Catalogue 54: Classics in Medicine, Science & Computing



HistoryofScience.com Jeremy Norman & Co., Inc. P.O. Box 867 Novato, CA 94948 Voice: (415) 892-3181 Fax: (415) 276-2317 R Email: orders@jnorman.com





I. Adams, George, the younger (1750-95). Essays on the microscope. . . . 4to & oblong folio. Mezzotint allegorical frontspiece after Duché, [iii]-xxiii, [1], 724pp., 32 engraved plates (numbered 1-31), mostly by Lodge after Milne. London: the author. . . , 1787. Text: 264 x 209 mm. Atlas: 250 x 370 mm. Tree calf ca. 1787, text volume with split in rear hinge, light wear. Frontispiece and some plates a bit trimmed (not affecting images), but a very good, clean set, in an unusually attractive contemporary

binding, with the plates in dark, rich impressions. \$3750

First Edition. The best summary of microscopy at the end of the eighteenth century, by the leading English maker, with 4pp. catalogue of instruments at end, and illustrations of a variety of microscopes in the atlas. Adams, son of British instrument maker George Adams the elder, introduced significant improvements to the microscope, including joint- and hinge-mounted limbs. His *Essays* became the standard work on microscopy into the nineteenth century.

Adams' work also describes microscopic observations of insects, "three hundred and seventy-nine animalcula" (i.e., microscopic animals), timber, minerals and salts. Most of the plates are derived from Hooke's *Micrographia*. His method of preparation of blood specimens is that essentially used today. 43652





"The Perfect Description of an Endocrine Disease"

2. Addison, Thomas (1793-1860). On the constitutional and local effects of disease of the suprarenal 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 and almost unnoticeably 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. Addison chanced upon adrenal disease while searching for the causes of pernicious anemia; his initial report on the subject, a short paper entitled "On anemia: Disease of the suprarenal capsules" (1849), attempted to link the two diseases. 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 anemia ("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. The edition binding of this work was glued with gutta-percha rather than sewn, and virtually all surviving copies typically require recasing. Garrison-Morton. com 3864. Norman / Grolier Medical Hundred 6oc. Heirs of Hippocrates 1502. Goldschmid, p. 194. McCann, pp. 87-89. Medvei, pp. 225-230. Norman 8. 41483



M. Plowder Ey M. P.

Inscribed to a Member of Parliament

3. Babbage, Charles (1791–1871). The exposition of 1851; or, views of the industry, the science, and the government, of England. xvi, 289 [1]pp. (lacks publisher's adverts.). London: John Murray, 1851. Diced calf ca. 1851, gilt spine, skillfully rebacked, retaining original spine. First and last leaves foxed, but a fine, clean copy. 214 x 136 mm. *Presentation Copy, inscribed on the half-title in Babbage's hand:* "M. C. Plowden Esqre. M. P. from the Author." Babbage presented this copy to a Member of Parliament, possibly with the hope of influencing government policy toward funding his calculating engines. \$6000

Second edition. The Great Exhibition of 1851, held at the specially constructed Crystal Palace in Hyde Park, London, was the first of the great international exhibitions held to celebrate progress in the world's arts and manufactures. Lyon Playfair, who played a leading role in organizing the exhibition, had originally suggested that Babbage be put in charge of the exhibition's Industrial Commission, but Playfair's suggestion was rejected by the British government, which was still at loggerheads with Babbage over funding for his calculating engines. Babbage was also refused permission to display the completed portion of his Difference Engine no. I at the exhibition, even though the exhibition's purpose was to display the latest advances in industry, and Babbage's machine, though built twenty years earlier, was arguably the finest product of precision mechanical engineering to date.

Angered at these slights, Babbage published this vitriolic history of the exhibition, in which he skewered the insularity and snobbism of its organizers, put forth his own ideas about how the exhibition should have been run, and sounded off on the corrupt state of science in England, much as he had two decades earlier. Chapter 13, entitled "Calculating engines," contains a description of the current state of development of his Analytical Engine. The expanded second edition, published a few months after the first, adds an extract from Charles R. Weld's *History of the Royal Society*, and also Augustus De Morgan's review of Weld's book, both of which give a supportive account of Babbage's Difference Engine project. Van Sinderen 1980, no. 61. *Origins of Cyberspace* 67. 39026







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Falsely Attributed to Surgeon-General Joseph Lovell

4. Beaumont, William (1785-1853). (1) A case of wounded stomach. In *The Medical Recorder of Original Papers and Intelligence in Medicine and Surgery* 8 (1825): 14-19. Whole volume, 8vo. xii, [2], 847pp. (2) Further experiments in the case of Alexis San Martin, who was wounded in the stomach by a load of duck-shot. . . . In *The Medical Recorder of Original Papers and Intelligence in Medicine and Surgery* 9 (1826): 94-97. Whole volume, 8vo. [6], 452, 8pp. Folding map. Together 2 volumes. 215 x 130 mm. Quarter calf, marbled boards in period style. Browned and foxed throughout because of the poor quality of paper used for this periodical. Perforated library stamps on title and 2 other leaves in Vol. I, library stamps on title and 2-3 other leaves in Vol. II but very good. \$3750

First Editions of Beaumont's first two papers on his groundbreaking experiments with gastric juice, issued several years prior to his famous *Experiments and Observations on the Gastric Juice* (1833). Beaumont's first paper on the subject, erroneously published under the name of Surgeon-General Joseph Lovell, was primarily devoted to the case history of Alexis St. Martin, the French-Canadian voyageur who had had a hole blown into

his stomach by the accidental discharge of a musket loaded with duck shot. On page 840 of this journal volume the editors corrected their mistake, noting that the paper was actually by Beaumont; they further stated that "we should be obliged to Dr. Beaumont for any further particulars of this case, which was considered as highly interesting, instructive and well drawn up." Beaumont's second paper, published a year later, contains the first account of the series of experiments Beaumont had begun with St. Martin in May 1825. Praised as "an American scientific landmark", Beaumont's paper "described a methodology and some controlled experiments that demonstrated the solvent properties of the gastric juice" (Nelson, *Beaumont: America's First Physiologist*, p. 132). Garrison-Morton.com 987.1, 987.2. Norman 150, 151. 43645





Ex-Libris Herbert Evans & Chauncey Leake

5. Beaumont, William (1785-1853). Experiments and observations on the gastric juice, and the physiology of digestion. 8vo. 280pp., text illustrations. Plattsburgh: F. P. Allen, 1833. 221 x 137 mm. Original boards, cloth spine with remains of paper label, light edgewear; preserved in a cloth slipcase. Foxing, sometimes heavy but a good copy in its original binding. From the library of Herbert M. Evans (1882-1971), with his bookplate; later owned by Chauncey D. Leake (1896-1978), with his note on paper wrapper enclosing the book. \$1500

First Edition. Beaumont, a U. S. Army surgeon, was the first to make an accurate scientific study of the physical phenomena of gastric digestion. While stationed at Fort Mackinac, Michigan, close to the Canadian border, Beaumont was presented with a unique opportunity in the person of one of his patients, the young French Canadian soldier Alexis St. Martin, who had been left with a permanent gastric fistula after suffering a gunshot wound to the stomach. Beaumont's experiments and observations, conducted between 1825 and 1831, conclusively established the chemical nature of digestion, the presence and role of hydrochloric acid in the stomach, the temperature of the stomach during digestion, the movement of the stomach walls and the relative digestibility of certain foods-all of which revolutionized current theories of the physiology of digestion. This copy is from the library of Herbert M. Evans, discoverer of vitamin E and human growth hormone; it was later given by Evans' daughter to Chauncey D. Leake, discoverer of the anesthetic properties of divinyl ether. On the paper wrapper in the slipcase Leake wrote: "Given to me by Mrs. Rolf La Frige, Herbert Evans' daughter Gail, through Warren Howell, June 24, 1972. This book means much to me, as it was the first of many biomedical classics which I discussed with Herbert Evans, when I came to California, green from Wisconsin, in 1929-Chauncey Leake." Facing the title page is the signature of Richard M. Eakin, a zoology professor at UC Berkeley who became famous for lectures in which he dressed up as historic figures. From the inscription it appears that Leake lent this copy to Eakin in March 1976 for a lecture in which Eakin impersonated Beaumont. Garrison-Morton.com 989. Dibner, Heralds of Science, 130. Fulton, pp. 186-190. Horblit 10. Norman 152. Norman, One Hundred Books Famous in Medicine, 61. 43594





One of Bell's Most Beautiful Works

6. Bell, Charles (1774-1842). The anatomy of the brain, explained in a series of engravings. 4to. vii, 87pp. 12 stipple-engraved (possibly combined with aquatint) plates, numbered I-XII; the first 11 hand-

colored; drawn by Charles Bell and engraved by Thomas Medland, Freeman, John Stewart and William Archibald. Plates I-X printed in colors as well as colored by hand. London: C. Whittingham for T. N. Longman and O. Rees; T. Cadell, Jun. and W. Davies, 1802. 297 x 232 mm. Later quarter calf, marbled boards, hinges cracking, light edgewear. Minor offsetting from plates, light toning but very good.

\$6000

First Edition. Charles Bell was one of the foremost British anatomists of the 19th century. His anatomical researches resulted in several important milestones, and he played an important part in the discovery of the Bell-Magendie law describing the discrete functions of the sensory and motor nerves. Bell was trained in art as well as in medicine, and his twelve plates illustrating the structure of the brain are among the most beautiful in neuroanatomy. Plate I is important for its accurate portrayal of the cerebral gyri. The plates have been described as aquatints, but upon examination most of the work appears to have been produced by stipple-engraving. Clarke & Dewhurst, *An Illustrated History of Brain Function*, p. 87. Gordon-Taylor, *Sir Charles Bell*, 4. Norman 168. 43650



Lord Belgray. Very ill bled three times - is he not 80? Cumunghow & Inthones Vinshi Place Dun John this is the end of the week When my prind that some fudow. some cof: Lation from harry duties. little present Cares. when Sean Minik of the inmate Fludger i treat. Still Sped here as his dream. athat awake Shight walk dam my friends in Westminthe This y hack The privaday disease here is inclu owhen Frend the English papers Sfer mud. account. Sorrawid for poor Middle ting ofelt for friend Hope with her shaken - we muster man other a please but Shace that dimmer also

A Remarkably Candid and Revealing Letter

7. Bell, Charles (1774-1842). Autograph letter signed to John Richardson (1780-1864). Ainslie Place [Edinburgh], February 3, 1837 [date from postmark]. 4pp., including address leaf. 229 x 189 mm. Marginal lacuna where seal was broken, affecting two words, small marginal tear in second leaf, minor soiling, but fine otherwise, and with Bell's wax seal intact. Complete transcription included.\$6000

An extraordinarily candid and revealing letter from surgeon and anatomist Charles Bell. Bell, a native of Edinburgh, received his medical degree from Edinburgh University in 1799 but spent most of his career in London, where he ran the Great Windmill Street School of Anatomy (established by William Hunter) and helped to found the Middlesex Hospital Medical School. In 1836 he returned to Scotland to take the position of professor of surgery at Edinburgh University. The present letter, sent about six months after Bell's departure from England, was written to John Richardson, one of Bell's oldest and closest friends, a lawyer who, like Bell himself, had left Scotland to seek his fortune in London. In the letter Bell spoke frankly about some of the difficulties he was experiencing in his new situation, including ongoing financial troubles and the inadequacies of his surgical colleagues. The overall tone of the letter is critical and somewhat depressed, which may be why it was not included in the *Letters of Sir Charles Bell* (1870).

Main thunks for taking my good friend Alic for and representation Direct in loit it. Carhlenne gesterday we don' with him such week. And friends rumark that he to in griat aparts a gaad prossoution . Lam in terms of dmin, with 6 of your Smaton here. a in Consultation on two sore! Let me hear for time to time a always first of the hanschola. Let me not ful that I have lost my surrest Marion has no lan plant but looks frank. that I have faids that I shall I los this affrant giving the Corner I promised - Ever truly your Poll.

The letter begins as follows:

Dear John, This is the end of the week when my mind has some freedom, some cessation from hourly duties, little present cares when I can think of the inmates of Fludyer Street. Still I feel here as in a dream & that awake I might walk down to my friends in Westminster thro G. park!

The prevailing disease here is unabated & when I read the English papers I fear much on your account. I sorrowed for poor Niddle [or Neddle] fainting & felt for friend Hope with her shaken nerves.

Fludyer Street in London, where Richardson and his family lived, had also been the site of Bell's first residence in that city; his biographer notes that "the walk from Fludyer Street to Piccadilly through St. James's and the Green Park was a favorite with Bell" (Gordon-Taylor, p. 16). The names mentioned in the second paragraph are most likely those of Richardson's children; the *Letters of Sir Charles Bell* includes a reference to Hope Richardson's wedding. Bell expresses his dissatisfaction with the state of surgical practice in Edinburgh:

... Indeed the practice here of surgery &c &c does not do—the errors I am forced to witness are painful. Tho the surgeons are well educated they want opportunities and when desperate cases, which are those I see, are under the family surgeon I have an office of great delicacy, both to do my duty & to save appearances—they want decision [i.e. lack decisiveness]—today I have seen a gentleman lost by five hours delay.

My class continues to be as much distinguished for order & attention as by members—would some of our chairs were better filled—Monro & Home are either careless or incapable. However all goes smoothly & really my hour from ten to eleven is the shortest & pleasantest in the day!

"Monro" refers to Alexander Monro *tertius* (1773-1859), who succeeded his grandfather and father as professor of anatomy at Edinburgh University. Monro's lack of ability as a teacher and administrator had led to a significant decline in enrollment at the university's medical school. We have not been able to identify "Home," but the reference cannot be to Sir Everard Home, who died in 1832.

In the next portion of the letter Bell discusses the worrying state of his finances. While in London Bell had been able to earn between $\pounds_{1,400}$ and $\pounds_{2,400}$ a year, but the professorship at Edinburgh paid only \pounds_{400} annually and Bell spent the last six years of his life struggling to supplement this meager income. His anxieties over money are clearly expressed here:

Altho' I knew that Brougham has nothing to do with the Minister, I wrote to him to get me a salary (for all the rogues have salaries but me)—. He answered that he was so provoked at them refusing me a pension that he wd not ask again—. I suppose his situation precludes him. He recommended me to apply to the Lord Advocate & I replied that I wd. be d___d [damned] first.

To you I have never made a [secret?] of Geo: Jos: difficulties & you might [per]ceive that my place here makes it rough on me. I paid \pounds 140 the other day for a printers account—bankrupt bill business. If I had got a salary I meant to have employed it in relieving him. I expect to be obliged to bind myself for no less a sum than \pounds 900. —Is it not hard. But for this I might make a respectable end of life.

Lord Brougham (Henry Peter Brougham, 1st Baron Brougham and Vaux [1778–1868]), another Edinburgh native, was a high-ranking British statesman who served as Lord Chancellor of England from 1830 to 1834. Brougham and Bell were old friends, and had collaborated on an annotated edition of William Paley's *Natural Theology*, published in 1836. Bell obviously hoped that Brougham would be able to pull some strings in his favor, either to increase his salary or to obtain him a government pension; however, at the time this letter was written Brougham had been out of office for three years and his political influence was diminished.

In the following paragraph Bell refers to expenses incurred by his brother George Joseph (1770-1843) in connection with the elder Bell's work for the Scottish government. In 1833 George Joseph had been made head of a royal commission to inquire into Scottish bankruptcy law, and it was he who was largely responsible for writing and issuing the commission's reports. It is evident from Charles Bell's letter that the commissioners were expected to pay their own printing costs for "bankrupt bill business," and that George Joseph was unable to do this without his brother's help.

