CATALOGUE 41:

Fifty-Two Rare Works in Science, Medicine and Technology



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"The Perfect Description of an Endocrine Disease"

Addison, Thomas (1793-1860). On the constitutional and local effects of disease of the supra-Ι. renal capsules. 4to. viii, 43, [1]pp. 11 hand-colored lithograph plates. London: Samuel Highley, 1855. 327 x 250 mm. Original green cloth stamped in gilt and blind, slightly worn, skillfully recased retaining original endpapers, preserved in a half morocco drop-back box. A little light foxing, stamp on title, but a very fine, bright copy. \$15,000

First Edition. "The perfect description of an endocrine disease" (Medvei, p. 226), and one of the most important rarities of 19th century medical literature. Addison's monograph inaugurated the study of diseases of the ductless glands and the disturbances in chemical equilibrium known as pluriglandular syndromes; it also marks the beginning of modern endocrinology. The present monograph focuses on diseases of the suprarenal capsules and contains the classic description of the endocrine disturbance now known as "Addison's disease," and also includes his superb account of pernicious ane-

mia ("Addison's anemia"), in which he suggested that the existence of anemia together with supra-renal disease was not coincidental. Addison was the first to suggest that the adrenal glands are essential for life, and his monograph inspired a burst of experimental research that led, among other things, to Vulpian's discovery of adrenalin in 1856. Garrison-Morton 3864. Norman / Grolier Medical Hundred 6oc. Heirs of Hippocrates 1502. Goldschmid, Bibliographie der pathologisch-anatomischen Abbildung, p. 194. McCann, pp. 87-89. Medvei, pp. 225-230. Norman 8. 41483





Optics & Color Theory, Illustrated by Rubens

2. Aguilon, François de (1567-1617). Opticorum libri sex. Folio. Engraved title, [44], 684, [44] pp. Lacking half-title. Engraved title and 6 large vignettes engraved by Galle after Peter Paul Rubens (1577-1640). Text woodcuts. Antwerp: Officina Plantiniana, 1613. 341 x 223 mm. Calf c. 1613, spine repaired, hinges a little rubbed. Light browning, scattered foxing, small library stamps and later ownership signature on title.Very good copy. \$9500



First Edition. A remarkable collaboration between the scientific, printing and visual arts. Intended for use in Jesuit schools, Aguilon's work was primarily a synthesis of classical and modern writings on optics; however, it also contained the first discussion of the stereographic process (which Aguilon named), one of the earliest presentations of the red-yellow-blue color system, an original theory of binocular vision and the first published description of Aguilon's horopter. Aguilar's theory of binocular vision was eventually superseded (despite claims to the contrary, he apparently knew nothing about Kepler's ideas on the retina); nevertheless his ideas had some influence on the great theorists of vision from Huygens to Newton to Helmholtz.

Production of Aguilon's book fell to the Plantin-Moretus printing house,

whose controllers were sympathetic to the Jesuits in Antwerp. The illustrations and allegorical title were prepared by Peter Paul Rubens, a friend of Balthasar Moretus and himself deeply interested in the world of books."The designs for the frontispiece and six vignettes reveal Rubens' knowledge of the actual text....Rubens combined successfully Aguilonius' references to ancient mythology and allegory into a coherent programme that also includes a connection with the science of optics, for all the various elements on the frontispiece have a direct relationship with the concept of vision" (Held, Rubens and the Book, p. 52). Norman 25. See Gernsheim, Hist. Photography, p. 253, crediting Aguilon with coining "stereoscopic." 41487





Precursor of Darwinian Theory

3. Baer, Karl Ernst von (1792-1876). Über Papuas und Alfuren. Offprint from *Mémoires de l'Académie Impériale des sciences de St. Pétersbourg,* 6e série, Sciences naturelles, 8 (1859). St. Petersburg: Buchdruckerei der K. Akademie der Wissenschaften, 1859. 327 x 245 mm. Original printed wrappers, spine repaired, a bit soiled, some chipping and fraying. Title-leaf soiled, some browning and foxing, tiny marginal tear in last 2 leaves and back wrapper, but overall very good. 19th century owner's name on front wrapper. \$3750

First Edition, Offprint Issue. Von Baer's anthropological paper on the Papua and Alfur peoples is an important precursor of Darwinian evolutionary theory. "In the introduction to the *Origin of Species* Darwin acknowledged von Baer's pioneering contribution to evolutionary thought in biology. Without mentioning its title, Darwin referred specifically to von Baer's 'Über Papuas und Alfuren,' published in the fall of 1859 by the St. Petersburg Academy of Sciences, a few months before the publication of the *Origin of Species*. He gave von Baer credit for expressing 'his conviction, chiefly grounded on the laws of geographical distribution, that forms now perfectly distinct have descended from a single parent-form.'... In the *Descent of Man* Darwin repeated his reference to von Baer as a supporter of the common origin of animal forms'' (Vucinich, *Darwin in Russian Thought*, p. 94). *Very rare.* 42165



Valentine Mott's Copy

4. Bell, John (1763-1820). The principles of surgery. Abridged by J. Augustine Smith . . . with notes and additions. xii, 562pp. 7 plates, text illustrations. New York: Collins and Perkins, 1810. 210 x 130 mm. 19th century tree calf, front hinge cracked, light wear and rubbing, front endpaper loosening. From the library of Valentine Mott (1785-1865), with his signature on the title; stamp of the Mott Memorial Medical and Surgical Library on the title and a few other places. \$950

First American Edition. From the library of Valentine Mott, the most celebrated American surgeon of the first half of the nineteenth century. Mott was a pioneer in vascular surgery: In 1818 he became the first to tie the innominate artery (see Garrison-Morton 2942), and in 1827 he performed

the first successful ligation of the common iliac artery (see Garrison-Morton 2950). He was one of the first American surgeons to successfully amputate at the hip joint (see Garrison-Morton 4451.1) and to excise the jaw for necrosis (see Garrison-Morton 4447). 42175



By One of the Foremost Painters and Architects of the Italian Baroque— The Best Edition with the Plates Printed in Sepia

5. Berrettini, Pietro, called Pietro da Cortona (1596–1669). Tabulae anatomicae. . . . Folio. xv [1], 104pp. 27 copperplates engraved and printed in sepia by Luca Ciamberlino (b. 1580) after drawings by Berrettini; engraved head-pieces and initials. Rome:Venanti Monaldini, 1788. 464 x 320 mm. (uncut). Later quarter vellum, boards, slightly rubbed. Title and plates a bit foxed and browned, 2 small oval library stamps on title, but a fine copy on thick unpressed paper. \$15,000

Second and Best Edition of

a dramatic and artistically important anatomical atlas, prepared by one of the foremost painters and architects of the Italian Baroque. In about 1618, when he was not yet twenty years old, Berrettini prepared a series of twenty anatomical drawings, possibly from dissections by the surgeon Nicolas Larchée. The drawings dealt chiefly with muscles, nerves and blood vessels, with special emphasis placed on the nerves; nineteen of them depict male figures and one (plate XXVII in the *Tabulae anatomicae*) a female. "Many of the dissected men hold oval or rectangular medallions—they look like framed mirrors—within which are drawn figures detailing the anatomy of various regions. Others have no accessory figures" (Roberts & Tomlinson, p. 273). Berrettini's actual drawings still exist—they were acquired by Sir William Hamilton, the British Ambassador to the King of Naples (and husband of Admiral Nelson's inamorata, Lady Emma Hamilton), who presented them to William Hunter for





inclusion in Hunter's anatomical museum. The drawings are now in the Hunter Collection in the University of Glasgow Library.

No one knows why Berrettini's plates remained unpublished for over a century after their creation; however, their appearance in the 18th century was almost certainly due to the high reputation Berrettini enjoyed at the time. The plates were initially published in 1741 by Gaetano Petrioli, surgeon to Victor Amadeus II of Sardinia, who had also come into possession and editorship of the famous Eustachian anatomical plates after their publication in 1714. Petrioli's edition contained the original twenty plates (nos. I-XIX and XXVII) plus seven others with figures copied from Vesalius, Vesling, Casserio and others, along with commentary supplied by Petrioli. For this original edition Petrioli caused Berrettini's plates to be embellished with numerous smaller anatomical figures taken from Vesalius, Valverde, etc., "engraved in an incongruous manner wherever there was sufficient space on the plate" (Roberts & Tomlinson, p. 274). In the second edition of 1788, which we are offering, these intrusive and distracting figures were removed by the edition's editor, Francesco Petraglia,

thus returning them to a state much more closely resembling Berrettini's original drawings. Petraglia's introduction to the second edition gives a history of plates, attributed here for the first time to Ciamberlano, whose monogram appears on plates I and IV. This is one of only a few instances in the history of anatomical art where the second edition should be preferred to the first.

Our copy of the 1788 edition has the anatomical plates printed in sepia, and in this fashion resembles the copy at the Swedish Society of Medicine, believed to be a presentation copy intended for Napoleon Bonaparte or a member of his family. Unlike the Swedish copy, however, ours has the engraved vignettes and initials printed in black. Copies with the plates printed in sepia are extremely rare on the market. Garrison-Morton 395.2 (citing the first edition). Choulant, *History and Bibliography* of Anatomic Illustration, pp. 235-39. Hagelin, Rare & Important Books in the Library of the Swedish Society of Medicine, pp. 54-57. Roberts & Tomlinson, Fabric of the Body, pp. 272-79 (illustrating 3 plates from the first edition plus 3 of the original drawings). Norman, The Anatomical Plates of Pietro da Cortona (1986). 41478



Discovery of Surgical Anesthesia

6. **Bigelow, Henry Jacob** (1818-90). Insensibility during surgical operations produced by inhalation. In: Boston Med. and Surg. J. XXXV, no. 16 (November 18, 1846): 309-17 & no. 19 (December 9, 1846): 379-82. Whole volume, 8vo, bound with Vol. XXXIV. 8, iv, 528; 544pp. Boston: David Clapp, 1846. 230 x 137 mm. The two volumes bound together in 19th cent. marbled boards rebacked in calf, leather corners, light rubbing. Slight foxing & browning. Fine. \$9500

First Edition. The formal announcement of the discovery of surgical anesthesia. The Boston dentist W.T. G. Morton, after experimenting with ether anesthesia in his dental practice, obtained permission from John Collins Warren, chief of surgery at Massachusetts General Hospital, to attempt anesthesia on a surgical patient. On October 16, with Morton administering the ether, Warren successfully removed a portion of a vascular tumor from the neck of his patient. The following day, Morton again administered ether to a patient undergoing an operation to remove a fatty tumor from her arm. At this point the surgeons at Massachusetts General refused to employ Morton's "Letheon" any further unless Morton revealed its exact nature-which he had hitherto kept secret in the hopes of patenting it—and allowed its free use at the hospital. On November 6, on the advice of Henry J. Bigelow, Morton at last divulged that his "Letheon" was in fact sulfuric ether. On **T2**

November 7, Morton administered ether to a patient undergoing amputation of the leg; with the success of this operation,"the value of ether as an anesthetic was established once and for all" (Wolfe, pp. 80-81).

Bigelow's account of Morton's discovery, written after the November 7 operation, is contained in Vol. 35, no. 16 of the Boston Medical & Surgical Journal. His follow-up paper, contained in no. 19, contains his responses to challenges brought by J. F. Flagg. The journal numbers following no. 16 also contain several articles on anesthesia by other authors, attesting to how quickly the news of the discovery spread after Bigelow's initial article. Fulton & Stanton IV.1. Norman / Grolier Medical Hundred 64A, noting that the separate offprint of Bigelow's work is printed from completely reset type, and omits the last 7 paragraphs of the original article. Garrison-Morton 5651. Wolfe, Tarnished Idol, pp. 75-83. 38000



Boolean Algebra

7. Boole, George (1815–64). The mathematical analysis of logic, being an essay towards a calculus of deductive reasoning. 8vo. [2], 82pp., errata slip. Cambridge: Macmillan, Barclay & Macmillan, 1847. 216 x 137 mm. Full black morocco gilt in period style. Lightly browned, perforated library stamp in lower margin of title and margin of p. 43 expertly filled in with no loss of text, small oval library ink stamp in lower margin of title, but a very good copy. \$12,500

First Edition of Boole's rare first exposition of Boolean algebra. Boole invented the first practical system of logic in algebraic form, which enabled more advances in logic to be made in the decades of the 19th century than in the 22 centuries preceding. Boole's algebraic logic was distinguished from the logics that preceded it in that it derived its theorems not from ordinary language (e.g., the Aristotelian syllogism), but from a purely formal system. Boole's work also contains what Bertrand Russell called the greatest discovery of the nineteenth century: the nature of pure mathematics."Here for the first time the view is clearly expressed that the essential characteristic of mathematics is not so much its content as its form. If any topic is presented in such a way that it consists of symbols and precise rules of operation upon these symbols, subject only to the requirement of inner consistency, this topic is part of mathematics" (Boyer, A History of Mathematics [1989], p. 649). Boole's groundbreaking work in mathematical logic led to the creation of set theory and probability

theory in mathematics, to the philosophical work of Peirce, Russell, Whitehead and Wittgenstein, and to computer technology via the master's thesis of C. E. Shannon, who recognized that the true / false values in Boole's two-valued logic were analogous to the open and closed states of electric circuits.

