paper boards, covers pasted over with a fragment of an rubricated incunable leaf from a work by Nicolaus de Lyra. A fine copy.

(#002046)

€ 2,900

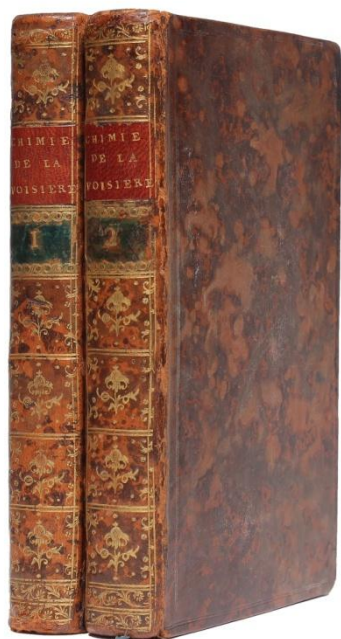
VD-16 L-256 (2); Waller 5563. Durling/NLM 2726 and Wellcome I, 194 (both earlier eds.), not in Adams, Machiels, BL London, BN Paris, NUC.

Extremely Rare German adaption of the noted medical treatise on wound surgery ascribed to the medieval author Lanfranc of Milan (fl. 1290-1296). An English edition was published by John Hall in 1565.



The foundation of modern chemistry

14 LAVOISIER, Antoine Laurent. *Traité élémentaire de chimie, présenté dans un ordre nouveau et d'après les découvertes modernes; avec figures...* 2 Parts in 2 volumes. Paris: Chez Cuchet, 1789.

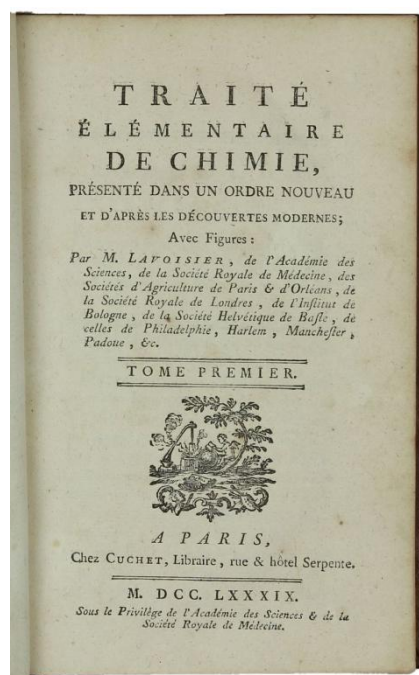


8vo (193x124 mm), xlv, 322; viii, 323-653, [3] pp., including half title to each part, 2 folding tables in part I and 13 folding engraved plates in part II. Little browning to text and plates, plate 8 with repair to margin not affecting image. Contemporary calf (little wear to hinges), flat spines attractively gilt with floral and ornamental tooling and red morocco lettering pieces, red-dyed edges, marbled endpapers. Little browning and occasional spotting, blue sticker to top corner of p.54. A handsome copy with ample margins. (#002052) € 5,600

Dibner 43; Grolier/Horblit 64; PMM 238; Wellcome III, p. 460; Norman 1295; Duveen 340.

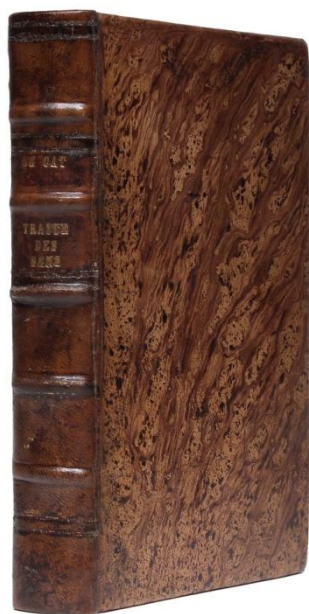
FIRST EDITION, second issue. Lavoisier's *Traite* "...was a decisive move in the final overthrow of alchemy and the phlogiston theory introduced by Stahl a century earlier. By the use of the

balance of weight determination at every chemical change and the building of a rational system of elements, Lavoisier laid the foundation of modern chemistry" (Dibner). The illustrations for this edition were conceived and executed by Lavoisier's wife, a skilled painter and engraver who had studied under Louis David, and who collaborated with her husband in his scientific experiments and researches. The second issue contains tables and various approvals of the work not included in the single-volume first or trial issue, of which only two copies are known.



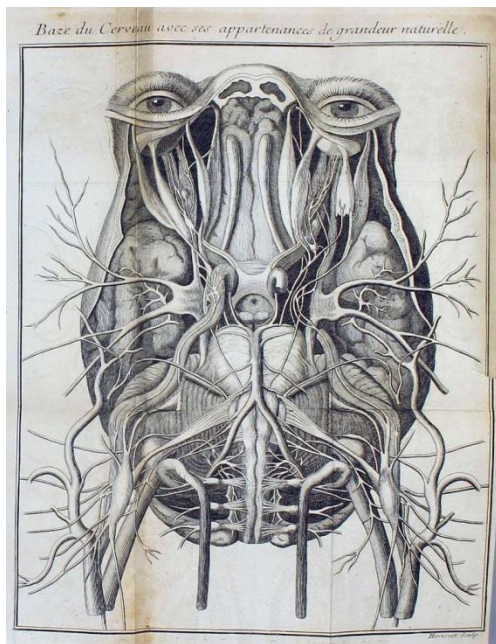
The physiology of the sense organs

15 LE CAT, Claude-Nicolas. *Traité des sens.* Rouen: [no publisher], 1740. 8vo (193x125 mm). [8], 201-232, 253-523 [1] pp., including 19 engraved plates (3 duplicate outline plates) on 16 sheets (15 folding), one engraving on p.201 and two vignettes. This work begins at page 201, with the caption title "Des sens en particulier." Leaf Bb2 misbound after Bb6. Later polished tree calf, spine titled in gilt and with 5 raised bands. Text and plates little browned (title-page stronger in outer margins) with occasional spotting and finger soiling. Title-leaf reinforced at gutter. Faint library stamp to title-page. This copy, published in a single volume only, is complete despite the fact that pagination starts at p.201. A fine copy of the impossibly rare first edition with no copy recorded at auction for more than 50 years. (#002048) € 3,500



Becker 234; Heirs of Hippocrates 851; Wellcome III, p.468 (all citing the 1744 edition); DSB VIII, 115; Blake/NLM, p.260.

FIRST EDITION of the author's most important work, "treats the anatomy and physiology of the sense organs in a philosophical context" (Becker). "In it Le Cat presented a theory of the propagation of light contrary to that of Newtonian attraction. He further reported on the pigmented choroid coat of the eye and assigned it a common embryonic origin with the pigment of the skin" (DSB).



The work is illustrated by a set of anatomical plates, including an outstanding folding plate of the base of the brain and of the lacrimal apparatus. "Le Cat (1700-1768), a man of many interests, was one of France's foremost surgeons and researchers. Perhaps better known as a skilled and accomplished lithotomist ... The book's six sections include an introduction to sensation, touch, taste, smell, hearing, and vision, which constitutes the major portion of the text." (Heirs of Hippocrates).

L'ouvrage parut pour la première fois à Rouen en 1740, et fut traduit en anglais en 1750. L'illustration comprend 19 figures hors texte, joliment gravées en taille douce d'après les dessins de l'auteur, dont 7 repliées, consacrées à l'ouïe et à la vue. Essai fameux sur les sens du médecin et chirurgien Claude-Nicolas Le Cat (1700-1768). "On a fait choix, pour l'impression, d'un caractère plus gros & plus beau; & quant aux planches, elles sont beaucoup mieux gravées, & sur du meilleur papier que celles de l'édition de Rouen. (...) on l'a enrichie de trois tables, dont la première indique les traités, la seconde les planches, & la troisième les matières. (...) Ce traité est divisé en

cinq parties principales, suivant le nombre des sens, qui sont le toucher, le goût, l'odorat, l'ouïe & la vue. Tout ce qu'avance l'auteur, dans chacune de ses parties, est fondé sur la parfaite connoissance qu'il a de la structure, du mécanisme, du jeu des organes, dont il traite; & lorsque ce jeu, ce mécanisme, lui sont inconnus, il appelle à son secours les secrètes démarches de la nature, les phénomènes les moins équivoques, l'analogie, les observations, ses propres découvertes, & celles des plus grands philosophes" (Avertissement de l'éditeur). On y trouve les noms de Newton, Mariotte, Méry, dont l'auteur réfute ou agrmente les théories. La part belle est faite au sens de la vue "qui est, sans contredit, le plus beau, & le plus fécond en merveilles." Les planches anatomiques de l'organe de l'ouïe & de la base du cerveau avec toutes ses dépendances, qu'il a jointes au Traité des sens, (...) suffiront pour prouver que le nom de Le Cat peut être placé à côté de celui du célèbre Winslow, dont notre auteur reçut les premières leçons en anatomie." (Eloy, Dictionnaire historique de la médecine ancienne et moderne, I, pp. 569-570).

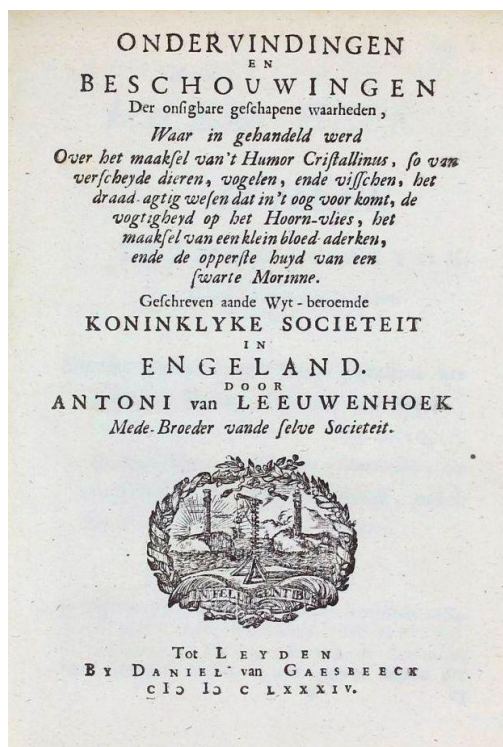
A fine set of all 165 letters in first edition

16 LEEUWENHOEK, Anton van. [Works, in Dutch.] *Ontleding en ontdekkingen... Brieven*. Group of 17 parts bound in 5 volumes. Leiden & Delft, 1684-1718. 4to (190-203x146-151 mm). With 100 plates, 3 engraved frontispieces and 123 engraved illustrations in text. Lacking only the engraved portrait of the author in vol. II. Vol. I-III and V in contemporary uniform Dutch vellum boards with spine titled in manuscript, sprinkled edges; occasional toning in first 2 volumes; vol. IV in contemporary calf, spine with 5 raised bands richly gilt in compartments (extremities little rubbed, corners bumped), light waterstain to top corner of first 40 leaves. Provenance: Signatures of the Rotterdam physician Jan van der Hoeven (1801-68) and his son and grandson of the same name (1834-1900 and 1863-1941), both surgeons; armorial ex-libris of the grandson to front paste-downs of 4 volumes; Kenneth Rapoport, ex-libris to front paste-downs. (#001988) € 28,000



Horbliit 65, Norman 1301-1315, Dobell 20.