In the remainder of the letter Bell mentions more old friends: his brother-in-law and former pupil Alexander ("Alic") Shaw (1804-90), a surgeon at Middlesex Hospital and author of *An Account of Sir Charles Bell's Discoveries in the Nervous System* (1860); and Henry Thomas Cockburn (1779-1854), a Scottish judge and one of the leaders of Scotland's Whig party. He ends the letter with these poignant words:

Let me hear from time to time & always first of the household. Let me not feel that I have lost my surest friends. Marion [Bell's wife] has no complaint but looks poorly as if this country did not agree with her & now that I have said that I shall close this without giving her the corner I promised [i.e., a corner of a sheet of this letter paper to write a personal note to Richardson]. Very truly yours, C Bell.

Gordon-Taylor, Sir Charles Bell: His Life and Times. Dictionary of National Biography. 40980



Ex-Libris Emile Bourquelot, Myron Prinzmetal and Chauncey Leake

8. Bernard, Claude (1813-78). Leçons sur les effets des substances toxiques et médicamenteuses. vii, 488pp. Text illustrations. Paris: Baillière, 1857. 214 x 136 mm. 19th century quarter morocco, marbled boards, spine a bit faded and worn, one corner bumped. Light toning but very good. Bookplate of French chemist and pharmacologist Emile Bourquelot (1851-1921). From the library of American cardiologist Myron Prinzmetal (1980-87), with his bookplate; Prinzmetal's gift inscription to pharmacologist and medical historian Chauncey D. Leake (1896-1978) on the half-title: "To my dear & wonderful teacher & friend C. L. from M. P. 2-20-62"; Leake's note on the rear endpaper: "The best copy of this classic I ever saw." Laid in is a slip of paper with Prinzmetal's pencil note: "C. L. / F[. . .] & Walter loved this. / M. P."; also a photograph of a bronze statue of Bernard annotated by Leake on the verso. \$950

First Edition. The great French physiologist Claude Bernard made significant contributions to anesthesia, developing a theory of general anesthesia based on experimental evidence and introducing new anesthetic techniques. His Lecons sur les effets des substances toxiques summarizes Bernard's researches on anesthetics and related substances up to the time of writing: "The 1857 lectures on toxic substances contained descriptions of the analyzed gaseous content of blood and a full account of the mechanism of toxicity of carbon monoxide. He demonstrated that the lethal effects of carbon monoxide were due to irreversible combination with hemoglobin, thus preventing transport of oxygen to tissues. The lectures included discussions on asphyxia and artificial respiration. In a clear account of curare's effects, he demonstrated that the drug causes paralysis by blocking the transmission of nerve impulses to muscles. After consideration of the poisonous actions of strychnine, venoms and nicotine, Bernard discussed the toxicity of alcohol, ether and chloroform, noting their interference with pancreatic and intestinal secretions, and with liver functions. Ether, he suggested, rendered an animal diabetic, probably by disturbing the glycogenic function of the liver. This was one of his great discoveries" (Leake, p. 112).

This copy has an excellent provenance, having belonged to Emile Bourquelot, who pioneered in the study of plant glycosides; Myron Prinzmetal, who made numerous important contributions to cardiology (see Garrison-Morton.com 2881) and was one of the first to explore the link between diet and heart disease; and Chauncey D. Leake, discoverer of the anesthetic properties of divinyl ether (see Garrison-Morton.com 5713), who had been Prinzmetal's teacher. Leake, "Historical note: Claude Bernard and anesthesia," *Anesthesiology* 8 (1971): 112–113. 43590



9. Bonet, Théophile (1620-89). A guide to the practical physician shewing from the most approved authors, both ancient and modern, the truest and safest way of curing all diseases . . . Folio. [12], 868 [i.e., 788], [4]pp., irregularly paginated. London: Thomas Flesher, 1684. 346 x 220 mm. Calf c. 1684, rebacked, corners repaired, endpapers renewed. Foxing and browning, but a good.copy. 20th century armorial bookplate of William Charles de Meuron Wentworth-Fitzwilliam, 7th Earl Fitzwilliam (1872-1943). \$1500

First Edition in English of Mercurius compitalitius (1683) by the Swiss physician Bonet, best known as the author of Sepulchretus sive anatomia (1679), the first systematic collection of pathological anatomy. Bonet's Guide is an encyclopedic compilation of diseases, arranged alphabetically in 18 books, plus a 19th book on remedies and a final book "concerning the office of a physician," discussing 63 topics on medical ethics and decorum, patient behavior, and guidelines for medical diagnosis, prognosis and practice."Based on Bonet's spending some forty years in curing the sick and drawing upon the writings of notable physician authors, 'The Office' is a captivating window into the practice of medicine. It describes in detail the remedies being used, the importance of empirical experience combined with knowledge of the curative treatments of the age, and recommendations for how to relate to patients in all matters-from the frequencies of physician visits to rules of consultation, to how the medicines of the times should be used, to stories about determining when patients are faking sickness" (Vanderpool, p. 15).

Bonet was remarkably modern in his ideas about treating the terminally ill. In "The Office" he included a detailed ethical discussion of how physicians should treat their dying patients, counseling doctors against abandoning these patients and advising them "plainly to foretell the Patient of his Death, when he desires to know the Event of his Disease."The *Guide's* chapter on "Agonia, or pangs of death," found in Book I, is devoted to palliative remedies for dying patients as a means of prolonging their lives. "Bonet's association of palliative measures with extending human life has been welcomed as a surprising finding in the 21st century over 325 years after Bonet discussed it at length" (Vanderpool, p. 17).Vanderpool, *Palliative Care: The 400-Year Quest for a Good Death*, pp. 15-17. Wing B3591. 43654







10. Boyle, Robert (1627–1691). Experiments and considerations about the porosity of bodies, in two essays. 8vo. [4], 145pp. (lacking final blank). London: Sam. Smith, 1684. 167 x 105 mm. Library buckram, hinges cracking. Small marginal stain on first several leaves, occasional foxing but very good. Early owner's signature on title. \$1850

First Edition. "To a modern physiologist the 'Porosity of Bodies' is of signal interest, for it marks the beginning of the study of osmotic pressure and of the exchange of substances through living membranes, which is at the basis of the regulation of all bodily processes. He commences by considering the skin and sweating, confirming Santorio's celebrated observations on loss of weight through insensible perspiration, but he points out that a larger fraction of the moisture is lost through the lungs than Santorio had supposed . . . There are interesting observations upon the absorption of medicines through the skin and through wounds . . . The second part of the essay deals with the porosity of solid bodies, and once more we find Boyle speaking in terms of atomic structure and arrangement . . . At the end there is an interesting section on the porosity of glass, in which the methods of staining glass are described at length" (Fulton, *A Bibliography of the Honourable Robert Boyle*, pp. 102–3). Fulton 149. 43643





"Tell Me What You Eat and I Will Tell You What You Are"

II. Brillat-Savarin, Jean Anthelme (1755-1826). Physiologie du gout, ou méditations de gastronomie transcendante . . . 2 vols., 8vo. [2], xiv, 390; 442pp. Paris: A. Sautelet et Cie., 1826. 206 x 126 mm. Quarter calf gilt, marbled boards ca. 1826, front hinge of Vol. I cracked, light edgewear. Occasional foxing but very good. \$5000

First Edition. "*La physiologie du gout* (1826) by Brillat-Savarin has been in print ever since its first publication, and is much the most famous of all gastronomic essays. Brillat-Savarin was a lawyer from Belley in the French Alps, and a bachelor who spent most of his life in Paris eating at the best tables. His tastes were shaped by both rural and metropolitan traditions of eating, and further diversified by a brief period as an émigré which took him as far as the USA and shooting wild turkeys in New England. His book was many years in preparation and published in the last few weeks of his life. It opens with a series of aphorisms, the most quoted of which is 'Tell me what you eat: I will tell you what you are.' These are followed by the 148 'Gastronomic Meditations' in 30 chapters which form the bulk of the book. Brillat-Savarin sets out the physiological knowledge of the day, on the sense of taste, appetite, and the nutritional qualities of foodstuffs, but in a light and witty way enlivened by many anecdotes" (Mennell, *All Manners of Food: Eating and Taste in England and France from the Middle Ages to the Present*, p. 268).Vicaire, *Bibliographie gastronomique*, cols. 116-117. 43644



Refuting Misconceptions in Science and Medicine; "Electricity" Coined

12. Browne, Thomas (1605–1682). Pseudodoxia epidemica: or, enquiries into very many received tenents, and commonly presumed truths. Folio. [20], 386pp. Lacking final blank. London: T.H. for Edward Dod, 1646. 272 x 178 mm. 19th century calf, with arms of Sir William Stirling-Maxwell (1818–78) on front and back covers, some wear at spine and edges, front hinge cracking. Margin of first leaf expertly repaired, tear in title also repaired, title a bit soiled, but a very good copy. Stirling-Maxwell's very large armorial bookplate inside front cover. \$950

First Edition, second state, with the imprint as above. In his second and largest work, often referred to as "Browne's Vulgar Errors," Browne drew upon his many years of reading, observation and experimental investigation to refute popular misconceptions in the fields of history, folklore, science, philology, natural history, medicine and embryology. Browne conducted numerous experiments in physics, comparative anatomy and biology, many of which were reported in *Pseudodoxia epidemica;* he also coined the term "electricity" (first printed here) to describe certain electromagnetic phenomena. "Except in matters of religious faith, [Browne] was unwilling to accept anything without carefully examining it in the light of such facts as he could gather. He has thus expressed himself regarding his own attitude: 'In philosophy, where truth seems double-faced, there is no man more paradoxical than myself, but in divinity, I love to keep to the road'" (Keynes, p. 51).

This copy displays the probable second state of the title, with the imprint reading "Printed by T.H. for Edward Dod, and are to be sold in Ivie Lane."The probable first state, which is scarcer, has the imprint reading "Printed by Tho. Harper for Edvvard Dod." Keynes, *Thomas Browne*, 73B. Norman 358. Wing B-5159. 43626





"The Greatest Medical Treatise Written by a Layman"

13. Burton, Robert (1577-1640). The anatomy of melancholy, what it is . . . the second edition, corrected and augmented by the author. Folio. [4], 64, [4], 188, [4], 189-332, [2], 333-557 [i.e., 567], [7]

pp. Oxford: John Lichfield and James Short for Henry Cripps, 1624. 284 x 180 mm.18th century mottled calf gilt, rebacked preserving original spine, light edgewear. Minor spotting and staining, a few marginal tears, small ink-stain on one leaf, a few small wormholes in upper margin of last few leaves, but very good. Early owner's signature ("Edward Parish") on title. \$3750

First Folio Edition (second overall) 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, *Bibliographia Burtoniana*, *2. Printing and the Mind of Man* 120 (first ed.). Hunter & Macalpine, pp. 94-98. 43637







One of the Most Famous Classics on Gout

14. Cadogan, William (1711-1797). A dissertation on the gout, and all chronic diseases, jointly considered . . . 8vo. [iii]-viii, 88pp.; lacking half-title (A1). London: J. Dodsley, 1771. 202 x 127 mm. 20th-century half morocco, gilt-lettered spine, cloth boards. Last leaf somewhat soiled and frayed, but very good. Partially trimmed early inscription [". . . Bagot"] on title. From the library of Haskell F. Norman, with his bookplate. \$1500

First Edition. Cadogan was one of the first to publicly blame the occurrence of gout upon its victims' immoderate habits, identifying the causes of the disease as "Indolence, Intemperance and Vexation." He rejected the traditional drastic treatments for gout, which included bleeding, purging and dosing with antimony, in favor of temperance, a moderate diet and regular exercise. These sensible recommendations did much to dispel the fashionable aura surrounding the disease and promoted a more rational and systematic approach to its alleviation. *A Dissertation on the Gout* was a sensation upon publication, going through eight editions in one year, but it was also severely criticized and lampooned by those unwilling to accept its tenets; Dr. Johnson, himself a sufferer, called it "a good book in general. . . but a foolish one as to particulars." Copeman, *A Short History of the Gout and the Rheumatic Diseases*, pp. 16–17; 85–87. Garrison-Morton.com 4498. Norman 384 (this copy). 43713



Massive Derivative and Original Anatomical Compendium With 264 Large Folio Plates

15. Caldani, Leopoldo Marco Antonio (1725–1813) & **Floriano Caldani** (1772–1836). Icones anatomicae, quotquot sunt celebriores, ex optimis neotericorum operibus summa diligentia depromtae et collectae....3 vols. in 4 (atlas) plus 3 vols. in 5 (text); text volumes titled *Iconum anatomicarum explicatio.* 9 volumes total. Large folio (atlas); folio (text). Text: 310; 336; 264; 277; [2], 424pp. Engraved titles and printed half-titles in all atlas volumes; title to Vol. I includes engraved portraits of both editors. Engraved frontispiece and 264 numbered plates, most accompanied by an outline plate. Venice: Joseph Picotti, 1801–14. 721 x 504 mm. (atlas); 364 x 257 mm. (text). 18th century half morocco gilt, mottled boards, light wear. Occasional dampstaining in text volumes, Vol. I of atlas with some light marginal dampstaining, tiny piece cut from corner of plate 17 (not affecting image), but overall a fine set, beautifully printed on thick paper. **\$12,500**

First Edition. A very large and impressive compilation of the best anatomical illustrations of the 17th and 18th centuries, "beautifully finished in the size of the originals" (Choulant / Frank, p. 328), supplemented with a number of plates after original anatomical preparations done by the younger Caldani. The *Icones anatomicae* was edited by the uncle-and-nephew team of Leopoldo and Floriano Caldani, both of whom were professors of medicine at Padua; the elder Caldani succeeded Morgagni as Padua's professor of anatomy. The Caldanis also prepared an accompanying text, *Icones anatomicarum explicatio*, containing explanations of the plates in the *Icones anatomicae*.



The plates drawn from Floriano Caldani's anatomical preparations include illustrations of the bursa mucosa, the skin, the ear, the tongue, the viscera, the heart and the portal vein. These original plates are noted in the text as being "Ex cadavere" (from a cadaver). The remaining plates are derived from the works of Albinus, Monro, Scarpa, Cruikshank, Cheselden, Haller, Duverney, Ruysch, Soemmerring, William Hunter, Mascagni, Vicq d'Azyr and others. The cost and work involved in creating the images new for this work and copying images from prior works would have been immense. This enormous work has long been undervalued in the antiquarian market.

Choulant states that "each finished plate is supplemented by an outline-plate, with the exception of Hunter's and Soemmerring's plates in the third volume [nos. 135-69], in which the outline-plates have been omitted." This statement is not completely true, as a significant minority of the plates in the remaining volumes of our set do not have outline plates; indeed, several of these plates have both outline and finished image on a single leaf. Choulant / Frank, *History and Bibliography of Anatomic Illustration*, pp. 327-29. *Heirs of Hippocrates* 962 (text and plates). Pybus 364 (plate vols. only). Not in Roberts & Tomlinson. 43716.

"The Ramus-Charpentier Mathematical Litigation"

16. Charpentier, Jacques (1521-74). Admonitio ad Thessalum, academiae parisiensis methodicum, de aliquot capitibus prooemii mathematici: Quae continent eiusdem Carpentarii praelectiones in sphaeram. 8vo. [4], 102 [i.e., 104]ff. Woodcut publisher's device on title, woodcut initials and headand tailpieces. Paris: Thomas Brumen, 1567. 165 x 108 mm. Vellum ca. 1567, spine repaired, endpapers renewed. Occasional marginal dampstaining, but a very good copy. \$2750

First Edition of one of the major works in the celebrated "Ramus-Charpentier Mathematical Litigation" between Charpentier, professor of medicine at the University of Paris, and the humanist philosopher Petrus Ramus (Pierre de la Ramée, 1515-72), regius professor of philosophy at the Collège Royal. The two men were longtime adversaries, having clashed over Ramus's outspoken criticisms of Aristotelian philosophy and his desire to reform the University's Church-controlled medieval curriculum, particularly in the instruction of mathematics and logic.