The son of a cobbler, Boole was largely self-educated. In 1830, at the age of fifteen, he began teaching in a school that he himself had established, and in 1835 he published the first of his more than fifty scientific writings. In 1849, without having obtained a college degree, Boole became professor of mathematics at Queen's College in Cork. His *Mathematical Analysis of Logic* was published two years before he received this university appointment, and it is very likely that he had to underwrite the publishing cost. This work is considerably rarer than Boole's *An Investigation of the Laws of Thought*, published seven years later in 1854. That textbook represented an expansion, or definitive expression of ideas first published in the 1847 pamphlet. 42168



The Most Famous Biography in English

8. Boswell, James (1740-95). The life of Samuel Johnson LL.D., comprehending an account of his studies and numerous works, in chronological order; a series of his epistolary correspondence and conversations with many eminent persons; and various original pieces of his composition, never before published. . . . 2 vols., 4to. xii [16], 516; [2], 588 [i.e., 586]pp. 6 cancel leaves: Vol. I, Mm4, Qq3; Vol. II, E3, O04, Zz1, Eee2. Stipple-engraved frontispiece portrait by J. Heath after Sir Joshua Reynolds, 2 engraved plates in Vol. II. London: Henry Baldwin for Charles Dilly, 1791. 277 x 214 mm. Mottled calf, gilt spines c. 1791, skillfully rebacked retaining the original spines; preserved in quarter morocco dropback box with gilt spine by Winstanley. A fine, crisp set. \$7500

First Edition, second issue, with the correct reading "give" in the couplet on p. 135 in Vol. I. "The first edition was published in two quarto volumes in an edition of 1700 copies. The Life of Johnson was written on a scale practically unknown to biographers before Boswell. It is a full-length portrait with all the blotches and pimples revealed....Wherever English is spoken, it has become a

veritable sacred book and has pervaded English life and thought in the same way that the Bible, Shakespeare and Bunyan have done. [Boswell] is a dramatic and descriptive artist of the first order" (Seccombe, The Age of Johnson). Grolier English 100, p. 130. Courtney & Smith, Bibl. Samuel Johnson, pp. 172-73. Pottle 79. Rothschild 463. 41744





Classic of Nephrology and Pathological Illustration

9. Bright, Richard (1789–1858). Reports of medical cases . . . 4to. xvi, 231pp. 16 hand-colored plates, numbered 1–6, 6*, 7–15, engraved by W. Say (1768–1834) after F. R. Say (d. 1858) with explanations. London: Longman . . . , 1827. 335 x 255 mm. Contemporary cloth-covered boards, uncut. New black morocco spine. Occasional light foxing on text but plates immaculate. Signature of American physician W. S. Bowen on title noting the purchase price of \$25.00 (then a comparatively large sum) in February 1859. Later inscription to George L. Porter, and his occasional ownership stamp in text (not affecting any plates). Case history penciled in Bowen's hand on front pastedown. Fine copy.

First Edition of the first volume of Bright's *Reports* (Bright published a second series of *Reports* in 1830-31, dealing with neuropathology; each series is a complete book in itself). Bright's work, a series of case histories correlating clinical and pathological phenomena, is one of the rarer and more ambitious English medical books of the 19th century. Information in the publisher's ledgers (now part of the Longman archive held at the Reading University Library), indicates that the *Reports* was printed on commission at Bright's expense, in lots of from five to fifty copies as ordered. According to the ledgers, 243 copies of the 1827 *Reports* and 171 copies of the 1830-31 *Reports* were sold between 26 September 1827 and 5 September 1861, when the last remaining copies were destroyed in the fire that consumed Longman's premises at Paternoster Row.

The 1827 *Reports* is most famous for its classic description of the complex of kidney disorders collectively and eponymically known as "Bright's disease." Bright was the first to distinguish between renal and cardiac edema, and \$12,500





the first to link renal edema and the presence of albumin in the urine with particular structural changes in the kidneys observed post-mortem. Five of the sixteen plates in the Reports effectively show the surface mottling and granulated texture of diseased kidneys. The work's engraved plates, meticulously hand-colored to accord with Bright's descriptions of the specimens examined, are among the most beautiful of medical illustrations. Most were drawn by Frederick Richard Say, a distinguished portraitist whose portrait of Bright now hangs in the Royal College of Physicians of London."In order to achieve the most poignant reproductions of his post-mortem material, Bright was probably required to bring Say to the autopsy room whenever a specimen of interest arose. Say presumably produced a water color image of the specimen on the spot which was subsequently copied by the engraver" (Fine, p. 779). Say's father, William, who produced the majority of the plates, used mezzotint variously combined with line-engraving, stipple, and soft-ground etching to create the printed images. Norman 341. Osler 1340. Lilly, p. 183. Goldschmid, pp. 126-127. Fine, "Pathological specimens of the kidney examined by Richard Bright," Kidney International 29 (1986), pp. 779-783. Peitzman,

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MEDICAL CASES,			
RELECTED			
WITH A VIEW OF ILLUSTRATING			
THE SYMPTOMS AND CURE OF DISEASES			
BY A REFERENCE TO			
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"Bright's disease and Bright's generation—toward exact medicine at Guy's Hospital," *Bull. Hist. Med.* 55 (1981), pp. 307-321. 41484



"The Greatest Medical Treatise Written by a Layman"

10. Burton, Robert (1577-1640). The anatomy of melancholy, what it is . . . 4to. [4], 72 [i.e., 76], [8], 783, [9]pp. Oxford: John Lichfield and James Short, 1621. 188 x 135 mm. Full green morocco gilt, all edges gilt, by Francis Bedford; slipcase by Phil Dusel. Expertly washed, top edges of the first 8 leaves remargined with no loss of text, light toning, but a very good copy. 20th century bookplate of Robert J. Collier. \$15,000

First Edition of the book that William Osler called "the greatest medical treatise written by a layman." With a keen eye for contradiction and a perverse relish for exposing it, Burton virtually destroyed the dominant humoral psychology by showing its inability to effectively define or cure the mental illness of melancholia, a term that encompasses what we now call clinical depression. Burton, who himself suffered from melancholia, drew upon nearly every science of his day (including psychology, physiology, astronomy, meteorology and even demonology) in his attempts to explicate the disease. The work is a curious blend of psychiatric encyclopedia (the first of its kind, citing nearly 500 medical authors) and literary tour-de-force. It was one of the most popular books of the 17th century, going through five revised editions in Burton's lifetime. Jordan-Smith 1. STC 4159. Norman 381. *Printing and the Mind of Man* 120. Hunter & Macalpine, pp. 94–98. 41455





Beautifully Illustrated Classic of Comparative Anatomy

II. Casserio, Guilio (1552–1616). De vocis auditusque organis historia anatomica. Folio. 2 parts in 1 vol. [60], 191, 126, [2]pp. Fine and unusual engraved titlepage, portraits of Casserio and of the Duke of Parma, and 33 (of 34) exquisite anatomical plates, paginated in the text. Our copy is one of those printed with a blank verso 2M3 in part 2 instead of plate XII, considered by researchers to be an ear-lier issue; a facsimile of this plate is tipped in for continuity. [Ferrara:Victorio Baldino, 1600–1601.] 386 x 264 mm.Vellum c. 1601, spine and margin of back cover repaired, light wear. A little light browning and offsetting, occasional faint dampstains, otherwise a very good copy. \$20,000

First Edition. Casserio was a student of Fabrici, and succeeded him in the chair of anatomy at the University of Padua. Like Fabrici, Casserio attempted to explain human anatomy by reference to the lower animals, and his De vocis, containing the first comparative studies of the vocal and auditory organs, represents one of the sixteenth century's most ambitious investigations in comparative anatomy. The work is divided into two treatises, on the anatomy of the larynx and on that of the ear. In the first, Casserio compared the human vocal apparatus to those of other mammals, birds, amphibians and even insects. He recognized the larynx to be the principal organ of voice, gave the first precise description of the cricoidthyroid muscles and accurately depicted the superior and inferior laryngeal nerves, which he correctly assumed to originate from cranial nerves. He also was the first to understand the complex sound-producing organs on the abdomen of the cicada. In the second treatise, Casserio provided the first detailed comparative account of the auditory ossicles, the first adequate description of the mammalian osseous labyrinth, and

the first representation of the ear of the fish—this last all the more remarkable in that, up to this time, no one had believed fishes to possess a sense of hearing.

None of De vocis's full-page engravings, including the title engraving and portraits, are signed. The drawings for them have generally been attributed to the German painter and etcher Joseph Maurer, on the basis of a passage (cited in Choulant) in the treatise on the ear; however, recent research indicates that the engraved title and two portraits are most likely the work of Jacopo Ligozzi (1547-1626), who also illustrated specimens for the Bolognese naturalist Ulisse Aldrovandi. In accuracy and artistry, the anatomical illustrations rank with the woodcuts of Vesalius, and, like the Vesalian illustrations, they provided a model and a standard for subsequent draftsmen. Choulant/ Frank 223-24. Garrison-Morton 286 & 1540. Grolier Club, 100 Books Famous in Medicine 24. Hoffer, Baroque Book Illustration (1970) 62. Cole, History of Comparative Anatomy (1944), pp. 112-25, reproducing 7 plates. Norman 410. 41482





Valentine Mott's Copy

12. Cooper, Astley (1768–1841). A manual of surgery . . . The third edition . . . edited by Thomas Castle. 459 [i.e., 467]pp. London: E. Cox; Boston: Munroe and Francis, and Charles S. Francis, New York, 1832. 177 x 102 mm. Quarter cloth, marbled boards, printed paper label ca. 1832, some wear at extremities, spine a bit faded. From the library of Valentine Mott (1785–1865), with his signature on the title; stamp of the Mott Memorial Medical and Surgical Library on the title and a few other places.

\$950

Third edition. From the library of Valentine Mott, the most celebrated American surgeon of the first half of the nineteenth century; see Garrison-Morton 2942, 2950, 4451.1 and 4447. Mott studied surgery under Cooper in London from 1807-9; Cooper was so impressed with Mott that he made Mott his assistant in surgery. "During his career [Mott] performed nearly a thousand amputations, operated 150 times for stone in the bladder, and ligated forty large arteries. According to his former teacher, Sir Astley Cooper, he performed more major operations than any surgeon in history, up to his time" (*Dictionary of American Biography*). 42176



The Original Octavo Version

13. Cowper, William (1666-1709). Myotomia reformata. . . . 8vo. [24], 280pp. 10 folding engravedplates. London: Sam. Smith & Benj. Walford, 1694. 192 x 111 mm. Paneled calf c. 1694, rebacked, end-papers renewed. Minor foxing & staining, but very good.\$2500

First Edition. The original octavo version of Cowper's anatomy of the muscles. Cowper produced the most significant anatomy of the muscles since the Renaissance; he was particularly concerned with correcting the English writers Molins and Browne then in vogue. After the publication of the 1694 edition Cowper worked until his death on an enlarged version, which was published posthumously in 1724 as a sumptuous folio atlas with 66 plates (some after Rubens and Raphael); see no. 15 in this catalogue. Russell, *British Anatomy 1525-1800*, 209. Wing C 6700. 40085







Baroque Anatomy

Cowper, William (1666–1709). The anatomy of humane bodies. . . . Folio. [72]ff. including I4. mezzotint portrait by Smith after Closterman, allegorical engraved title attributed to Abraham Bloteling (1640–90) with pasted-on English title in cartouche as usual, second engraved title with vignette by Sturt. 114 plates (2 folding, 105 designed by Gérard de Lairesse [1640–1711] & probably engraved by Bloteling, 9 mostly drawn & engraved by M. van der Gucht. London: Sam. Smith & Benj. Walford, 1698 [printed at the Sheldonian Theater, Oxford]. 569 × 353 mm. Paneled calf c. 1698, rebacked, corners repaired, endpapers renewed, some rubbing & wear. Portrait, which is often missing, mounted as always, tears in folding plates and a few other plates repaired, some dust-soiling (especially to portrait) & fraying, light foxing & spotting as in virtually all copies due to mineral deposits in the paper. Very good copy. Early owner's inscription on flyleaf: "Olim liber Rob. Lynch / Nunc autem Geo. LeGrand." \$15,000

First Edition in English of the original plates designed for Govard Bidloo by Gérard de Lairesse, a painter who rivaled Rembrandt in popularity in his time (see Garrison-Morton 385). Bidloo's text, however, 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 (it was 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. Lairesse's designs are a total departure from the idealistic tradition inaugurated by Vesalius: His anatomical figures are displayed with everyday realism and sensuality, bringing the qualities of Dutch still-life painting into anatomical illustration. Dumaitre, Gérard de Lairesse (1982). Hofer, Baroque Book Illustration, 146. Russell, British Anatomy 1525-1800, 211. 39289



Splendid 18th Century Atlas with Illustrations after Rubens & Raphael

15. Cowper, William (1666–1709). Myotomia reformata. . . . Folio. [12], lxxvii, 114, [4], [115]–194pp. Fronts. & 66 magnificent plates (plus 1 outline plate), double-page engraved table, numerous fine head- & tailpieces, fascinating historiated initials with myotomical motifs, diagrams in text. London: Printed for Robert Knaplock, William & John Innys & Jacob Tonson, 1724. 493 x 330 mm. 20th century three-quarter calf, cloth boards. Occasional light foxing and soiling, but a very good copy.