A fine set of all the 165 letters in Dutch, **ALL IN FIRST EDITION**, comprising letters 28-146 and I-XLVI (letters 1-27 were not printed in Dutch, though several were published in Latin or English, usually abridged, in the Philosophical Transactions). In 1672 Leeuwenhoek began to make his own microscopes with extremely powerful lenses, with which he examined innumerable organic and inorganic structures. Regner de Graaf introduced him to the Royal Society in 1673,



and from then on for half a century he wrote long letters to the Society in which he described a vast array of discoveries. "His most important contributions were made in the fields of microbiology, sexual reproduction, hematology, and plant anatomy. He was the first to recognize the true nature of microorganisms" (Norman). He was the first to observe, *inter alia*, the red blood cells, and he saw the passage of blood from the arteries to the veins in the fin of a fish in 1688. This event was the final proof of Harvey's circulation theory. He first described, in about thirty letters, microorganisms, including bacteria, protozoa, and rotifers. His discovery of unicellular life made him the father of microbiology. At the suggestion of the medical student Johann Ham, Leeuwenhoek examined seminal fluid and observed spermatozoa, which he dubbed little animals (*animalcula*). He was convinced that man was preformed in them, and thus started a long-running debate with the Harveian school. He is one of the greatest figures in the history of microscopy, and is with Hooke the only seventeenth-century microscopist about whose technique anything is known. During his lifetime Leeuwenhoek published 165 letters, individually or in collections, in arabic- and roman-numbered series. The present set follows the composition of Dobell's own copies of which he states that "perfect copies, composed of first editions throughout, and with all the plates,

are now extremely rare" (Dobell 20). Dobell has seen only one such perfect sets (his own). Content in order of appearance as bound in:

1.1 - *Ontledingen en Ontdekkingen van levende Dierkens in de Teel-deelen van verscheide Dieren, Vogelen en Visschen; van het Hout met der selver meningvuldige Vaaten...* Leyden: Boutesteyn, 1686. [1-5] 6-40, 35 [1] pp., engraved allegorical title in first state (dated 1685) and 3 engraved plates (2 folding), text engravings. Contains unnumbered letters 28-31 & 34-36, each series continuously paginated separately. Letters 34-36 misbound after 1.2. Dobell 8; Norman 1309.

1.2 - *Ondervindingen en Beschouwingen der onsigtbare geschapene waarheden, vervat in verscheide Brieven, geschreven aan de Wijt-beroemde Koninklijke Societeit in Engeland.* Leyden: van Gaesbeeck, 1684. [8], 8, 32 pp., text engravings. Contains letters 32 & 33, unnumbered and paged separately. Bound after 1.1. Dobell 1; Norman 1301; Horblit 65.

1.3 - *Ondervindingen en Beschouwingen der onsigtbare geschapene waarheden, waar in gehandelt werd vande Eyerstok.* Leyden: van Gaesbeeck, 1684. [2], 21 [1], 19 pp., text engravings. Contains letters 37 & 39, unnumbered and paged separately. Letter 39 misbound after 1.6 (letter 38). Dobell 2; Norman 1303; Horblit 65; Norman Medicine 37.

1.4 - *Ondervindingen en Beschouwingen der onsigtbare geschapene waarheden, waar in gehandelt werd vande Schobbens inde Mond.* Leyden: van Gaesbeeck, 1684. iv, 24 pp., text engravings. Contains letter 40, unnumbered. Dobell 3; Norman 1305; Horblit 65.

1.5 - *Ondervindingen en Beschouwingen der onsigtbare geschapene waarheden, waar in gehandelt werd over het maaksel van't Humor Criftallinus.* Leyden: van Gaesbeeck, 1684. [2], 26 pp., text engravings. Contains letter 41, unnumbered. Dobell 4; Norman 1306; Horblit 65.

1.6 - *Ontledingen en Ontdekkingen van de onsigtbare Verborgentheden; vervat in verscheide Brieven, geschreven aan de Wijt-vermaarde Koninklijke Wetenschap-soekende Societeit tot Londen in Engeland.* Leyden: Boutesteyn, 1685. 94 (i.e. 88) pp., text engravings. Contains unnumbered letters 38, 42, 43. First 12 leaves with the title and letter 38 misbound after 1.3 (letter 37). Dobell 5; Horblit 65.

1.7 - *Ontdekkingen en Ontledingen van Sout-figuren van verscheide Souten: van Levendige Dierkens in de Mannelyke Saden de Baarmoeder ingestort; ende van de Voort-telling.* Leyden: Boutesteyn, 1685. [2] 3-76 pp., engraved folding plate, text engravings. Contains unnumbered letters 44 & 45; the latter containing Leeuwenhoek's observations of spermatazoa. Dobell 6; Norman 1307; Horblit 65.

1.8 - *Ontledingen en Ontdekkingen van het Begin der Planten in de Zaden van Boomen.* Leyden: Boutesteyn, 1685. [2] 3-78, [2, blank] pp., engraved folding plate, text engravings. Contains unnumbered letters 46 & 47. Dobell 7; Norman 1308; Horblit 65.

1.9 - *Ontledingen en Ontdekkingen van de Cinnaber naturalis, en Bus-poeder; van het maaxsel van Been en Huyd*. Leyden: Boutesteyn, 1686. [3] 4-109 [1] pp., engraved folding plate, text engravings. Contains unnumbered letters 48-52. Dobell 9; Norman 1310; Horblit 65.

2.1 - *Vervolg der Brieven, geschreven aan de Wytvermaarde Koninglijke Societeit in Londen*. Leyden: Boutesteyn, 1687. [8], 155 [1] pp., 8 engraved plates (2 folding), text engravings. An engraved portrait is cited by Dobell, which is not included here. Contains letters 53-60, all except the first numbered. Dobell 10; Norman 1311 (cit. 2nd edition) ; Horblit 65.

2.2 - *Natuurs Verborgentheden Ontdekt: zijnde een Tweede Vervolg der Brieven, geschreven aan de Koninglijke Societeit tot Londen*. Delft: Voorstad, 1689. [2], 157-260, 269-298, [2, blank] 299-350 pp., 6 engraved plates (3 folding), text engravings. Contains letters 61-67, all numbered. Dobell 12; Norman 1312; Horblit 65.

2.3 - *Derde Vervolg der Brieven, geschreven aan de Koninglyke Societeit tot Londen*. Delft: van Kroonevelt, 1693. [8], 351-531 [1] pp., 6 engraved plates (5 folding, 1 supplied), text engravings. Contains letters 68-75, all numbered. Dobell 13; Norman 1314; Horblit 65.

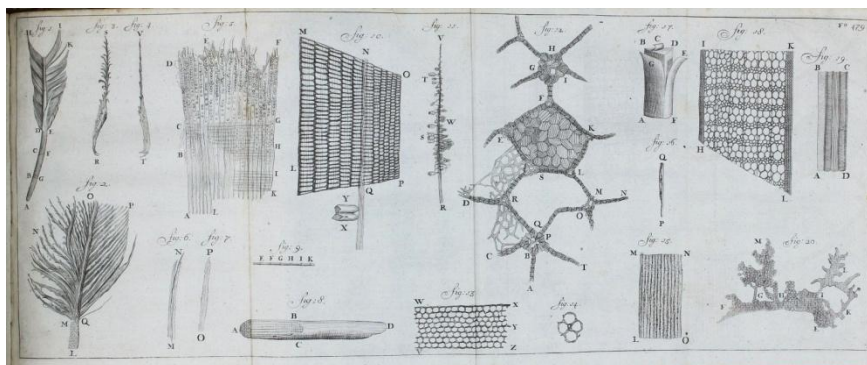
2.4 - *Vierde Vervolg der Brieven, geschreven aan de Wytvermaarde Koninklijke Societeit in Londen*. Delft: van Kroonevelt, 1694. [2], 533-730 pp., 6 engraved plates (5 folding). Contains letters 76-83, all numbered. Dobell 14; Norman 1315; Horblit 65.

3.1 - *Vijfde Vervolg der Brieven, geschreven aan verscheide Hoge Standspersonen en Geleerde Luijden*. Delft: van Kroonevelt, 1696. [8], 1-172, [10], including additional engraved title dated 1696, 7 engraved plates (3 folding). Contains letters 84-96, all numbered. Dobell 15; Horblit 65.

3.2 - *Sesde Vervolg der Brieven, geschreven aan verscheide Hoge Standspersonen en Geleerde Luijden*. Delft: van Kroonevelt, 1697. [4], 173-342, [10], 5 engraved plates (1 folding). Contains letters 97-107, all numbered. Dobell 16; Horblit 65.

4 - *Sevende Vervolg der Brieven, waar in gehandelt werd, van veele Opmerkens en verwonderens-waardige Natuurs-Geheimen*. Delft: van Krooneveld, 1702. [7], 2-452, [22] pp., 25 engraved plates (2 folding). Contains letters 108-146, all numbered. Dobell 18.

5 - *Send-Brieven, zoo aan de Hoog-edele Heeren van de Koninklyke Societeit te Londen, als aan andere Aansienelyke en Geleerde Lieden*. Delft: Beman, 1718. [16], 460, [28] pp., additional engraved title with portrait inset (dated 1718) and 31 engraved plates (12 folding). Contains letters I-XLVI, all numbered. Dobell 19; Horblit 65.

