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Classics of Science, Medicine & Technology

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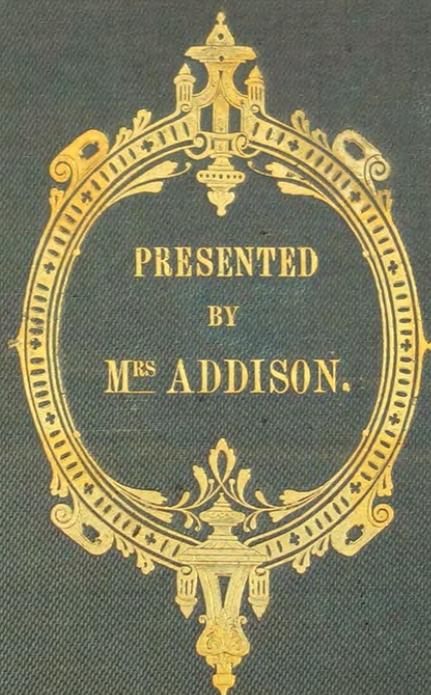
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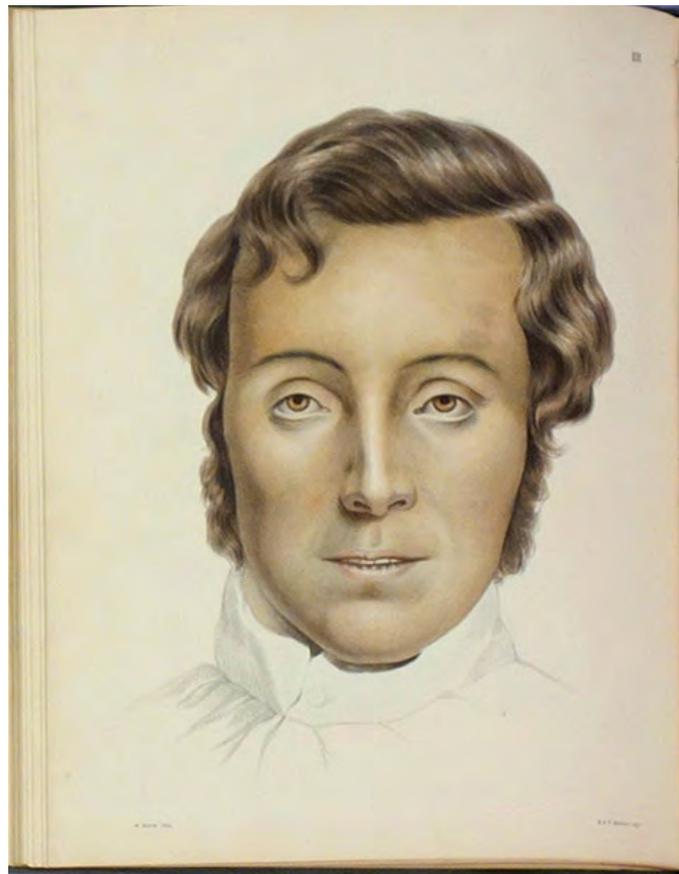
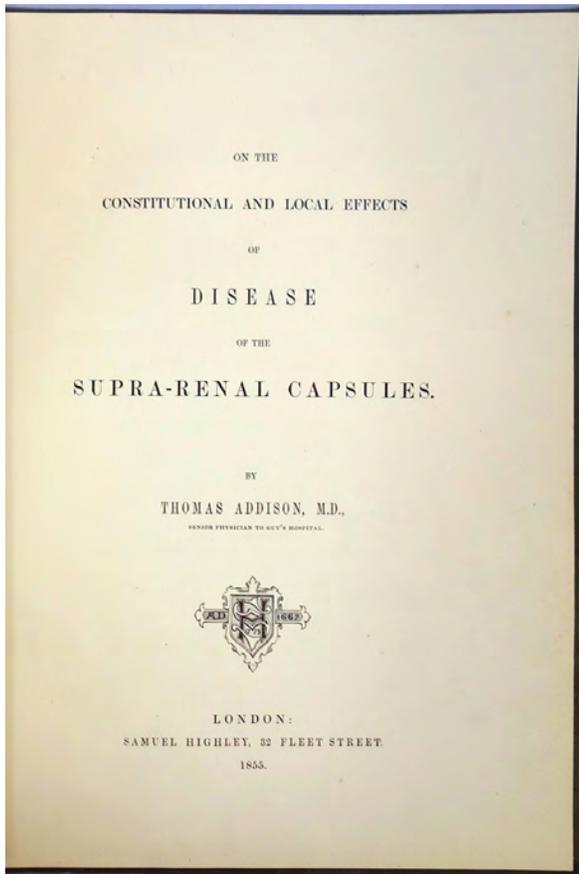
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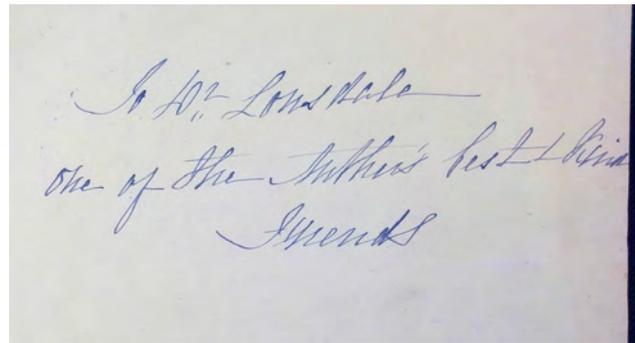
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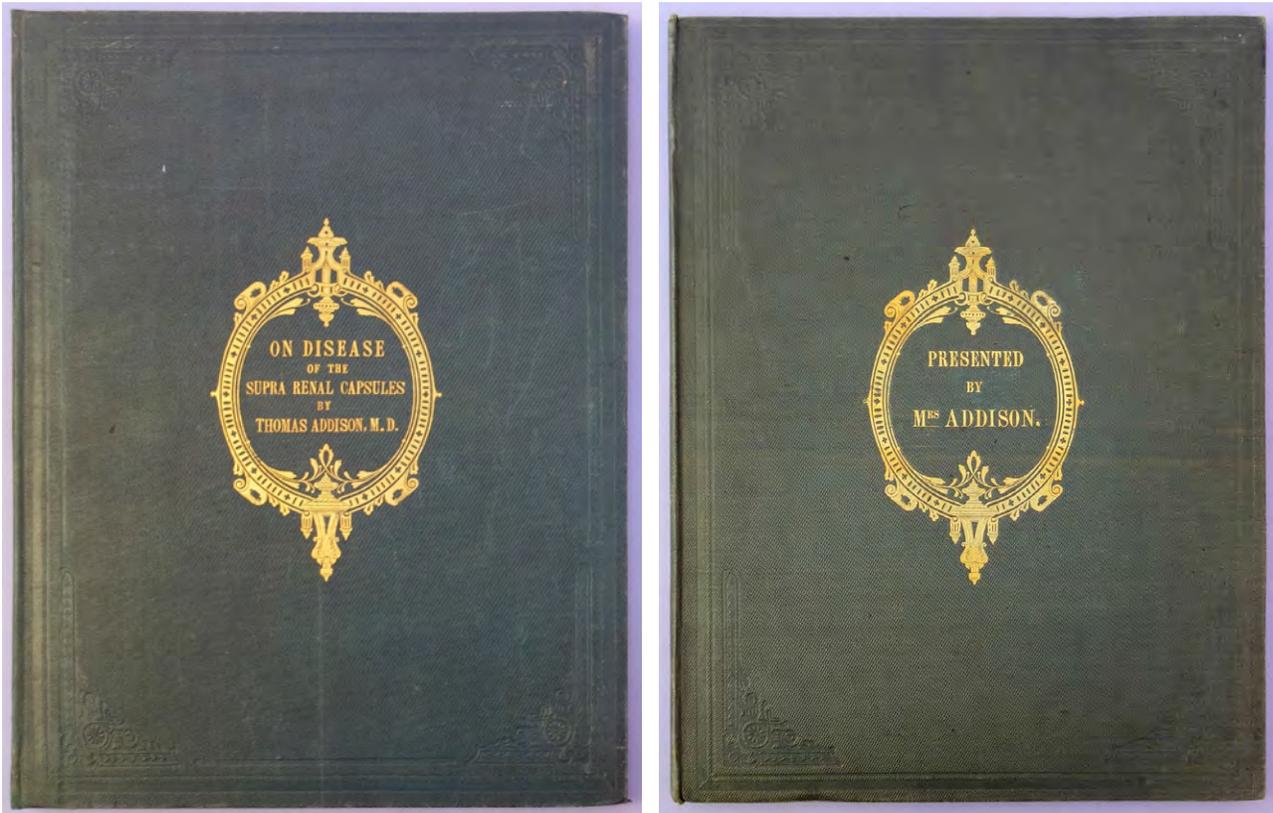