Ramus and Charpentier's "mathematical" dispute began in 1565, when Pasquier Du Hamel, the University's regius professor of mathematics, died and an unqualified Sicilian, Dampestre Cosel, was appointed to succeed him. Ramus objected both to Cosel's ignorance of mathematics and to the system of patronage and influence-peddling that had resulted in his appointment; he successfully pressured Cosel to resign the professorship and in 1566 persuaded Charles IX to issue a royal decree requiring that all future candidates for regius professorships undergo a competitive examination to determine their fitness for the position.

While this was happening Charpentier, despite his ignorance of mathematics, claimed the vacant chair for himself, obtaining letters patent from Charles IX confirming him in the post without undergoing any public scrutiny of his qualifications. Ramus lost no time in attacking Charpentier, going before Parlement to accuse his old enemy of purchasing the mathematics chair from Cosel and violating the king's decree regarding examinations for regius professors; he demanded that Charpentier demonstrate his mathematical abilities before being allowed to take the chair. Charpentier fought back, both in a hearing before Parlement in which he and Ramus argued their separate positions, and in several published works including his Admonitio ad Thessalum ("Warning to Thessalus"), "Thessalus" being Charpentier's name for Ramus. In this work Charpentier attacked Ramus's mathematical views while hinting broadly at their heretical nature; he accused Ramus of claiming that mathematics "constitutes the essence of things, prior to substances" (Golding, p. 21). Golding, "What's so great about mathematics? Some Renaissance responses," in Proceedings of the Symposium on Christoph Clavius (2005), pp. 19-22. Skalnik, Ramus and Reform: University and Church at the End of the Renaissance (2002), pp. 80-86. For a detailed account of the Ramus-Charpentier controversy, see Golding, "Pythagoras in Paris: Petrus Ramus imagines the prehistory of mathematics," Configurations 17 (2009): 51-86. 43686

IAC. CARPEN-TARII, REGII PRO-FESSORIS, AD-MONITIO. Monition. Mathematici: que continet ciu/dem Carpentarij preletici: que continet ciu/dem Carpentarij preleticines in Spheram. Ad Illuftrifsimum Cardinalem & principem Carolum Locaringum.



PARISIIS, Apud Thomam Brumennium, in claufo Brunello, fub figno Oliuz. 1567.





Signed Copy in the Scarce Dust-Jacket

17. Cushing, Harvey (1879-1939). From a surgeon's journal. xxi, 534pp. Frontispiece and 34 unnumbered plates. Boston: Little, Brown & Co., 1936. 228 x 158 mm. Original cloth, dust-jacket (cor-

ners of front flap clipped, a few tears and nicks, one tear mended with clear tape), gilt stamping on spine rubbed. Very good copy, *signed by Cushing on a blank leaf inserted after the title, as in some special copies.* \$1250

First Edition, one of the special copies of this work with a blank leaf signed by Cushing inserted after the title; this blank leaf is not present in ordinary copies. The book consists of extracts from the voluminous diary that Cushing kept during his service as a military surgeon during World War I, covering the period from March 1915 to November 1918. "During the first months of 1935 H.C. occupied himself with his war journal. It had been bound up in nine fat volumes



of approximately a thousand pages each and while he extracted a good many entries bodily for the published volume, it is of some interest that he 'edited' nearly every passage, now and again adding and subtracting—additions being made on the basis of other contemporary records. He was inclined to hold his own memory in contempt, and as a rule was over-conscientious about avoiding additions which could not be fully documented" (Fulton, *Life of Harvey Cushing*, p. 657). *Bibliography of the Writings of Harvey Cushing*, no. 22. 43712

YALE UNIVERSITY THE SCHOOL OF MEDICINE NEW HAVEN · CONNECTICUT DR. HARVEY CUSHING September 18, 1939 Dear Creighton: Thanks for your note. Schuman's Seventy Noteworthy Medical Acritics, one for every birthday, not only rather staggered me but cost me sixty dollars - the outrageous price he asked for the first and second volumes of the Charaka Cube publications, the only two missing in my set which I felt obliged to complete. But if this William W. Welch published in New Haven, 1857 was one of the seventy iteas, I completely overlooked it. I don't guite know who William W. may have been, though I take it for granted he was one of the Welch's of Norfolk concerning whom I wrote the enclosed skit some five years ago, and which I herewith inscribe to you. I wish I had known that you had been here this summer, for I should have promptly made a date with you. I have been here without interruption knee-deep in a <u>blo</u>-bibliography of Vesalius -indeed more than that for I have occasionally become completely bogged quite up to my nock. It is the second time I have tackled the subject, once twenty-five years ago. Both times to my great consternation 1t has brought on a Great War, for which I can't take the suffic blame though part of it. Always affy, Hary Cum P.S. How shocking! I have just come upon Schuman's alogue. The Charaka Club volumes must have come from another alogue inscribed to me, I think, by a Hoosler from Indiana named so. It is separantly gotting to be quite the thing. But I wish ooked as young as that photograph Schuman has dug up from somewhe Dr. Creighton Barker 129 Whitney Avenue New Haven, Connecticut

Superb Letter on Book Collecting and his Vesalius Bibliography, Written Three Weeks Before his Death

18. Cushing, Harvey (1879-1939). Typed letter signed to Dr. Creighton Barker (1892-1960). 1 sheet. New Haven, September 18, 1939. 280 x 217 mm. Tipped into: **Cushing.** The Doctors Welch of Norfolk. Offprint from *The New England Journal of Medicine* 210 (1934). 6, [2]pp. 229 x 153 mm. Original printed wrappers. Fine copy, inscribed by Cushing on the front wrapper: "Creighton Barker from his friend Harvey Cushing." \$2750

An excellent letter discussing Cushing's activities as a book collector, the Schuman's catalogue issued in honor of his seventieth birthday (*Seventy Noteworthy Medical Rarities, in Honor of the Seventieth Birthday of Dr. Harvey Cushing* [1939]), and his ongoing work on the *Bio-Bibliography of Andreas Vesalius*, a task interrupted by his death from heart disease less than three weeks after this letter was written (the work was published posthumously from Cushing's notes in 1943).

... Schuman's Seventy Noteworthy Medical Rarities, one for every birthday, not only rather staggered me but cost me sixty dollars—the outrageous price he asked for the first and second volumes of the Charaka Club publications, the only two missing in my set which I felt obliged to complete.

Schuman's catalogue apparently mentioned a William W. Welch, possibly referring to William Wickham Welch (1818-92), the father of Johns Hopkins Hospital co-founder William H. Welch (1850-1934):

... if this William W. Welch published in New Haven, 1857 was one of the seventy items, I completely overlooked it. I don't quite know who William W. may have been, though I take it for granted he was one of the



Welch's of Norfolk concerning whom I wrote the enclosed skit [*The Doctors Welch of Norfolk*] some five years ago, and which I herewith inscribe to you.

Cushing ended his letter with a jocular reference to his magisterial bibliography of the works of Andreas Vesalius:

... I have been here without interruption knee-deep in a bio-bibliography of Vesalius—indeed more than that for I have occasionally become completely bogged quite up to my neck. It is the second time I have tackled the subject, once twenty-five years ago. Both times to my great consternation it has brought on a Great War, for which I can't take the entire blame though part of it.

In a postscript Cushing mentions Schuman's catalogue again, wishing that he "looked as young as that photograph Schuman has dug up from somewhere." Cushing's correspondent, Dr. Creighton Barker, was a trustee of Yale University and an officer of the Connecticut State Medical Society. 43651

Fundamental Discovery in Cerebral Function– The Very Rare Offprint

19. Flourens, Pierre (1794–1867). Recherches physiques sur les propriétés et les fonctions du systême nerveux dans les animaux vertébrés. Offprint from *Archives générales de médecine* 2 (1823). [2], 50pp. 201 x 122 mm. Modern quarter morocco, marbled boards. Fine copy. \$3750

First Edition, Offprint Issue of Flourens' first and perhaps greatest paper on cerebral function. In an effort to refute Gall's theory of cerebral localization, Flourens carried out a famous series of experiments on pigeons, in which he selectively removed either the cerebral lobes or the cerebellum in order to demonstrate their roles in brain physiology. The pigeons deprived of their cerebral lobes retained their sense of equilibrium, but lost all sense of volition and showed no sensory awareness of their surroundings; in contrast, those deprived of their cerebellums lost all ability to coordinate their muscular motions, but retained their ability to initiate movement and process sensory information. Flourens concluded from these experiments that the cerebral lobes were the seat of intelligence and perception, while the faculty of muscular coordination resided in the cerebellum; however, he insisted that the entire brain acted as a whole with respect to each of its functions. Garrison-Morton.com 1391. Norman 803 (offprint issue). Clarke & O'Malley, The Human Brain and Spinal Cord, pp. 483-488; 656-660. 43715



Rare State with the Plates Printed in Sepia

20. Galvani, Aloysio Domenico [Luigi] (1737–1798). De viribus electricitatis in motu musculari commentarius cum Joannis Aldini dissertatione et notis. Edited by Giovanni Aldini (1762–1834). 4to. xxvi, [2, blank], 80pp. 3 folding engraved plates printed in sanguine, letter "E" in figure 22 uncorrected. Modena: apud Societatem Typographicam, 1792. 277 x 209 mm. Vellum ca. 1792, title inked on spine, front cover a bit warped. Minor dust-soiling, a few unobtrusive marginal dampstains, small library stamps on title, last leaf and versos of plates, but very good. From the library of American pediatrician Abraham Jacobi (1830–1919), founder of the first children's clinic in the U.S., with his signature on the title; bookplate of the Medical and Chirurgical Faculty of Maryland noting Jacobi's gift of this copy. \$12,500

First Edition in Book Form. In his experiments on the irritable responses provoked by static electricity in prepared frogs, Galvani inadvertently discovered the central phenomenon of galvanism: The production of electric current from the contact of two different metals in a moist environment. Galvani interpreted his results differently, however, seeing them as confirmation of the eighteenth-century speculation that the nerves and muscles of animals contain a special type of "animal electricity" distinct from the frictional electricity produced by electrical apparatus such as the Leyden jar.

Galvani first published his theory of animal electricity in Vol. 7 of *De Bononiensi scientiarum et artium instituto atque academia* (1791), where it excited much interest and controversy. The present book-form edition appeared the following year, edited by Giovanni Aldini, Galvani's nephew and premier apologist. Aldini prefaced Galvani's



report with his own theory of animal electricity, and appended the exchange of letters between Don Bassano Carminati and Galvani in which Carminati reported Volta's replication of Galvani's experiments and critique of the animal electricity hypothesis.

The plates in this copy are printed in sanguine, a reddish-brown ink. In some copies the plates are found printed in black, most of which have the letter "E" in Figure 22 corrected to "B"; based on this evidence and the "extraordinary freshness" of the images, Fulton and Cushing ("A bibliographical study of the Galvani and



the Aldini writings on animal electricity," *Annals of Science* I [1936]: 239–268) claimed priority of issue for the sanguine plates. However, a black-printed plate has been noted with the letter "E" uncorrected, thus suggesting that there is no discernable priority among uncorrected plates printed in either color (corrected plates can be presumed to be of the second issue). Fulton & Cushing, "A bibliographical study of the Galvani and the Aldini writings on animal electricity," *Annals of Science* I (1936), no. 5. Norman 869. 43632



One of the First Early Modern Works in Experimental Science

21. Gilbert, William (1544–1603). De magnete, magneticisque corporibus, et de magno magnete tellure. . . . Folio. [16], 240pp. Text woodcuts, folding woodcut plate. London: Peter Short, 1600. 296

x 194 mm. Recently bound in old vellum antiphonal leaf, cloth ties; preserved in a cloth drop-back box. Corner of leaf *2 repaired, minor stains on p. 46, light foxing, but very good. \$18,500

First Edition. "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). Gilbert divided his work into six books, the first of which gave an outline of the history of magnetism and introduced his new hypothesis that the earth itself was a magnet. In chapter 2 of the second book, Gilbert distinguished the effects of electricity from those of magnetism, thus establishing electrical studies as a separate discipline; he also introduced the terms "electricity,""electric force," and "electric attraction," and described the first instrument (the versorium) for measuring electricity. In the remainder of his treatise, Gilbert discussed the five known movements associated with magnets-coition, direction, variation, declination and revolution-and discussed them in terms of the earth's magnetism, using data obtained from experiments with a small spherical magnet ("terella") which, he believed, duplicated the earth's magnetism in miniature. Heilbron, pp. 169-179. Printing and the Mind of Man 107. Horblit, 100 Books Famous in Science, 41. Dibner, Heralds of Science, 54. Norman 905. S.T.C. 11883. 43653





Goddard's Only Two Publications on Rocketry

22. Goddard, Robert H. (1882-1945). A method of reaching extreme altitudes. *Smithsonian Miscellaneous Collections* 71, no. 2. 8vo. [4], 69, [1]pp. 5 plate leaves with plates numbered 1–10. Washington, D.C.: Smithsonian Institution, 1919. 246 x 168 mm. Original tan printed wrappers, preserved in a folding cloth box. Wrappers chipped at spine and corners, front hinge partially split, otherwise a very good copy. From the library of Harrison D. Horblit (1912–88), author of the noted bibliography *One Hundred Books Famous in Science* (1964), with his bookplate on the inner flap of the folding box.

\$12,500

First Edition of the earliest practical treatise on the development of rocketry for space flight. "Like the Russian hero Konstantin Tsiolkovsky and the German pioneer Hermann Oberth, Goddard worked out the theory of rocket propulsion independently. . . . Having explored the mathematical practicality of rocketry since 1906 and the experimental workability of reaction engines in laboratory vacuum tests since 1912, Goddard began to accumulate ideas for probing beyond the Earth's stratosphere. His first two patents in 1914, for a liquid-fuel gun rocket and a multistage step rocket, let to some modest recognition and financial support from the Smithsonian Institution. . . . The publication in 1919 of his seminal paper 'A Method of Reaching Extreme Altitudes' gave Goddard distorted publicity because he had suggested that jet propulsion could be used to attain escape velocity and that this theory could be proved by crashing a flash-powder missile on the moon. Sensitive to criticism of his moon-rocket idea, he worked quietly and steadily toward the perfection of his rocket technology and techniques. . . . Among Goddard's successful innovations were fuel-injection systems, regenerative cooling of combustion chambers, gyroscopic stabilization and control, instrumented payloads and recovery systems, guidance vanes in the exhaust plume, gimbaled and clustered engines, and aluminum fuel and oxidizer pumps" (*Dictionary of Scientific Biography*).

The secretive Goddard published only two booklets on rocketry, of which this is the first. The remainder of his work was documented in patents. Goddard's booklet of 1919 was preceded by the theoretical writings of Tsiolkovsky published in Russian, 1903-1914, and by the theoretical paper by Esnault-Pelterie published in French in 1913. Goddard & Pendray, *The Papers of Robert H. Goddard*, I, 233-38. 43688

23. Goddard, Robert H. (1882-1945). Liquid-propellant rocket development. 10pp. 6 plate leaves. Washington, DC: Smithsonian Institution, 1936. 246 x 163 mm. Original printed wrappers; preserved in a cloth drop-back box. Fine copy. From the library of aviation and aerospace pioneer Theodore von Kármán (1881-1963), with his stamp and docketing on the front wrapper. Front wrapper inscribed "Nat'l Research Council," with stamp beneath reading "Division of Chemistry and Chemical Technology."

First Edition of Goddard's second and last published paper on rocketry. "With an eye toward patentability of demonstrated systems and with the aid of no more than a handful of technicians, Goddard achieved a series of workable liquid-fuel flights starting in 1926. Through the patronage of Charles A. Lindbergh, the Daniel and Florence Guggenheim Foundation, and the Carnegie and Smithsonian institutions, the Goddards and their small staff were able to move near Roswell, New Mexico. There, during most of the 1930s, Goddard demonstrated, despite many failures in his systematic static and flight tests, progressively more sophisticated experimental boosters and payloads, reaching speeds of 700 miles per hour and altitudes above 8000 feet in several test flights" (*Dictionary of Scientific Biography*).