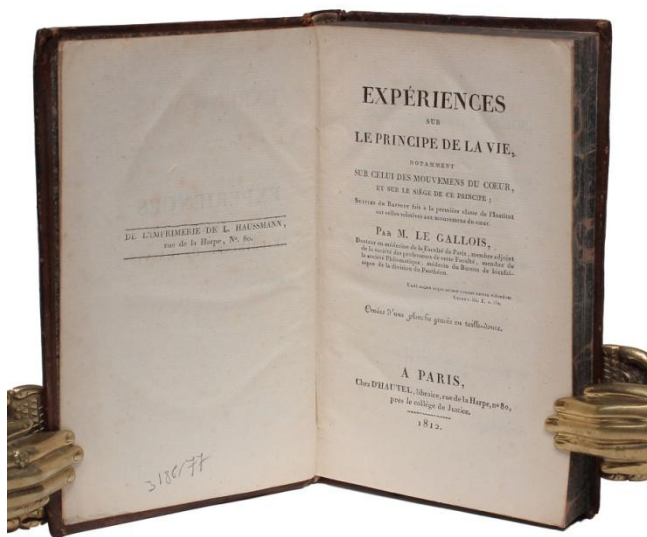


A landmark in the history of physiology

17 LE GALLOIS, Julien Jean Cesar. *Expériences sur le principe de la vie, notamment sur celui des mouvemens du coeur, et sur le siège de ce principe; suivies du rapport fait a la premiere classe de l'Institut sur celles relatives aux mouvemens du coeur*. Paris: D'Hautel, 1812. 8vo (203x127 mm). [6], [i] ii-xxiv, [1] 2-364, [2] pp., including half title, one large folding engraved plate and errata leave bound at end. Minor occasional spotting and browning to text. Full sheepskin with plain spine tooled in gilt and with red morocco label (little wear to hinges and head of spine), marbled endpapers and edges. Fine, wide-margined copy. (#002055) € 1,200

Norman 1324; Heirs of Hippocrates 1251; Wellcome III, p. 479; Waller 5679; Cushing L31; DSB VIII, p.132; Garrison-M. 928.

Le Gallois (1770-1814) was one of the earliest of the experimental physiologists. In this, his principal work, he was the first, after Borelli, to revive the neurogenic theory of the heart's action. He describes the action of the vagus nerve on respiration. He showed that bilateral section of the vagus can produce fatal broncho-pneumonia.



Le Gallois discovered the site of the respiratory center in a circumscribed area of the medulla oblongata, a discovery that replaced the belief that respiration depended on the entire brain. He also described the action of the vagus nerve on respiration, showed that bilateral section of the vagus can produce fatal broncho-pneumonia, and revived the neurogenic theory of the heart's action which states that the motor power of the heart comes from the spinal cord via the branches of the sympathetic nervous system (Norman 1324).

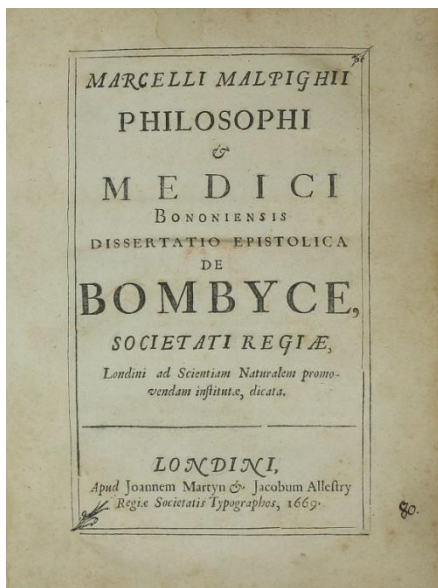
"His experiments were remarkable in the diversity and ingenuity of their design and arranged in a logical sequence. Le Gallois's unshakable belief in the supreme importance of observations and well-

performed experiments, together with his reserve in interpreting his data, indicate that he was a scientist of great stature." (DSB VIII, p.134).

Il fut un des premiers physiologistes à pratiquer la méthode expérimentale et l'expérimentation animale. Il mena notamment une série d'expériences sur des animaux pour clarifier le mécanisme de la respiration. Par décapitation de vertébrés ou d'autres types de destruction ciblée des connexions nerveuses dans le cerveau et la moelle épinière, il est venu à la conclusion que la respiration est contrôlée par un centre respiratoire, qui est situé dans le bulbe rachidien. Il fut le premier à étudier le problème de la théorie neurogénique par la méthode de destruction progressive des portions successives du système nerveux central. Le Gallois fit des expériences sur le système vasculaire, la respiration artificielle, l'oxygénation et la conservation du sang.

The first monograph on an invertebrate

18 MALPIGHI, Marcello. *Dissertatio epistolica de bombyce.* London: John Martyn & Jacob Allestry, 1669. 4to (230x169 mm). [6], 100, [4] pp., 12 folding engraved plates, without first blank. Contemporary vellum (soiled, spotted), spine titled in manuscript. Text leaves with little marginal browning and soiling, occasional faint spotting, title-leave with light dampstain and little chipping in



upper margin not affecting text, 6 plates with closed tears not affecting image, front pastedown with old ownership inscription. Provenance: Friedländer & Sohn Buchhandlung, Berlin (ticket at lower pastedown); Geipart (signature on front pastedown). (#002071) € 3,400

Garrison-M. 293; NLM/Krivatsy 7334; Norman 1428; DSB IX, p.65; Wing M-349; Wellcome, IV 38.

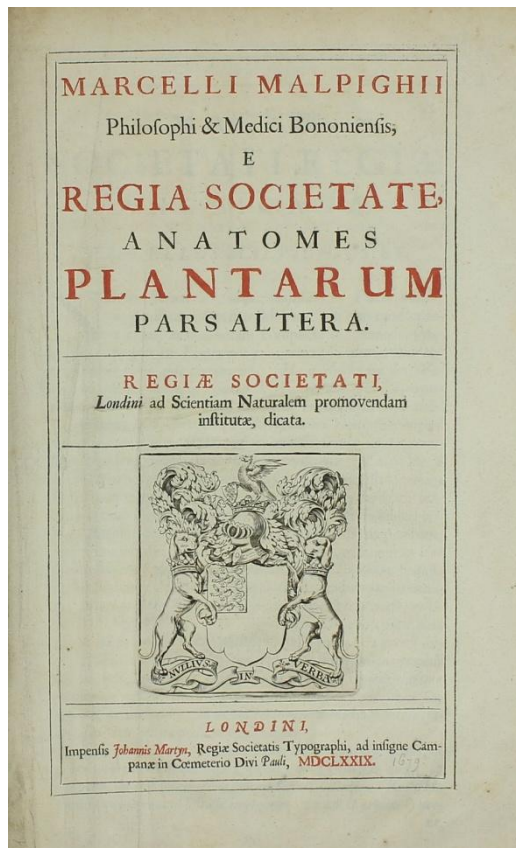
First edition. "Malpighi's work on the silkworm represents the first monograph on an invertebrate and records one of the most striking pieces of research work on his part. He dissected the silkworm under the microscope with great skill and observed its intricate structure; before the appearance of this work the silkworm was believed not to have internal organs" (Garrison-M).

"In *de bombyce* Malpighi had carefully observed the artisan nature construct each of the three stages - larva, chrysalis, and moth - through which the silkworm is formed. He further remarked on the specific apparatuses with which the silkworm is provided, among

them the air ducts (tracheae) and the blood duct with a number of pulsating centers (corcula)" (DSB IX, p.65).

Foundation of the science of plant anatomy

19 MALPIGHI, Marcello. I. *Anatome plantarum. Cui subjungitur appendix iteratas & auctas ejusdem authoris de ovo incubato observationes continens.* II. *Anatomes plantarum pars altera.* London: John Martyn, 1675-1679. Two works in two volumes. Folio (352x237 mm). [4], 15, [5], 82, [2], 20; [8], 93, [3] pp. including elaborately engraved allegorical frontispiece in each volume by Robert White, letterpress titles in red & black with large engraved arms of the Royal Society, and 100 engraved plates. Contemporary vellum (soiled, corners worn, spine of vol I repaired). Engraved frontispiece and title-leave in vol. 1 reinforced at gutter, frontispiece also with paper repair to lower



corner (just affecting border), tear to lower margin of frontispiece and title leave in vol. 2. Light browning, occasional spotting and mainly marginal dampstaining to text and plates, few plates in vol. 2 with wormholes in lower margin not affecting image. Provenance: W.V.W.H. (initials dated 1687); The Janus Foundation of San Francisco (bookplates to pastedowns); W. Junk (bookseller labels). Fine copy with ample margins.

(#002057) € 6,500

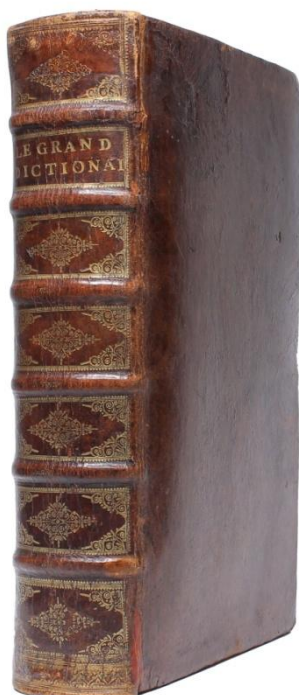
Dibner 22; Horblit 43a; Norman 1430; Garrison-M. 536; DSB IX, p.65; Henrey 239; Morton, pp 178-194; Nissen (botany) 1269; Wing M-345.

FIRST EDITION. Malpighi, together with Nehemiah Grew, founded the science of plant anatomy: both men published their first works on the subject in 1671, and although they worked independently of one another, each was aware of the other's continuing investigations over the fifteen years following. Unlike Grew's *Anatomy of Plants*, which was written as a complete textbook of plant anatomy, Malpighi's *Anatome plantarum* contained only the account of his own researches. Apart from the contributions paralleled in Grew's work, the *Anatome* is valuable for its clear accounts of details Grew failed to see, and for introducing a standard Latin-based terminology for the various plant organs and structures. As with Grew, the microscope was fundamental

to Malpighi's investigations; "the many anatomical observations made by Grew and Malpighi still excite astonished admiration by their completeness, accuracy and grasp of reality - almost all eventually became part of the enduring foundation of plant anatomy" (Morton, p 192). The first volume of Malpighi's work also contains as an appendix a reprint of his *De ovi incubato* (1672).

The first modern encyclopedia

20 MORERI, Louis. *Le grand dictionnaire historique, ou le mélange curieux de l'histoire sainte et profane.* Lyon: J. Girin et B. Rivière, 1674. Folio (352x225 mm). [36], 1346 pp., including half title, engraved frontispiece by G. Audran. Title printed in red and black.