\$7500



First Folio Edition. One of the most beautiful atlases of the 18th century, Cowper's *Myotomia* made a modest first appearance in 1694 as an octavo with 10 plates (see no. 13 in this catalogue). Cowper worked until his death on a new edition, which was finally published posthumously under the supervision and at the expense of Richard Mead (1673-1754). This new sumptuous folio with 66 plates, some after Rubens and Raphael, and others after nature, ranks as one of the most artistic anatomical publicatons of the period, not only for the quality of the plates, but for the overall printing, especially the ingenious historiated initials with myotomical motifs. The text of this edition also contains a long introduction on muscular mechanics by Dr. Henry Pemberton, editor of the 1726 edition of Newton's *Principia*. The *Myotomia* was the most complete atlas of the muscles published up to that time in any language, and should be considered on a par with the very greatest atlases of the period by Albinus and Cheselden. See Garrison-Morton 1214, 2730 & 3247. Choulant, *History and Bibliography of Anatomic Illustration*, 253. Russell, *British Anatomy 1525-1800*, 210. Cole, *History 5* & 6, reproducing historiated initial. Hahn & Dumaitre, *Histoire de la medecine et du livre medical*, pp. 263 & 268; 279-80 & 318 reproducing illustrations. Roberts & Tomlinson, *Fabric of the Body*, pp. 415-17. 41916



Darwin's First Full-Length Scientific Paper

16. Darwin, Charles (1804–82). Observations on the parallel roads of Glen Roy, and of other parts of Lochaber in Scotland, with an attempt to prove that they are of marine origin. Extract from: *Philosophical Transactions* 129: 39–81. 2 plates, text illustrations. 287 x 228 mm. Quarter morocco, marbled boards in period style. Minor foxing on plates, but very good. \$1250

First Edition of Darwin's first full-length scientific paper and the only one he published in the Philosophical Transactions; it is also the longest article he ever had published in a periodical. The subject of Darwin's paper is a famous geological formation in the Scottish Highlands that resembles a series of three parallel roads running along the sides of a narrow valley; the "roads" are actually terraces that formed along the shores of an ice-dammed lake during the last Ice Age. Darwin visited Glen Roy in 1838 and was much struck by its geology, writing to Charles Lyell that "I wandered the mountains in all directions and examined that most extraordinary district. I think without any exceptions, not even the first volcanic island, the first elevated beach, or the passage of the Cordillera, as so interesting to me as this week. It is

far the most remarkable area I ever examined.... I am now employed in writing a paper on the subject, which, I find very amusing work, excepting that I cannot anyhow condense it into reasonable limits. I can assure you Glen Roy has astonished me" (Darwin Correspondence Project). Darwin argued that the Glen Roy "roads" were ancient marine beaches raised above present-day sea level by uplift of the earth's crust, a theory also endorsed by Lyell; however, both men were subsequently proved wrong by Louis Agassiz, who successfully demonstrated the formation's glacial origin. Freeman 1653. "Darwin Correspondence Project . Letter 424 — Darwin, C. R. to Lyell, Charles, 9 Aug [1838]." Darwin Correspondence Project. Web. 26 Sept. 2011. 42155



Darwin's Most Important Contribution to Genetics

Darwin, Charles (1809-82). The variation of animals and plants under domestication. 8vo. viii, 17. 411, [1], adverts. dated April, 1867; viii, 486pp., adverts. dated February, 1868. Text illustrations. London: Murray, 1868. 224 x 140 mm. Original cloth, lower corner of Vol. I front cover and text block slightly gnawed, otherwise a very good, bright set. 19th century owner's signature ("J. Pierce, Brighton, 1868") in both volumes. \$4000

First Edition, First Issue, with fourteen errata in the two vols. This work contains Darwin's provisional hypothesis of pangenesis, his most important contribution to genetics. Darwin had intended Variation of

Animals and Plants to be the second in a multi-volume series, to which the Origin was only the introduction. It is a mine of data on its subject. Freeman, Works of Charles Darwin, 877. 42140





Rare Darwin Centenary Ephemera

18. [**Darwin, Charles** (1809–82).] Darwin Centenary. Group of 16 items, as listed below.V.p., 1908– 9. In original wrappers or unbound as issued. All but nos. 15 and 16 in large envelope (chipped and tattered) addressed to Prof. H[ugh] F[rank] Newall (1857–1944), Director of the Astrophysical Observatory at Cambridge University.Very good to fine. \$750

1. Darwin Celebration, June 22-24, 1909 . . . Dear Sir, As you are probably aware . . . Botany School, Cambridge, December 14, 1908. Printed form letter. 1 sheet. 237 x 184 mm.

2. University of Cambridge. Darwin Celebration, June 22–24, 1909 . . . The Vice–Chancellor has the honour to invite [Mr. H. F. Newall] to take part in this commemoration . . . Pembroke College, February [10], 1909. Printed form letter. 1 sheet. 237 x 184 mm. Newall's name and the date inserted in manuscript. 3. Darwin Celebration, June 22–24, 1909 ... Dear Sir, In accordance with the reply received from you ... Cambridge, May 5, 1909. Printed form letter. 1 sheet. 237 x 184 mm. Ink annotation at the foot.

4. Centenary of the birth of Charles Darwin and the fiftieth anniversary of the publication of the *Origin of Species*. To be celebrated at Cambridge, June 22, 23, 24, 1909. List of delegates and other guests invited by the University. Cambridge, June 3, 1909. 25pp. 282 x 222 mm. Original printed wrappers. Printed notice on the front wrapper reads: "Revised lists will be issued later."

5. Darwin Celebration. Admission to the Senate House . . . Pembroke College Lodge, 7 June 1909. [4] pp. 286 x 224. Unbound as issued. Light foxing and toning, small splits in gutter fold, pencil marks on blank first page.

6. The Darwin Celebration June 22, 23, 24, 1909. List of delegates and other guests . . . In *Cambridge University Reporter* 39, no. 1756 (June 10, 1909). Whole number. 35pp. 288 x 227 mm. Original printed selfwrappers. Edges a bit frayed.

7. Centenary of the birth of Charles Darwin ... To be celebrated at Cambridge, June 22, 23, 24, 1909. List of delegates and other guests invited by the University. Cambridge, June 19, 1909. 25pp. 282 x 222 mm. Original printed wrappers. Printed notice on the front wrapper reads: "Final lists."

8. Darwin Celebration. June 22, 23, 24, 1909. Provisional programme. N.p., n.d. 1 sheet. 185 x 118 mm. Annotated in pencil.

9. University of Cambridge. Darwin Commemoration June 22-24, 1909. Programme. [4]pp. Unbound as issued. 268 x 211 mm.

10. Darwin Celebration, June 22, 23, 24, 1909. To members of the Senate. At the reception by the Chancellor on Tuesday, June 22 \dots Printed circular. N.p., n.d. 237 x 184 mm.

11. University of Cambridge. Order of proceedings in the Senate House Wednesday, June 23, 1909 . . . 11pp. Original printed self-wrappers. 281 x 222 mm.

12. Darwin Celebration. To members of the Senate. Banquet, June 23, 1909. 1 sheet. 119 x 185 mm.

13. Mr. William Darwin, Sir George and Lady Darwin, Mr. Francis and Miss Frances Darwin . . . At Home in the Trinity Fellows' garden on Thursday, June 24th . . . Printed invitation. I sheet printed on heavy card, creased vertically. 122 x 185 mm. "Programme of music" printed on the verso. "Mr. and Mrs. Newall" written in manuscript in the upper left corner.

14. The portraits, prints and writings of Charles Robert Darwin. Exhibited at Christ's College, Cambridge, 1909. [8], 47pp. 213 x 172 mm. Original printed wrappers, small split in lower spine.

15. Shipley, Arthur E. (1861–1927). British Association for the Advancement of Science. Address to the Zoological Section. 47pp. Winnipeg: Privately printed, 1909. 279 x 222 mm. Original printed wrappers, typed label pasted to front wrapper, light wear to spine. The first portion of Shipley's address is titled "Charles Darwin."

16. Shipley. Charles Darwin. 26pp. [Winnipeg:] Privately printed, 1909. 279 x 222 mm. Original printed wrappers, a little stained. An expanded version of the first portion of Shipley's address to the BAAS.

42177





Mind-Body Duality

19. Descartes, René (1596–1650). Les passions de l'âme. 8vo. [48], 286, [2, blank]pp. Paris: Henry le Gras, 1649. 157 x 92 mm.Vellum ca. 1649, spine a bit darkened. Fine copy, preserved in a cloth dropback box. \$20,000

First Edition, Paris Issue. Descartes' final work, which drew heavily on the then-unpublished *Traité de l'homme*, contains the application of his mechanistic physiology to the relationship between mind and body. Descartes made an essential distinction between the soul as the divinely-endowed seat of consciousness, will and rational thought, and the body as a machine or automaton subject to the laws of physics, and only indirectly controlled by the soul through the nerves. Using this dualistic model, he was able to make the important distinction between voluntary and involuntary actions. Descartes located the soul in the pineal gland, which thus served as the locus for interaction between soul and body; he

had defined the pineal gland's function in the *Traité*, but *Les passions de l'âme* contains his first published account of it. The work also contains the first use of the word "reflex" in connection with the action of the nervous system. "Cartesian dualism . . . gave great impetus to the development of psychology in its own right" (Hunter & Macalpine, p. 133).

The first edition of *Les passions de l'âme* was divided between Louis Elzevier in Amsterdam and Henry le Gras in Paris. There is no priority between the two versions; both are equally rare. Garrison-Morton 4965. Guibert, *Bibliographie des oeuvres de René Descartes*, pp. 150–151. Norman 626. 41445



The First Brain Dissections

20. Dryander, Johannes (Johannes Eichmann) (1500–60). Der gantzen Artzenei gemeyner Inhalt, des einem Arzt bede in der Theorie und Practic zusteht. Folio. [4] (includes blank *4), 110ff. Numerous anatomical & other woodcuts included in foliation, attributed to Hans Brosamer or his school, or to Georg Thomas. Frankfort: Christian Egenolph, [1542]. 298 × 197 mm. Modern half vellum. Some browning & soiling, minor dampstaining & worming in margins of some leaves, but still very good. 20th century owner's signature on endpaper. \$12,500



First Edition. Dryander's practice of medicine is one of the first general works on medicine to include a series of woodcuts based on dissection. Dryander, fellow-student in Paris with Vesalius, and professor of medicine at Marburg, carried out some of the earliest public dissections in Germany. Based on these, he issued his celebrated and excessively rare Anatomia Capitis Humani in 1536, the first work on the anatomy of the head, and his Anatomiae, hoc est, Corporis Humani Dissectionis in 1537, which repeated and expanded on the 1536 work (see Garrison-Morton 370–71). For his 1542 Artzenei he re-issued the key woodcuts showing dissection of the brain from the two previous works, as well as other woodcuts he had used, based on Berengario primarily, and his own dissections.

There are two entirely new woodcuts in the Artzenei, both full-page, one of which fuses in a single diagram the two vascular plates from Vesalius's *Tabulae Sex* published in 1538. Vesalius complained bitterly about this in the *Fabrica* in 1543; however, Herrlinger (85) points out that in some cases Vesalius's own illustrations are taken from Dryander, albeit with improvements. Numerous other woodcuts illustrate text on food and drink, materia medica, and medical treatment. Choulant/Frank 148–49, & 132, noting that Dryander also drew on the remarkable woodcuts in Phryesen's Spiegel der Artzny (Strassburg, 1518); in fact in his preface, Dryander states that his book is meant to update the earlier Phryesen. Cushing, Bio-bibliography of Andreas Vesalius, II.20. 41438





The Most Scientific Renaissance Anatomist

21. Eustachi, Bartolomeo (c. 1505-74). Tabulae anatomicae. . . . Edited by Giovanni Maria Lancisi (1654-1720). Folio. xliv, 115, [1], [14, index & errata]pp. 47 engraved plates prepared by Giulio de'Musi under the direction of Eustachi and his assistant Pier Matteo Pini, engraved title vignette by Petrus Leo Gherrinus, 2 engraved graduated scales on plate inserted after p. xliv. Rome: Francisco Gonzaga, 1714. 359 x 241 mm. 18th century marbled boards rebacked in calf, corners a bit worn. Occasional faint foxing, but fine overall. \$10,000

First Edition. Had Eustachi's full series of 47 anatomical copperplates been published at the time of their completion in 1552, Eustachi would have ranked with Vesalius as a founder of modern anatomy. As it happened, only the first eight were issued during Eustachi's lifetime (in his *Opuscula anatomica* [1564]), while the remaining 39 were lost for over a century after his death. Early in the 18th century, Eustachi's copperplates were discovered in the Vatican Library and presented by Pope Clement XI to his physician, Giovanni Maria Lancisi, who published them with his own notes in 1714. Eustachi, considered to have been "the most scientific anatomist of the High Renaissance" (Lilly), was the first to describe the adrenal gland, the abducens nerve, the thoracic duct and the valvulae venae (Eustachian valve) in the right ventricle of the heart. He was the first to accurately describe the uterus, as well as the first since classical times to give an account of the Eustachian tube. His plates are remarkable for their advanced anatomical knowledge, superior at times even to that in Vesalius's *Fabrica*; indeed, Eustachi was critical of the Vesalian illustrations, and corrected some of their errors.