This copy is from the library of aeronautics pioneer Theodore von Kármán, who in addition to directing the Jet Propulsion Laboratory at Caltech was also the founder of the Aerojet Engineering Corporation, one of the industrial giants of the jet age. "At Caltech, Karman and his students laid the foundations for aerodynamic design leading to supersonic flight" (*Dictionary of Scientific Biography*). 43705







2. Assistant igniting the rocket shown in figure 1.



"One of the Greatest Names in Medical Bibliography"

24. Haller, Albrecht von (1708-77). Bibliotheca anatomica qua scripta ad anatomen et physiologiam facienta a rerum initiis recensentur. 2 vols., 4to. [2], viii, 816; [6], 870pp. London [i.e., Zürich]: Prostant apud Carol. Heydinger . . . [Vol. I]; Zürich: Orell, Gessner, Fuessli et Socc. [Vol. II], 1774-77. 252 x 202 mm. (uncut). 18th century vellum, worn, Vol. I rebacked and with new endpapers. Minor foxing and dust-soiling, edges of leaves a bit frayed, but a good set. Old library stamps on titles and on several leaves throughout each volume. \$1250

First Edition; English issue of Vol. I, consisting of the original sheets (printed in Zürich) with cancel title. "Haller is one of the greatest names in medical bibliography. While pursuing his monumental scientific career he found time to compile bibliographies of botany, anatomy, medicine and surgery, which together form the most exhaustive summary of previous writings on these subjects" (Garrison-Morton.com 438). The present work is Haller's bibliography of anatomy, consisting of two thick quarto volumes containing almost 1700 pages; Vol. I covers the period from ancient times to 1700 and Vol. II the years 1701 to 1774. "[Haller's] reputation as a bibliographer rests upon his four *Bibliothecae*, the compilation of which occupied him during the last ten years of his life . . . In each of these massive compilations the materials are arranged chronologically, each author being given a numbered section, and following his name a brief statement is made of his university and professional connections. His writings are then listed with an accurate transcription of the titles . . . Following each title, Haller gives a résumé of the contents of the book, usually with critical comment on the author's conclusions and anything else about the book that he considered novel or interesting" (Fulton, *The Great Medical Bibliographers*, pp. 43-44). 43636

First Large Meeting of Computer Professionals

25. Harvard University Computation Labo-

ratory. Symposium on large-scale digital calculating machinery. Proceedings. . . . Jointly sponsored by the Navy Department Bureau of Ordnance and Harvard University at the Computation Laboratory, 7–10 January 1947.Volume XVI in the Annals of the Computation Laboratory of Harvard University. [2], xxix [1], 302pp. Text illustrations. 268 x 199 mm. Cambridge: Harvard U. P., 1948. Original dark blue cloth, pictorial dust-jacket (a few tiny chips and nicks). Fine copy. From the library of Harry R. Mimno (1900–1981), professor of applied physics at Harvard and a participant in the conference (see p. xxiv), with his signature on the front pastedown. \$1250

First Edition, with the Scarce Dust-Jacket. The 1947 "Symposium on Large-Scale Digital Computing"—the first large meeting of professionals in the computer field—was held in connection with the official opening of Harvard University's new Computation Laboratory in January of that year. The symposium provided one of the first forums for discussion of the problems and approaches in the design, construction, operation, and application of computers. It was organized by Howard Aiken, head of the Computation Laboratory, who during the postwar years devoted a good portion of his energies to a "one-man propaganda campaign to spread the use of computers" (Welch, p. 171).

The symposium's primary focus was on technological approaches to machine computation. Over three hundred people attended the conference, including Alan Turing, Edmund Berkeley, Grace Hopper, Wallace Eckert, Jay Forrester, John Mauchly, Herman Goldstine, George Stibitz, and Norbert Wiener (who caused something of a stir when, for ideological reasons, he withdrew at the last minute from presenting a paper at the symposium).

This copy was originally owned by Harvard physicist Harry R. Mimno, a participant in the conference, who played a significant role in the planning and building of the Harvard Mark I computer; see *Makin' Numbers*, p.



Homes



32. Origins of Cyberspace 414. Welch, "Aiken's program in a Harvard setting," in Cohen and Welch, eds., Makin' Numbers: Howard Aiken and the Computer (Cambridge: MIT Press), pp. 163–81. 43631

PRESENTED TO George Edward Paget. M.D. Harveian Orator 1866. By the Royal College of Physicians of London.

In a Presentation Binding

26. Harvey, William (1578-1657). Opera omnia: A collegio medicorum Londinensi edita. Edited by Mark Akenside. 4to. [8], xxxviii, [2], 673pp., including errata leaf. *Lacking leaf Rr1*, the half-title to Tomus Secundus. Engraved frontispiece portrait, plate. 294 x 234 mm. Mid-19th century calf gilt, front cover stamped with the arms of the Royal College of Surgeons. Rebacked retaining original backstrip. Light toning & foxing, but very good. [London]: A Collegio Medicorum Londinensi, 1766. Presented by the Royal College of Physicians to Sir George Edward Paget (1809-92), the Harveian Orator for 1866, with bookplate commemorating the presentation on the front pastedown. \$2750

Second collected edition in Latin. "Harvey's chief works in Latin have only twice been printed in a collected form, first by van Kerckhem at Leyden in 1737, and secondly by Bowyer for the Royal College of Physicians in 1766. The latter is an imposing volume with a fine engraved portrait" (Keynes, p. 100). This edition also includes a life of Harvey and a list of emendations in the 1628 *De motu cordis* and the 1649 *De circulatione sanguinis*. This copy of Harvey's collected works was presented by its publishers, in a presentation binding, 99 years after its publication. Keynes 47. 43641







Conservation of Energy

27. Helmholtz, Hermann von (1821–1894). Über die Erhaltung der Kraft, eine physikalische Abhandlung. . . . [4], 72pp. Berlin: G. Reimer, 1847. 214 x 133 mm. 19th century half calf, marbled boards, rebacked and corners repaired, endpapers renewed. Very good copy. 19th century engraved bookplate of Dr. Edmund Atkinson (1831–1901), professor of applied science at the Royal Military Academy, Sandhurst (Great Britain). \$20,000

First Edition. On the basis of this short paper, written when he was only twenty-six, Helmholtz is ranked as one of the founders, along with James Joule and J. R. von Mayer, of the principle of conservation of energy. The paper sets forth the philosophical and physical basis of the energy conservation principle. Helmholtz maintained that the scientific world view was based on two abstractions, matter and force, and since the only possible relationship that can exist among the ultimate particles of matter is a spatial one, then ultimate forces must be moving forces radically directed. This can be inferred from the impossibility of producing work continually from nothing. Helmholtz analyzed different forms of energy and different types of force and motion, grouping them into two categories, active (kinetic) and tension (potential). He also gave mathematical expression to the energy of motion, providing an experimental measure for research on all forces, including those of muscle physiology and chemistry. Dibner, *Heralds of Science*, 159. Garrison-Morton.com 611. Horblit, *100 Books Famous in Science*, 48. Norman 1039. *Printing and the Mind of Man* 323. 43633



"Most Prestigious Scientific Work Ever Produced up to that Time"

28. Humboldt, F. W. H. Alexander von (1769–1859). Kosmos. Entwurf einer physischen Weltbeschreibung. 4 vols. text plus oblong folio atlas by Traugott Bromme (1802–66) and index (Vol. V). Folding table in Vol. III; 42 plates in the atlas, mostly hand-colored wood or steel-engraved thematic maps & some plain aquatint views. Stuttgart: Cotta, 1845–62 (text); Krais & Hoffmann, [1851] (atlas). 220 x 136 mm. text and index; 278 x 337 mm. atlas. Text and index bound in quarter morocco gilt, mottled boards c. 1862, spines a bit rubbed, light wear to edges and corners; atlas in paste paper boards ca. 1862, rebacked, endpapers renewed, light edgewear. Title of atlas a bit soiled, but otherwise a very good, remarkably clean set. \$2750

First Editions of All Volumes. To say that *Kosmos* embraces Humboldt's diverse interests in one popular science work, is to say that it includes founding material in the sciences of geography, plant geography, orography, climatology and meteorology, among others. "Written in superb literary style, the *Kosmos* became the most prestigious scientific work ever produced up to that time. It was an immense success. The first edition of volume I was sold out in two months. Soon it had been translated into many languages . . .





"The *Kosmos* put together in one unified work all the various interests and discoveries of Humboldt's lifetime. In the first volume there is a general presentation of the whole picture of the universe. The second volume starts with a discussion of the portrayal of nature through the ages by landscape painters and by poets and then continues with a history of man's effort to discover and describe the earth since the time of the ancient

Egyptians. Humboldt's enormous erudition becomes especially clear in this second volume. The third volume deals with the laws of celestial space, which we would call astronomy. The fourth volume deals with the earth, not only with geophysics, but also with man" (James, *All Possible Worlds. A History of Geographical Ideas* [1972], pp. 162–63). The work also provides citations to 9,000 sources, making it an invaluable reference for the history of science. The atlas reflects the latest trends in cartography with its colored thematic maps.

Kosmos, as Humboldt conceived it, consisted of the four text volumes only. Although *Printing and the Mind of Man* calls for the atlas, this was actually issued separately without Humboldt's participation. The same is true of the work's posthumous fifth volume (1862), which contains the index. *Printing and the Mind of Man* 320. *Dictionary of Scientific Biography*. Sabin 33726 (text) & 8201 (atlas). 43707





29. Hunter, William (1718–83). Medical commentaries. Part I [all published]. Containing a plain and direct answer to Professor Alexander Monro jun. Interspersed with remarks on the structure, functions, and diseases of several parts of the human body. 4to. vii, [1], 103 [i.e. 113]pp. 4 engraved plates after van Rymsdyk. London: A. Hamilton for A. Millar, 1762. 282 x 230 mm. 18th century half calf, marbled boards, rebacked. Some foxing and toning but very good. Stamp of the Northern Ireland Royal College of Surgeons on the title. \$2750

First Edition of the only book-length text publication of Hunter's career. The *Commentaries* were motivated by the dispute between Hunter, his younger brother John, his pupils William Hewson and William Cruikshank, and Alexander Monro secundus (1697-1767) over who had been the first to discover that the lymphatic vessels were absorbent—an achievement that Hunter described as "the greatest discovery both in physiology and in pathology . . . since the discovery of the circulation" (quoted in Porter, p. 27). The lymphatics dispute contributed to the growing rancor between William and John Hunter that led to a complete breach between the two brothers, culminating in William cutting John out of his will. Part II of the *Commentaries* was to have related to Hunter's *Gravid Uterus* (1774) but the text was so delayed that its connection with the *Commentaries* was dropped. Porter, "William Hunter: A surgeon and a



gentleman," in Bynum and Porter, eds., *William Hunter and the Eighteenth-Century Medical World* (1985), pp. 7-34. 43575
Some have made out levalogy to I Hunter ways that the heale vad is thrown into the sterne at the time of Copulation, which hav been veen by experimente, and co mised with affind that Course Through the fallspian tule from the fortue lutic, the first abcarance of force tion is astrong mucous in the funder ateri, and this surcous makes the devidua reflecta, Monstere are vo formid from very first beginning

Unrecorded Manuscript of Hunter's Lectures on Obstetrics Prior to Publication of His Classic Work

30. [Hunter, William (1718–83).] The gravid uterus by Dr. Hunter 1770. Manuscript notebook in an unidentified hand, written on rectos only, with commentary in a different 18th-century hand on versos of over half of the written pages. Approx. 170 leaves, 85 containing notes relating to Hunter's course on the gravid uterus and 4 with notes on "Embalming dead body's"; the remaining leaves blank. N.p. [London], 1770. 189 x 121 mm. Calf ca. 1770, marbled endpapers, hinges cracked, light wear, spine label reversed and placed at the foot of the spine in error.Very good example. \$15,000

Remarkable and very *rare* example of notes taken by a student at William Hunter's course of lectures on obstetrics, given at the famous school of anatomy Hunter had founded two years previously at Great Windmill Street in London's Soho district. Hunter, the elder brother of John Hunter, was the greatest obstetrician of his day as well as a specialist in the anatomy of pregnancy; his *Anatomy of the Human Gravid Uterus* (1774), which he worked on for over twenty years, is one of the great artistic achievements in medicine. Manuscript lecture notes like these are a rich source of information about Hunter's teaching methods, anatomical knowledge and experience as a practicing obstetrician. They are also quite rare: There are no

The Grand Itterns. M. Hunter.

on the other. I Hunter says that there is lite or nodanger of the Child Turning about in the from b an there is not hoomy undefo the Child is very esnall, and the Turn to any paos Sometimes we find the head upwardo and the Brick preventing, and the placenta find to the he ch of the stores or flove to the Do lince there of surne before the Child, flooding in these faves we v very Conviderable

examples of lecture notes from Hunter's obstetrics courses cited in OCLC; Glasgow University, home of the museum based on William Hunter's collections, has one such notebook dating from about the same time as ours.

The present notebook begins with a description of the anatomy of the uterus and brief discussions of uterine diseases such as cancer, polyps and "hystericks"; it continues with a detailed account of pregnancy and its complications and a brief note on diseases of newborns. The section on obstetrics is followed by several blank leaves and a four-page note on "Embalming dead body's." The notes are liberally sprinkled with "Dr. Hunter says ...," "Dr. Hunter is of the opinion ..." and other similar phrases, as for example on the subject of breech position: "Dr. Hunter says that there is little or no danger of the Child turning about in the womb as there is not room, unless the Child is very small and then it may turn to any position." The notebook is especially remarkable in that it also contains commentary on the notes in a different hand written on the versos of over half the manuscript pages. The commenter was also most likely one of Hunter's students, given the presence of such statements as "Dr. Hunter open'd a woman who died five weeks after her lying in, and found the menses coming on ..." 43708



Keen's Secret Operations on President Cleveland

31. Keen, William Williams (1837–1932). Autograph letter signed to M. Jacques. 1.5pp., on sheet with letterhead of Lake Mohonk Mountain House. Mohonk Lake, N.Y., August 31, 1928. 241 x 153 mm. Traces of mounting in left margin, but fine otherwise. \$1500

A fine letter from the celebrated American surgeon William Williams Keen touching on one of his most famous accomplishments—his participation in the secret surgical operations performed on President Grover Cleveland in 1893 to remove a cancerous growth from the President's mouth.

I am glad that you were interested in my latest (observe I do not say "last") volume [referring to Keen's recently published *The Surgical Operations on President Cleveland in 1893 Together with Six Additional Papers of Reminiscences* (1928)]. It was a remarkable event. When we put Mr. Cleveland in his bed what an emphatic deep "Thank God" we said!

The reason for the secrecy surrounding the operations on the President was that the United States was then in the middle of a financial crisis caused by the inflationary Sherman Silver Purchase Act of 1890. Cleveland had been elected to a second term on a platform that called for repeal of the Act and his leadership was essential to that process. Feeling that any sign of ill health



might be interpreted as weakness and throw support to the pro-silver side, Cleveland decided to keep his illness and the operations secret.

In a postscript Keen refers to the Cleveland operation again: "Not long before the Cleveland case I had a patient who while still under the anesthetic was suddenly paralyzed!! Suppose—!"

Keen's letter also mentions his longtime friend, the American physician and writer Silas Weir Mitchell (1829-1914), with whom he co-authored the classic *Gunshot Wounds and other Injuries of Nerves* (1864; see Garrison-Morton.com 2167) together with George Morehouse.

How vividly your quoting this honored name brings back to me our 1900 experiences & how Weir (that dear now lost friend) & I sat in the seats of the mighty for the first act & then skedaddled to the Opéra Comique lest we be trapped as ignorant intruders!