Contemporary full leather with 6 raised bands richly gilt in compartments (some wear to extremities, old repair to spine ends), sprinkled edges. Text with some foxing and browning, half title and frontispiece reinforced at gutter, 8 mm of blank lower margin of frontispiece cut away without loss of image. A few leaves with light dampstaining. A good, unmarked copy of the first edition and of greatest rarity. Only three copies of the first edition listed in KVK and Worldcat (Zurich, BM Lyon and Paris BnF), no copy in the USA. (#002064) € 4,800

PMM 155a; Brunet III, 1901; Zischka 7

VERY RARE FIRST EDITION OF THE FIRST MODERN ENCYCLOPEDIA. Moreri's work is ranked, along with Bayle's *Dictionnaire Historique et Critique*, as one of the first vernacular encyclopedias to make an impact on the European world of letters. Moreri deliberately designed his encyclopedia as an apologia and defence of the Roman Catholic Church. It is also noteworthy for its emphasis on biographical and historical entries which for a long time were neglected by other compilers such as Harris, Chambers and Bayle (whose own *Dictionnaire* was composed as a direct response to Moreri's work). It was eclipsed by Diderot's *Encyclopédie* (Paris, 1751-65).

One of the most important works in the history of medicine

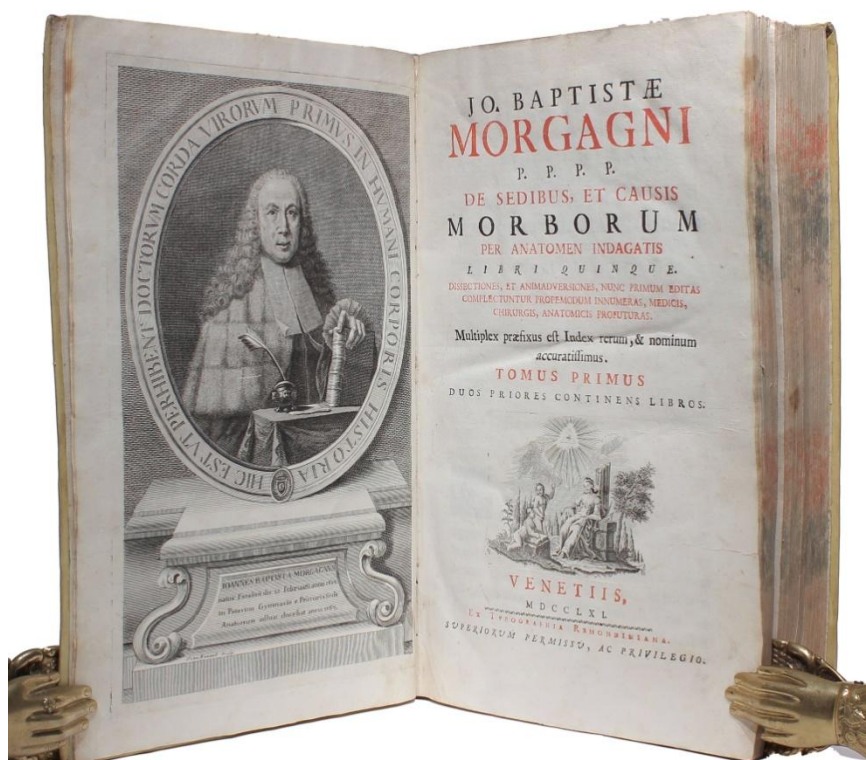
21 MORGAGNI, Giovanni Battista. *De sedibus, et causis morborum per anatomen indagatis libri quinque.* Two volumes in one. Venice: ex typographia Remondiniana, 1761. Folio (370x234 mm). [10],



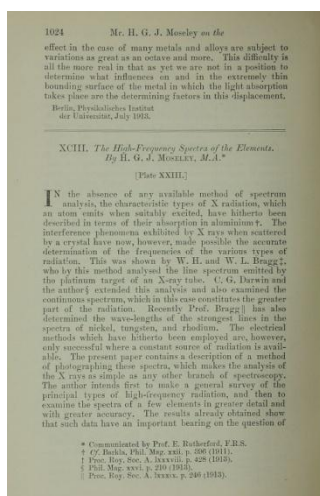
ix-xcvi, [2] 3-298, [2]; [2] 3-452 pp., including the scarce half-title and final blank to first volume, engraved frontispiece portrait of the author by Jean Renard in first volume, both title-pages with engraved allegorical vignettes, first title printed in red and black. Contemporary full vellum (boards very little soiled and lightly rubbed at extremities), spine with morocco label titled in gilt, cut edges partly coloured. Internally crisp and clean with only very minor occasional spotting, worm holes to lower margin of a few leaves not affecting text. One of the finest copies we have ever seen. (#002053) € 6,300

PMM 206; Dibner 125; Norman 1547; Grolier Medicine 46; Heirs of Hippocrates 792; Wellcome IV, 178; Garrison-M. 2276; NLM/Blake 312; Osler 1178; Waller 6672

First edition, first issue, of Morgagni's main work and ONE OF THE MOST IMPORTANT WORKS IN THE HISTORY OF MEDICINE. "Morgagni was the true founder of modern pathological anatomy" (Garrison-Morton). Morgagni, Professor of Anatomy at Padua, used evidence from his experience and records of some 700 post-mortem dissections, to establish a procedure of basing diagnosis and treatment on a detailed knowledge of the anatomical conditions of common diseases, i.e. a classification of symptoms rather than diseases. The work includes a number of descriptions of new diseases, many of which have remained classics until recent times.



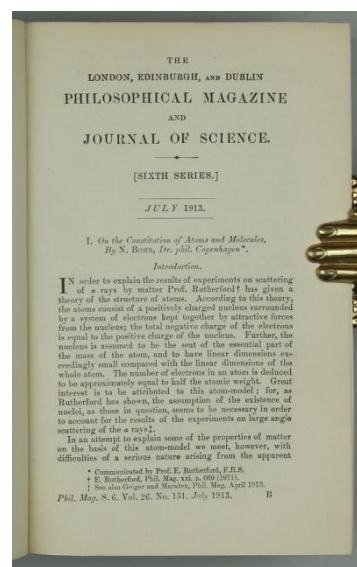
The definition of atomic numbers



22 MOSELEY, Henry Gwyn Jeffreys. *The high-frequency spectra of the elements / The High-Frequency Spectra of the Elements. Part II.* In: The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science, Sixth series, vol.26, no. 156 (December 1913), pp. 1024-1034, plate XXIII; and Sixth series, vol.27, no. 160 (April 1914), pp. 703-713. [Bound with]: II. **BOHR, Niels.** *On the Constitution of Atoms and Molecules.* 3 parts. In: The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science, Sixth series, vol.26 (July-December 1913), pp. 1-25, 476-502 and 857-75. London: Taylor and Francis, 1913-1914. 2 volumes, 8vo (210x140 mm). Whole volumes: viii, 1064 pp., 23 plates, Sept. issue misbound at end; viii, 1044 pp., 16 plates. Contemporary half cloth (spine sun-faded, boards somewhat rubbed and scuffed). Rear inner joint of vol. 26 broken; endpapers with library stamps, title stamped, slightly browned. Margins of some plates occasionally shaved (not affecting plate to Moseley's paper). Provenance: Bundesamt für Eich- und Vermessungswesen (bookplates with shelf numbers to front pastedowns and stamps to general title pages). Good set with the important milestone papers. (#002069) € 2,200

I. DSB IX, 542; PMM 407; Norman 1559

FIRST EDITION of Moseley's breakthrough work which placed the atomic table on a firm scientific foundation. "Moseley, working under Rutherford at Manchester, used the method of X-ray spectroscopy devised by the Braggs to calculate variations in the wavelength of the rays emitted by each element. These he was able to arrange in a series according to the nuclear charge of each element. Thus if the nuclear charge of hydrogen is



1, in helium it is 2, in lithium 3, and so on by regular progression to uranium as 92. These figures Moseley called atomic numbers. He pointed out that they also represented a corresponding increase in extra-nuclear electrons and that it is the number and arrangement of these electrons rather than the atomic weight that determines the properties of an element. It was now possible to base the periodic table on a firm foundation, and to state with confidence that the number of elements up to uranium is limited to 92. When Moseley's table was completed, six atomic numbers had no corresponding elements; but Moseley himself was able to predict the nature of four of the missing elements" (PMM 407)

II. DSB II, 239; PMM 411; Norman 258

FIRST EDITION."Bohr's three-part paper postulated the existence of stationary states of an atomic system whose behavior could be described using classical mechanics, while the transition of the system from one stationary state to another would represent a non-classical process accompanied by emission or absorption of one quantum of homogeneous radiation, the frequency of which was related to its energy by Planck's equation" (Norman).

The first detailed, scientific and popular description of the world

- 23 MÜNSTER, Sebastian.** *Cosmographiae Universalis Lib. VI.* Basel: Henric Petri, March 1572. Folio (314x209 mm), [188], [100], 1333, [3] pp., printer's woodcut devices on title-page and verso of final leaf, woodcut portrait of Münster on verso of title-page, woodcut initials, 25 unnumbered double-page woodcut maps with printed text on rectos, about 935 woodcut illustrations within text, including maps, 50 double-page town views and 3 multiple folded panoramic views. Contemporary German blind-tooled pigskin over wooden boards (soiled, extremities worn, clasps lacking). The 25 double page woodcut maps are in excellent condition, the text and the town views are only little browned with little occasional spotting. Light dampstaining in places is mostly confined to blank margins, the folding sides of the panoramic views of Vienna, Florence and the Rhine are creased and have old paper repairs mainly in blank margins, 3 oversize woodcuts on K1-2, EE1-2 and Ili1-2 are trimmed a few mm into plate image at fore-edges, LLI1-2 trimmed just touching image, leaves Tt1-2 with lower corner torn not affecting text, OO5 with tear to fore-edge affecting a few marginals verso, 2 pages with old annotations and text markings in red ink. Provenance: Johann Carl Büeller (ownership inscription to front endpaper, dated 1672). An excellent copy in its original binding, collated complete. (#002036) € 15,000



Sabin 51383; Burmeister 91; Graesse IV.622.