Eustachi had prepared this series of plates to illustrate a projected book entitled *De dissensionibus ac controversiis anatomicis*, the text of which was lost after his death. The plates are strikingly modern, produced without the conventional 16th-century decorative accompaniments, and framed on three sides by numbered rules giving coordinates by which any part of the body could be precisely located on the plate; this device eliminated the need for identifying marks within the plate (the graduated scales were provided by the publisher for use as a location aid). The images are generic figures, composites of many anatomical observations, and are mathematically as well as representationally exact. Garrison-Morton 391. Choulant / Frank, pp. 200-202. Cole I, 256. Lilly, *Notable Medical Books*, p. 41. Norman 740. Roberts & Tomlinson, *Fabric of the Body*, pp. 188-93. 41485





"The Most Desirable for Purposes of Study"

22. Eustachi, Bartolomeo (c. 1510–74). Bernardi Siegfried Albini [1697–1770] . . . explicatio tabularum anatomicarum. . . . Folio. [8], 28, 277, [3]pp. 47 copperplates with outlines (7 with 2 outlines each), engraved by Jan Wandelaar after the originals. Leiden: Langerak & Verbeek, 1744. 383 × 250 mm. 18th or 19th cent. boards, somewhat rubbed, rebacked in calf. Occasional minor foxing, but a fine copy, with clean plates. \$3750

The beautiful edition of Eustachi's anatomical plates edited by Albinus, with plates engraved after the originals by his artist Wandelaar. Albinus extensively annotated his edition and had the newly engraved copies of the plates accompanied by separate outline plates of equal size with explanatory letters; thus his edition "is the most desirable for purposes of study" (O'Malley in *Dictionary of Scientific Biography*). See Garrison-Morton 391. Garrison, *History of Medicine*, p. 336. Choulant/ Frank 202. 24659





Franklin's Most Famous Experiment

23. Franklin, Benjamin (1706-90). (1) A letter of Benjamin Franklin, Esq; to Mr. Peter Collinson, F.R.S. concerning an electrical kite. In *Philosophical Transactions* 47 (1753): 565-567. (2) A letter from Mr. Franklin to Mr. Peter Collinson, F.R.S. concerning the effects of lightning. In *ibid*.: 289-291. (3) Watson, William. An account of Mr. Benjamin Franklin's treatise, lately published, intituled, *Experiments and Observations on Electricity, made at Philadelphia in America*. In *ibid*.: 202-211. Whole volume, 4to. [18], 571, [17]pp. 18 plates of 20; *lacking plates 7 and 14* (the missing plates do not illustrate the Franklin papers). 227 x 173 mm. Full antique calf, gilt in period style. Very small, almost invisible library blind-stamp on title and last leaves. Light foxing and toning, but very good. \$4500

First Editions. Franklin's famous kite experiment, in which he demonstrated that lightning is an electrical phenomenon, was first published in no. (1), a letter Franklin wrote to his friend Peter Collinson on October 1, 1752 that was read before the Royal Society on December 21, 1752. In the letter Franklin gave instructions on constructing the electrical kite (a kite made of silk fabric and lightweight wood, with a "sharp-pointed wire" attached to the vertical crosspiece and a metal key tied to the kite's string) and on conducting the experiment:

The kite is to be raised, when a thunder-gust appears to be coming on . . . As soon as any of the thunderclouds come over the kite, the pointed wire will draw the electric fire from them; and the kite, with all the twine, will be electrified; and the loose filaments of the twine will stand out every way, and be attracted by an approaching finger. When the rain has wet the kite and twine, so that it can conduct the electric fire freely, you will find it stream out plentifully from the key on approach of your knuckle (p. 566).

This volume of the *Philosophical Transactions* includes an earlier letter from Franklin to Collinson on lightning and electricity (no. [2]), in which he describes electricity's effects on magnetized compass needles and the firing of gunpowder by electricity. It also includes a review of the first part of Franklin's *Experiments and Observations on Electricity* (no. [3]). Cohen, *Benjamin Franklin's Science* (1990), ch. 6. 42158


Classic of Social Anthropology

24. Frazer, James George (1854–1941). The golden bough. 2 vols. xii, [2], 409, [1]; [6], 407pp. Frontispiece in Vol. I. London: Macmillan, 1890. 227 x 145 mm. (uncut). Original cloth, Vol. I front cover a bit spotted, spines a little dull. Edges a bit frayed, but very good. Bookplate of Arthur Quiller-Couch (1863–1944) in both volumes. \$3000

First Edition of Frazer's classic comparative study of mythology and religion. Frazer's work was not only "a foundational text for the new discipline of social anthropology, shaping the issues around which the discipline would develop, but its impact was felt just as powerfully in philosophy, theology and psychology, in the social disciplines of sociology and politics and in literary and art criticism. The roll call of those who were influenced by or responded to *The Golden Bough* includes many of the most prominent and radical thinkers of the period, including Malinowski and Durkheim in social anthropology, Bergson and Ryle in philosophy, Freud in psychology and Spengler and Toynbee in philosophical history. ... Equally, the search for the ritual and archetypal significances of works of art, initiated in the 1890s by Jane Harrison and Gilbert Murray, who applied the methods of *The Golden Bough* to classical literature, was to culminate in the mid-century in some of the most important of modern approaches to the study of English literature in the work of such critics as Wilson Knight in Britain and Northrop Frye in North America" (Craig, p. vii). This copy is from the library of noted author and literary critic Arthur Quiller-Couch, editor of the monumental *Oxford Book of English Verse*. Craig, "Introduction," in Frazer, *The Golden Bough* (2010 reprint of the 1890 ed.), pp. vii-xxvi. *Printing and the Mind of Man* 374. 41764



Fingerprints: The Rare Complete Set

25. Galton, Francis (1822–1911). (1) Finger prints. 8vo. xvi, 216pp. 16 plates. London and New York: Macmillan, 1892. 226 x 145 mm. (uncut and partly unopened). Original maroon fine-diaper cloth, gilt-lettered spine (a bit faded), front cover cloth a bit bubbled, faint library stamp on front cover and small library label on spine, both of the Bibliotheek Leesmuseum in Amsterdam. Minor foxing and toning, library stamp on title and front endpaper, small tear in rear endpaper, but very good. Bookplate of American zoologist Charles Atwood Kofoid (1865–1947). (2) Decipherment of blurred finger prints. London and New York: Macmillan, 1893. 8vo. [2], 18pp. 16 photographic plates of fingerprints. London: Macmillan, 1893. 225 x 143 mm. Original maroon cloth, gilt-lettered spine (sl. faded) and front cover. Fine copy apart from slight wear to extremities and small tear in rear endpaper. (3) Fingerprint directories. 8vo. [8], 127, [1]pp. 9 photographic plates. London: Macmillan, 1895. 224 x 144 mm. Original maroon cloth, gilt-lettered spine (a bit faded) light wear to extremities. Small library stamps on title and half-title, small library labels inside front cover and on spine, but very good. Together three works.

\$1500



First Editions. Galton is perhaps best known for his development of the fingerprint system as a means of personal identification, an achievement rooted in his interest in classifying and comparing human traits. The need for a reliable means of personal identification had become a pressing one in the nineteenth century with the increasing mobility and anonymity of European populations, the institutionalization of law enforcement, and colonialist expansion into Asia and Africa. In the early 1880s Galton learned of the independent fingerprint studies of Henry Faulds and Sir William Herschel (a descendant of the astronomer), both of whom had suggested the use of fingerprints in criminal identification. Faulds had classified fingerprints into the basic categories of whorl, loop and arch (still used today), and proposed their use in studies of heredity, while Herschel had pointed out the crucial fact that fingerprints do not

alter with age. After collecting and studying massive amounts of fingerprint data, Galton published three books on the subject. The first and most important of these was Finger Prints, which established the importance of fingerprints in both biological and criminological investigation. This was followed by Decipherment of Blurred Finger Prints, described on its title-page as a supplementary chapter to Galton's Finger Prints, showing "how to prepare fingerprint evidence from badly impressed prints" (Gillham, Life of Sir Francis Galton, p. 243). Galton's last major work on fingerprints was Fingerprint Directories, intended to "provide a means for indexing the fingerprints of several hundred thousand individuals" (Gillham, p. 243). Printing and the Mind of Man 376 (Finger Prints). Garrison-Morton 186 (Finger Prints). Norman 867 (Finger Prints), 868 (Fingerprint Directories). 41519



The "Principia" of Chemical Thermodynamics and Physical Chemistry

26. Gibbs, Josiah Willard (1839-1903). On the equilibrium of heterogeneous substances. First part [second part]. In: *Transactions of the Connecticut Academy of Arts and Sciences* 3, part 1 (1874): 108-248; part 2 (1878): 343-524. Two whole numbers, 8vo. xi, [1], 248; [4], [249]-529 [1]pp. 60 plates. 236 x 150 mm. Modern half green morocco, silk endpapers. Light browning, some marginal fraying, otherwise very good. Small oval stamps of the U.S. Patent Office Library on a few leaves in Vol. I. Bookplate of Herbert M. Evans (1882-1971) laid into each volume. \$7500

First Edition. Gibbs's paper, known as the *Principia* of chemical thermodynamics and physical chemistry, remains, along with Benjamin Franklin's pioneering studies of electricity, among the greatest American contributions to physics and chemistry. The paper integrated chemical, physical, electrical, and electromagnetic phenomena into a coherent system. It introduced concepts such as chemical potential, phase rule, and others which form the basis for modern physical chemistry. Gibbs's mathematical

equations provided the key to understanding patterns of meaning that had never been imagined, let alone understood, and spared scientists the undertaking of thousands of experiments in order to ascertain the precise conditions for successful chemical processes. This copy is from the library of Herbert M. Evans, discoverer of vitamin E (see Garrison-Morton 1055) and one of the 20th century's greatest collectors in the history of science. Dibner 49. Horblit 60. Norman 899. 41466



The Magnet—Extremely Rare First Continental Edition

27. Gilbert, William (1544-1603). Tractatus sive physiologia nova de magnete, magneticisque corporibus et magno magnete tellure sex libris comprehendis. 4to. [9] (of 10)ff., 232, [1]pp. *Lacking halftitle.* Engraved title-leaf with portrait of Gilbert, 12 engraved plates (some folding), woodcut text illustrations. Sedini [Szczecin, Poland]: Typis Götzianis, Ioh: Hallervordij, 1628. 229 x 180 mm. Modern calf, gilt-lettered spine. Browned as usual, minor marginal dampstaining, small marginal wormhole, but otherwise very good. Signature of Samuel Horsley (1733-1806), Bishop of St. Asaph, on the title and a few marginal notes and corrections probably his. \$8500



First Continental Edition of Gilbert's De Magnete, originally published in London in 1600."One of the earliest monographs devoted to a particular branch of terrestrial physics, and one of the first published reports of an extensive series of linked, reconfirmed experiments" (Heilbron, Electricity in the 17th and 18th Centuries, p. 169). The Sedini edition, printed in the Duchy of Pomerania, was prepared by Wolfgang Lochmann (1594-1643) and is extremely rare, much more so than the first edition. The large woodcuts of the first edition are here printed as copperplates, and the text was revised and enlarged. There are three issues of the Sedini edition: one with engraved title, the lower vignette showing a magnetic compass trailing after a ship (as in our copy); one with this vignette showing

the compass on board ship; and one with printed title only. Roller notes that some examples have "Authoris" on the engraved title in the place of "Ioh: Hallervordij," indicating that Lochmann apparently remaindered the sheets to Johann Hallervord, a well-known book dealer in the German city of Rostock. This copy once belonged to Samuel Horsley, Bishop of St. Asaph and a fellow of the Royal Society; Horsley was particularly interested in astronomical and geometrical science, and published an edition of Newton's Opera (1779-85) with his commentary. Roller, The De magnete of William Gilbert, pp. 175-76. Heilbron, pp. 169-179. See Printing and the Mind of Man 107; Horblit 41; Dibner 54. 41458





Introduction of the Metric System

28. [Haüy, René Just (1743-1822).] Instruction sur les mesures déduites de la grandeur de la terre, uniformes pour toute la république, et sur les calculs relatifs à leur division décimale. Paris: Imprimerie Nationale, An II [1793/94]. 8vo. xxxii, 224, [28] pp. Folding plate. 215 x 133 mm. (uncut). Original paste paper wrappers, corners and front hinge unobtrusively repaired. Leaves Q3-Q4 loose, minor paper flaw in leaf C4, minor fraying to uncut edges, light toning, but fine otherwise. Marginal notes (mostly in pencil, one or two in ink) in what appears to be 2 different hands; 2 scraps of manuscript notes laid in. \$4500



First Edition of the work that introduced the metric system to the world. In 1788 the French Academy of Sciences, at the suggestion of Talleyrand, proposed the establishment of a new universal decimal system of measurement founded upon some "natural and invariable base" to replace France's diverse regional systems. This project was approved by the National Assembly in 1790 and a basic unit or "meter" of measurement proposed, which was to be a decimal unit one ten-millionth of the distance between the terrestrial pole and the Equator. In 1791 the French national assembly voted to replace the old French unit of length (toise) with this new unit. In the summer of 1792 Jean Baptiste Delambre and Pierre François André Méchain embarked from Paris to establish the definitive length of the meter by taking

geodetic measurements along the Dunkink-Barcelona meridian. In August 1793, while Méchain and Delambre were still carrying out their task, the French National Assembly "affirmed the decimal system and the meridianal definition of the meter, ordered the continuation of the work, and decreed that the Academy provide for the manufacture, distribution, and explanation of provisional meters for general use while it prosecuted its measurements. This provisional meter was defined as a ten-millionth of ninety times the average degree in France as determined by Lacaille [in 1739-40] ... It differed from the definitive meter by about a quarter of a millimeter" (Heilbron, pp. 227-228). The definitive meter, as determined by Méchain and Delambre, would not be announced until the publication of Delambre's Base du système métrique décimal (1806-10).