Keen, one of the most brilliant surgeons of his era, gained worldwide fame as one of the first to operate successfully for meningiomas (large brain tumors; see Garrison-Morton.com 4866), and to develop a procedure for drainage of the cerebral ventricles. He was also the first in the United States to use x-rays clinically (see Garrison-Morton.com 2684.1). During the Civil War he served as a surgeon with the U. S. Army. Keen was one of the first American surgeons to adopt Lister's system of antisepsis, and wrote the first American surgical textbook based on antiseptic principles. His *Keen's System of Surgery* (1906–21) was the standard textbook for American surgeons in the first decades of the 20th century. 43698



The Original Prototype of the World's First Stored Program Personal Computer

32. KENBAK-I. (1) Prototype Kenbak-1 computer built by its inventor, John Blankenbaker (b. 1929). Comprises motherboard with 132 integrated circuits, 2 power supplies, 2 MOS shift registers (1024 bits each) and cooling fan, in customized steel case with 3-prong power connector, the front panel with a toggle power switch, 12 incandescent lights, 15 pushbuttons and various lettering including the name "KENBAK-1." Approximately 490 x 292 x 110 mm. Preserved in a foam-padded protective instrument case. (2) Binder of documentation including Programming Reference Manual KENBAK-1 Computer (Los Angeles: KENBAK, 1971; iii, 24pp.); "Installation & maintenance" (photocopy; 8pp.); "Theory of operation" (photocopy; 9-42, 26pp.); original coding sheets, mimeographed purchase guides, reviews, stationery, etc. (3) Laboratory exercises KENBAK-1 computer. Variously paginated. Los Angeles: KENBAK, 1971. Original wrappers, spiral-bound. (4) Advertisement for the KENBAK-1 computer. In Scientific American 224, no. 3 (September 1971): 194. Whole number, in original printed wrappers. \$65,000

The prototype of the KENBAK-1, the world's first commercially available stored-program personal computer, so deemed in 1987 by a panel of judges, including Apple co-founder Steve Wozniak, at the Computer Museum in Boston. Only about 40 or 50 of these machines were ever built, of which perhaps ten remain extant.



The stored program concept, in which both program and data are processed in an electronic memory, was the key concept in the design of the electronic computer as theorized by John von Neumann in the so-called von Neumann architecture. Because the Kenbak-I was the first personal computer to apply this key concept in its design, it is an especially important landmark in the history of computing.

The KENBAK-1, invented by computer engineer John Blankenbaker, went on sale in 1971, five years before the Apple 1. This prototype model of the KENBAK-1 is the very one used in the first demonstration of a commercial personal computer, which took place in May 1971 at an Anaheim, California convention of high school mathematics teachers. This unit was still operational in July 2015.

[The KENBAK-1] was created in 1971 by John Blankenbaker, working in his garage in Los Angeles. Initial sales commenced in September of 1971. It was intended to be educational and the professionals in the field were



enthusiastic but it was a struggle to convince the non-professionals that they could buy a real computer at this price (\$750), thus only some 40 devices were sold, mainly to schools.

The creator of Kenbak-1—John Blankenbaker, had a long experience in the field of computers. He started the design of a computing device as early as in the winter of 1949, when he was a 19 y.o. physics freshman at Oregon State College, inspirited by an article in a magazine. After graduation from the college in 1952, he worked at Hughes Aircraft Co. in the department for digital computers, designing the arithmetic unit for a business data processor. Some time in the late 1950s he began to think there could be simple computers which could be afforded by individuals.

As late as in the fall of 1970 he found himself unemployed and decided to investigate what might be done to make a computer for personal use. He wanted the computer to be low cost, educational, and able to give the user satisfaction with simple programs. The computer could be serial and slow which would reduce the cost yet create the environment that was desired. It should demonstrate as many programming concepts as was possible. Because of the small size, the native language of the unit would be the machine language. Above all, it had to be a stored program machine in the von Neumann sense. To keep the costs low, switches and lights were the input and output of the machine. (Some thought was given to punched card input, but it was never developed.)

By the spring of 1971, the logic printed circuit board had been built and the computer was assembled. Designed before microprocessors were available, the logic consisted of small and medium scale integrated circuits, mounted on one printed circuit board. MOS shift registers implemented the serial memory. Switches in the front keyed the input and lights displayed the output. The memory was two MOS shift registers, each of 1024 bits. The computer executed several hundred instructions per second (Dalakov).

As noted above, Blankenbaker demonstrated the KENBAK-1 in May 1971 using this prototype. In September 1971 the first advertisement for the machine appeared in the *Scientific American*, promising potential customers that "very quickly you, or your family or students, can write programs of fun and interest." Blankenbaker intended the computer to be used for educational purposes and so did not make any special effort to market it to hobbyists, an omission he later regretted. Between 40 and 50 commercial units, differing slightly from the prototype, were manufactured and sold between 1971 and 1973, when the company folded. According to Wikipedia, about 10 KENBAK-1 units are now known to exist worldwide. Dalakov, Georgi. "The KENBAK-1 of John Blankenbaker." *History of Computers, Computing and Internet*. N.p., n.d. Web. Accessed 06 Nov. 2015. Wilson, Bill. "The Man Who Made 'the World's First Personal Computer." *BBC News*. N.p., 6 Nov. 2015. Web. Accessed 09 Nov. 2015. 43693

437 EXPLANATION OF THE PLATES. PLATE VI PLATE VIII. Fig I. The Stethoscope or Cylinder, reduced to one Fig. 4 actual dimensions, LAENNE a. The Stopper. b. The lower end The lower end.
 The upper half.
 The auricular or upper extremity.
 Fig. 2. Longitudinal section of the same,
 The stopper.
 Point of union of the two parfs. DISEASES OF THE CHEST 1821 The upper half. 3. The same section, with the stopper removed. Ein. 5 Fig. 3. The same section, with the support relationships of the section of the same wood as the rest a. The body of it, formed of the same wood as the rest a. The body of the statement of the instrument to the instrument to traversing the stopper, for fixing it is the the of the stethoscope.
Fig. 6. Upper half of the stethoscope.
a. Body of it.
b. Screw (in the wood) for fixing the two portions to-Fig 6. Actual diameter of the stethoscope. a. Diameter of the canal of the stethoscope. N. B. Any turner will be able to make the instrument, on the above description.—*Trans*. FINIS. IGURS, PRINTER, PENZAN

33. Laennec, René Théophile Hyacinth (1781-1826). A treatise on the diseases of the chest, in which they are described according to their anatomical characters, and their diagnosis established on a new principle by means of acoustick instruments. Translated by John Forbes (1787-1861). 8vo. [4], vii-xl, [2], [1], 2-437, [3]pp. 8 engraved plates by John Pope Vibert (1797-1865). London: T. and G. Underwood, 1821. Modern half morocco gilt in antique style, in a half morocco drop-back box. Old library stamp almost invisibly removed from margin of title with no loss of text or margins. Plates slightly foxed but a fine copy from the Max Miller collection. Later owner's bookplate on front pastedown.

\$5000

First Edition in English of Laennec's *De l'Auscultation médiate (1819), printed in an edition of* only 500 copies, compared to the total printing of 3600 copies that comprised the two states of the first edition in French. Laennec's invention of the stethoscope, which he announced in his 1819 treatise, provided the first adequate method for diagnosing diseases of the thorax and represented the greatest advance in physical diagnosis between Auenbrugger's percussion and Röntgen's discovery of x-rays.

Forbes abridged parts of Laennec's work, omitted others, and condensed the remainder, reducing it to about half of its original length. Although

TREATISE ON THE DISEASES OF THE CHEST, IN WHICH THEY ARE DESCRIBED ACCORDING TO THEIR ANATOMICAL CHARACTERS. AND THEIR DIAGNOSIS ESTABLISHED ON A NEW PRINCIPLE BY MEANS OF ACOUSTICK INSTRUMENTS. With Plates. TRANSLATED FROM THE FRENCH OF R. T. H. LAENNEC, M. D. WITH A PREFACE AND NOTES BY JOHN FORBES, M. D. PHYSICIAN TO THE PENZANCE DISPENSARY, SECRETARY OF THE ROYAL GEOLOGICAL SOCIETY OF CORNWALL, &C. &C. London : PRINTED FOR T. AND G. UNDERWOOD, 32, FLEET STREET. 1821.

Λ

he greatly underestimated the influence the stethoscope was to have on medicine, Forbes nevertheless was as responsible as anyone else for introducing and popularizing the use of the stethoscope in the English-speaking world. According to a letter from Forbes to Laennec, all 500 copies of the small English printing had been sold by September 1823. This suggests that the initial reception of the stethoscope was slow in England; however, by the time of the second English edition (1827), demand for the instrument had widened exponentially. Bishop, "Reception of the stethoscope and Laennec's book," *Thorax* (1981): 36, 487-92. Norman 1256. 43642



34. Lamarck, Jean Baptiste (1744–1829). Recherches sur les causes des principaux faits physiques. . . . 2 vols., 8vo. xvi, 375; [4], 412pp. Engraved plate in Vol. I, folding chart in Vol. II. B1 in Vol. I is a cancel, signed "B*". Paris: Maradan, seconde année de la République [1794]. 211 x 136 mm. Original paste paper wrappers, hand-lettered paper spine labels, spines worn and chipped with some loss, wrappers partly detached. Edges a bit frayed, some toning, but very good. \$1250

First Edition of Lamarck's first major scientific work. "With the publication of the *Recherches*, Larmarck brought together the various strands of his work in physics and chemistry, and his views on the differences between organic and inorganic beings" (Corsi, pp. 47-48). Lamarck's chemical theories played an important part in the development of his ideas about the origin of species, as they provided a materialistic definition of life, reproduction and evolution. In opposition to the "new chemistry" established by Lavoisier, Lamarck held that there were only four true elements: Earth, air, fire and water. Fire was the most important of these four elements, and its three states—natural, "fixed," and a state of expansion (caloric fire)—were central to a great number of chemical and physical phenomena. Lamarck believed that only living beings could produce chemical compounds, with the most complex compounds being produced by those animals with the most highly organized physiological structure; in the absence of life, these compounds would naturally decompose over time into their constituent elements, producing in the process all known inorganic substances. This mineral "chain of being," with continuous degradation from the most complex to the simplest, is similar to Lamarck's later theory of the evolution of species: Each stressed the gradual and successive production of forms, while denying the relevance of defined species. Corsi, *The Age of Lamarck*, pp. 47–53. Duveen, *Bibliotheca alchemica et chemica*, p. 334. Norman 1260. 43640

; but the Rati + HO expelsing Comple mila is C. H. O. Rational formula for Achol. HO Sthyle Or) Water Ether Achol does that it bouls at 96. obvained by distilling actifie a pafe and the an equal weight of Sulpland. 30 when these are 1" mixed the 80 Spiritus atheres Nitrece is uly insites with the Alethor toform distilling rectified spirit u new acid called the Sulphophinic Acid decomposes + gues up Oto the a of Acohor moved by the SO, losing half of the

Manuscript on Chemistry, Pharmacology and Botany, Including Recipes for Ether, Chloroform, Opiates, and Digitalis

35. Leake, Jonas Richard (1844-78). Materia medica. Autograph manuscript notebook, signed "Jonas Richard Leake" on front flyleaf. 290 numbered pages plus several blank leaves. Belgravia, July 1866. 183 x 115 mm. 19th century half calf, rubbed, upper spine chipped, a few scratches on front cover.

Very good. From the library of Chauncey D. Leake (1896-1978), with his bookplate (loose) and pencil annotations in the back. \$3750

Leake, the son of an Irish physician, was born in Surrey, trained as a surgeon and obtained his license to practice in 1864. He subsequently joined the British Army's 80th Regiment as an assistant surgeon. The present notebook was evidently prepared as part of Leake's duties as an army surgeon, as it bears the inscription "80th Regiment" on the flyleaf beneath Leake's signature.

Leake's notebook is very clearly and legibly written, with only a few additions and corrections, and includes several diagrams and chemical formulae. It is divided into several sections: "Materia medica" (pp. 1-123); "Action of medicines" (pp. 126-129); "Chemistry (inorganic)" (pp. 131-176); "Chemical processes" (pp. 177-203); "Tests" (pp. 204-232); "Organic chemistry" (pp. 233-265); and "Treatise on botany" (pp. 267-295). Pages 238-239 contain directions for manufacturing sulfuric ether, ending with the note that "its vapour is a safe anaesthetic." Pages 241-242 contain similar directions for chloroform. The notebook is from the library of pharmacologist and medical historian Chauncey D. Leake (no relation to Jonas), discoverer of the anesthetic properties of divinyl ether (see Garrison-Morton.com 5713). 43593



concedat comitas tua el benevolentea, felez erem. Tator actur La el studiosus ne id tibi prorsus infructuosum Schomos Cumining Ligr evaderel. Viro Doctestimo Responsion teres vir clarif et volun. rothur adaupnus tatem the inscription expectabo Datas turas 15. Porce Protey. Yau-Roien queen yable a colo a venim, quentum Doctor Arthur Lee it has soll anonce parte observationum canny title 1/4 week 1/1. Thomas lumin's ligr: Mintavana tim suimalis the Catach' open patt? Reg lambaum totaun his intactu non passine dolos. gust inter any, probation in austium at re gratia pause miki num attingen liceas Surrey theet una /c/ offert. Observation manet, an fruction of the the dealers 1 Trixis Mich 1 Stran 19. Katerben au tipuli in ut in Kate Imdon stulmun Ul valeas due in scientie naturalis in: m pius Intertachus crementum et patrio tuo decus, celeber vir, realities gen. Why following Kallidage ? Baca gut is had bloudard, non vor floud ut in Grafaulon. Redals offerraidan, to put of surgiorantes. addenter optat a. Tumory sin ortening. and one. I primit of contribute gene mili visiting properties i A. Lee Sondini Bontu novemb: 18° 1765. will plon setequida el conttituisa nova genera, vertir perquitilionibu non dedogranda, ul religues day mili orgo iterum gratalo qued amanticipi nothi mia, have tecure de his carne grant que concentra este con cannage Manores, hancitane és de prin o casterine gra basis de la caste anté d'acter aj cue sejeneme la gratine d'alle que la meritificie moit se d'Athan, que den de se a concentrations aux de la que promité dans la volte l'Athan, que de se a concentrations aux de la que regione ipic ma catterio perquais aunining nomine ones que, mitate tur tiarun natitularen cultontry maker an genuna o Diatinime ferra. Yale vir tantanen, et vota nota amicilliana Exple

One of the Earliest American Naturalists /Politicians Corresponds with Michel Adanson

36. Lee, Arthur (1740-92). Autograph letter signed, in Latin, to French naturalist Michel Adanson (1727-1806), plus autograph draft signed of Adanson's reply, also in Latin, on recto of address leaf. London, November 18, 1765 (Lee); Paris, January 14, 1766 (Adanson). 3pp. total (Lee letter 2pp.; Adanson letter 1 page). 221 x 186 mm. Tear along inner fold, lacunae where seal was broken (not affecting text), but very good. \$1500

Rare and unusual example of correspondence between American physician and diplomat Arthur Lee and French naturalist Michel Adanson, with Adanson's draft reply written on the recto of the letter's address leaf. Both correspondents wrote in Latin, which until the end of the 18th century remained the universal language of science. Nevertheless, scientific letters in Latin from this date are unusual on the market

Though he was trained in medicine, Lee is best known for his political activities on behalf of the American colonies and the newly formed United States during the 1770s and 1780s: He served as envoy to Spain and Prussia during the Revolutionary War, helped to negotiate the 1778 Franco-American Treaty of Alliance, and participated as a delegate in the third Continental Congress. His correspondent, Michel Adanson, was the author of *Familles naturelles des plantes* (1763-64), which contains the first so-called "natural" method of flowering plant classification based on comparison of as many organs as possible (Linnaeus's botanical taxonomy, in contrast, is based primarily on a plant's sexual characteristics). Adanson's work forms the basis of present-day numerical taxonomy.