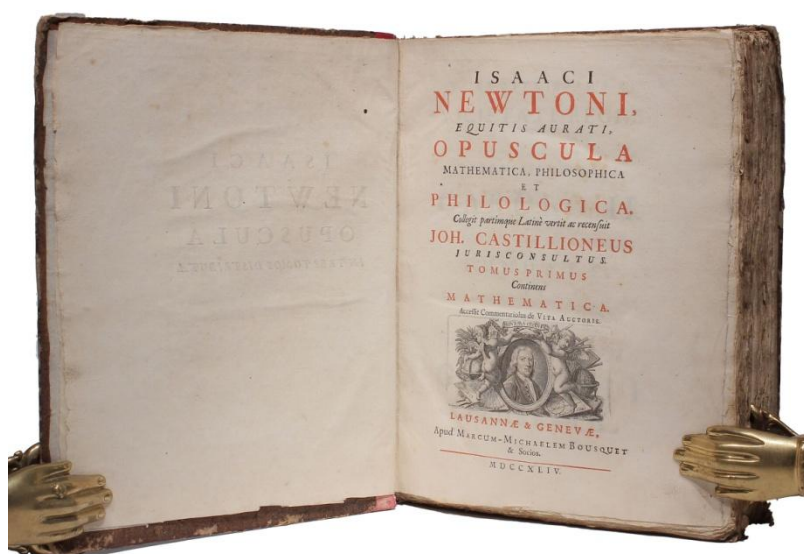
5th edition of the Latin translation (1st 1550) of "the first detailed, scientific and popular description of the world in Münster's native language [1st: German, 1544], as well as a supreme effort of geographical study and literature of the Reformation period" (Enc. Brit.). The *Cosmographia* reached a total of 46 editions in 6 languages by 1650, each incorporating additions and revisions. Münster (1488-1552) was a professor of Hebrew at Basel University. The scientifically most valuable sections are those which deal with Germany and Central Europe. Included are separate sections on the Holy Land, Africa, and Asia, while contained on pages 1260-1279 under the title "De Novis Insulis", is a description of America, with relations of the voyages and discoveries of the early explorers, Columbus, Vespucci, Magellan, &c. Profusely illustrated with woodcuts. The map of Cuba and the plan of Cusco appear for the first time in this edition. Also, for the first time in a latin edition, 25 double-page maps were included (the earlier editions only had 14 such maps).



24 **NEWTON, Isaac.** *Opuscula mathematica, philosophica et philologica. Collegit partimque Latine vertit ac recensuit J. Castillioneus (d. i. G. F. Salvemini).* 3 parts in 2 volumes. Lausanne and Geneva: Bousquet, 1744. Vol. 1 (part 1): 4to (265x213 mm). [8], xxviii (recte 38), 420 pp., including half title, engraved title vignette, 28 folding engraved plates, 3 oversize tables within pagination folded in. Contemporary paste paper binding, spine with 4 raised bands, leaves untrimmed, occasional little browning. Vol. 2 (parts 2 and 3): 4to (250x200 mm). [2], vi, 423 [3 blank] pp.; vi, 566 (recte 562), [2] pp., including 2 engraved title vignettes and 36 folding engraved plates (4 plates in part 3). Title-page of part 2 with old stamp and erased stamp repaired with paper. Contemporary plain vellum (rubbed and slightly bumped) with label titled in gilt. Leaves partially untrimmed at lower edge. Internally little browned, light dampstain to lower corner of a few leaves. A clean, crisp copy with ample margins. (#002035) € 1,800

Wallis 2. DSB X, 93. Poggendorff II, 279.
Roller-G. II, 235. Babson 9 (Gray 2).

Newton's "Opuscula Mathematica [...]" covers many different treatises by Isaac Newton, from his mathematical works and optical lectures, which were greatly influential and laid the basis for modern science, to his philological essays on history and theology. Thus the work presents several of his most influential texts. The three volumes of "Opuscula Mathematica" are part of a hybrid set of in all 8 volumes of the first collected works of Isaac Newton. The hybrid set was published between 1739-1761 and also consists of "Geneva Principia", 3 vols. (1739-42), "Opticks" (1740) and "Arithmetica Universalis" (1761), but the three volumes of "Opuscula Mathematica" are usually found separate.



25 PARACELSUS, Theophrastus (Bombast von Hohenheim). *Chirurgische Bücher und Schrifften dess Edelen Hochgelehrten unnd Bewehrten Philosophi und Medici, Philippi Theophrasti Bombast von Hohenheim Paracelsi genandt Jetzt auffs New auß den Originalen ... und ... Handtschrifften ... an tag*

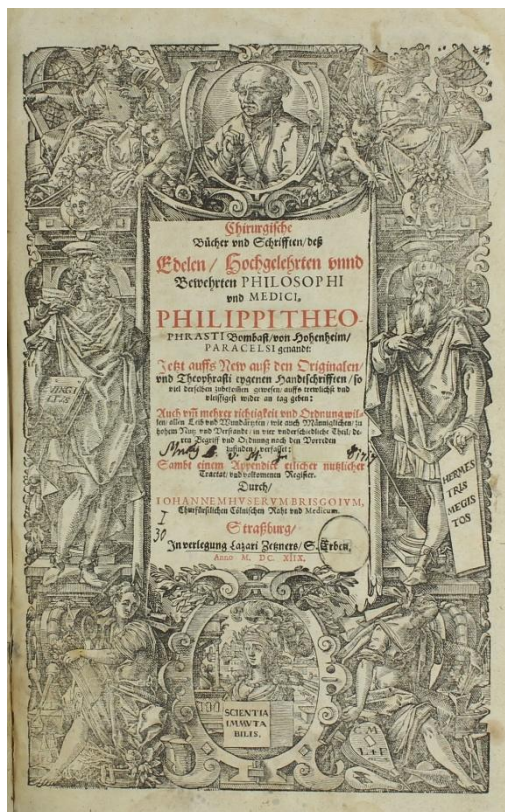


geben: Auch ... in vier unterschiedliche Theil ... verfasset: Sambt einem Appendice ... und vollkommenen Register. Durch Johannem Huserum Brisgoium ... Strassburg: Heirs of Lazarus Zetzner, 1618. Four parts and appendix in one volume. Folio. [12], 148, [2], 149-329 [1], [2], 330-523 [1], [3], 525-795, [39] pp. Without the final blank. Signature:): (6, A-L6, M-N4, O-Z6, Aa-Dd6, Ee8, Ff-V6, Xx8, Yy-Zz6, Aaa-Yyy6, Zzz4, Aaaa4, Bbbb6 (-4Bbbb6). Woodcut title-page in red and black by Ludwig Frig after Christoph Murer, portrait of Paracelsus, 3 separate part titles with large printer's devices, 3 text illustrations. Contemporary elaborately blind-tooled pigskin with original clasps present but lacks one piece of the front cover clasp-end, front free endpaper torn from damp and repaired, owner's entry dated 1717 on title-page (old stamp and inscription partly pasted over with paper); light dampstains in upper and lower margin, front and rear endpapers and final few leaves affected from mold in lower margin, some browning and occasional spotting (margins stronger affected). Provenance: Krown & Spellman Collection. Still, a very good copy in original binding. (#002045) € 3,500

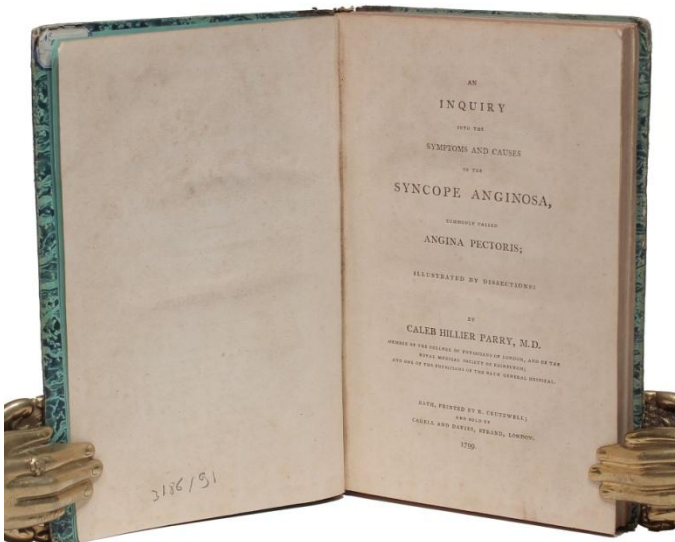
VD17 3:301630V; Sudhoff 302; Bruning 1262; Ferguson, Paracelsiana, 146; Mook 192; BL 17th German B1812; Wellcome I, 4812; Krivatsy/NLM 8568; Brunet IV, 357. Graesse V, 127.

Second Collected Strassburg Edition with added materials. "Paracelsus was one of the most controversial and dazzling figures on the threshold between the Middle Ages to Modern Times. Trained as a physician and surgeon, he tried to overcome certain medical and philosophical concepts common at his time. He replaced them with a natural philosophy comprising a peculiar mixture of Neoplatonic lore and Christian thought based on the Biblical word. Deeply influenced by the ideas of medieval alchemy, both theoretical and practical, he believed in the importance of experience in contrast to mere speculative theories. Following alchemical guidelines, he introduced a number of new medicinal preparations which would become influential for centuries. His attempt to explain bodily processes as alchemical operations smoothed the way for a new insight into the physiological functioning of the human body. Disappointed by the lack of approval by his colleagues, Paracelsus at times resorted to theology, wandering about as a lay-preacher, philosophically interpreting the Bible and writing religious tracts. During his lifetime only a very few of his writings appeared in print, the bulk to be edited after his death, between 1560 and 1600. Surpassed in Early-Modern times only by Martin Luther, Paracelsus as a German language writer produced a multiplicity of treatises, the medical and natural philosophical tracts equaling the theological ones in number." (Urs Leo Gantenbein, The Zurich Paracelsus Project).

"Dieser chirurgische Band der deutschen Folioausgabe ist ganz anders zu beurteilen als die beiden medicinisch - philosophischen Bände: er ist abgesehen von der Großen Wundarznei ein vollständig neues Werk, nach Husers Handschrift gedruckt und von allergrößtem Werte für die Kenntniss Hohenheims, für die er mit den 11 Bänden der Baseler Quartausgabe die wichtigste Grundlage bildet" (Sudhoff).