The new metric system—one of the few permanent social reforms to result from the upheavals of the French Revolution-was first officially announced in two works issued in Year Two of the Republic (1793/94) by the government's Temporary Commission on Republican Weights and Measures. The first was Instruction sur les mesures, which emphasized mathematics and theory; the second was an abridged version of the Instruction containing a shorter and simpler presentation of the system. On p. xxxii of Instruction sur les mesures the commission announced that these two versions would be followed by a third, which "will only present a précis of the system, and which will be printed partly in octavo format for distribution, and partly as a broadside to be displayed in public places for viewing by all citizens."We have not been able to find a record of this third version. Both Instruction sur les mesures and its abridged version were reprinted by several other French publishers throughout the country. The unnamed author was French crystallographer René Just Haüy, a member of the Temporary Commission. Norman 1499 (lacking the folding plate). Dibner 113 (citing a copy published in Macon in 1794). Heilbron, "The measure of enlightenment," in Frängsmyr, Heilbron and Rider, eds., The Quantifying Spirit in the Eighteenth Century (1990), pp. 207-242. 42160

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Socio-Economics of Medicine in Pre-Civil War Virginia

29. Heaton, Jonathan (1781–1845). Medical accounts book. Folio ledger with manuscript entries. 430 numbered pages. Loudoun, County, Virginia, 1827–44. 322 x 195 mm. Original blind-tooled reverse calf, worn. Minor foxing. With: Copy of settlement of the estate of Jonathan Heaton. June 12, 1847. [4]ff. plus 2 integral blank leaves. 336 x 210 mm. Unbound. Edges frayed. With: Inventory and appraisement of the personal estate of Doctr. Jonathan Heaton decd. [6]ff. plus 2 integral blank leaves. June 1845. 327 x 207 mm. Unbound. Minor spotting. With: Colored voters of Woodgrove precinct, Jefferson district, Loudoun Co.Va. I sheet. N.d. [1867 or after]. 310 x 186 mm. Edges frayed, minor dust-soiling. Together 4 items. \$3750

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Unique Nineteenth-Century American Medical Documents, of great interest for medical, economic and social history. First is the medical ledger of Virginia physician Jonathan Heaton, containing his financial records of medical services provided to hundreds of patients over nearly two decades from the 1820s to the 1840s. These include accounts of both services rendered (e.g., p. 105 shows that Capt. John Chamblin incurred a \$10.00 fee on June 15, 1838 for "Med. Obst. viz N. Woman 5.00 (20th), Obs. vis 5.00," with "N" probably standing for "Negro"), and records of payment both in cash and in goods (e.g., p. 92 shows Joshua Clipp's August 29, 1830 payment of his account "By 2 Bus. Salt 1.371/2 - Cash 7.62¹/₂"). Pages 350-356 contain a manuscript copy, written in 1882, of an 1829 "Memorandum of the family of Doct. James Heaton [Jonathan Heaton's father] as given by Rachel Fulton to Townsend Heaton 1st August 1829," with additions by Jonathan's



son James Heaton. The next two documents form part of the resolution of Jonathan Heaton's estate after his death in 1845; these documents, prepared by his son James Heaton, include records of payments from Dr. Heaton's patients and a priced inventory of his worldly goods ("One gray mare colt 3 years old 50.00 ... 7 horse collars 7.00 ... two stands bees 4.00 ... Medical library 24.50"). The last document in this collection is a record of "Colored Voters" in Loudoun County's Woodgrove precinct, listing 29 names; this document could not have been written before 1867, when African American men were first allowed to vote in Virginia.

Dr. Jonathan Heaton practiced medicine in Loudoun County in northern Virginia. He was a slave owner, but apparently a fairly enlightened one; he taught his slaves to read and write, and freed them and paid their passage to Liberia prior to his death. 42181



Uranus and the Motion of the Stars

30. Herschel, William (1738–1822). (1) A letter from William Herschel, Esq., F.R.S. to Sir Joseph Banks, Bart., F.R. S. (2) On the diameter and magnitude of the *Georgium Sidus*; with a description of the dark and lucid disk and periphery micrometers. (3) On the proper motion of the sun and solar system; with an account of several changes that have happened among the fixed stars since the time of Mr. Flamstead. In *Philosophical Transactions* 73 (1783): 1-3; 4-14; 247–283. 3 plates (nos. IV-VI). Whole volume, 4to. vii, [1], 245, [1], vii, [1], iv, 247–302, *303–*370, 303–501, [3, incl. errata]pp. 10 plates. Full calf gilt in period style. Very small, almost invisible library blind-stamp on title and last leaves. Occasional light foxing and toning, but very good. \$3750



First Editions. On March 13, 1781, while undertaking an extensive telescopic survey of the heavens, Herschel observed an object which he immediately recognized as being unlike any ordinary star. He first believed it to be a comet, and announced it as such in a paper read before the Bath Philosophical Society; however, examination of the object's orbit by other astronomers revealed that it was in fact a planet-the first planet in our solar system to be discovered in historical times. In an open letter to Joseph Banks (no. I above), Herschel proposed naming the new planet Georgium Sidus (Georgian star) in honor of George III. As might be imagined, this proposal did not find favor with Continental astronomers, and the name Uranus, suggested by German astronomer J. G. Bode, was soon widely adopted (the name became universal in 1850 when Britain's Nautical Almanac Office finally switched from Georgium Sidus to Uranus). Herschel's first paper on the new planet (no. 2) records his observations of the Georgium Sidus between October 22, 1781 and November 4, 1782; it was read before the Royal Society on November 7, 1782.

Herschel's primary goal as an astronomer was to understand "the construction of the heavens," and to that end he designed and constructed the largest and most powerful telescopes of his day. With these superior instruments he "threw open the doors to the modern telescopic exploration of the universe" (Mullaney, p. 140), discovering hundreds of new stars and nebulae, identifying nebulae as clusters of stars, describing the rotational behavior of binary stars, and confirming that the Milky Way galaxy is a flat, finite cluster of stars. In his "On the proper motion of the sun and solar system" (no. **3**) Herschel announced another remarkable finding: that

our Solar System is moving through space in the direction of the constellation Hercules—just 10° from the modern position . . . He noticed that the stars in that direction of the sky appeared to be "opening up" or spreading out before us while those in the opposite part of the sky were "closing in" on themselves . . . This was truly an amazing deduction on his part, especially given the relatively primitive and limited number of positions available to him (Mullaney, p. 141).

Printing and the Mind of Man 227 (no. 3). Mullaney, The Herschel Objects and How to Observe Them (2007), pp. 139-141. Dictionary of Scientific Biography. 42150

[38] was fimilar to that noticed in Cafe XVII., with this exception, its being free from the livid tint obferved in that inflance. CASE XX. FROM William Summers the difeafe was transfered to William Pead a boy of eight years old, who was inoculated March 28th. On the 6th day he complained of pain in the axilla, and on the 7th was affected with the common fymptoms of a patient fickening with the Small-pox from inoculation, which did not terminate 'till the 3d day after the feizure. So perfect was the fimilarity to the variolous fever that I was induced to examine the fkin, conceiving there might have been fome eruptions, but none appeared. The efflorefcent blufh around the part punctured in the boy's arm was fo truly characteriflic of that which appears on variolous inoculation, that I have given a reprefentation of it. The drawing was made when the pultule was begining to die away, and the areola retiring from the centre. (See Plate, No. 3.) CASE

Foundation of Immunization

31. Jenner, Edward (1749–1823). An inquiry into the causes and effects of the variolae vaccinae.... 4to. [2], iv, 75, [3]pp. 4 hand-colored engraved plates. London: for the author..., 1798. 260×203 mm. Marbled boards with vellum corners c. 1798, a little rubbed, rebacked in calf, original label preserved. Light browning & foxing as usual, small piece cut out of upper corner of front free endpaper, but a fine copy, in a quarter morocco case. Leather book labels of Louis Silver and Arthur W. Lissauer.

\$27,500

First Edition. "Jenner must be considered the founder of immunology; in vaccination he made the first use of attenuated virus for immunization. For his coining of the term "virus," his effort to describe the natural history of the cowpox virus, and his description of anaphylaxis, he must be considered the first pioneer of the modern science of virology" (*Dictionary of Scientific Biography*). All these contributions are to be found in the 75 pages of his *Inquiry*, reporting 23 cases of vaccination along with the observation of anaphylaxis, which provided a starting point for the whole study of allergy. The four plates are the first depictions of the condition provoked by the introduction of cow-pox.

With Jenner's *Inquiry* the prospect for control and possible eradication of smallpox opened up, and his whole life after 1798 was occupied with vaccination. He found that dried vaccine could be obtained and shipped long distances, even as far as India, where it was sent in 1801. The impact of Jenner's discovery on his contemporaries was so great that although Britain and France were at war, Napoleon had a medal struck in honor of Jenner (and vaccinated his troops). In 1980 the World Health Organization announced that smallpox had been eradicated from all countries through intensive vaccination campaigns. Garrison-Morton 5423. Horblit 56. Dibner 127. *Printing and the Mind of Man* 250. LeFanu, *Jenner*, 28–34; entry 23. Lilly Library 151. Waller 5136. 41433





Probably the Most Beautiful Early Medical Book And the Greatest Woodcut Book in the Classic Venetian Style

32. Ketham [Kircheim], Johannes de (fl. 15th cent.). Fasciculus medicie. Folio. [4], lviii [i.e., lix] ff., final blank. 10 full-page woodcuts attributed to the school of Andrea Mantegna (1431?-1506), especially to his brother-in-law Gentile Bellini (1429-1507). Title with woodcut border and woodcut initials in text. [Venice: Cesare Arrivabeni, 1522.] 302 x 206 mm. Old antiphonal vellum sheet (perhaps 15th cent. Italian, with red and blue ornamentation) over boards, hinges repaired, minor working in back board. A little dampstaining & soiling in first and last leaves, a few leaves trimmed closely minutely affecting borders and a few text letters but not the beautiful woodcut images, otherwise a fine copy. A few old annotations. \$21,500



Penultimate Venetian edition of "the greatest piece of illustration in the classic style of XV-century Venetian books" (Hind, Intro. Hist. Woodcut, 2, p. 494; see also pp. 495-97). This collection of short medical treatises, some dating as far back as the thirteenth century, circulated widely in manuscript before the de Gregorii of Forlivio issued the first edition from their Venetian press in 1491. The "Ketham" to whom the printers attributed the collection was, as Sudhoff speculates, most probably Johann von Kircheim, a physician and professor of medicine in Vienna who assembled these texts for educational purposes; "Ketham" is a plausible corruption of "Kircheim." The 1491 edition was the first printed medical book to contain anatomical illustrations, if we discount the crude phlebotomy figure that occurs in a Flemish collection of surgical texts by Lanfranck, Guy de Chauliac and Avicenna (Louvain, 1481), and the woodcut of the three cerebral ventricles printed in the Philosophia naturalis of Albertus Magnus (Brescia, 1490). The anatomical illustrations prepared for the 1491 edition included the following: (1) Phlebotomy man; (2) Zodiacal man; (3) Seated figure of pregnant woman, showing the internal organs; (4) Wound man; and (5) Disease man. Another woodcut, printed in red and black, shows a schematic representation of urine glasses arranged in a circle. All of these illustrations are well established in the manuscript tradition.



The 1491 edition of Ketham's collection was followed by an Italian translation published in 1493/4, to which Mondino's Anathomia was added. For this Italian translation, all of the illustrations save that of the "Disease man" were redrawn and recut, and four new illustrations were added: (1) Petrus de Montagnana in his pulpit (frontispiece); (2) Petrus, his students and an attendant with a flask of urine; (3) Doctor's visit to a plague patient; and (4) A lesson in dissection. There has been much speculation about the identity of the artist of these strikingly beautiful woodcuts, but he was certainly close to the school of Gentile Bellini. The 1493/4 Italian edition of Ketham, and the 1495 Latin edition that followed, were the basis of the dozen or so editions printed over the next thirty years, including the 1522 edition we are offering here. It is in the woodcuts prepared for the Italian edition that we see the first evidence of the transition from medieval to modern anatomical illustration. See Garrison-Morton 363, citing the first edition of 1491. Norman / Grolier Medical 100, 10. Choulant / Frank, pp. 115-22. Heirs of Hippocrates 126, noting that the 1522 edition, with gives Ketham's name and nationality in the incipit, finalizes the idea that Ketham was responsible for the work. 41437





"Book-Making, Knowledge-Regurgitating Machine"

33. [Kircher, Athansius (1602–80).] Kestler, Joannes Stephanus. Physiologia Kircheriana experimentalis . . . Folio. [8, incl. engraved title], 248, [8]pp. Engraved illustrations and woodcuts in text. Amsterdam: Apud Janssonio-Waesbergios, 1680. 345 x 220 mm. Modern vellum. Minor foxing and browning, but very good. Bookplate. \$5000

First Edition. A codification of Kircher's scientific observations and experiments, edited by his pupil Joannes Kestler and published the year of Kircher's death. "Naturally there are large sections on light and shadow, magnetism, acoustics, and music; but there are also experiments and observations in hydraulics, alchemy, and a myriad of other topics. This compendium was perhaps a response to entreaties from Kircher's fellow scientists, who appreciated his keen observations and experiments but did not care to wade through some 40 volumes to glean them" (Merrill, *Athanasius Kircher (1602-1680): Jesuit Scholar* [1989], p. 71). The work includes a discussion of the magic lantern (which Kircher did not invent, although he did publish a study of its principles in his

Ars magna lucis et umbrae [1646]), and the first recorded experiment on hypnosis of animals.