The Only Presentation Copy Known, In a Special Presentation Binding

I. Addison, Thomas (1793-1860). On the constitutional and local effects of disease of the supra-renal capsules. 4to. viii, 43, [1]pp. 11 hand-colored lithograph plates. London: Samuel Highley, 1855. 323 x 249 mm. Original green cloth stamped in gilt and blind, very slight wear at extremities. Fine copy, *presented by Addison's widow to Addison's friend Henry Lonsdale (1816-76), with a unique binding with the gilt-stamped ornament on the front cover reading "Presented by Mrs. Addison," instead of the usual title lettering, and inscription on the front free endpaper, presumably in the hand of Mrs. Addison, reading: "To Dr. Lonsdale one of the Author's best & kind friends."* \$37,500



First Edition. 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.

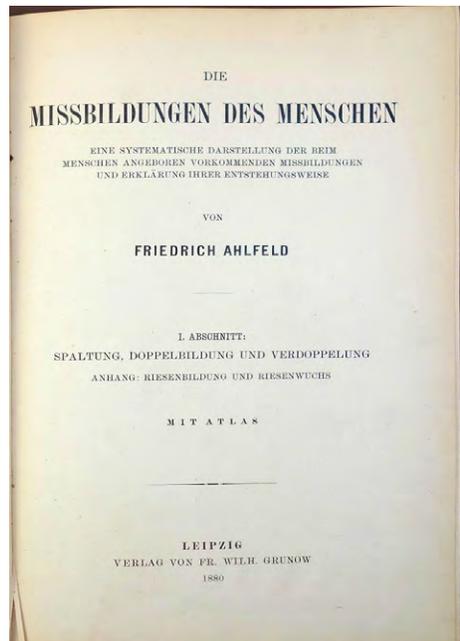
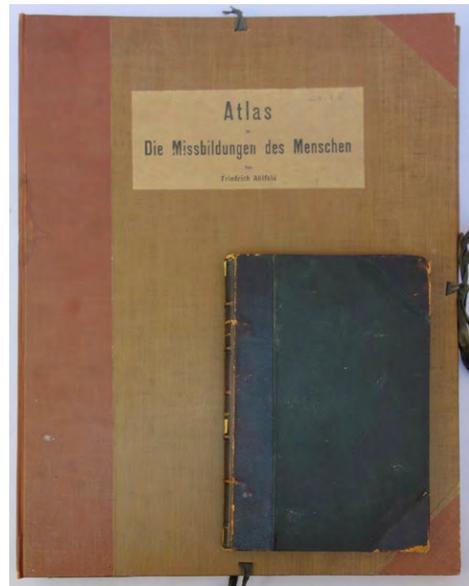


Binding of no. 2, a regular copy of Addison's "Supra-Renal Capsules" (left), compared to the binding of the presentation copy (right)

Addison, a brilliant researcher and diagnostician, is traditionally regarded as one of the "great men" of Guy's Hospital, where he worked and taught for over forty years. A shy and taciturn man, Addison suffered from bouts of severe depression during his lifetime, and eventually committed suicide in 1860. Addison's mental instability apparently precluded him from giving any copies of his *Disease of the Supra-Renal Capsules* to his friends, as we know of no other presentation copies of this work apart from this one from his widow. It is in a very special original binding, that was undoubtedly designed for the purpose, in which the normal lettering within the gilt cartouche on the upper cover ("On Disease of the Supra Renal Capsules by Thomas Addison, M.D.") is replaced by the words "Presented by Mrs. Addison." The work was inscribed to Dr. Henry Lonsdale, who was physician to the Cumberland Infirmary in Carlisle; he was also the author of *The Worthies of Cumberland* (1873), which contains a 12-page memoir of Addison. *This copy is the only nineteenth century medical or scientific work in a cloth presentation binding of this type that we have seen in our more than fifty years of experience.* For comparison we have offered a regular copy as no. 2 in this catalogue and have reproduced images of both this presentation binding and the regular edition binding side by side. Garrison-Morton.com 3864. Norman, *One Hundred Books Famous in Medicine*, 60c. *Heirs of Hippocrates* 1502. Goldschmid, p. 194. McCann, pp. 87-89. Medvei, pp. 225-230. Norman 8. 44220