- 26 PARRY, Caleb Hillier.** *An Inquiry into the Symptoms and Causes of Syncope Anginosa, Commonly Called Angina Pectoris.* Bath: printed by R. Cruttwell, London: sold by Cadell and Davies, 1799. 8vo (224x138 mm). [6], [1] 2-167 [1], iii [1] pp. [bound with] **BUTTER, William.** *A Treatise on the Disease commonly called Angina Pectoris.* London: [Printed for J. Callow, by T. Harper, Jun. & Co.], 1806. [3], 8, [3], 10-62, [2] pp. Two works in one volume. Contemporary half sheepskin with spine gilt (little wear to hinges and spine ends), green endpapers, small shelf label to front pastedown. Little age-toning and faint occasional spotting, small blue sticker to top corner of p.54. A fine copy with ample margins. (#002056) € 12,000



I. Garrison-Morton 2888; Norman 1646; Heirs of Hippocrates 1127; Osler 3622; Wellcome IV, p. 309.

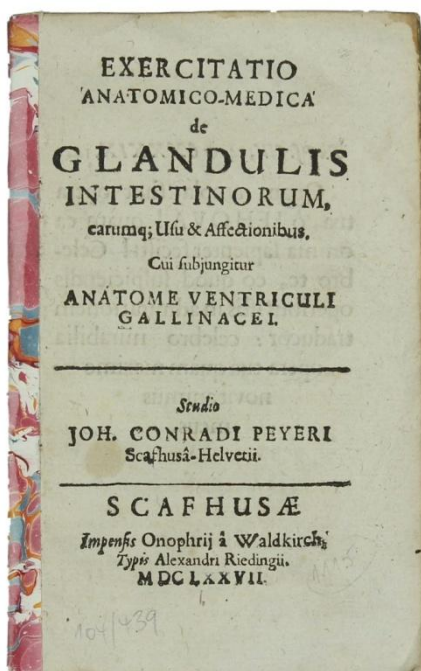
FIRST EDITION, EXTREMELY RARE. "In this important contribution to the understanding of the coronary circulation, Parry... reports on several patients suffering from what he termed 'syncope anginosa' and concludes that the condition is caused by disease of the coronary arteries' (Heirs of Hippocrates).

The author was a lifelong friend of Edward Jenner; he delayed publication of the present work because Jenner had diagnosed John Hunter as having angina pectoris and Parry did not want to alarm Hunter with the detailed information included here. Rare at auction, one copy sold for \$34,100 at Sotheby's (Medical Library of Dr. Meyer Friedman sale, 2001).

II. Hirsch I, p. 788.

The second edition of a work on angina pectoris by William Butter (1726-1805), originally printed in London in 1791.

- 27 PEYER, Johann Conrad.** *Exercitatio anatomico-medica de glandulis intestinorum, earumque usu & affectionibus : cui subjungitur Anatomie ventriculi gallinaei.* Schaffhausen: Onophrius a Waldkirch, 1677. 8vo (150x94 mm), [28], 136, [6] pp. Separate half-title for the second text, 3 folding engraved plates, 3 leaves of plate explanations (possible cut and separated from one leaf) bound next to plates within text, title-page somewhat creased and with small tear to top margin not affecting text. Only little browned, otherwise clean and unmarked. Without cover (paper strip to spine). Good copy of an exceedingly rare work. (#002044) € 6,500

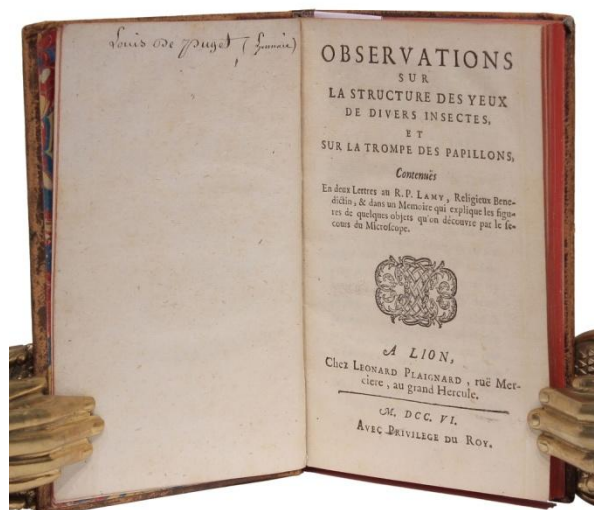


ADB XXV, 568; Garrison-Morton 1100; Waller 7359; Hirsch-Hubotter IV, 550

FIRST EDITION. During the period when Peyer and his associates were conducting their research in Schaffhausen, the chemical processes governing digestion were unknown. In the present book, Peyer described what has come to be called "Peyer's patches," the lymphoid follicles in the small intestine that play a role in typhoid fever. Extremely rare: 9 copies located in OCLC only. One copy with the same number of plates sold at Sotheby's in 2001 (Friedman Medical Library sale) for \$13,200.

Erstes und wohl folgenreichstes Werk des Schweizer Mediziners Peyer (1653-1712), in der er die 'Noduli lymphatici aggregatii' des menschlichen Dünndarmes beschrieb, die er irrtümlich für Drüsen hielt. Dieser Irrtum hielt sich bis in die Mitte des 19. Jahrhunderts, als Brücke den lymphatischen Charakter der vermeintlichen Drüsen erkannte. Obwohl schon 1645 Marco Aurelio Severino diese Strukturen beschrieben hatte, sind sie bis heute in der Medizin als "Peyersche Platten" bekannt.

28 PUGET, Louis de. *Observations sur la structure des yeux de divers insects et sur la trompe des papillons.* Lyon: Leonard Plaignard, 1706. 8vo (162x105 mm). [8], 157, [3] pp., including title vignette and 3 engraved folding plates. Full sheepskin, boards with gilt stamped arabesque in center, spine

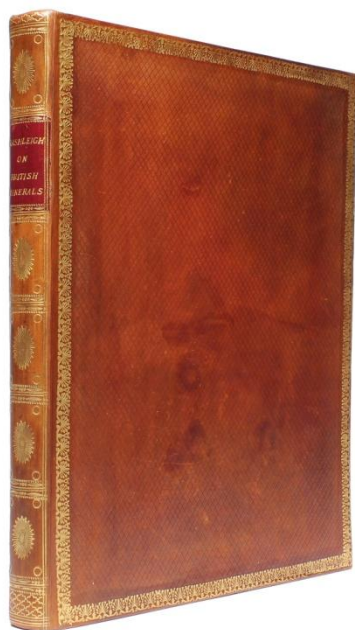


with 5 raised bands gilt in compartments (spine and extremities rubbed, boards scratched), marbled endpapers, red-dyed edges. Text lightly browned, very little spotting in places, a few hand correction in black ink. Fine copy of a rare work. (#002049) € 900

First and only edition of an interesting early work recording observations in zoological anatomy with the aid of the microscope, a new line of investigation of which the possibilities had been demonstrated by Leeuwenhoek some years before. The engraved plates show sections from insects' eyes and from the proboscis of butterflies revealing their structure. The author (1629-1709) was a physician of some repute at Lyon (Goldschmidt Cat. No. 154).

One of the most beautiful mineralogy books of the 18th century

29 RASHLEIGH, Philip. *Specimens of British Minerals, selected from the Cabinet of Philip Rashleigh.* Two parts bound in one volume. London: Printed by W. Bulmer and Co., 1797-1802. 4to (285x228 mm). [4], 56, [2]; [4], 23, [3] pp., including title-pages to each part. 54 fine aquatint plates, most with contemporary hand colouring, some with manuscript plate numbers added, occasional very light spotting. Later gilt decorated diced calf, yellow-dyed edges. An outstanding copy, unmarked and unstained, with colored plates and the protective tissue paper to plates in fine condition. (#002073) € 15,000

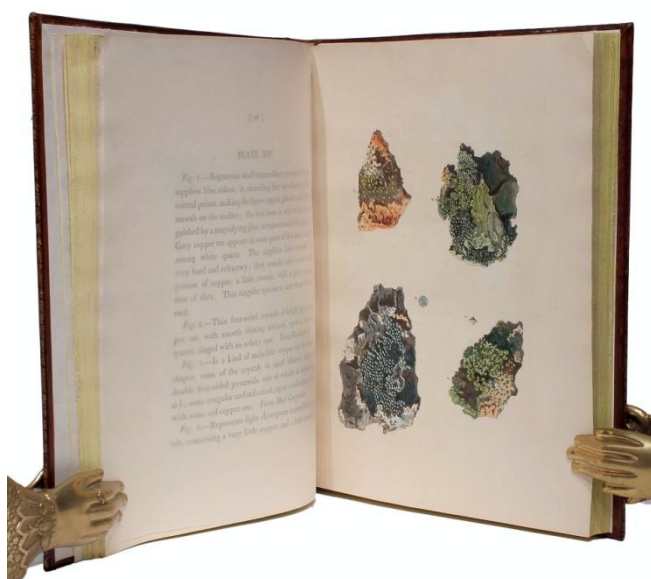


Robert W. Jones, *Philip Rashleigh and his Specimens of British Minerals*, in: *The Mineralogical Record*, 26:4, pp. 77-84; Ward & Carozzi 1833; Wilson, *Mineral Collecting*, pp. 71-74; Curtis P. Schuh, *Annotated Bio-Bibliography of Mineralogy and Crystallography*; Sotheran, Second Supplement 9593; Sotheby's Freilich Sale, 451.

FIRST EDITION. Philip Rashleigh owned the best collection of Cornish minerals ever assembled, much of which is still intact today. The current work describe his best specimens. As Robert W. Jones notes: "These volumes, with their handcolored engravings, stand with the works of James Sowerby as the finest English colored mineralogies produced in their day. Few collections can boast so many scientifically important specimens. For example, Rashleigh was the first to illustrate and describe bournonite." (Sotheby's, Freilich Sale, 2001).