The Jesuit polymath and experimentalist Athanasius Kircher was one of the scientific stars of the seventeenth century. He was the first scholar to enjoy a global reputation, and the first to support himself financially through the sale of his books. Described as a "book-making, knowledge-regurgitating machine," Kircher produced some forty treatises "on virtually every imaginable aspect of ancient and modern knowledge," each one "demonstrat[ing] his dizzying array of linguistic, paleographic, historical, and scientific skills, and . . . advertis[ing] his myriad inventions, possession of strange and exotic artifacts, and mysterious manuscripts" (Findlen, ed., *Athanasius Kircher: The Last Man Who Knew Everything* [2004], p. 2). 41481



"The Basis of Modern Bacteriological Practice"—Printing and the Mind of Man

34. Koch, Robert (1843-1910). (1) Untersuchungen über Bacterien.V. Die Aetiologie der Milzbrand-Krankheit, begründet auf die Entwicklungsgeschichte des *Bacillus Anthracis*. In *Beiträge zur Biologie der Pflanzen* 2, zweites Heft (1876): 277-310. Plate. (2) Untersuchungen über Bacterien.VI. Verfahren zur Untersuchung, zum Conserviren und Photographiren der Bacterien. In *ibid*.: 399-434. 3 plates. Whole volume. [8], 121, [4], 122-310, [4], 311-440pp. 16 plates (several colored). 224 x 143 mm. Sold with Vol. 1, both volumes in original cloth, rebacked in morocco, endpapers renewed. Library stamps on contents pages and versos of 1 or 2 plates. Light toning, but very good. \$6000



First Editions. "These two papers form the basis of modern bacteriological practice-indeed of the very science itself" (Printing and the Mind of *Man*). In the first paper, on the etiology of anthrax, Koch verified C. J. Davaine's earlier observation that anthrax was caused by rodlike microorganisms found in the blood of infected sheep, and provided the first rigorous demonstration of the specific association of a particular bacterium with a particular disease. "Koch invented techniques for culturing [anthrax bacteria] in drops of cattle blood or aqueous humor on the warm stage of his microscope, under varied conditions of moisture, temperature and air access. He traced accurately their mode of growth and life cycle, including the phenomena of spore formation and germination, which Davaine neither observed nor suspected....Before publishing these observations, Koch sought an interview with Ferdinand Cohn, the famous botanist in Breslau, who in his pioneering Untersuchungen über Bacterien (1872-1876) had stressed the fixity of bacterial species and anticipated the spore-forming properties of Bacillus anthracis. In the spring of 1876 Koch demonstrated his methods and preparations to Cohn and to the pathologist Julius Cohnheim and his assistants. After personally confirming the results, Cohn included Koch's classic

report on the etiology of anthrax in the next issue of his journal, *Beiträge zur Biologie der Pflanzen*. In 1877 the *Beiträge* contained another paper by Koch, "Verfahren zur Untersuchung, zum Conserviren und Photographiren der Bacterien." This described techniques for dry-fixing thin films of bacterial culture on glass slides, for staining them with aniline dyes (according to information received from Carl Weigert in Breslau), and for recording their structure by microphotography" (*Dictionary of Scientific Biography*). Koch received the Nobel Prize for Physiology / Medicine in 1905 for his bacteriological work.

Koch's papers formed part of Ferdinand Cohn's "Untersuchungen über Bacterien" (Researches on bacteria), a series of papers on bacteriology that Cohn began publishing in the *Beiträge zur Biologie der Pflanzen* in 1872. Volumes 1 and 2 of the *Beiträge*, offered here, include Cohn's classic contributions to the "Untersuchungen" of 1872, 1875 and 1876, in which he defined the nature of bacteria, classified bacteria into four morphological groups (still in use today), and announced his discovery of thermoresistant spores in certain bacteria species. The first two volumes of Cohn's *Beiträge* are *rare on the market*. *Printing and the Mind of Man* 366a (Koch). Garrison-Morton 5167, 2488 (Koch); 2483 (Cohn). 41138



The World's First Air Meet

35. Laignier, Georges Henri. Livre d'or de la grande semaine d'aviation de la Champagne. [8], 224pp. 8 plates, text illustrations. Reims: Imprimerie coopérative de Reims; Paris: H. Dunod & E. Pinat, [1909]. 263 x 204 mm. Original printed wrappers, spine a bit worn, tears in front wrapper expertly repaired. Very good copy. \$3750

First Edition. The "Golden Book" of the Great Aviation Week at Reims, the world's first air meet, held August 22-29, 1909 at what is now the Base Aérienne 112 in Reims-Champagne. "By the end of the week, [Hubert] Latham had reached a height of 155 meters (508 feet) to win the altitude contest, Henri Farman had flown for three hours and fifteen minutes, covering 180 kilometers (approximately 112 miles) to win the Grand Prix, [Louis] Blériot had secured the prize for the fastest speed over 10 kilometers (at 76.95 kilometers per hour, 47.75 miles per hour), Farman had won the passengers' prize by carrying two passengers around

la piste, and [Étienne] Bunau-Varilla had flown 62 miles to win a mechanics' prize for his team....American Glenn Curtiss won two prizes for speed, the Prix de la Vitesse (for averaging 75 kilometers per hour, 46.63 miles per hour, over three 10-kilometer laps), and the Gordon Bennett trophy for averaging 75.7 kilometers per hour (47.02 miles per hour) over 20 kilometers" (Hallion, Taking Flight [2003], p. 260). The Livre d'or, profusely illustrated with pictures of the aviators and their machines, was compiled by Georges Henri Laignier, a member of the Reims meet's organizing committee. 42179





Celestial Mechanics

36. Laplace, Pierre-Simon (1749-1827). Traité de mécanique céleste. 5 vols. in 4, 4to. Folding plate in Vol. IV. *Supplement to Vol. V not present*. Paris: Crapelet for Duprat, An VII [1799] (Vols. I-II); Crapelet for Duprat, An XI—1802 (Vol. III); Courcier, An XIII—1805 (Vol. IV); Bachelier, 1825 [i.e., 1823-1825] (Vol.V). 260 x 201 mm.Vols. I-II in diced russia gilt c. 1799, rebacked; Vols III-IV bound together in quarter calf gilt, paste paper boards, rebacked, light edgewear; Vol.V in an early American binding of black straight-grain morocco, elaborately gilt, with inner gilt dentelles, a.e.g., slightly rubbed at extremities. Minor occasional foxing, a few faint marginal dampstains, but very good.Vol.V from the library of American mathematician Robert Adrain (1775-1843), with his signature on the rear endpaper: "Robert Adrain / New Brunswick / N. J. / January 27 1823 [sic]." On the front pastedown is a gilt morocco label tooled with some of the same tools as the binding, which reads: "To Robert Adrain. Presented by one who has long admired his genius and revered his worth." \$12,500



First Edition, French Republican Issue of Vols. I-II. "A treatise on celestial mechanics in the tradition of Newton's Principia. Here Laplace applied his mathematical theories of probability to celestial bodies and concluded that the apparent changes in the motion of planets and their satellites are changes of long periods, and that the solar system is in all probability very stable. He gave methods for calculating the movements of translation and rotation of heavenly bodies and for resolving problems of tides, from which he deduced the mass of the moon" (Dibner). Laplace's system of celestial mechanics (a term he coined) marked an advance over that of Newton, who had posited the necessity of a Deity in the universe to correct planetary irregularities; Laplace on the other hand, when asked by Napoleon why his system contained no mention of the Creator, replied "I had no need of such a hypothesis."

The bibliographical makeup of *Mécanique céleste* is complex; see Horblit and the Norman library catalogue for collations and paginations. Two issues of Vols. I-II exist, one with the imprint of Crapelet and Duprat alone and the French Republican date "An VII"; and one dated "1799" with the additional imprint reading "Berlin: chez F.T. de la Garde, Libraire," printed for European distribution.Vol.V, comprising a series of addenda to the first four volumes, appeared twenty years after Vol. IV; according to Laplace's "Avertissement" to this volume, each of its five books was issued separately in the month indicated on its part-title. The fifth volume's supplement, dated 1827 ("Supplément au 5e volume du *Traité de mécanique céleste*...") is not present in this copy, but it is not unusual for sets to be lacking one or more of the supplements.

Vol.V in this set is from the library of Irish-American mathematician Robert Adrain, who during the first decades of the nineteenth century was one of only two mathematicians in the United States (the other being Nathaniel Bowditch) capable of work of international standing. He is best known for his formulation of the method of least squares, anticipating Gauss's work on the same subject, and for his improved estimates of the earth's diameter and ellipticity. The volume's binding is similar in style to other American bindings of the period; see Early American Bookbindings from the Collection of Michael Papantonio (1972), figs. 34, 39, 45 and 48. The volume was very likely bound before the publication of its supplement, which appeared in 1827. Dibner 14. Horblit 63. Printing and the Mind of Man 252. Norman 1277. 34363



Geology

37. Lyell, Charles (1797-1875). Principles of geology, being an attempt to explain the former changes of the earth's surface, by references to causes now in operation. 3 volumes, 8vo. xv, [1], 511; xii, 330, [2]; xxxi, [1], 398, 109pp., plus 4pp. publisher's advertisements. 11 plates, including 3 engraved frontispieces (2 hand-colored), and 3 maps (2 folding, 2 hand-colored). London: John Murray, 1830-32. Calf ca. 1832, a little rubbed, rebacked, endpapers renewed. Gilt arms of the Society of Writers to the Signet on front covers. Very good set.

First Edition. Lyell's Principles of Geology revolutionized the science of geology. The work had two major and controversial goals: First, to establish a strict uniformitarian theory of the earth based upon a knowledge of the existing causes and effects of geologic change; and second, to give a specific meaning to the term "geology" and establish its proper position relative to the other physical sciences. Unlike many geologists of his day, who believed that the earth had been subjected in the past to events unparalleled in modern times, Lyell argued that the order of nature in the past was uniform with that in the present, and that therefore all geological phenomena should be attributed to the gradual action, over sufficient time, of modern geological processes. Lyell's work had profound influence upon Charles Darwin, who read the Principles aboard the Beagle. Not only

did the work shape Darwin's understanding of geology, but its discussion of the problems of evolution stimulated Darwin's thinking on the subject.

The first edition was published in an edition of 1,500 copies and sold for fifteen shillings a copy. Lyell received 200 guineas for the work. The title page of

Vol. I indicates that the work was originally intended to be published in two volumes. Norman 1398. Greene, *Geology in the 19th Century*, pp. 70–76. Rudwick, *The Meaning of Fossils*, pp. 174–191. Ward & Carozzi, *Geology Emerging*, 1407. Wilson, *Charles Lyell: The Years to 1841*, pp. 146–47; 210. 41761



AN ESSAY
ON THE
PRINCIPLE OF POPULATION;
OR,
A VIEW OF ITS PAST AND PRESENT EFFECTS
M
HUMAN HAPPINESS;
WITH AN INQUIRY INTO OUR PROSPECTS RESPECTING THE FUTURE REMOVAL
OR MITIGATION OF THE EVILS WHICH IT OCCASIONS.
A NEW EDITION, VERY MUCH ENLARGED.
By T. R. MALTHUS, A. M.
LONDON
FRINTED FOR J. JOHNSON, IN ST. PAUL'S CHURCH-YARD,
BY T. BENSLEY, BOLT COURT, FLEET STREET.
1803.
The second se

The "Struggle for Existence"

38. Malthus, Thomas (1766–1834). An essay on the principle of population; or a view of its past and present effects on human happiness . . . 4to. viii, [4], 610pp. London: T. Bensley for J. Johnson, 1803. 285 x 225 mm. (uncut). Original boards, rebacked, endpapers renewed, one corner restored. Tape repair to last leaf, minor foxing, but a very good copy, preserved in a cloth case. \$8500

Second edition, extensively revised and four times larger than the original edition of 1798. The 1803 edition was the first to have Malthus's name on the title, and the first to contain numerical data supporting his claim that populations increase by geometrical proportion but food supplies only increase arithmetically. "Malthus was one of the founders of modern economics. His *Essay* was originally the product of a discussion on the perfectibility of society with his father . . . Thus the first edition (published anonymously) was essentially a fighting tract, but later editions were considerably altered and grew bulkier as Malthus defended his views against a host of critics . . . The *Essay* was highly influential in the progress of though in early nineteenth century Europe [and] his influence on social policy was considerable . . . Both Darwin and Wallace clearly acknowledged Malthus as a source of the idea of the 'struggle for existence''' (*Printing and the Mind of Man* 251). Garrison-Morton 1693. Kress B4701. 41515



1524 HOLLINS STREET BALTIMORE, MD., U. S. A. Dear Paul:-Your letter followed me down from New York. You tell the horrible truth about Dreiser with surgical accuracy, but he still remains the best of the corn-fed herd. There is something Mary MacLaneish about him: his self-revelations are immense. Howells is too discreet and shallow. James is merely a fifth-rate Englishman. Dreiser really belongs to our fair republic, and shows the Knight of Pythias complex. He is more fun than a massacre. I wish you knew him. My book will not appear until after the war. If I printed it now it would have to be expurgated to the point of inanity. Even as it stands the mis. is feeble. I shall hold it, insert the ghastly truth, and then throw it overboard while the coroner's jury is sitting. I am 36, overweight, suffer from diabetes, chilblains and malaria, and am conscientiously opposed to war, Woodrow and capital punish-1524 HOLLINS STREET BALTIMORE, MD., U. S. A. -2-Let the storm rage ! ment. Don't miss "Misinforming a Nation", by W.H.Wright (Huebsch), a superb piece of pecksniffery. Wright has carried off the moral indignation business magnificently. Yours.