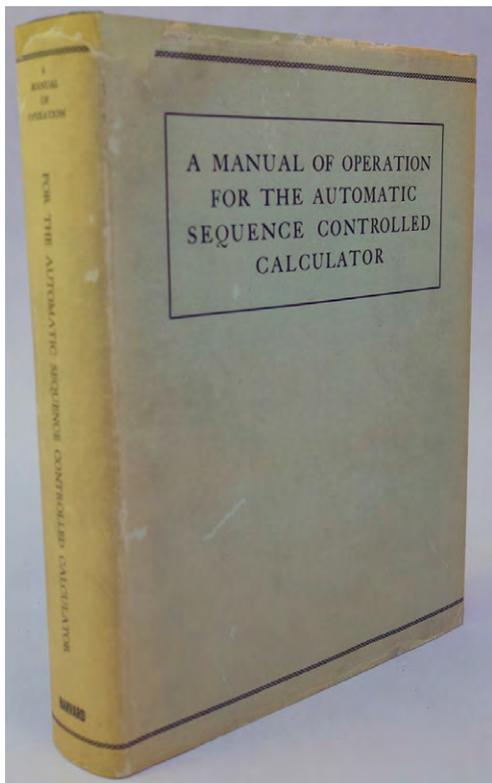
2. Addison, Thomas (1793-1860). On the constitutional and local effects of disease of the supra-renal capsules. 4to. viii, 43, [1]pp. 11 hand-colored lithograph plates. London: Samuel Highley, 1855. 327 x 250 mm. Original green cloth stamped in gilt and blind, slightly worn, skillfully recased retaining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

First Edition. Garrison-Morton.com 3864. Norman, *One Hundred Books Famous in Medicine*, 60c. *Heirs of Hippocrates* 1502. Goldschmid, p. 194. McCann, pp. 87-89. Medvei, pp. 225-230. Norman 8. 41483



3. **Ahlfeld, [Johann] Friedrich** (1834-1929). *Die Missbildungen des Menschen*. Eine systematische Darstellung der beim Menschen angeboren vorkommenden Missbildungen und Erklärung ihrer Entstehungsweise. 2 vols. in 1, plus atlas. xv, 144; ix, 145-297pp. (text). Atlas consists of 49 unbound lithographed plates. Leipzig: F.W. Grunow, 1880-1882. 230 x 157 mm. (text); 455 x 351 mm. (atlas). Text bound in half morocco, hinges and corners a bit rubbed, small paper labels pasted to spine; atlas plates laid into a cloth folder with cloth ties, paper label on front cover, small dampstain on spine. Light toning, atlas plates lightly foxed, a few plate corners creased, first plate with small toned area from folder endsheets, but very good. \$6000

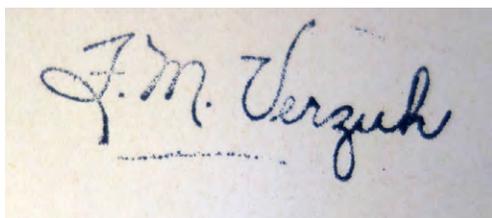
First Edition. Ahlfeld, a gynecologist and obstetrician, was one of several medical researchers who helped to put teratology on a scientific footing in the latter half of the nineteenth century. His *Die Missbildung des Menschen* gives a systematic presentation of congenital malformations in humans and explains their modes of origin. The plates reproduce images of important specimens from otherwise inaccessible sources. Rare on the market; this is the first set we have handled in over 40 years. Garrison-Morton.com 534.66. 44193



Manual for the First Electro-Mechanical General Purpose Computer, with Programs Written by Grace Hopper

4. [Aiken, Howard Hathaway (1900–1973) and Grace Murray Hopper (1906–92).] A manual of operation for the Automatic Sequence Controlled Calculator by the staff of the Computation Laboratory. [16], 561 [3]pp. 17 numbered plates (including frontispiece), text illustrations. Cambridge: Harvard University Press, 1946. 268 x 200 mm. Original dark blue cloth, dust-jacket (expertly repaired). Minor finger-soiling, but very good. From the library of computing pioneer Frank M. Verzuh (1918–2000), with his signature stamp on the front free endpaper. \$3850

First Edition, in the Extremely Rare Dust-Jacket, of the first book on digital computing co-authored by Grace Hopper, the first woman after Ada Lovelace to contribute significantly to the history of computing. This book also contains full instructions for programming the first general-purpose electro-mechanical computer, and examples of the first programs for an electro-mechanical computer. *This is the only copy of this work in dust-jacket that we have ever handled.*



The Harvard Mark I, also known as the IBM Automatic Sequence Controlled Calculator, was the brainchild of Howard Aiken, who first conceived of building a powerful, large-scale calculating machine in 1935 while pursuing graduate studies in physics at Harvard University. In 1937, after Aiken had become a professor of applied mathematics at Harvard's Graduate School of Engineer-

ing, he proposed his idea to a number of calculating-machine manufacturers, receiving several rejections before finally convincing IBM to undertake the project. Construction of the Mark I was completed in early 1943, and a year later the machine was dismantled and shipped to Harvard, where it became operational in May 1944.

After the Mark I was set up it was immediately commandeered for war work by the United States Navy. Aiken, a commander in the United States Naval Reserve, was put in charge of the navy's computation project. One of Aiken's staff was Lieutenant (later Admiral) Grace M. Hopper, a mathematician who, in her own words, had "never met a digit" until joining the Computation Laboratory; she would go on to become one of the most famous of the postwar computer pioneers, making fundamental contributions to the development of the first compilers. The operating manual for the Mark I calculator—published as Volume 1 of the *Annals of the Computation Laboratory of Harvard University*—was written largely by Hopper, who was the chief author of chapters 1–3 and the eight appendices following chapter 6.