"Rare, especially in complete sets. This sumptuous publication describes and illustrates selected specimens from the very large collection of Cornish minerals and fossils formed by the author. Rashleigh began to collect minerals around 1765, and since the upper oxide zones of many mines in the area were at that time just beginning to be explored, he was able to assemble over the remainder of his life probably the finest private

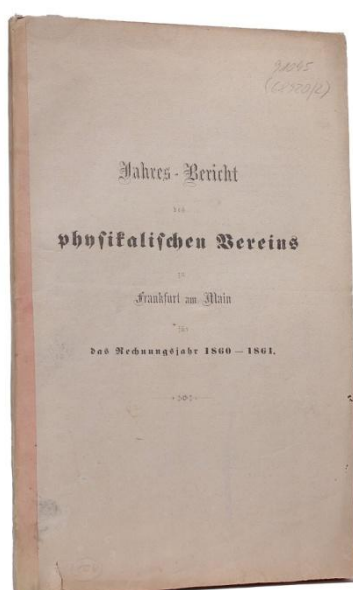
collection of Cornish minerals ever. This work, published in two parts, describes and illustrates some of the finest specimens from his collection. The first part was written in 1797 partially as a response to the numerous requests Rashleigh had from his many visitors and foreign correspondents for an illustrated catalog of his collection. The beautiful copper engravings show recognizable classic specimens of cassiterite and various other rare and common copper species, such as chalcophyllite, liroconite, cuprite and pharmacosiderite. These excellent illustrations were the result of the Cornish engraver Henry Bone [1755-1834] efforts. The first part was so well received that in 1802 a second part was prepared and published. For this volume, the services of the engraver Thomas Medland [?-1833] and the colorist Thomas Richard Underwood [1765-1836]



where the engraver Thomas Medland [?-1833] and the colorist Thomas Richard Underwood [1765-1836] were retained, and the same high quality was maintained. However, the text of both volumes shows Rashleigh ignorance of mineralogy as a science. The descriptions do not reference the common mineralogical names of the species illustrated. Nor does the author reference any other mineralogical works. Instead, Rashleigh describes the minerals with his own peculiar nomenclature. But this is a small thing for a work that was written with the pride of a proud collector, for an audience of other collectors. It would appear that the second part, published five years after the original is an uncommon item. Often only the first part of this work is offered for sale; seldom are both parts present. This is probably an effect of the second part being published as an afterthought by Rashleigh." (C. P. Schuh, Rashleigh).

Coining the term "telephone"

30 REIS, Johann Philipp. Ueber Telephonie durch den galvanischen Strom. In: *Jahres-Bericht des physikalischen Vereins zu Frankfurt am Main für das Rechnungsjahr 1860-1861*, pp. 57-64. Frankfurt am Main, 1861. 8vo (219x140 mm). Whole volume, 80 pp., illustrations in text and 6 folding plates. Wrapper to spine only, Pages clean with just very minor spotting, short closed tear to lower margin of title-page, otherwise fine copy of the rare milestone paper. (#002070) € 2,400



Darmstaedter 612. Wheeler Gift 1532 (detailed with ill.); see also DSB I, 582 and PMM 365 (for Ball).

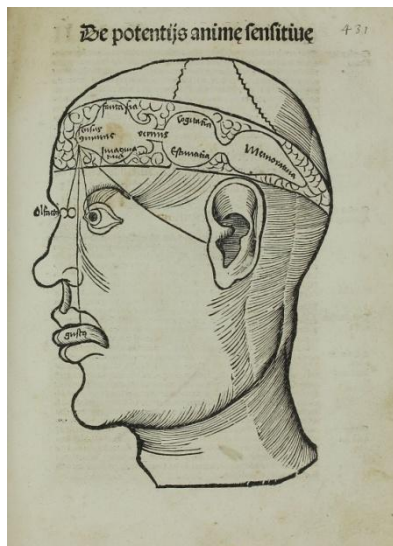
The RARE FIRST EDITION of Reis's paper on the invention of the telephone as presented in a lecture before the Physical Society of Frankfurt on 26 October 1861. Reis was the second man after Bourseul to think of transmitting speech electrically. It was Reis who coined the term "telephone" and he was the first, in 1860, to produce a functioning device that could transmit musical notes, indistinct speech, and occasionally distinct speech by means of electric signals. Practically, Reis's telephones had varying success; some worked well and others produced only static. Nevertheless, they were displayed all over Europe and one was on show in Scotland when Bell was there visiting his father.

Erstdruck von Reis' Vortrag vor dem physikalischen Verein in Frankfurt, in

dem er den von ihm entwickelten Apparat zur Reproduktion von Tönen über beliebige Entfernungen durch den elektrischen Strom vorstellt. Seine Erfindung geriet, nicht zuletzt durch die Gegnerschaft Poggendorffs, in Vergessenheit. Erst mit Graham Ball, der 1876 ein verbessertes Gerät als eigene Erfindung zum Patent anmeldete, begann der Siegeszug des Telephons. - Enthält noch 11 weitere Artikel, darunter vier von R. C. Böttger (vgl. DSB II, 340).

The first modern encyclopedia

31 REISCH, Georg. *Margarita philosophica cum additionibus novis: ab auctore suo revisione quarto superadditis.* Basel: M. Furter, 5. März 1517. 4to (211x154 mm). 289 unnumbered leaves, signatures: a-d8, e4, f-z8, A-O8. Colophon on O8r: "Michael Furterius imp̄ssit Basilee. Anno. 1517 die vero. 5. Martii." Title in red and black within woodcut border, woodcut initials, 21 full-page woodcuts, numerous smaller woodcut illustrations within text. Lacks the world map and 2 folding diagrams. Foliated throughout by contemporary hand. Near contemporary vellum (worn and soiled, hinges cracked but holding), gatherings a and O loose. Contents little browned, title-page somewhat soiled, small hole in z1 not affecting image, occasional minor spotting, otherwise clean and unmarked. Good copy, but without the large Ptolemaic worldmap and the two folding plates with music notations as usual. (#002062) € 5,000

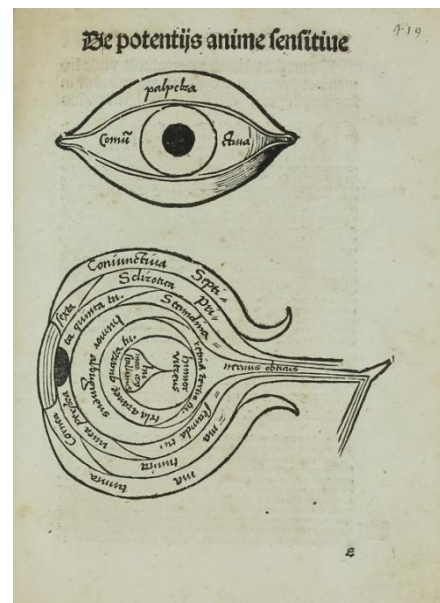


VD 16, R 1040; Adams R 336; Fairfax Murray 354; Sabin 69129; vgl. Smith, Rara 82.

Fourth authorized edition of the first "modern" encyclopaedia first published in 1503 followed by numerous editions throughout the 16th century. "The work is a handbook or encyclopaedia of natural and moral philosophy, presented in dialogue form, and illustrated with a large number of woodcuts. The twelve books in which it is divided relate to grammar, logic, rhetoric, artificial memory, correspondence, arithmetic, music, geometry, astronomy, cosmography, astrology, natural philosophy, chemistry, alchemy, botany, optics, mental philosophy, theology, and moral philosophy" (Sabin). The work also includes "the

oldest printed illustration of the structure of the eye" on f. E1r (Choulant-Fr. pp. 80 u. 126-129).

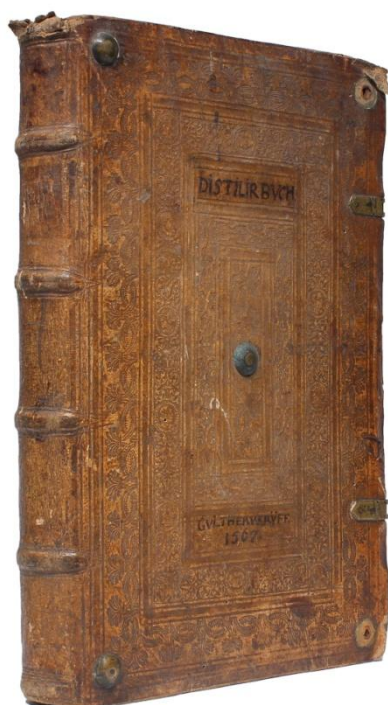
Vierte autorisierte Ausgabe. Das erste enzyklopädische Werk der neueren europäischen Geistesgeschichte. Behandelt in Dialogform zwischen Lehrer und Schüler in 12 Büchern die freien Künste und die Naturwissenschaften, darunter Musik, Medizin, Geometrie u. Vermessung. Bemerkenswert u.a. "the oldest printed illustration of the structure of the eye" (Choulant-Fr. p. 80 u. 126-129, hier Bl. E1r) und die kleine Ansicht von Freiburg im Breisgau (Bl. B3). Es fehlen die Weltkarte sowie die 2 Schematafeln mit Noten.



With finely hand-colored woodcuts throughout

32 RYFF, Walter Hermann. *New Groß Distillir-Buch, Wolgegründter künstlicher Distillation...* Corrigiert, und über vorige Edition gebessert. Frankfurt am Main: Christian Egenolff's Erben, 1567.

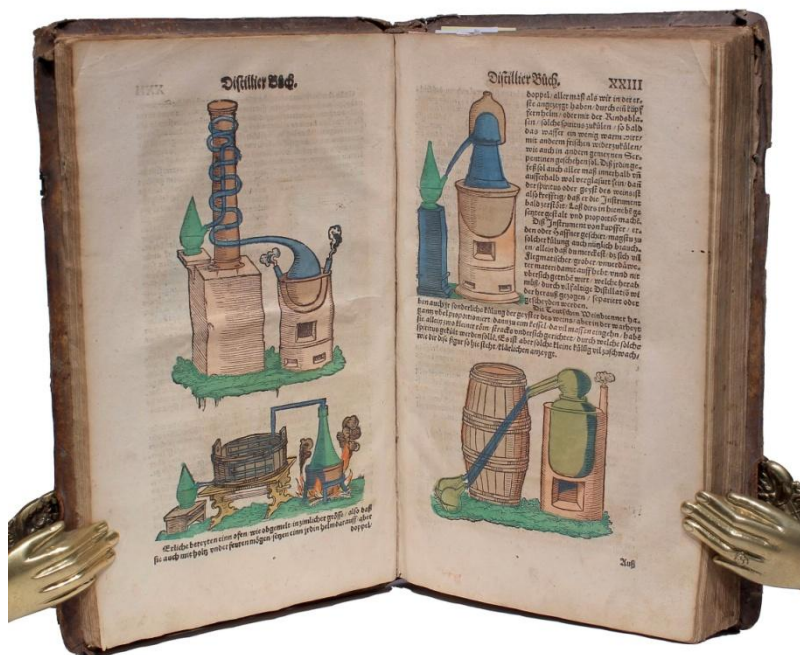
Folio (292x186 mm). [4], CXC VII ff. Signatures: *4, A-26, a-k6. Colophon on K5: "Zu Franckfort am Meyn, Bey Christian Egenolffs seligen Erben, Jm Jar M.D.LXVII" Title page printed in red and black, woodcut vignette on verso of title page, and numerous hand-colored woodcuts, representing apparatus for distilling, herbs and flowers, in the text. Contemporary blind-stamped pigskin over wooden boards (soiled, extremities worn), spine with 4 raised bands, boards with 3 (of 10) brass studs preserved, clasps gone, 2 brass catches still present, front board titled in manuscript. Internally little browned throughout, occasional spotting and soiling, short closed tears to lower margin of a few leaves, little worming and faint dampstaining to margins of few leaves. Leaves I3 and I5 with holes due to paper corrosion within green-colored woodcuts affecting a few letters on rear page, a few leaves torn in fore-margin or lower corner not affecting text. Unsophisticated copy with fine contemporary coloring of woodcuts. (#002072) € 9,000



Bird, Durling, Duveen, Lesky or Osler, not in STC.