Claripino Domino Adansono Arthur See Salutern, Vistoria naturalis studio de ditus, magistros quesos et scientio isticos cultores veneror. Je inter corun summor, doctifime vir, opera tua el merita posucre mihi itaque gratifima est occasio, quam preber mutua nobiscum amicutia dignificmie dom: Cummin teum societatem per literas inciendi. Luippe m me milie in votis est, antiquam in patriam mean Virginiam America redeam, et jam breve sum veror surres, cum clarig: Europa viris societatem literares, fingere; at, mutuo officio, quicquid in remotis hisce regionibus, America scilical et Europa, ad promovendan ntiam naturalem are sul natura probeal, inter nos communicaremer. Hor vero jam perfece um clarif: Professore Lug: Batao: et amico tuo. My Proyen. It si candem mihi facultatem

When he wrote his letter to Adanson, Lee had just obtained his medical degree from the University of Edinburgh with a thesis on Peruvian bark (cinchona), an early remedy against malaria. In the letter Lee introduced himself to Adanson, mentioning their mutual friends Mr. Cummins and Dutch botanist Adriaan van Royen (1704-79), and expressed the hope that he and Adanson could correspond after he (Lee) had returned to Virginia. Adanson, who was then compiling his enormous (and still unpublished) encyclopedia *L'Ordre Universel de la Nature*, wrote back to Lee welcoming the proposed correspondence and asking Lee to provide specific taxonomic information (leaf placement, type of seed pod, etc.) on several genera of plants native to North America. These included *Trixis*, a genus of shrubs in the aster family; *Kalmia*, a genus of flowering evergreen shrubs; *Sideroxylon spinosum*, a type of "bully tree"; *Callicarpa* (beautyberry), a genus of shrubs and small trees; and *Sabatia*, the rose gentians. Adanson's autograph draft of his reply includes Lee's address and Adanson's salutation, and would have been copied by a secretary to send to Lee. 43704



On the Earliest Origins of Medicine

37. Lettsom, John Coakley (1744-1815). History of the origin of medicine: An oration, delivered at the anniversary meeting of the Medical Society of London, January 19, 1778 . . . 4to. viii, 168pp. Hand-colored frontispiece plate, black and white version of the same plate bound between pp. 148-149. London: J. Phillips for E. & C. Dilly, 1778. 287 x 230 mm. (uncut). Original boards, rebacked, some spotting. Edges a bit dust-soiled and frayed, tear in front free endpaper repaired, minor foxing, but very good. Stamp on frontispiece of the Medical and Chirurgical Society of Aberdeen. Inscribed on title: "Ex libris Societatis Med. Chirurg. Aberdonensis Donor Gul. Saunders M.D.," noting that this copy was given to the Society by Dr. William Saunders (1743-1817), founder and first president of the Medical and Chirurgical Society of London (later incorporated into the Royal Society of Medicine). \$1500

First Edition. Lettsom, a Quaker physician and philanthropist, founded the Medical Society of London in 1783; the Society, which is still active, is the oldest such organization in the United Kingdom. Five years later Lettsom delivered an oration before the Society on the history of medicine, "presuming



that nothing could prove more interesting to the professor of the healing art, than a knowledge of its origin" (p. vi); the oration, with additional materials, was then published in book form. The work covers the history of medicine from the time of the Creation to the Trojan War (6000 - 1184 B.C.), and describes both Old and New World medical practices of the period.

This copy was presented to the Medical and Chirurgical Society of Aberdeen by Dr. William Saunders, a onetime member of the Medical Society of London who broke away from the MSL in 1805 to found the Medical and Chirurgical Society of London. Garrison-Morton.com 6381.43638



Introduction of the Antiseptic Principle in Surgery

38. Lister, Joseph (1827-1912). (1) On a new method of treating compound fracture, abscess, etc., with observations on the conditions of suppuration. In *Lancet* 1 (1867): 327-329, 357-359, 387-389, 507-509; 2 (1867): 95-96. (2) On the antiseptic principle in the practice of surgery. In *Lancet* 2 (1867): 353-356. Together 2 volumes. 270 x 188 mm. Modern half calf, marbled boards. Fine. \$9500

First Editions. As head of the surgical wards at Glasgow's Royal Infirmary, Lister was appalled by the forty percent mortality rate among surgical patients, most of it caused by gangrene, erysipelas, septicemia and other post-operative infections. After studying this problem he came to believe that wound suppuration was a form of putrefaction and was confirmed in his belief by the writings of Pasteur, who had recently proved that putrefaction was a fermentative process caused by living microorganisms. Lister adopted carbolic acid as a weapon against microorganisms after learning of its efficacy in sewage treatment and used it in eleven cases of compound fracture, nine of which recovered. He then applied his antiseptic techniques to the treatment of abscesses with similar suc-



cess. Lister described his remarkable achievements in his classic series of reports, "On a new method of treating compound fracture," his first work on the antiseptic principle in surgery. The reports include two novel observations on the healing capacities of tissues protected from infection: first, that a carbolized blood clot becomes organized into living tissue by ingrowth of surrounding cells and blood vessels; and second, that portions of dead bone in an aseptic wound are absorbed by adjacent granulation tissue. In "On the antiseptic principle in the practice of surgery," Lister gladly acknowledged his debt to the writings of Pasteur, which had revealed to him both the causes of wound sepsis and the key to their elimination from hospitals. No offprint of these papers is recorded. Garrison-Morton.com 5634, 5635. *Printing and the Mind of Man* 316c. 43710

For my dear friend Propersor David Krech with Kindert resards and warmer & feelmer Al / Lerig morcow, august 1969



Inscribed by Luria to a Fellow Memory Researcher

39. Luria, Aleksandr Romanovich (1902–77). The mind of a mnemonist: A little book about a vast memory. Translated from the Russian by Lynn Solotaroff. xi, [5], 160pp. London: Jonathan Cape, 1969. 197 x 128 mm. Original cloth, dust-jacket. Very fine exceptionally bright copy, in a fine dust

jacket, *inscribed by Luria* to Russian-American psychologist David Krech (1909-77) on the front endpaper: "For my dear friend Professor David Krech with kindest regards and warmest feelings, Al. Luria. Moscow, August 1969." \$850

First British Edition of Luria's *Malen'kaia knizhka o bol'shoi pamiati* (1968), first published in English by Basic Books (New York) in 1968. Luria was one of the greatest developmental psychologists of the twentieth century, best known for his seminal textbook on neuropsychology, *Higher Cortical Functions in Man* (1962), and for his groundbreaking researches on aphasia, speech dysfunction and child neuropsychology. His *Mind of a Mnemonist*, written for a general audience, is an extended case study of S.V. Shereshevskii, a Russian journalist with a seemingly unlimited power of memorization who could commit long speeches, complex mathematical formulas, and even poetry in foreign languages to memory and retain them for years afterward. *The Mind of a Mnemonist* is one of Luria's most popular writings, one in which, as the late Oliver Sacks remarked, "science became poetry." Luria presented this copy to friend and colleague David Krech, professor of psychology at U. C. Berkeley, best known for his research on the chemistry of learning and memory. 43668



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40. Martins, Charles Frédéric (1806-89). Autograph letter signed, in German, to Theodor Plieninger (1795-1879). 3pp. plus address, written on letterhead of the Société Géologique de France. Paris, 30 August 1847. 209 x 135 mm. Fine. Preserved in a cloth folding case. \$375

From the French botanist and geologist Charles Frédéric Martins, professor of botany and natural sciences at the University of Montpellier and superintendent of Montpellier's *Jardin des Plantes* from 1851 to 1880, to the German paleontologist Theodor Plieninger. A supporter of Darwin's theory of evolution, Martins was the first at Montpellier to give a course of lectures incorporating Darwinian evolutionary theory (see *The Correspondence of Charles Darwin*, vol. 22, p. 502); he also corresponded with Darwin and prepared a French translation of the second edition of Darwin's Climbing Plants. He also translated Goethe's and Haeckel's works on natural history and edited those of Lamarck, while publishing a large number of his own works on geology and natural history.

As a geologist Martins was one of the earliest to support glacial theory, and in a paper published in 1840 he was the first to hypothesize that Scandinavia had been covered by a separate ice cap. The Scandinavian geologist Axel Joachim Erdmann praised Martins as "virtually the lone champion" of glacial theory during

the 1840s (see Krüger, *Discovering the Ice Ages*, p. 312). The present letter refers to his geological theories concerning Scandinavia:

Allow me to disagree with you on one point about Scandinavia, namely on account of the striations that you attribute to the structure of the rock. I have a large collection of polished rocks and can assure you that the true parallel straight striations do not have this origin. Erosion by weathering seems very different to me ...

Martins most likely was describing the parallel scratches in rock caused by the movement of glaciers. In another part of the letter Martins mentions his young friend Fraas, who had found several Jurassic fossils in France including the head of a large dinosaur. This last would have been of particular interest to Martins' correspondent, Theodor Plieninger, who co-authored a paper in 1844 describing the first dinosaur find in Württemberg. 43630

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 and long 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:

... [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 reasonable men 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 Philadel-

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phia 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.com 2942), and in 1827 he performed the first successful ligation of the common iliac artery (see Garrison-Morton.com 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.com 4447). He also performed plastic surgery, most notably an operation recorded in his "Case of immobility of the jaw and Taliacotian operation" (1831), in which he divided contracted scar bands and inserted a flap from the patient's cheek to the left corner of the mouth (see Zeis Index 1425). "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 ofVelpeau'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



Pioneering Work on Women in Military Medicine, Signed by the Author and her Life Partner

42. Murray, Flora (1869–1923). Women as Army surgeons: Being the history of the Women's Hospital Corps in Paris, Wimereux and Endell Street, September 1914 – October 1919. xvi, 263pp. Folding frontispiece and 11 plate leaves containing 22 plates. London: Hodder & Stoughton, [1920]. 214 x 138 mm. Original blue cloth, light edgewear, gilt-stamping on spine a bit faded, front hinge a bit loose. Endpapers foxed, light toning, but very good. *Signed on the flyleaf by Murray*

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and her colleague and life partner, Dr. Louisa Garrett Anderson (1873-1943), to whom the book is dedicated. Front panel of dust-jacket, mounted on card, laid in, together with publisher's label addressed to "Mrs. Lawrence," almost certainly the same Mrs. Lawrence mentioned on page 135 as one of the nursing sisters from French hospitals who remained with the WHC after 1919. Offprint of Murray's obituary from *The Lancet* tipped in. \$950

First Edition. Murray obtained her medical degree at the University of Durham in 1905, after training in London. In 1908 she became involved in the women's suffrage movement in Britain, joining the Women's Social and Political Union and, together with her companion Dr. Louisa Anderson (daughter of Elizabeth Garrett Anderson, the first woman to qualify as an M.D. in Britain), providing medical care to hunger-striking suffragists released from prison. She and Anderson also founded the pioneering Women's Hospital for Children in 1912. Shortly after the outbreak of World War I, Murray and Anderson became "the first women to break down the prejudice of the British War Office and, after successfully forming the Women's Hospital Corps (the motto of which was the WSPU's 'Deeds not Words'), and running a hospital in Claridge's Hotel in Paris, they were invited to organize a hospital at Wimereux near Boulogne. In February 1915 they were asked to take entire charge of the Endell Street Military Hospital in London ... [which] treated 26,000 patients before it closed in 1919" (Crawford, *The Women's Suffrage Movement: A Reference Guide 1866-1928*, p. 13). Murray's Women as Army Surgeons gives a vivid account of the Women's Hospital Corps' wartime experiences; she dedicated the book to Anderson—"bold, cautious, true and my loving comrade."The two women are buried in adjacent graves near their home in Penn, Buckinghamshire; Anderson's tombstone reads, "We have been gloriously happy." 43662



43. Paracelsus [Philippus Aureolus Theophrastus Bombastus von Hohenheim] (1493-1541). (1) Philosophiae magnae . . . Tractatus aliquot, jetzt erst in Truck geben, unnd hiernach verzeichnet. [8], 247,

[3]pp. Woodcut portrait of Paracelsus on verso of A4. Cologne: Arnoldi Birckman, 1567. (2) Des hocherfahrnesten Medici Aureoli Theophrasti Paracelsi schreyben von den kranckheyten ... [58]ff., unnumbered. [Basel:] N.p., 1567. (3) Astronomica et astrologica ... Opuscula aliquot, jetzt erst in Truck geben und nach der Vorred verzeichnet. [18, of 20], 236, [4]pp.; lacking the unsigned leaf containing the woodcut portrait of Paracelsus and first portion of Philalethes' "Carmen" (see Sudhoff). Together 3 works in one, 4to. 202 x 151 mm. Blind-tooled pigskin ca. 1567, front cover stamped "MOC 1576" above and below central panel, brass clasps, handlettered vellum label on spine, upper extremity worn, light rubbing, signature and another inscription cut from front free endpaper, which has been repaired. Moderate toning, a few minor stains, first few leaves a bit loose, former owner's notes (some partly erased) on title of first work, throughout second work and on rear endpapers, but a very good copy in an unrestored dated period binding complete with the original brass clasps and catches.. Engraved armorial bookplate \$9500



First Editions of three posthumously published collections of Paracelsus's writings. "Only a few of Paracelsus's works were published during his lifetime . . . Most of his writings came to light in the decades following his death, and their publication reached a peak in about 1570" (*Dictionary of Scientific Biography*). *Philosophiae magnae* contains 17 tracts on various occult subjects including witches and witchcraft, ghosts, evil spirits, mythological creatures and "animals created through sodomy" (*De animalibus ex sodomia natis*); these works "provide a clear and topical guide to Paracelsus's engagement with the occult themes of his time, their roots in medieval and religious tradition, and their interpenetration of his medical and natural philosophical work as a whole" (Weeks, p. 103). *Von den kranckheyten* contains tracts on certain diseases including melancholia and St.Vitus' dance, and *Astronomica et astrologica* contains writings on those subjects, including an explanation of solar eclipses. Sudhoff, *Bibliographia Paracelsica*, nos. 85, 86, 91. Weeks, "Paracelsus," in *The Occult World*, ed. C. Partridge, pp. 99-106. 43646



44. Paré, Ambroise (1510? – 1590). Opera chirurgica . . . Folio. [12], 851, [27]pp. 317 woodcuts in the text, including portrait of Paré aged 68 on the verso of leaf (:)4. Title in red and black. Frankfurt: Apud Joannem Feyrabend, impensis Petri Fischeri, 1594. 334 x 214 mm. Old calf, rebacked, new cloth ties, light wear at corners; preserved in a drop-back box. Very good, clean copy. Early ownership signature (illegible), dated 1600, on title. Bookplate and ownership stamps of Juan Carlos Ahumada (1890–1976), professor of gynecology at the University of Buenos Aires. \$7500

Third Latin edition. Paré's collected works, first published in French in 1575, represent the greatest and most influential book in Renaissance surgery, and the first original surgical writing in Europe since the Middle Ages. Paré's innovations in treatment are extraordinarily comprehensive, ranging from his opposition to boiling oil in gunshot wounds and ligature instead of cautery in amputations to his revival of podalic version in obstetrics. He popularized the truss in hernia, and ushered in the modern age of prostheses and brace making, using armorers, whose trade was disappearing with the advent of gunpowder, to manufacture his devices."Paré used rope and windlass traction for femoral fractures and was able to distinguish hip dislocation from fracture of the femoral neck. He confirmed the cord compression in vertebral fractures that had been recognized by the Egyptians and Hippocrates . . . Paré used appliances and methods rather like those of Hippocrates for reducing hip and shoulder dislocations, and one or two special to himself. He describes displacement of the 'appendices' (i.e. epiphyses) of the long bones, to be restored if deformity is to be avoided, and reduced neck disloca-



tions by manipulation and traction ... " (Le Vay, *History of Orthopedics*, pp. 224–25; also 222–230). Paré anticipated Andry in pointing out the role of bad posture in scoliosis, was the first to use corsets to correct spinal deformities, and invented boots for clubfoot. His surgical and orthopedic devices are amply illustrated in the present edition of his work, which contains over 300 fine woodcut illustrations. This copy was once owned by Argentinian gyne-cologist Juan Carlos Ahumada, after whom Ahumada-del Castillo syndrome is named. Doe, *Paré*, 48. 43655