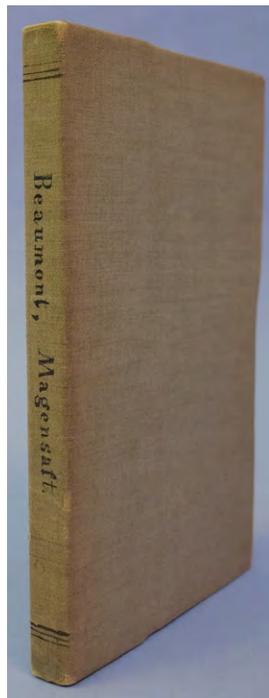
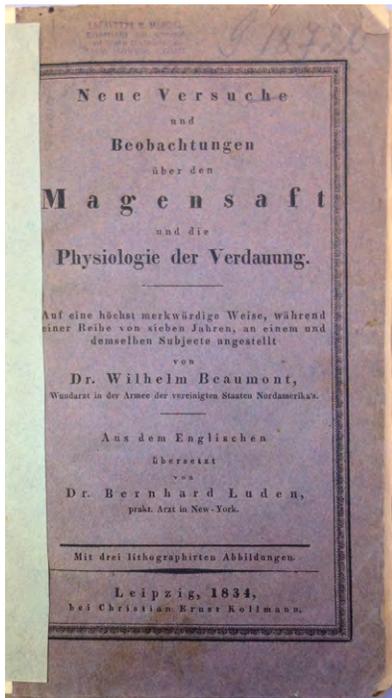
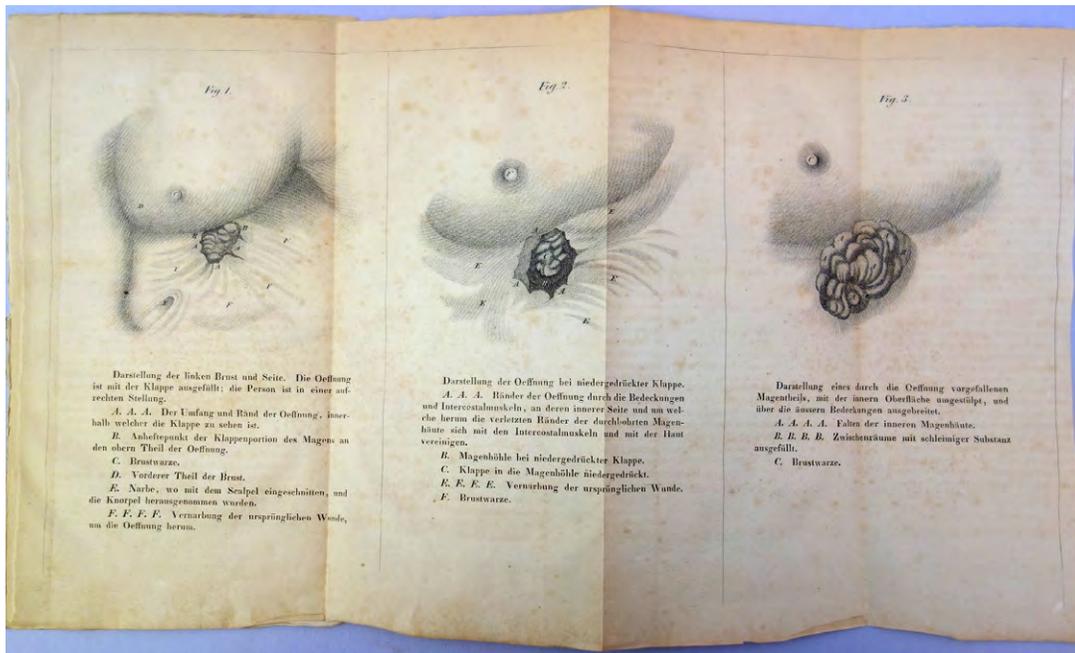
This copy is from the library of Frank M. Verzuh, an early pioneer in the computing field. "Frank M. Verzuh worked at the Massachusetts Institute of Technology from 1940 until 1960, beginning as a research assistant in the Department of Electrical Engineering, earning his SM degree in 1946 and his SCD in 1952 and becoming the first Assistant Director of the Computation Center in 1956 . . . Before and during World War II he worked under Vannevar Bush on differential analyzers and the Rapid Arithmetic Machine. Together with other leading researchers he attended the renowned Moore School Lectures in 1946. His notes are the only remaining ones for some of those lectures" ("Dr. Frank Matthew Verzuh." *IT History Society*. N.p., 31 Dec. 2015. Web. Accessed 17 Nov. 2016). *Origins of Cyberspace* 411. 44184



5. Bastet, F. D., manufacturer. Set of approximately 55 steel surgical instruments plus extra blades, etc., in a 2-compartment wooden case (lock missing, interior catches need repair). The Hague, ca. 1890–1900. Set appears to be complete and unused, with machine oil still present on several of the instruments. Some wear to wooden box. \$1250

F. D. Bastet was a Dutch manufacturer and seller of cutlery, knives, razors and surgical instruments from the late 19th to the mid-20th century. This set of instruments includes forceps, knives, rasps, scalpels, probes, retractors and saws, including an unusual hand-cranked chain saw for bone. 44226



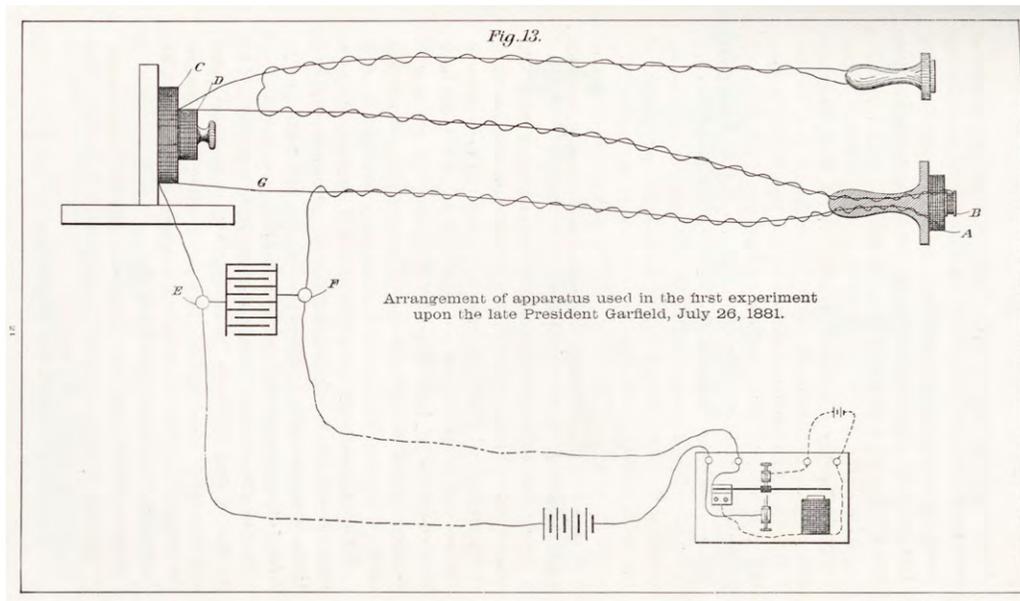


6. Beaumont, William (1785–1853). *Neue Versuche und Beobachtungen über den Magensaft und die Physiologie der Verdauung*. Translated by Dr. Bernhard Luden. vi, 222pp. Folding plate with three images. Leipzig: Christian Ernst Kollmann, 1834. 230 x 132 mm. Original printed wrappers glued into later cloth folder, spine perished, signatures loose (needs rebinding). Light toning, edges a bit frayed, otherwise internally very good. Stamp of biochemist Lafayette B. Mendel (1872–1935) on front wrapper and title. \$950

First Edition in German of Beaumont's classic work on the physiology of digestion, first published in English in 1833. 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.