"Let the Storm Rage!"

39. Mencken, Henry Louis (1880-1956). Typed letter signed to J. Gilman D'Arcy Paul (1893-1960).
2 pages. Baltimore, n.d. [1917]. 152 x 217 mm. Light soiling and creasing, lower edges a bit frayed, but very good.
\$1500

Excellent and characteristically acerbic letter from satirist and critic H. L. Mencken, regarded as one of the most influential American writers of the first half of the 20th century. His correspondent was Gilman D'Arcy Paul, a journalist, diplomat and civic leader in Baltimore.

The letter opens with a brief discussion of the merits of Mencken's great friend Theodore Dreiser (1871-1945), author of *Sister Carrie* and *An American Tragedy*, whom Mencken championed despite acknowledging Dreiser's faults as a novelist:

...You tell the horrible truth about Dreiser with surgical accuracy, but he still remains the best of the corn-fed herd. There is something Mary MacLaneish about him: his self-revelations are immense. Howells is too discreet and shallow. James is merely a fifth-rate Englishman. Dreiser really belongs to our fair republic, and shows the Knight of Pythias complex. I wish you knew him. He is more fun than a massacre.

The other authors referred to here are William Dean Howells (1837-1920), Henry James (1843-1916) and Canadian writer Mary MacLane (1881-1929), author of several scandalous "confessional" memoirs. The Knights of Pythias is an American fraternal organization devoted to the ideals of loyalty, honor and friendship.

The letter goes on to mention one of Mencken's forthcoming books (not named here, but probably the first series of his *Prejudices*) and touches on his pacifist politics:

My book will not appear until after the war. If I printed it now it would have to be expurgated to the point of inanity . . . I shall hold it, insert the ghastly truth, and then throw it overboard while the coroner's jury is still sitting.

I am 36, overweight, suffer from diabetes, chilblains and malaria, and am conscientiously opposed to war, Woodrow [Wilson] and capital punishment. Let the storm rage!

Mencken ends by recommending Willard H. Wright's *Misinforming a Nation* (1917), a diatribe against the Anglophilia of the *Encyclopaedia Britannica*; Wright's views would have meshed well with Mencken's own distrust of British "propaganda." Mencken was Wright's patron and mentor, and had helped the younger author obtain a position as culture columnist for the *New York Evening Mail*. 42139





Rare Complete Set

40. Morel, Bénédict Augustin (1809-73). Traité des dégénérescences physiques, intellectuelles et morales de l'espèce humaine. Text and atlas. xix, 700pp. (text); 23pp., 12 lithograph plates. Paris: J. B. Baillière, 1857. 210 x 133 mm. (text); 306 x 220 mm. (atlas). Text bound in quarter morocco, marbled boards, green vellum corners ca. 1857, slightly worn; atlas in quarter calf, marbled boards, green vellum corners ca. 1857, spine a little worn, small splits in lower hinges mended. Text volume a bit toned, otherwise very good. **\$**2750

First Edition, *complete with the atlas*, often not found with the text. "The main support for the theory of mental illness as regression, which dominated psychiatric practice for several decades. Morel described and illustrated the nature, causes and signs of human degeneration. He focused on physical signs but also included various intellectual and moral deviations.

This led to the classification of criminals and geniuses as types of degenerates or deviates along with the insane and neurotic. Morel emphasized the hereditary factor and his work helped bring about a de-emphasis on therapeutic work in the psychiatry of his time. The atlas reproduces by lithography some of the earliest photographs of the insane" (Garrison-Morton 4933.1). 41502



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"A Respectable and Useful School of Medical Science and Surgery in Our City"

41. Mott, Valentine (1785-1865). Autograph letter signed to Richard Harlan (1796-1843). New York, "15th of 1st mo" [i.e., January 15], 1820. 3pp. plus address. 230 x 189 mm. Tears along folds and lacuna where seal was broken expertly repaired, not affecting text. \$4500 Excellent letter to American physician and naturalist Richard Harlan from Valentine Mott, the most celebrated American surgeon of the first half of the nineteenth century. The letter discusses medical education at "our infant University"; i.e., Columbia College in New York, where Mott was professor of surgery. The letter provides intriguing information both about the administration of Columbia College's medical school and the college's reputation vis-à-vis its older, more established Philadelphia counterparts:

... Thou must know that our classes are not completely formed till about the New Year, and now I am enabled to furnish thee with the correct number of Pupils... . In our university those only matriculate who are pay pupils, these only we report as Students—all young practitioners and Graduates, of whom there are many, attending the Lectures are not reported by us, and therefore are not included in this estimate. The number of Students is about 160 ...

... [T]here is good ground for believing that our University will in time become useful to the country, reputable to the State, and profitable to the Professors-But it requires time for this, as for the reputation and success of a private practitioner; these rewards are fortunately the fruits of talents and well directed industry. It cannot be expected by <u>reasonable men</u> that our school will rival your University [i.e., the University of Pennsylvania, the first medical school established in the United States], whose fame has long since been established and will in all probability long continue to maintain the ascendancy. But the names of those who have given to Philadelphia its great name as a School of Physic will not always give it its present claim ... As far as my exertions can go, they shall contribute, and they shall be the most assiduous too, in creating at some future period a respectable

and useful school of medical science and Surgery in our City.

Mott was a pioneer in vascular surgery: In 1818 he became the first to tie the innominate artery (see Garrison-Morton 2942), and in 1827 he performed the first successful ligation of the common iliac artery (see Garrison-Morton 2950). He was one of the first American surgeons to successfully amputate at the hip joint (see Garrison-Morton 4451.1) and to excise the jaw for necrosis (see Garrison-Morton 4447). "During his career [Mott] performed nearly a thousand amputations, operated 150 times for stone in the bladder, and ligated forty large arteries. According to his former teacher, Sir Astley Cooper, he performed more major operations than any surgeon in history, up to his time" (Dictionary of American Biography). He was the author of over twenty medical papers, and prepared the annotated and greatly expanded English translation of Velpeau's Nouveaux elements de médecine opératoire, published under the title New Elements of Operative Surgery (1845-47). Mott also spent many years teaching surgery at various medical institutions, primarily Columbia College and the College of Physicians and Surgeons in New York. He remained active in his profession until just before his death, and received more honors during his career than any other medical man in America at that time.

Mott's correspondent, Richard Harlan, was a pioneer in the study of comparative anatomy and vertebrate paleontology in the United States in the early 19th century. In 1820 the young Harlan, just two years out of medical school, was employed as a teacher of anatomy at Joseph Parrish's private medical school in Philadelphia, which is no doubt why he was interested in medical education. Harlan would go on to have a distinguished career: A member of several American scientific societies, including the American Philosophical Society, he was the author of a number books and articles on anatomy, physiology, paleontology and zoology, the most important being *Fauna Americana* (1825), the first comprehensive zoological survey of North America. 42103

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The Latin "Opticks"

42. Newton, Isaac (1642–1727). Optice. . . . 4to. [14], 348, [2], 24, [2], 43, [1]pp. Leaf Ss1 a cancel. 19 folding engraved plates. London: Sam. Smith & Benj. Walford, 1706. 239 x 188 mm. Paneled calf ca. 1706, rebacked, endpapers renewed, a bit rubbed, corners reinforced. First and last leaves a bit soiled and stained, but otherwise a very good, crisp copy. 18th century owner's signature (A. Worden of Trinity College, Dublin), dated 1740, on title. \$10,000

First Edition in Latin of Newton's *Opticks* (1704), the most famous English book on optics. This edition contains seven added *quaestiones* (nos. 17–23), which are partly devoted to Newton's support for the corpuscular (or emission) theory of light, not found in the English edition. "In the new Queries, Newton expressed fundamental views on the nature of light, on the nature of bodies, on the relation of God to the physical universe, and on the presence in nature of a whole range of forces which furnish the activity necessary for the operation of the world and for its permanence. . . . The new Queries were the most informative of the speculations that Newton ever

published" (Westfall, *Never at Rest*, p. 644). The Latin edition also includes the two mathematical works at the end as in the English edition. As in most copies of this work leaf Ss1 is a cancel; the leaf was replaced because Newton had second thoughts about his original description of universal space as "the sensorium of God" (*sensorium Dei*). The Latin *Optice*, which made Newton's work on optics available to all European scientists, "revolutionized scientific thought and made him recognized as one of the greatest geniuses of all time" (Birren, *History of Color in Painting*, p. 20). *Descriptive Catalogue of the Grace K. Babson Collection of the Works of Sir Isaac Newton*, 137. Norman 1589. 41440



Common Origin of the Human Races

43. Prichard, James Cowles (1786–1848). Researches into the physical history of mankind. 5 vols. 23 plates (some hand-colored), folding map. London: Sherwood, Gilbert & Piper, 1837–47. 19th century calf gilt, slight wear along hinges. Plates in Vol. I toned, with two plates loose, minor offsetting from plates in other volumes, but very good. Laid into Vol. I is a letter dated Nov. 22, 1849 from American chemist [Oliver] Wolcott Gibbs (1822–1908) to Dr. F. U. Johnston, presenting this set to Johnston as thanks for his "kindness and care during my long illness." \$1500

Mixed edition, consisting of the fourth edition of Vol. I (1841) and the third editions of the remaining volumes (1837-41-44-47). Prichard's classic work on anthropology was originally issued in 1813 as a single volume without illustrations; by the third edition it had expanded to five volumes containing many colored plates."In that form it synthesized all then known information about the various races of mankind, forming a basis for modern ethnological research (Garrison-Morton 159). Prichard's interest in anthropology was stimulated by one of the pressing questions of his day: Did all the races of mankind have a common origin, as stated in the Scriptures, or did they spring from different ancestral stocks? Prichard, a confirmed monogenist, sought to demonstrate the common origin of the human races by compiling evidence from a variety of fields, including anatomy, physiology, comparative psychology, linguistics and cross-cultural studies. As his work proceeded Prichard became increasingly convinced that the last two categories were the most important in determining the history of races, so much so that he devoted four volumes of the five-volume third edition of *Researches* to cultural and linguistic "artifacts."