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45. Poe, Edgar Allan (1809-49). Mesmerism "in articulo mortis." An astounding & horrifying narrative, shewing the extraordinary power of mesmerism in arresting the progress of death. 16pp. London: Short & Co., 1846. 213 x 138 mm. Without wrappers as issued; preserved in a cloth folding case. Light toning but a fine copy. Bookplate of American book collector Edward Hubert Litchfield (1879-1949). \$7500

First Separate Edition of Poe's gruesome short story on the occult "powers" of mesmerism, originally published under the title "The facts in the case of M.Valdemar" in *The American Whig Review* of December 1845. "Poe plays with the idea that a dying person may be so imbued with magnetic fluid by a mesmerist that he can remain, although dead, in a kind of suspended death for months, until released by the mesmerist—at which point his body immediately turns into a pile of stinking, putrid slime. Taking it to be factual, people seriously debated whether such a horrifying use of mesmerism was possible, and condemned it on the assumption that it was" (Waterfield, *Hidden Depths: The Story of Hypnosis*, p. 146). "Mesmerism 'in articulo mortis" was the last of three mesmeric tales Poe wrote in 1844 and 1845; although these works "were essentially literary, it is also significant that these works were written in the style of scientific texts . . . Although Poe's intentions remain somewhat ambiguous, leading some critics to suggest that he may have actually attempted to perpetrate a literary hoax, it is important to acknowledge that these works were published and received as legitimate contributions to the field of science, and thus they offer insight into the assumptions and expectations of the scientific community" (Enns, p. 65). Enns, "Mesmerism and the electric age: From Poe to Edison," in Willis & Wynne, eds., *Victorian Literary Mesmerism*, pp. 61–82. Heartman & Canny, *A Bibliography of the First Printings of the Writings of Edgar Allan Poe*, p. 111. 43625

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Anaphylaxis, a Nobel Prize Winning Discovery; Autograph Manuscript

46. Richet, Charles (1850–1935). De l'anaphylaxie ou sensibilité croissante des organismes à des doses successives de poison. Autograph manuscript signed, 33 numbered loose leaves, prepared for the printer with numerous erasures and corrections. [Paris, probably before 1911.] 210 x 157 mm. Light horizontal crease where previously folded, minor soiling, rust-marks from paper clip on first and last leaves. Very good. Preserved in a cloth folder. \$7500

Richet and his colleague Paul Portier discovered the phenomenon of anaphylaxis, a hitherto unknown property of the immune system, for which Richet received the 1913 Nobel Prize in medicine. Richet coined the term anaphylaxis to describe a sensitized individual's sometimes lethal reaction to a second, small-dose injection of an antigen This research helped elucidate hay fever, asthma and other allergic reactions to foreign substances and explained some previously not understood cases of intoxication and sudden death.

In 1902, while researching the toxins produced by the Portuguese man-of-war and sea anemone, Richet and Portier injected dogs with sublethal does of these poisons in an attempt to convey immunity and determine experimentally the parameters of toxicity. To their surprise, they discovered that second doses of the poison caused shock and death in some of their experimental animals, leading them to conclude that the poison had an effect exactly opposite to the immunizing properties of serums, vaccines, etc.—instead of reinforcing the body's resistance to a foreign substance, a sublethal dose of the poison created a prolonged and sometimes deadly hypersensitivity to future doses. Richet continued his investigations on anaphylaxis, constructing a general theory of the phenomenon in 1907 (see Garrison-Morton.com 2599), and attempting to explain the function of anaphylaxis in evolutionary terms.. Magill, *The Nobel Prize Winners: Physiology or Medicine*, p. 173. 33314

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Precursor of "Heart Block"

47. Romanes, George John (1848–94). (1) Preliminary observations on the locomotor system of medusae. Offprint from *Philosophical Transactions* 166 (1876). [2], 269–313pp. 2 plates. London: Trübner & Co., 1876. (2) Further observations on the locomotor system of medusae. Offprint from *Philosophical Transactions* 167 (1877). [2], 659–752pp. 2 plates. London: Trübner & Co., 1878. (3) Concluding observations on the locomotor system of medusae. Offprint from *Philosophical Transactions* 171 (1880). [2], 161–202pp. London: Trübner & Co., 1880. Together 3 offprints. 302 x 233 mm. Original printed wrappers. A few small chips in wrappers, otherwise fine. **\$1250**

First Editions, Offprint Issues. "Romanes' work with electro-stimulation directly influenced [Walter H.] Gaskell in his artificial production of 'heart-block,' the name for which Gaskell based on an expression of Romanes" (Garrison-Morton.com 632). Romanes, Darwin's last disciple, performed an extensive anatomical and physiological investigation of jellyfish (medusae) in order to discover whether these creatures possessed any type of nervous system, a question that had not yet been determined. On the basis of his experiments, Romanes concluded that jellyfish do



possess a primitive neural network, which generates and controls their characteristic pulsating motion. Romanes further discovered that the nervous impulses causing these pulsations were unable to pass through an artificially narrowed section of tissue, which he termed a "block." The concept of heart block, introduced by Gaskell, led to understanding of the heart's natural pacemaker and to the development of artificial pacemakers. 43676





48. Santorio, Santorio (1561–1636). Commentaria in primam fen primi libri canonis Avicennae. 4to. [40]pp., 1120 columns. Woodcut illustrations. Venice: Marco Antonio Brogiollo, 1646. 233 x 166 mm. 18th century quarter vellum, marbled boards, minor rubbing and edgewear. Very good copy. Occasional marginal marks in red pencil, marginal note (cropped) on Q3v. \$2750

Third edition of Santorio's commentary on the first book of Avicenna's *Canon*, first published in folio in 1625. Santorio, professor of theoretical medicine at the University of Padua, introduced the use of precision instruments for quantitative biological studies; he is regarded as the founder of metabolic research. Using himself as a subject, Santorio conducted a long series of experiments with a scale and pulse-clock, a thermometer and other instruments to measure such metabolic phenomena as pulse rate, respiration, body temperature and the daily variations in the weight of his body relative to ingestion and excretion. He determined that most excretion takes place invisibly through the skin, proved that this invisible excretion varied considerably as a function of both physiological and environmental factors.



The 1625 edition of Santorio's *Commentaria* contained the first illustrations of several of his instruments, including a hygrometer, a pendulum for measuring pulse rate, a syringe for extracting bladder stones, and a bathing bed; these illustrations are repeated in the 1646 edition. The work also revealed for the first time the principles of construction of these instruments, which had been invented many years before. Garrison-Morton.com 2668 (first ed.). Norman 1893 (first ed.). 43635



The "Canals" of Mars, Inscribed to Astronomer Heinrich Kreutz

49. Schiaparelli, Giovanni Virginio (1835-

1910). Osservazioni astronomiche e fisiche sull'asse di rotaztione e sulla topografia del pianeta Marte . . . 6 parts in 2 volumes. Part 1: 136pp., 5 plates; Part 2: 109, [3]pp., 6 plates; Part 3: 95, [1]pp., 3 plates; Part 4: 60pp., 3 plates; Part 5: 50pp., 4 plates; Part 6: 114pp., 5 plates. Rome: Coi Tipi del Salviucci, 1878-99. 286

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x 207 mm. (Part I); 284 x 215 mm. (Parts 2 – 6). Part I elaborately bound in morocco gilt ca. 1878, gilt arms on front cover probably those of Heinrich Kreutz (see below), all edges gilt, rebacked, very light edgewear; Parts 2 – 6 bound together in 19th century half cloth, marbled boards, slight wear; the two volumes preserved in a cloth drop-back box. Some of the plates a bit foxed, but overall fine. *Schiaparelli's Presentation Inscription* in Part I to astronomer Heinrich Kreutz (1854–1907): "Al chiarrissimo Signor Prof. Dr. H. Kreutz omaggio di sincera amicizia da parte dell'Autore." Bookplate in each volume of historian of rocketry and space travel Frederick I. Ordway III (1927–2014). \$7500

First Editions. In 1877 Schiaparelli, director of Milan's Brera Observatory, began his study of the planet Mars, using a high-quality Merz refracting telescope. Over the next 13 years he continued his observations of the planet's topography and features: He was the first to name the Martian "seas" (dark areas) and "continents" (light areas), and he used Secchi's term "canali" (channels) to describe what he took to be a network of lines



crisscrossing the planet (these lines are actually optical illusions caused by the human brain's tendency to impose patterns on visual data). Although Schiaparelli believed these lines to be natural features, the term "canali," mistranslated into English as "canals," gave rise to a great deal of popular speculation about the possibility of intelligent life on Mars. Interest in the Martian "canals" was further fueled when American astronomer Percival Lowell published his *Mars* in 1895; Lowell believed that the canals had been built by intelligent Martians to carry water from the planet's polar ice caps to its equatorial regions. Lowell's ideas were largely rejected by astronomers but caught the imagination of the public, becoming a staple of science fiction in the first half of the twentieth century and inspiring such works as H. G. Wells' *War of the Worlds*. It was not until the Mariner flights to Mars in the late 1960s that the notion of canals on Mars was finally put to rest. However, recent evidence collected by the robotic Mars Rover has revived the possibility of organic life existing on Mars.

Schiaparelli presented this copy of the first part of his *Osservazioni* to German astronomer Heinrich Kreutz, best known for his studies of the orbits of several sungrazing comets—now known as the "Kreutz sungrazers"— which revealed that these comets were fragments of a much larger comet that had disintegrated several centuries previously. Schiaparelli had also performed important studies of comets prior to embarking on his Mars project; it was he who originated the hypothesis (since confirmed) that meteor showers are debris from comets that become visible when they cross the earth's orbit. *Dictionary of Scientific Biography*. Dunbar, Brian. "The 'Canali' and the First Martians." *NASA*. NASA, 03 Nov. 2003. Web. Accessed 23 Nov. 2015. 43703



Inscribed to Theodore von Kármán by the Three Co-Authors

50. Seifert, Howard S.; **Mark M. Mills** (1917-58) and **Martin Summerfield**. The physics of rockets [pt. 2: Physics of rockets: Liquid-propellant rockets; pt. 3: Physics of rockets: Dynamics of long-range rockets]. 3 offprints from *American Journal of Physics* 15, no. 1 (Jan.-Feb. 1947); no. 2 (Mar.-Apr. 1947); no. 3 (May-June 1947). 1-21; 121-140; 255-272pp. Text illustrations. 267 x 199 mm. Original printed wrappers; boxed. Fine. From the library of Theodore von Kármán (1881-1963), with his characteristic docketing on the front wrappers; *Presentation Inscription* in Summerfield's hand to von Kármán, signed by all three authors, on the front wrapper of the first part: "To Dr. Theodore von Kármán In appreciation of your guidance and our long association. Martin Summerfield Mark Mills Howard S. Seifert." Dittoed typescript presentation slip stapled to front wrapper of the third part. \$5000

First Separate Editions. The first study of the physics of rocketry published in the United States after World War II, written by three members of Caltech's Jet Propulsion Laboratory. The three-part paper, published two years after the end of the war, reflects the advances in rocket science made available to the United States after the collapse of Nazi Germany, which during the war had developed the first long-range guided rockets (the V-I and V-2) and used them as weapons in the last months of the conflict. The paper also discusses the work on liquid- and solid-propellant rocket systems done at Caltech's Jet Propulsion Laboratory under the guidance of the lab's director, Theodore von Kármán, to whom these offprints were presented. Topics covered here include the dynamics of rocket jets, the theory of solid-propellant operation, fundamental of liquid-propellant rocket motors, sounding rockets and escape from the earth, and rockets utilizing nuclear energy.

This set of offprints is from the library of aeronautics pioneer Theodore von Kármán, who in addition to directing the JPL at Caltech was also the founder of the Aerojet Engineering Corporation, one of the industrial giants of the jet age. "At Caltech, Karman and his students laid the foundations for aerodynamic design leading to supersonic flight" (*Dictionary of Scientific Biography*). Ley, *Rockets, Missiles and Space Travel* (1951), p. 415. 43701

The Introductory Secture: Anatomy in the Greek Sangaage , fignifies but and was confind only to the art of difsecting by antients. The Moderno use it in a mole composine Sense. It is divided ento human and comparative, the the latter is to be introduced only where the parts forve to illustrate those of the human body; monsters was weful for anatomical enquiries, as they frequently for to throw fome new light, on the works of nature: anatomy has been applied to the Vege table & Minera kingdome, and from there many curious Observation have been collected: This Saince has undergone man Revolutions, & the its rise was probably very early, y its progress was very slow. It cannot be s: any precise beginning nor was it brought to be Chance nor be the Ofenious and Sagacity of a

The First Systematic Teacher of Anatomy, Surgery and Obstetrics in the United States: Unpublished Manuscript

51. [Shippen, William, junior (1738–1808).] De Benneville, Daniel (1753–1827). Anatomical lectures by William Shippen Junior M.D. anat: & chirurg: profess: in the University of Pennsylvania. Manuscript medical commonplace book. 93 leaves. Philadelphia, n.d. [1781 or after]. 144 x 190 mm. Original boards, leather backstrip, worn, missing two-thirds of front cover restored. Upper half of first leaf extensively repaired replacing missing upper half, dampstain in lower portion of first leaf, first few leaves frayed, evenly toned throughout, but a good example of an 18th-century American medical manuscript, written in a neat and legible hand. Boxed. \$15,000

Very Rare contemporary manuscript record of anatomical lectures given by William Shippen junior, the first systematic teacher of anatomy, surgery and obstetrics in the United States. Shippen never published his anatomical lectures (or any other medical works apart from his 1761 doctoral thesis), so that the only record we have of his teachings is contained in student notebooks like the one we are offering. Notebooks containing Shippen lectures are rare—OCLC records seven examples written between 1766 and the early nineteenth century, three at the University of Pennsylvania, two at the College of Physicians of Philadelphia (which Shippen helped to found), one at the National Library of Medicine and one at McGill University's Osler Library (see *Bibliotheca Osleriana* 7635). Most of these examples have probably been in institutional collections since the 19th century.

Shippen, the son of physician and statesman William Shippen senior (1712–1801), obtained his medical degree at the University of Edinburgh. Shippen's career as a professor of medicine began in 1762, when he started giving anatomical lectures in Philadelphia for medical students. In 1765, when John Morgan established the first medical school in the United States at the College of Philadelphia, Shippen joined the faculty as professor of anatomy and surgery. When the Pennsylvania state legislature created the University of the State of Pennsylva-

Inatomical Lectu

nia in 1779, Shippen taught there as well, and in 1791, when the University merged with the College of Philadelphia to form the University of Pennsylvania, Shippen was appointed to the University's chair of anatomy, surgery and midwifery. Shippen also served as a physician in the Pennsylvania Hospital and held important medical posts, including Physician-in-Chief of the American Army, during the American Revolutionary War.

Our notebook, which records the first two lectures in Shippen's anatomy course, was written by Dr. Daniel de Benneville, the eldest son of physician and Universalist preacher George de Benneville (1703-93). De Benneville received his first medical training from his father; when the Revolutionary War broke out he served as a surgeon in the 12th (some sources say 13th) Virginia regiment of the Continental Army. It is entirely possible that De Benneville and Shippen encountered each other during



their military service. De Benneville retired from Army service in 1781, and it is likely that he began attending Shippen's lectures at the University of Pennsylvania sometime after this date. Shippen virtually ceased lecturing at the University after the death of his son in 1798; this date makes a likely end point to the period during which De Benneville would have studied anatomy under Shippen.