The German translation of Beaumont's work was made by Dr. Bernhard Luden (b. 1807) of New York, son of German historian Heinrich Luden. This copy is from the library of Lafayette B. Mendel, best known for his discovery of Vitamin A and water-soluble Vitamin B. See Garrison–Morton.com 989; Dibner, *Heralds of Science*, 130; Horblit 10; Norman 152; Norman, *One Hundred Books Famous in Medicine*, 61. 44023



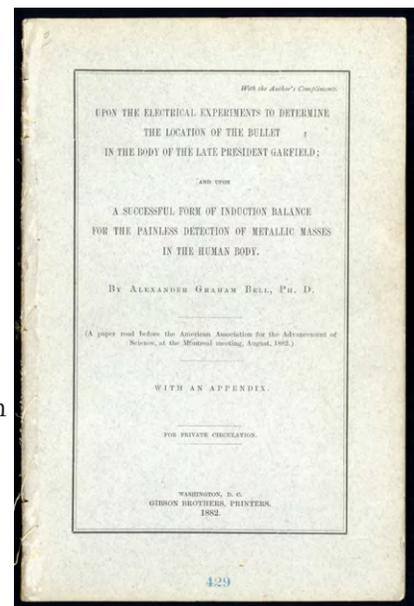
Alexander Graham Bell Invents a Device for Detecting Bullets without Probing

7. Bell, Alexander Graham (1847-1922). Upon the electrical experiments to determine the location of the bullet in the body of the late President Garfield; an upon a successful form of induction balance for the painless detection of metallic masses in the human body. 58pp. Text illustrations. Washington DC: Gibson Brothers, 1882. 228 x 150 mm. Original printed wrappers, spine perished, evidence of previous binding in a book (oversewing, glue and mesh at spine). Very good copy. Embossed stamp of the Connecticut State Library on front wrapper and first leaf. \$1500

First Edition, Author's Offprint for private circulation (so noted on the front wrapper) of the paper describing Bell's induction balance, the best instrument for locating metallic objects in the body prior to the x-ray.

On July 2, 1881 President James Garfield was shot by a deranged assassin; he survived for 79 days before dying from septicemia on September 19. The assassination attempt left Garfield with a bullet lodged behind his pancreas, but his death could likely have been prevented had he received better medical care after the shooting. Unfortunately, his doctors did not understand antiseptic principles and so did not take any measures to prevent infection, probing the president's wound with unsterilized fingers and instruments in a vain attempt to find the bullet; they also misjudged the path the bullet took, believing that it had traveled to the right rather than to the left in Garfield's body.

Shortly after the shooting Bell was asked if he could invent a device to detect the bullet in Garfield's body without the need for painful probing. Bell came up with his induction balance, a machine that used a telephone hooked up to an electric current to locate metallic objects in the body. On August 2 Bell tried to find the bullet lodged inside the president but was unsuccessful, in part because the metal in Garfield's bed frame prevented Bell from getting an accurate result, and in part because Garfield's doctor would only let Bell use his device on Garfield's right side. The president's deteriorating condition prevented Bell from making a second attempt, and after his initial failure he was denounced as a charlatan; however, an improved version of Bell's induction balance saved countless lives on the battlefield in the decades before the x-ray came into general use. Garrison-Morton.com 8176. 44223





Inscribed to One of the "Immortals" Years before Bernard Himself was Elected to the Académie Française

8. Bernard, Claude (1813–78). *Nouvelle fonction du foie, considérée comme organe producteur de matière sucrée chez l'homme et les animaux.* 92, [2]pp. Wood-engraved text illustration. Paris: J.-B. Baillière [etc.], 1853. 277 x 223 mm. Original gray-green printed wrappers, spine a little worn; boxed. Light foxing but a fine and totally unrestored copy in its original condition. Presentation copy, inscribed by Bernard to François-Auguste Mignet (1796–1884) on the front wrapper: "Monsieur Mignet de l'Académie Française de l'Académie des Sciences morales et politiques &c. &c. hommage de l'auteur Cl. Bernard."

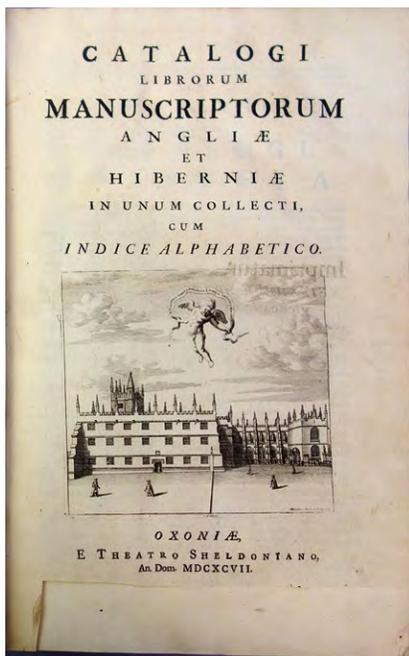
\$22,500

First Monograph Edition of Bernard's thesis for the doctorate in science, a "remarkable exposition of the glycogenic function of the liver" (Horblit, *One Hundred Books Famous in Science*, 11a, citing this edition). The monograph edition was probably published simultaneously with a very few copies of a thesis edition produced to meet the legal requirements of the degree. Both versions are rare; presentation copies even more so.

Bernard's contributions are so important and so numerous that it is difficult to select one work to represent them. His major physiological discoveries included the role of the pancreas in digestion, the glycogenic function of the liver, the vasomotor innovation, and the effects of curare on neuromuscular transmission. He also introduced seminal theoretical concepts such as that of internal secretion . . . Bernard began investigating the glycogenic function of the liver in the 1840s, publishing his first communication on the subject in 1848. In order to determine whether glycemia (sugar in the blood) is a normal or abnormal physiological phenomenon, Bernard conducted a series of experiments in which series of animals were fed either starchy or meat diets, or in some cases not fed at all for several days. He found sugar in blood samples taken from all