This copy was once owned by American chemist Wolcott Gibbs, professor of chemistry at Harvard from 1863 to 1887. Gibbs "is known for performing the first electrogravimetric analysis, namely the reductions of copper and nickel ions to their respective metals" (Wikipedia). *Printing and the Mind of Man* 303 (3rd ed.). Norman 1742 (3rd ed.). 41169



Rare Ethnographic Atlas

44. Prichard, James Cowles (1786-1848). Six ethnographical maps illustrative of "The Natural History of Man"... Folio. [4]pp. plus six hand-colored engraved folding maps. London and New York: H. Baillière, 1861. 437 x 284 mm. Original marbled boards, cloth backstrip, paper label on front cover, a little worn and rubbed, hinges tender. Front margins a bit frayed, a few tears along map folds, but very good. \$2750

Second edition, second issue (first edition 1843; first issue of second edition 1851). This atlas of six ethnographical maps was intended as a companion to Prichard's Natural History of Man, originally published in 1843, and the expanded five-volume edition of his Researches into the Physical History of Mankind (1836-1847

and subsequent eds.). The maps show the distribution of races and the physical history of mankind in Asia, Africa, Europe, the Americas and Oceania, and indicate the movement of cultures native to these continents over time. The atlas was sold separately from the text, and is quite scarce. 42183





Pneumatic Chemistry

45. Priestley, Joseph (1733–1804). Observations on different kinds of air. **In:** *Philosophical Transactions* 62 (1772): 147–264, I folding copperplate. Whole volume, 4to. xiv, 494, [2, including errata]pp. 12 (of 13) folding copperplates, *lacking Plate III* (not affecting the Priestley paper). London: Davis, 1772. 222 x 171 mm. Full antique calf, gilt, in period style. Small, almost invisible library blind-stamp on first and last leaves. Light foxing and toning, a few small tears in plates repaired, occasional offsetting from plates, but very good. \$3000

First Edition. The first of Priestley's remarkable papers on pneumatic chemistry. "In this essay Priestley showed that in air collected after the processes of combustion, respiration or putrefaction, one-fifth of the volume disappeared. He had also observed that mint grew vigorously in air tainted by animal respiration and that evidently plants reversed the process of polluting the air as respiration did. In this paper he also announced two new gases that he had obtained—nitrous oxide and carbonic oxide; these won him the Royal Society's Copley medal" (Dibner 40). Priestley's hundreds of experiments on different types of "air," carried out over several years, led to the identification of numerous gases, including ammonia, nitrogen dioxide and (most importantly) oxygen, which Priestley obtained in 1774 by heating mercuric oxide. Priestley's experiments with gases led Cavendish and Watt to discover the compound nature of water, and it was this revelation, coupled with Priestley's isolation of oxygen, that formed the experimental basis of Lavoisier's new oxidation chemistry. *Printing and the Mind of Man* 217. 42148



The First Aeronautical Exposition

46. Rives, Gustave. Rapport sur le premier salon de l'aeronautique. Grand Palais, Paris, Decembre 1908. 91, [5], [4, adverts.]pp. Text illustrations. Paris: Librairie des Sciences Aéronautiques, 1908. 285 x 230 mm. (partly unopened). Original printed wrappers, extremities of spine a little worn, light spotting. Very good copy. \$1250

First Edition. Catalogue of the first international aeronautical exposition, held in Paris in December 1908. Included are descriptions, diagrams and photographs of the aircraft exhibited (biplanes, monoplanes, blimps, etc.), plus portraits of aviators / inventors, a timeline and a bibliography of aeronautical literature. 42180





Standard Anatomical Reference

47. Roberts, K. B. and J. D. W. Tomlinson. The fabric of the body: European traditions of anatomical illustration. Oxford: Clarendon Press, 1992. xx, 638pp. Copiously illustrated. Original cloth, pictorial slipcase. Near-mint copy. **\$**375

First Edition of this standard reference work on the history of anatomical illustration. 41986




Beautiful 17th Century Anatomy

48. Spiegel [Spigelius], Adriaan van den (1578–1625). Opera quae extant, omnia. Edited by Johannes Antonides vander Linden (1609–1664). 2 vols. in 1. [24], 303, [15]; 199, [1]; [4], 49, [3]; lxxxvi, [6]; [6], 155, [9]pp. Engraved title, portrait of Spiegel by Jeremiah Falck, 97 engraved anatomical plates from Casserio's *Tabulae anatomicae* by Francisco Valesio after Odoardo Fialetti, 10 plates after Casserio to illustrate Spiegel's *De format foetu*, 10 engravings to illustrate the treatises in Vol. II. Amsterdam: Johannes Blaeu, 1645. 434 x 277 mm. 17th century calf, rebacked, slightly rubbed. First two leaves a bit soiled, early inscription crossed out on engraved title, one or two marginal tears expertly repaired, but a fine, unusually tall copy. From the library of James Ogilvie, 4th Earl of Findlater (1664–1730), with his signature on the dedication leaf and his initials in gilt on the front and back covers. \$20,000

First Collected Edition. Spiegel succeeded Giulio Casserio to the chair of anatomy at the University of Padua; his name survives in the terms *linea Spigelii* (the linea alba on the midline aponeurosis of the abdominal muscles) and *lobus caudatus hepatis Spigelii*. This collected edition of his works contains the three published during his lifetime—*Isagogae in rem herbariam* (1606), *De lumbrico lato liber* (1618) and *De semitertiana* (1624)—as well as *De humani corporis fabrica libri X* (1627), and *De formatu foetu* (1626), left in manuscript on Spiegel's death. *De humani* corporis fabrica was edited by Daniel Bucretius or Rindfleisch, who obtained from the heirs of Casserio seventy-eight anatomical plates by the German draftsman and engraver Joseph Maurer, originally prepared to illustrate Casserio's unfinished *Theatrum anatomicum*. Bucetius removed one spoiled plate and added twenty others drawn by Odoardo Fialetti and engraved by Francesco Valesio; five of these, depicting parts of the vascular and nervous systems, were derived from Vesalius. *De formatu foetu* was edited by Spiegel's son-in-law Liberalis Crema, who illustrated



the 1626 edition with nine copperplates purchased from Casserio's grandson; these plates, which depict the pregnant uterus, placenta and fetus, are among Casserio's most beautiful engravings. Johannes vander Linden, who edited the *Opera omnia*, added to *De formatu foetu* a tenth Casserian engraving representing the hymen, so that this edition of Spiegel's works "constitutes the most complete collection of original impressions of the eighty-seven plates from Casserius" legacy and the twenty added to them by Bucretius" (Choulant, p. 227).

In addition to the five works by Spiegel, the *Opera omnia* contains Gaspare Aselli's *De lactibus*, Johannes de

Waal's *Epistolae duae, de motu chyli & sanguinis*, vander Linden's *De monstrosis vermibus, observatio rara*; and the fifth printing of William Harvey's *De motu cordis*. The *Opera omnia* was the most elaborate work to which Harvey contributed; a portrait, painted when he was seventy-nine, shows Harvey with this edition of Spiegel's works spread open before him. This copy was once owned by James Ogilvie, fourth Earl of Findlater, who held a number of important political offices in both Scotland and England around the turn of the eighteenth century. Choulant, *History and Bibliography of Anatomic Illustration*, pp. 226–228. Keynes, *Harvey*, 5. Norman 1987. 41479



The First Modern Analysis of Mass Society

49. Tocqueville, Alexis de (1805-59). Democracy in America. 2 vols. xxx, 464; xx, 355pp. New York: Adlard and Saunders; George Dearborn & Co. [Vol. II: J. & H. G. Langley (etc.)], 1838-40. 224 x 142 mm. Original cloth, Vol. I spine faded, a bit worn and extremities and corners, Vol. II skillfully rebacked preserving original spine, tips of corners strengthened with polymer. Some foxing, but a very good set. 19th century owner's bookplate in Vol. I, 19th century bookplate of Harvard's Hasty Pudding Club Library in Vol. II.

First American Edition of this classic work of political and social science, the first modern analysis of mass society. "To be able to write about America with quoting Tocqueville has become no easy task, so de rigeur, so indispensable has his thought become to the consideration of nearly every aspect of Ameri-

can life....What makes Tocqueville unavoidable is that without having written a particularly systematic book, he nonetheless seems to have covered almost all the large and interesting subjects about America" (Epstein, "Introduction," in Tocqueville, *Democracy in America* [2000 reprint]). Howes T-278. 41892





The Only Collected Edition of Vesalius

50. Vesalius, Andreas (1514-64). Opera omnia anatomica & chirurgica cura Hermann Boerhaave (1668-1738) & Bernhardi Siegfried Albini (1697-1770). 2 vols., large folio. [44], 572; [8], 577-1156, [52]pp. Superb engraved title, portrait & 79 full-page copperplates by Jan Wandelaar (1690-1759), 37 engravings in the text, woodcut illustrations. Leiden: du Vivie ..., 1725. 461 x 282 mm. Full paneled calf in antique style. Occasional marginal dampstaining and spotting, tiny wormhole in lower margin of Vol. 2, but a fine, crisp and unusually tall and wide-margined copy. \$12,500

First, and remarkably, still the Only Edition of the collected works of Vesalius, published in luxurious format on excellent paper with no regard to cost by Boerhaave and his young colleague Albinus, with copperplate reproductions of the original Vesalian woodcuts by Wandelaar, who later engraved the plates for Albinus's magnificent anatomical atlases. Vesalius's *Fabrica*, the great 16th-century classic of anatomy, was still studied as a textbook in Boerhaave's day—Boerhaave himself used it while a student, and cited its illustrations numerous times in his *Institutes*. The *Fabrica*, of course, was often reprinted, as were Vesalius's lesser works; however, a complete collected edition of Vesalius had never been published until Boerhaave and Albinus undertook the task. "In a few years these two men succeeded in preparing this work for the press and in publishing it in two large folio volumes.... Boerhaave and Albinus added the modern anatomical nomenclature, so that students and physicians could understand the terms used by Vesalius. And so both Albinus and Boerhaave, in their own Latin works, were able to refer constantly to this edition of Vesalius. The whole work was preceded by a biography of the great sixteenth-century anatomist



[which] seems to have been written by Boerhaave" (Lindeboom, *Boerhaave*, p. 138). The 19th-century authority on Vesalius, Moritz Roth, called Boerhaave-Albinus edition a brilliantly written treatise in which Vesalius's astonishing achievements were shown for the first time.

Volume 1 contains a reprint of the 1555 edition of the *Fabrica*.Volume 2 reprints the *Epitome* of 1543, the China-root epistle, Fallopius's letter to Manna, Vesalius's *Examen* of Fallopius, and Cuneus's *Examen*. Inexplicably the editors omitted the Venesection letter but included the spurious *Chirurgia magna*. A few preliminary copies of volume 1 were issued with a titlepage dated 1724 in an effort to gain subscribers to the complete work (Cushing VI.D.-7). However, those copies consisted of only the first 358 pp. of the 572-page volume. Cushing VI.D.-8. Lindeboom, *Bibliographia Boerhaaviana* (1959), 554. Lindeboom, *Herman Boerhaave* (1968), pp. 137-41. 41491



Graphic Images of Neuroanatomy

51. Vieussens, Raymond (1641–1715). Neurographia universalis. Folio. [16], 252, [2, errata]pp. Engraved portrait of Vieussens and engraved arms of Cardinal de Bonsy, plus 30 superb copperplates (16 folding) by Beaudeau after drawings by the author. Leiden: Certe, 1665. 345×230 mm.Vellum ca. 1665, a little soiled. Edges of one or two plates frayed, traces of bookplate on front free endpaper, upper corner of front free endpaper cut away, a few tears repaired, but very good. Signature of Gottieb Schelwig (1683-1727), professor of philosophy and librarian at the Danzig Gymnasium, on the title; Schelwig's handsomely penned presentation inscription to Aegidius Glagau M.D. (1648-1737), a disciple of Boerhaave, on the front flyleaf.





First Edition, second issue, dated 1665; identical, except for the date, to the extremely rare first issue of 1664. All copies, of whatever issue, read "editio nova" on the title, even though they are of the first edition. This copy has the engraved portrait of the author, which is often lacking.

Vieussens's treatise, the result of ten years' study and the dissection of 500 cadavers, is the best illustrated neurological monograph of the 17th century. "Vieussens is credited with the first description of the pyramids, the inferior olive, the centrum ovale and the semilunar ganglion. He also went into great detail describing the peripheral nerves. Following the method of Variolus, he made some of the first successful attempts to tease out the internal structures of the brain, demonstrating the continuity of the corona radiata, the internal capsule, the cerebral peduncle, and the pyramidal fasciculi of the pons and medulla oblontaga" (McHenry, *Garrison's History of Neurology*, pp. 61–64). Vieussens' magnificent copperplates, the largest of which extend to 109×58 cm., are among the most aesthetically appealing of all depictions of the greater nervous system. Garrison-Morton 1379. Norman 2153. 41486



Invention of the Electric Battery Discovery of the Infra-Red Rays

52. Volta, Alessandro (1747-1827). (1) On the electricity excited by the mere contact of conducting substances of different kinds. In: *Philosophical Transactions* 90, part 2 (1800), pp. 403-31. Folding plate (famous illustration of voltaic pile). With: Herschel, Frederick William (1738-1822). (2) Investigation of the powers of the prismatic colours to heat and illuminate objects. Experiments on the refrangibility of the invisible rays of the sun. Experiments on the solar, and on the terrestrial rays that occasion heat. In: *ibid.*, pp. 255-326; 437-538. 12 folding plates. Whole volume, 4to. vi, 238, 26, [4], 239-436, [4], 437-732, [8]pp. 33 plates. London: W. Bulmer for Peter Elmsly, 1800. 218 x 164 mm. Full antique calf, gilt in period style. Light foxing, offsetting and toning, title leaf repaired, margins trimmed causing the loss of several plate numbers but not otherwise affecting the images or text. Very small, almost invisible library blind-stamps on title and last leaves. Very good copy. \$9500 (1) First Edition. Volta's epochal paper (in French), describing the voltaic pile, the first electric battery. In his paper, addressed to Sir Joseph Banks at the Royal Society, Volta described two types of battery (the pile and the "crown of cups" filled with salty or alkaline water and connected by bimetallic arcs), and, in a rebuttal to the Galvanists, represented his apparatus as being fundamentally the same as the natural electricity-producing organs of the torpedo fish. By providing a source of continuous, controllable electric current, Volta's battery revolutionized the theory and practice of electricity. The voltaic pile made possible the experiments leading to the decomposition of water, electro-deposition of metal, and creation of the electro-magnet, initiating the electrical age. *Printing and the Mind of Man* 255. Horblit 37b. Dibner 60.

(2) First Editions of Herschel's three papers announcing his discovery of infra-red rays. Herschel "made some delicate experiments at one end of the spectrum with a thermometer and discovered that when sunlight was refracted by a prism, invisible heat-rays fell outside the visible spectrum, being less refracted than red light. He had, in fact, discovered the infra-red rays" (*Printing and the Mind of Man* 254). 42151