Apart from the Shippen lectures, De Benneville's notebook contains several detailed case histories, the first of which was "under Dr. Morgan's care"; this may be a reference to John Morgan. Also in the notebook are numerous recipes for medical compounds, accounts of cures performed by other physicians, a long essay on puerperal fever, a multi-page outline of Cullen's *Nosology* (1769), notes on the treatment of pregnant and laboring women, and a "Table of Attraction" recording the actions of various medicines. Altogether, De Bennev-ille's notebook represents a complex and extensive record of an American doctor's experience in the late 18th century. Heitman, *Historical Register of Officers of the Continental Army* (1892) (De Benneville). Kelly & Burbage, *Dictionary of American Medical Biography.* 43069



First Accurate Illustrations of the Fetus in Utero

52. Smellie, William (1697-1763). A sett[!] of anatomical tables, with explanations, and an abridgement of the practice of midwifery, with a view to illustrate a treatise on that subject, and collection of cases. Folio. 22 leaves, unsigned and unpaginated. 39 engraved plates by Charles Grignion after drawings by Jan van Rymsdyk, Pieter Camper (1722–89) and Smellie himself. London: [D. Wilson], printed in the year 1754. 547 x 362 mm. 18th century marbled boards, worn, rebacked and recornered in calf, free endpapers creased. Minor toning, spotting and offsetting, old repairs to free endpapers, a few insignificant marginal tears, but very good. Ownership inscription "Wm. Bond the gift of Mr. Hales 1817" on front free endpaper. \$7500

First Edition of Smellie's magnificent obstetrical atlas, illustrated with life-size anatomical plates containing the first accurate anatomical illustrations of the fetus in utero. In the preface to his *Treatise on the Theory and Practice of Midwifery* (1752), Smellie announced his original intention to "insert in this Compendium, plates of the most useful instruments appertaining to the art of midwifery; but as large drawings could not be properly bound in a book of so small a size, I have resolved to publish them in folio, with that set of prints which I am now preparing, according to the proposals specified in the advertisement at the end of this volume." This advertisement announced the imminent publication of "twenty-six plates, of about 18 inches by 12," engraved from the drawings made by Jan van Rymsdyk "for the use of those who attend [Smellie's obstetrical] lectures." Two years later the *Sett of Anatomical Tables* was published with the number of plates increased to thirty-nine, eleven of which had been contributed by Pieter Camper, one of Smellie's former pupils. The remaining two plates, nos. 37 and 39, are presumed to have been drawn by Smellie himself. The atlas was sold by subscription, unbound





in sheets, for $\pounds 2.6s$ —a very high price for the time. Some sources state that the first edition consisted of only eighty to one hundred copies, but the edition was most probably larger than this.

The life-size drawings Rymsdyk made for Smellie, now part of the Hunterian Collection at the University of Glasgow, were "far superior in accuracy to any that had appeared previously, surpassed only by those he made soon after for William Hunter's obstetrical atlas, not published until twenty years later" (Hagelin). The drawings by Camper, now preserved in the Library of the Royal College of Physicians at Edinburgh, are mainly diagrammatic, and it is possible that "Smellie instructed [Camper] to include only such detail as was necessary to his immediate purpose . . . [which] was mainly to indicate the position of the fetus in the uterus, and the application of the forceps to the head" (Thornton, p. 17). Smellie was the leading forceps practitioner in London, and the forceps that he devised—a short, straight instrument with the blades covered in leather—held the field for many years in the face of numerous modifications.

Smellie was a pioneer of modern obstetrics, and one of the great teachers of midwifery. Among his pupils were William Hunter and the physician-author Tobias Smollett, who edited Smellie's works for publication. "His contribution to our knowledge of the mechanism of labor is of fundamental importance. His additions to our knowledge of contracted pelves were also noteworthy. He not only gave directions for measuring the pelvis but was the first to measure the diagonal conjugate diameter and this today remains the most important pelvimetric maneuver we possess" (Thoms, pp. 124–25). Garrison-Morton.com 6514.1. Hagelin, *Rare and Important Medical Books*, pp. 118–19. Norman 1955. Thoms, *Classical Contributions to Obstetrics and Gynecology*, pp. 124–29. Thornton, *Jan van Rymsdyk*, pp. 10–21. 43656



Manifesto of the Royal Society With the Very Rare Frontispiece

53. Sprat, Thomas (1635-1713). The history of the Royal-Society of London, for the improving of

natural knowledge. 4to. [16], 438, [2, including errata]pp. Engraved arms of the Royal Society on the verso of the license leaf, etched frontispiece by Wenceslas Hollar (1607-67) after John Evelyn (1620-76) or possibly Mary Evelyn, 2 engraved folding plates. 207 x 157 mm. London: T. R. for J. Martyn, and J. Allestry, 1667. Blind-tooled calf ca. 1667, light wear to hinges and edges, head of spine worn. Occasional minor soiling and staining, but a fine, *completely unrestored* copy. Signature of Martin Bowes (1670-1726) of Bury St. Edmonds, Suffolk on front pastedown, also brief shorthand note and shelfmark; some ink underlining in text. \$7500

First Edition, second state of p. 85 without the repeated "of" on lines 6–7. A fine and completely unrestored copy of the first history of the Royal Society, published only five years after the Society received its Royal Charter. Sprat, a clergyman, was one of the original founders of the Royal Society; "[his] exposition of the conception and beginning of the Royal Society remains the only one which tells us, in any detail, not only what the founders were doing, but even more important, what they *thought* they were doing" (Purver, *The Royal Society: Concept and Creation*, p. 9).

Sprat divided his work into 3 parts, the first of which discussed the state of natural philosophy of the "ancients" and compared that with the "moderns." The second part gave examples of the kind of scientific work that members of the Royal Society were doing. Influenced by Bacon, who appears in the fron-



tispiece, Sprat focused on the utilitarian products of science, and nearly all the papers he chose for reproduction in the *History* deal with technological or commercial problems, and the virtuoso singled out by Sprat was Sir



Christopher Wren—inventor, architect and technologist. Sprat's third part contains "A Defense and Recommendation of Experimental Knowledge in General." The work contains two contributions by Robert Hooke: "A method for making a history of the weather" (pp. 173-182, with plate); and "An account of a dog dissected" (p. 232). The pictorial frontispiece by John Evelyn (or possibly his wife, Mary), which is not found in most copies, depicts a bust of Charles II being crowned by Fame with a laurel wreath, flanked on either side by Francis Bacon and William, Viscount Brouncker, the Society's first President. John Beale; see Michael Hunter, *Science and Society in Restoration England*, pp. 194-197. Keynes, *Evelyn*, 178; *Hooke*, 28. Norman 1989. Wing S-5032. 43699

54. Stahl, Georg Ernst (1659-1734). Fundamenta chymiae dogmaticae & experimentalis....4to.
[8], 255, [25]pp. Nuremberg: Johann Ernst Adelbulner for Wolfgang Mauritz, 1723. 198 x 161 mm.
Modern half vellum, floral-patterned boards. Light toning, but a very good, crisp copy. \$3000

First Edition. Stahl was the originator of the phlogiston theory, which dominated chemistry until the end of the eighteenth century. Stahl took the structure of his theory from 17th-century alchemist Johann Joachim Becher, who had stated air, water and earth to be the three elementary principles; water and earth were the basis of all material things, and Becher further subdivided the principle of earth into the three principles of substantiality, combustibility and weight/ductility/volatility. Stahl elaborated from Becher's "second earth" a new chemical principle, phlogiston, representing the principle of combustibility that combined with other chemical substances to form compounds. Experimental evidence for the existence of phlogiston came largely from metals and minerals, particularly from the reversible relationship of metals and their calces: when a metal was heated intensely, its phlogiston was driven off and a calx appeared, but when phlogiston was reintroduced to the calx (by heating it with carbon, oil, pitch or other phlogiston-rich materials), the metal reappeared. Air did not combine with phlogiston but received it when it was liberated during combustion; air could absorb only a limited amount of phlogiston, and when that limit was reached, combustion could no longer take place. The flaws in the phlogiston theory are obvious and it did not survive the eighteenth century; however, it served as an important link between older (al)chemical concepts and the new, an attempt to modify the existing intellectual framework in order to account for new experimental observations. Duveen, Bibliotheca Alchemica et Chemica, p. 560. Norman 2005. Partington, History of Chemistry, Vol. II, pp. 662-678. 43634



Vesalius, Andreas (1514-64). Anatomia: Addita nunc postremo 55. etiam antiquorum anatome. Folio. [8, including engraved title by Francisco Valegio], 510, [46], [20]pp. Woodcut text illustrations by Joannes Criegher after the original Vesalian woodcuts. The last 20 pages consist of a separately titled appendix: Universa antiquorum anatome tam ossium, quam partium & externarum, & internarum ex Rufo Ephesio medico antiquissimo: Tribus tabellis explicate per Fabium Paulinum ... Venice: apud Joan. Anton. et Iacobum de Franciscis, [1604]. 318 x 216 mm. Modern vellum. Margins of first and last signatures repaired, title a bit soiled, half-title (Cushing's *1) bound after engraved title (Cushing's *2), signature Xx bound after Yy. Upper margin of title inscribed "Inclita Nationis Polona Patavii Sumptibus," faint ownership inscription dated 1677 on verso title, partly effaced inscription ("Sumptibus nationis emptus") on dedication leaf.Very good. \$15,000

Fifth edition of the *Fabrica*. The typography of this edition closely follows that of the fourth edition, issued in 1568 by the Venetian printer Francesco Senense, father of Giovanni Antonio and Jacopo de Franceschi. This fifth edition also reprints the reduced-size woodblocks prepared by Joannes Criegher for the



fourth edition. "The sons of Francesco Senense must have come into possession of Criegher's carefully engraved wood-blocks and when in 1604 their father's edition of 1568 presumably became sold out, they decided to issue another in precisely the same format . . . Fabricius of Acquapendente was by now professor of anatomy at Padua, and it was in all likelihood the student text he recommended. Additions to the book were a title-page hand-somely engraved on copper and an additional series of anatomical tables with a new title-page and privilege giving the date of publication which was absent on the frontispiece" (Cushing, p. 93). Cushing, *A Bio-bibliography of Andreas Vesalius*, VI.A-5. 43649





56. Weber, Carl Martin (1734-1800). Entwurf einer auserlesenen medicinischpraktischen Bibliothek für angehende Aerzte. 8vo. [16]. 538, [36]pp., plus final blank. Dessau & Leipzig: Auf Kosten der Verlags-Kasse, 1784. 202 x 123 mm. 19th century marbled boards, light wear. Minor foxing and toning but very good. \$1250

First Edition of Weber's "Plan of a select practical medical library for future physicians." The work is "an annotated bibliography, arranged by subject, and chronologically indexed by date of publication within each subject, with an author index at the end" (Garrison-Morton.com 7194). 43648

The Largest 19th Century American Anatomical Manikin

57. White, James T. (1845-1920). White's physiological manikin. Near-life size anatomical figure consisting of two folding wooden panels measuring 87.9 x 60.2 cm., opening to 174.5 x 60.2 cm., with numerous chromolithographed flaps for both halves of the torso, arms, hands, legs, feet and the head, as well as large separate view of the ear and eye, opening to reveal various anatomical views of a male human body. Edges of flaps reinforced in places with metal; flaps held down by movable metal tabs. New York: James T. White, 1886. Two metal tabs loose, some of the outer flaps worn at edges, minor creasing, two patches of wear on the background near the head, but on the whole remarkably well preserved, the wooden case scratched somewhat as one would expect. \$6500





A wonderful, nearly life-sized anatomical "manikin," with multiple and multi-layered flaps giving an internal view of the human body's muscles, tendons, arteries, bones, joints, digestive organs, heart, lungs, and reproductive organs. Intended as a teaching aid for medical students, this type of anatomical mannequin also was used "in popular lectures, classes on hygiene, doctor's offices, and traveling medicine shows where patent medicines were sold" (Sappoi, *Dream Anatomy*, p. 140). This is the largest manikin of this type produced in America during the 19th century, and examples are very scarce on the market

James T. White began his publishing career in San Francisco, founding the James T. White Co. in 1869. In 1886 the firm relocated to New York City, where it published, among other things, the first edition of the National Cyclopaedia of American Biography (1891-1939). White patented his "Physiological manikin" on May 18, 1886; our version states that it was "reissued December 14, 1886." 43692



No. 56. Wooden folding case for White's Physiological Manikin







Invention of the Airplane

58. Wright, Wilbur (1867-1912). (1) Some aeronautical experiments. In *Journal of the Western Society of Engineers* 6 (1901): 489-510. (2) Experiments and observations in soaring flight. In *Journal of the West-ern Society of Engineers* 8 (1903): 400-417. Together two volumes. 222 x 145 mm. Modern cloth, Library stamps on title pages; stamp of the Massachusetts Institute of Technology on lower edge of 1903 volume., but otherwise very good clean copies. \$7500

First Editions, journal issues. "Some aeronautical experiments" was the Wright brothers' first publication on aeronautics, and the work that first made their experiments with motorless gliders known to the world. The paper describes the brothers' progress over three seasons of glider flight, during which they mastered the art of flight control and solved the problem of wing warp drag by the addition of a vertical rear rudder. Wright presented this paper to the Western Society of Engineers at the urging of Octave Chanute, who was to a large degree responsible for encouraging the Wright brothers' early work; the paper is prefaced by some remarks by Chanute discussing the possibility of motorized flight using a new lightweight steam or gas engine.

"Experiments and observations in soaring flight," includes the first account of his and Orville's attempts with

motorized gliders. The brothers made their first powered flight (852 feet in 59 seconds) on 17 December 1903, six months after this report was read before the Western Society of Engineers. Of the work described in their second paper Wilbur later testified in 1912: "This was the first time in the history of the world that lateral balance had been achieved by adjusting wing tips to respectively different angles of incidence on the right and left sides . . . We were the first to functionally employ a movable vertical tail in a flying aeroplane. We were the first to employ wings adjustable to respectively different angles of incidence in a flying aeroplane. We were the first to use the two in combination in a flying aeroplane" (quoted in Freudenthal, *Flight into History: The Wright Brothers and the Air Age*, p. 60). These were the key discoveries made by the Wrights. When they applied for a patent on their work it was on their system of control and stability in a glider. Their key patent did not concern motorized airplanes. Dibner, *Heralds of Science*, 185. Gibbs-Smith, *The Invention of the Aeroplane 1799-1909*, pp. 37-40; 46-47. 43690




59. Hook, Diana H. and Jeremy M. Norman. Origins of cyberspace: A library on the history of computing, networking and telecommunications. With contributions by Michael R. Williams. x, 670pp. mostly printed in two columns. $8-1/2 \times 11$ inches. 284 illustrations. Printed in two colors throughout on Fortune Matte 80 pound acid-free paper. Bound in heavy cloth with silver stamping. ISBN 0-930405-85-4. Edition limited to 500 copies. Novato: Historyofscience.com, 2002. Also available in a deluxe numbered edition, bound in full leather, all edges gilt, in a cloth slipcase.

\$500 (regular) \$1500 (deluxe)

Since its publication in 2002, *Origins of Cyberspace* has become the standard bibliographical reference for classics in the history of computing, networking and telecommunications. It describes the Jeremy Norman library of technical reports, books, pamphlets, blueprints, typescripts, manuscripts, photographs, and ephemera on the history of computing and computer-related aspects of telecommunications, from the early seventeenth century to about 1969 and includes 1411 annotated entries.

"In my view the medal for bravery should be awarded to Hook and Norman for this first large-scale attempt at defining the important and most influential works on the history and development of computing by mechanical or electronic means . . . here we have a bibliography, that will, I predict, become the standard reference work" (Jolyon Hudson, in *Antiquarian Book Review* [Dec/Jan 2002]). 38301

Besides the regular limited edition, we still have three copies in stock of the deluxe edition signed by the coauthors, the designer, and the binder, bound in full leather, all edges gilt, in a cloth slipcase. 38310





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