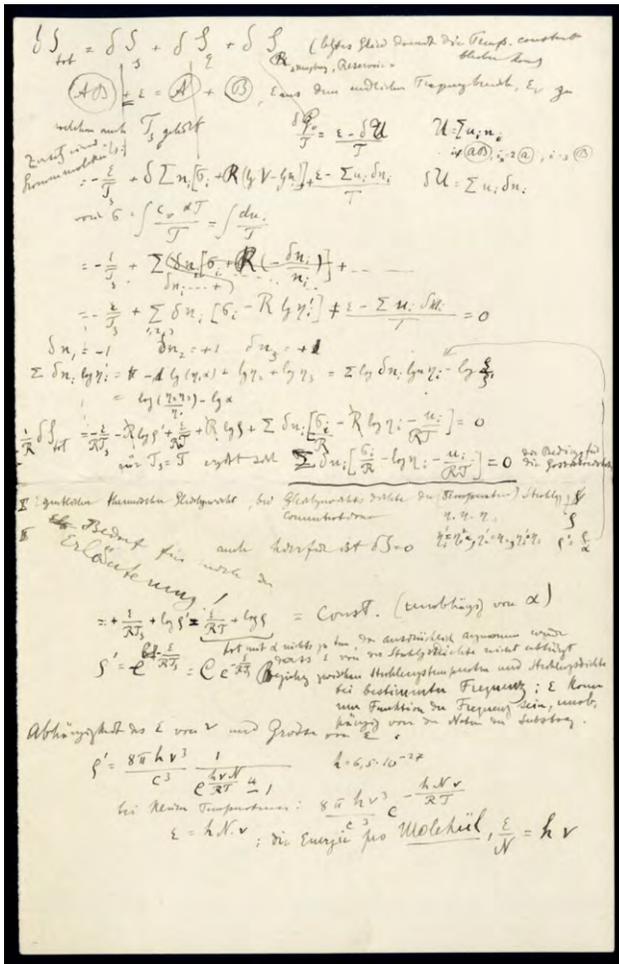
of these groups, from which he concluded that glycemia results from a normal and constant metabolic process independent of food intake and that blood sugar must be produced by a source within the animal body” (Norman, *One Hundred Books Famous in Medicine*, 67A, citing both the thesis edition and the monograph edition).

Bernard elegantly inscribed this copy of his thesis to François-Auguste Mignet, a noted French liberal journalist, playwright and historian. As Bernard’s beautifully penned inscription states, Mignet was a member of both the Académie Française, France’s most august and exclusive learned society, and the Académie des Sciences Morales et Politiques, another of the five academies of the Institut de France. The Académie Française consists of forty members, known as *immortels* (immortals). New members are elected by the members of the Académie itself, and *académiciens* hold office for life. As a member of both societies, Mignet represented the pinnacle of the French establishment in the arts, letters, and science. Bernard, who had initially aspired to a literary career and retained a strong literary bent in his writings, was eventually elected to the Académie Française, taking his seat along with other luminaries, including Mignet, in 1868. This is an extremely rare honor for a physician, and perhaps the highest academic honor that France offers. Norman 200. Norman, *One Hundred Books Famous in Medicine*, 67A. Horblit, *One Hundred Books Famous in Science*, 11A. 44221



9. [Bernard, Edward.] *Catalogi librorum manuscriptorum Angliæ et Hiberniæ in unum collecti, cum indice alphabetico.* 2 vols. [16], 374, [44], 88, [10], 89–274 [i.e., 174], [8]; 256, 253–255, 356–403, [24], 65, [5]pp. Engraved frontispiece portrait in Vol. I. Oxford: E Theatro Sheldoniano, 1697–98. Bound with: **Smith, Thomas.** *Catalogus librorum manuscriptorum Bibliothecæ Cottonianæ.* [12], 1, [2], 159, [25]pp. Engraved portrait frontispiece. Oxford: E Theatro Sheldoniano, 1696. Together 2 works in 1, folio. 388 x 237 mm. Quarter calf, marbled boards, boards worn and rubbed but sound. Lower margins of titles in first work cut away, not affecting text, but very good. Signature of Franciscan friar Richard Francis Walsh, dated 1822, on front pastedown of Vol. I. \$3750

First Editions. Bernard’s work represents the first attempt at a union catalogue of manuscripts in institutional and private libraries in England and Ireland. Volume I of Bernard’s *Catalogi librorum manuscriptorum Angliæ et Hiberniæ* contains catalogues of the manuscripts in the Bodleian and other libraries in the universities of Oxford and Cambridge; Volume II catalogues the manuscripts of the cathedral libraries in England and Ireland. Smith’s *Catalogus librorum manuscriptorum Bibliothecæ Cottonianæ* is the first published catalogue of the celebrated private manuscript library formed by Sir Robert Bruce Cotton; the collection, which contains 958 rare and precious manuscripts, is one of the foundations of the British Library. Smith’s work also includes a biography of Cotton and a history of his library. 42269



10. [Besso, Michele (1873-1955).] Autograph manuscript notes, including numerous mathematical calculations, relating to Einstein's "Thermodynamische Begründung des photochemischen Äquivalentgestezes." One sheet, written on one side only. N.p., n.d. [ca. 1911-1912]. 220 x 140 mm. Creased horizontally but fine. \$25,000

Besso, an Italian-Swiss engineer, met his close friend Albert Einstein when the latter was at the Federal Polytechnic Institute (now the ETH Zurich); Einstein described Besso as "the best sounding board in Europe" for scientific ideas. The present sheet of notes in Besso's hand is an example of this fruitful relationship between the two men: It contains Besso's mathematical recalculations of formulae that Einstein used in his paper "Thermodynamische Begründung des photochemischen Äquivalentgestezes" [Thermodynamic foundation of the photochemical equivalence law], published in the *Annalen der Physik* on March 26, 1912. On this leaf Besso makes specific use of Planck's constant h , which at the time was calculated as 6.5×10^{-27} : "Die Energie pro Molekul, $E/N = hv$." This and the other calculations at the foot of the leaf relate directly to p. 837 of Einstein's paper, in which Einstein re-expressed Wilhelm Wien's formula of radiation by introducing Planck's constant into it.