The extremely rare third edition of Brunschwig's book on the art of distillation pirated by Egenolff (first edition in 1545, second edition in 1556) with only one copy in the USA (Folger Library).

Die seltene dritte Ausgabe dieser zuvor 1545 und 1556 erschienenen Bearbeitung von Hieronymus Brunschwigs Destillierbuch. - Die Holzschnitte in schönem Altkolorit, gelegentlich Farbbruch im Grün, dadurch geringer Text- und Bildverlust.

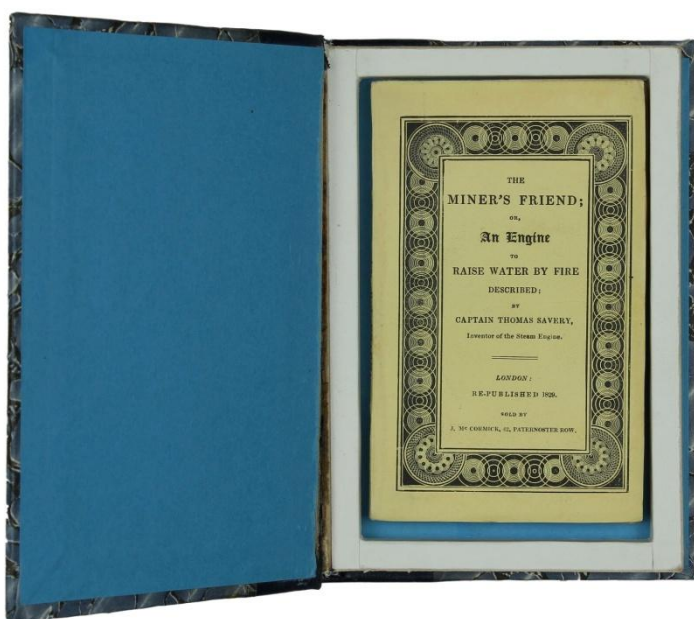


The rare first reprint of Savery's description of his steam pump

- 33 SAVERY, Thomas.** *The Miner's Friend; or, an Engine to Raise Water by Fire, Described. And of the Manner of Fixing it in Mines; with an Account of the Several other Uses it is Applicable unto; and an Answer to the Objections made against it, reprinted.* London: printed for S. Crouch by W. Clowes, 1827. 12mo (145x90 mm). [2], 53 [1] pp., including engraved portrait frontispiece and four plates, vignette illustrations to text, imprint to title dated 1827. Original printed yellow wrappers (with imprint dated 1829) contained in purpose made clamshell box, with navy crushed morocco spine. Pages untrimmed. Little browning and light dampstaining to two plates. Fine copy. (#002075) € 1,800

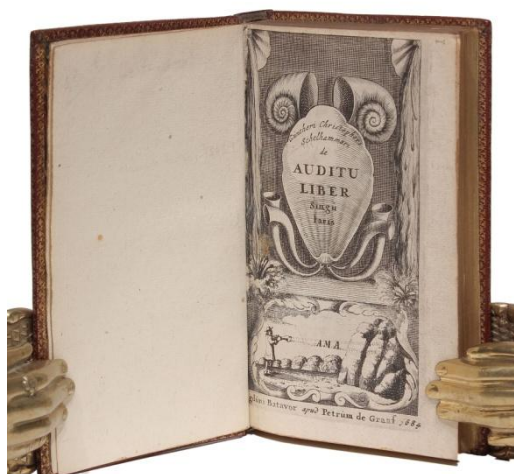
Dibner 177 (article published in Phil. Trans. Royal Society, 1699). Honeyman sale 2766; Norman 1895 (both for first separate edition).

Impossibly rare with no copy recorded at auction in the past 50 years and no copy in the USA according to OCLC/WorldCat. Although the imprint is dated 1829 on the wrapper, there is no copy known with an earlier imprint date for the wrapper (thus maybe a typo).



The FIRST REPRINT of Savery's description of his steam pump which, 'though not a steam engine in the modern sense of the word, embodied the first practical application of the force of steam to mechanical purposes' (DNB). His device, patented in 1698 and demonstrated before the Royal Society in 1699, 'was a condensing type engine in which the steam was caused to condense within a receiver, thereby creating a vacuum and raising water to be pumped up within connected pipes' (Dibner). While designed specifically to pump water from deep mine-shafts (as shown in Sturt's plate), Savery's invention, with some modifications by Thomas Newcomen, was found adaptable to supplying water to tall buildings and produce mechanical power by raising water to turn waterwheels. In 1712 the first working device was installed in the Warwickshire coal mines, allowing deeper shafts to be worked.

- 34 SCHELHAMMER, Günther Christoph.** *De Auditu liber unus. Quo plerorumque omnium doctorum sententiae examinantur, & auditus ratio nova methodo, ex ipsius naturae legibus, explicatur.* Lugduni-Batavorum: apud Petrum de Graaf, 1684. 8vo (156x92 mm). [40], 274, [4] pp., including additional engraved title-page, woodcut head-, tail-pieces and decorative initials, and 5 engraved plates at the end. Later full red morocco with boards ruled in gilt, spine with 5 raised bands richly gilt in compartments, cut edges gilt, marbled endpapers. Text and plates clean and virtually unspotted, only little age-toned. Provenance: Dr. Maurice Villaret (ex-libris on front pastedown). Fine copy in beautiful binding. (#002050) sold



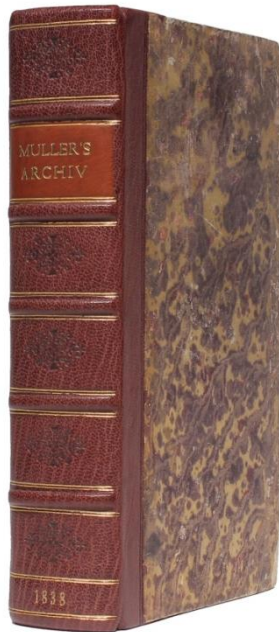
Garrison-Morton, 1545.1; NLM/Krivatsy 10373; Wellcome V, p.43.

First edition. An early account of the anatomy, physics, and physiology of hearing, along with an historical summary of earlier work. It includes a set of fine plates depicting the anatomy of the

inner ear and the path of sound waves through the canals. Schelhammer (1649-1716) was professor of botany at Helmstedt at time of publication, and later became professor of anatomy at Jena.

The Foundation of the Cell Theory

35 SCHLEIDEN, Matthias Jacob. *Beiträge zur Phytogenesis.* In: Archiv für Anatomie, Physiologie und wissenschaftliche Medizin 5, Heft 2 (1838), pp 137-76. Includes two etched and aquatint plates (nos. III and IV) on one folding sheet. Berlin: Veit et Comp., 1838. 8vo (209x128 mm). Whole volume: [2], cxcviii, 608 pp. 16 plates on 15 sheets. Pp. 605-8 bound before p.1 . Contemporary marbled boards, rebacked and repaired. Light browning, occasional faint spotting.

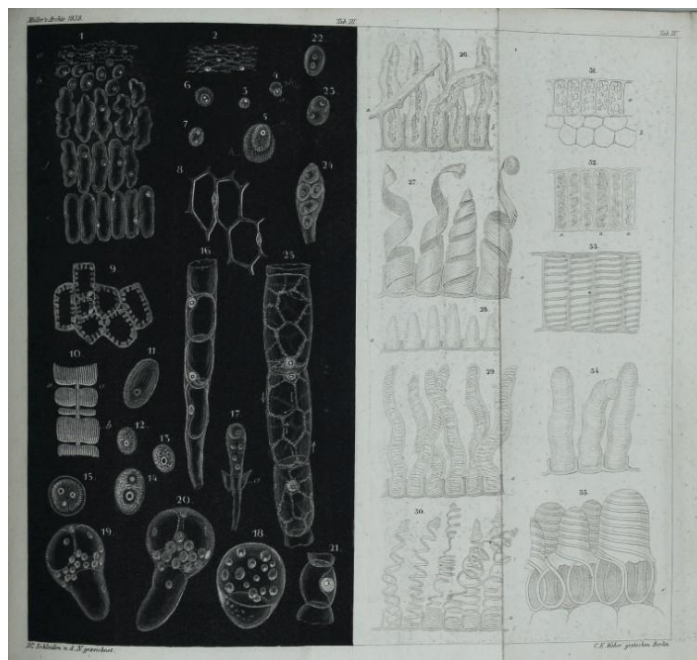


Provenance: Muséum d'Histoire Naturelle Paris (stamps to general title-page). A fine copy of an exceedingly rare paper, only one other copy is recorded to have appeared at auctions in the past 50 years (Norman sale, 1998, offprint issue, \$18,400). Both, PMM and Sparrow list the journal issue. (#002059) € 9,500

PMM 307a; Sparrow 175; Norman 1907 (offprint issue); Hughes, History of Cytology, 37ff; Garrison-Morton 112; DSB XII, p.173-174.

THE VERY RARE FIRST EDITION of Schleiden's enunciation of his cell theory, in which he stated that the cell is the basic unit of plant life. A well-to-do botany professor who gave up academia to devote himself full-time to a successful career as lecturer and writer of popular scientific works, Schleiden made a name for himself through the present paper, which provoked wide discussion and was quickly translated into French and English. Schleiden was the first to postulate that plant tissue is composed of aggregates of individual cells, and attempted in this article to describe the development of the vegetable cell. His mistaken view based on a theory "as old as the study of the cell itself" (DSB), was that the cell develops from a nucleus or "cytoblast" which crystallizes within an amorphous primary liquid composed of sugar, gum and mucous. Although this theory of

spontaneous generation of the cell was erroneous, Schleiden's work marked an important stage in the development of modern cell theory. A year later Theodor Schwann was to bring it one step further with his conclusion that cells were the basic unit of animal as well as plant life, and the two are generally regarded as co-founders of the cell or Schleiden-Schwann theory.



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