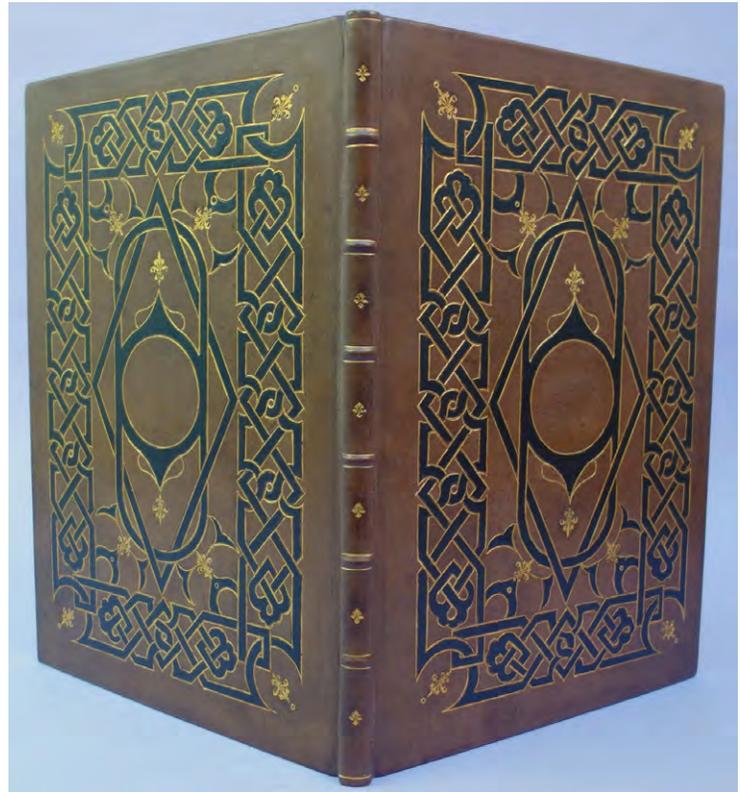
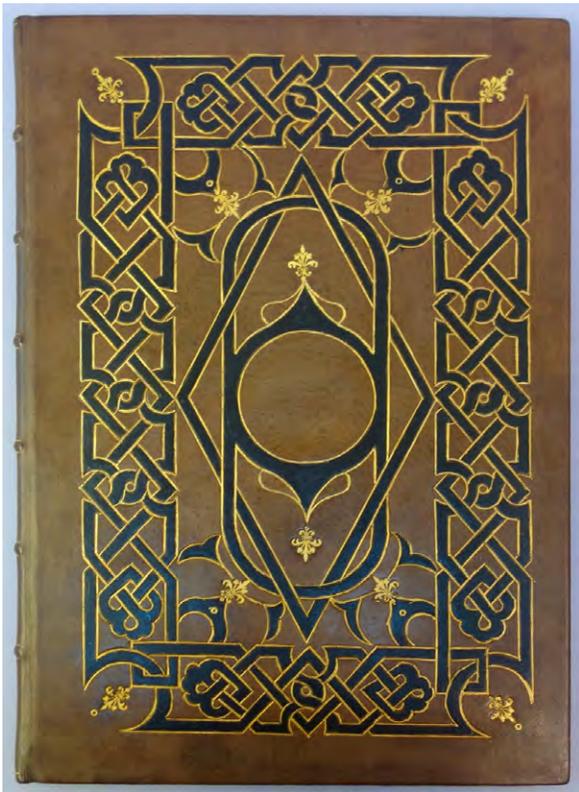
Besso is best known today for his collaboration with Einstein on research that led to the theory of general

relativity. In 1913 and 1914 the two friends generated a set of research notes now known as the Einstein-Besso manuscript, one of only two extant manuscripts (the other being the so-called Zurich notebook of 1912-13) with research notes documenting Einstein's work toward the general theory of relativity. This sheet comes from the collection of historian of physics Jagdish Mehra (1931-2008). 44199



French Renaissance Classic of Machinery and Mechanical Engineering

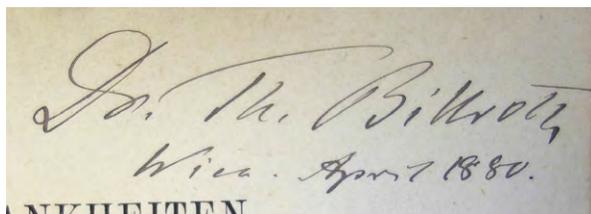
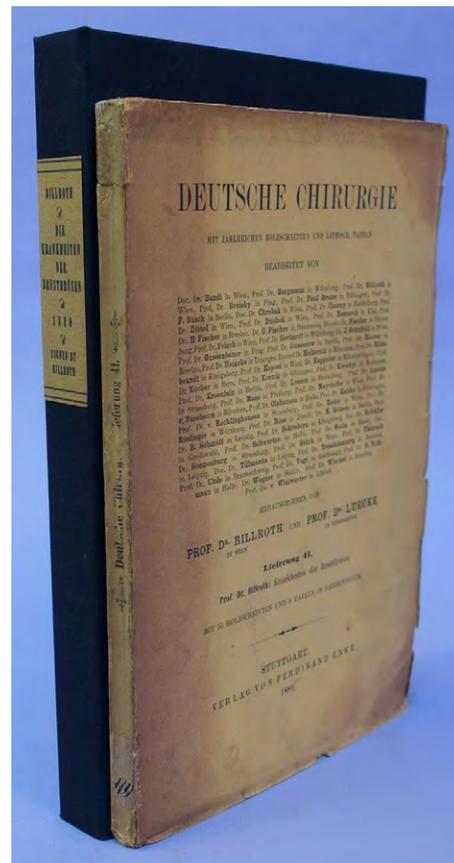
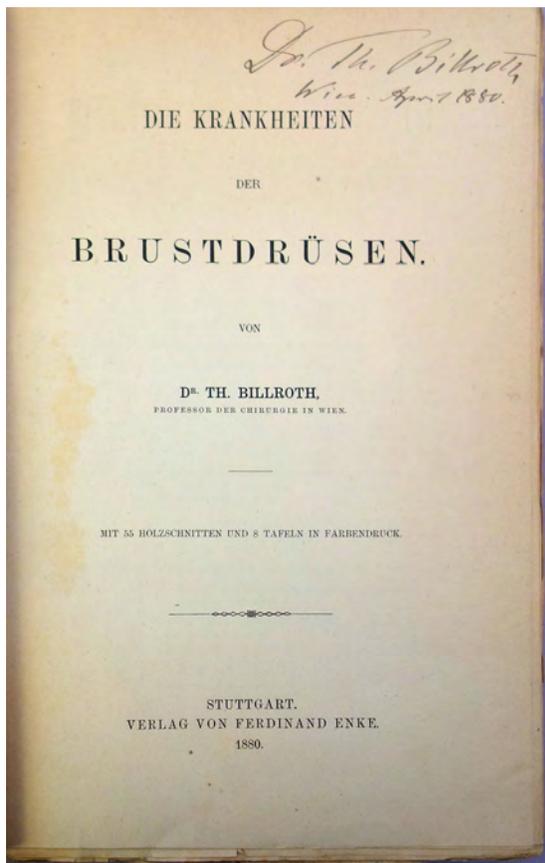
11. Besson, Jacques (d. 1569?). *Theatrum instrumentorum et machinarum*. . . cum Franc. Beroaldi figurarum declaratione demonstrativa. Edited by François Béroalde de Verville (1558-1612). Folio. II unnumbered leaves. Engraved architectural title-page border and 60 full-page engraved plates following the text, numbered 1-60. The plates are unsigned but were most probably drawn by Jacques Androuet du Cerceau (1510?-post 1584); plates 17, 35, 39 and 51 are copies of the original Androuet plates by René Boyvin (1525?-1580?), signed with his monogram. Lyon: Barth. Vincent, 1578. 365 x 253 mm. Superbly bound in full calf gilt, front and back covers tooled and painted with strapwork in the style of sixteenth-century French painted bindings, by Sean Richards. Small marginal tear in one plate repaired, but a fine copy. \$15,000



Third(?) edition. Besson's lavishly illustrated *Theatrum instrumentorum et machinarum*, one of the first French works on machines and mechanical engineering, was originally published in an edition with no imprint (Orléans, 1569?) under the title *Instrumentorum et machinarum*. . . *liber primus*. This first edition was followed by three Lyon editions published in 1578, each augmented with explanatory notes by François Béroalde de Verville (author of the erotic classic *Moyen de parvenir*) and published by Barthélemy Vincent. Mortimer states that the present edition, distinguished by its Latin text, imprint date in Roman numerals, and four plates copied by Boyvin (see above), is probably the second Vincent edition; see Mortimer, *French 16th Century Books*, pp. 76–80 for further discussion.

Besson's *Theatrum* illustrates an amazing variety of inventions, ranging from war machines to musical instruments to fire-fighting apparatus. The sixty full-page plates, reprinted from the first edition, were most probably designed by the Orléans architect Jacques Androuet du Cerceau. In the present edition, plates 17, 35, 39 and 51 were replaced with copies by René Boyvin (signed with his monogram), but the original plates remained in Vincent's possession and appeared variously in later editions. As a theoretical work the *Theatrum* was well received, going through several editions and translations and doing much to popularize mechanical engineering (in the tradition of Leonardo da Vinci) among the scientific dilettantes of France. This is in comparison to Ramelli's book which had much more restricted circulation. Besson's designs could hardly have been practical for his era, however, as they made extensive use of both the screw and the worm-wheel, devices that would have worked in theory, but could not yet be made with enough accuracy to function efficiently. Adams B-838. Mortimer, *French 16th Century Books*, 58. Norman 227. 43709





Billroth's Own Copy of his Breast Cancer Classic

12. Billroth, [Christian Albert] Theodor (1829–94). *Die Krankheiten der Brustdrüsen*. Deutsche Chirurgie, Lieferung 41. x, [2], 168pp. 8 chromolithograph plates, text illustrations. Stuttgart: Ferdinand Enke, 1880. 256 x 168 mm. Original printed wrappers, tears in spine expertly repaired, spine and corners a bit darkened, edges a bit frayed; preserved in a cloth drop-back box. Minor foxing in the plates, but very good. With Billroth's autograph signature on the title: "Dr. Th. Billroth / Wien April 1880."

\$3750

First Edition of Billroth's classic monograph on breast cancer and other diseases of the mammary glands. Signed copies of Billroth's works are rare; this is the first one we have handled in our five decades in the trade.

Die Krankheiten der Brustdrüsen appears to be an expanded version of Billroth's *Die Krankheiten der weiblichen Brustdrüsen* [Diseases of the female mammary glands], which was published as Vol. III, part 10 of *Handbuch der Frauenkrankheiten* (1880); the expanded *Krankheiten der Brustdrüsen* adds a final chapter on male breast cancer. The work is also significant in the history of plastic and reconstructive surgery; see Gabka & Vaubel, *Plastic Surgery Past and Present*, p. 136. Billroth, professor of surgery at Zürich and Vienna, was the founder of the Vienna School of Surgery. He has also been called the founder of modern abdominal surgery, and he was one of the first to introduce antisepsis into the Continental operating room. He was instrumental in establishing the first modern school of thought in surgery, using statistical methods and analyzing his failures as well as his successes. Billroth's disciples helped to spread his teachings throughout Europe, and his methods of surgical education had a great influence on William Halsted's pioneering surgical residency program at Johns Hopkins. Garrison-Morton.com 5773. 44206

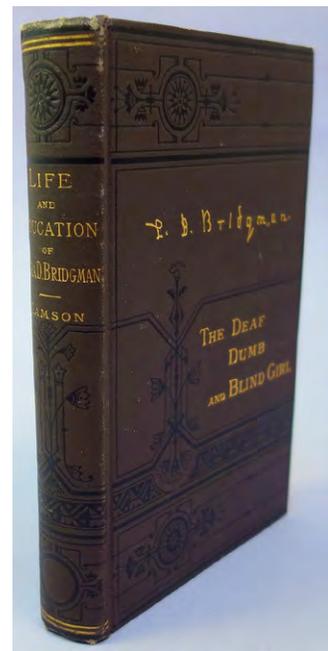
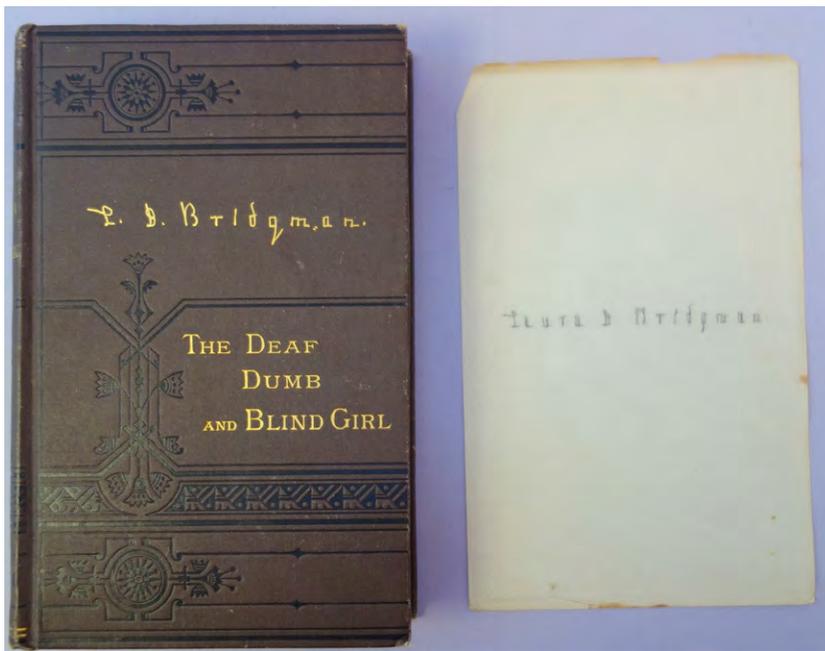


Extremely Rare, Apparently Unrecorded Medical Broadsheet containing an astrological bloodletting calendar, from the press of Christian Egenolph (1502–1555), one of the most significant German printers of the sixteenth century. The broadsheet is not recorded in any of the online databases we usually consult, such as OCLC, KVK and VD 16/17; likewise, there is no copy listed in Chrisman’s *Bibliography of Strasbourg Imprints 1480–1599*. Given the ephemeral nature of such documents, it is quite possible that our copy of this broadsheet, which was preserved by being bound into a book, is the only surviving example.

Bloodletting as a means of curing or preventing illness goes back to antiquity. It was practiced in Egypt circa 1000 years BCE and later adopted by Greek and Roman physicians in classical times as a means of restoring balance

among the body’s humors. The Greek physician Galen (129 – ca. 216 CE), whose writings dominated Western medicine for over a millennium, was largely responsible for bloodletting’s enduring popularity as a therapy. After discovering, contrary to then-current belief, that arteries contain blood rather than air, Galen developed a complex system in which specified amounts of blood were removed from specific blood vessels (either arteries or veins) depending on the illness, the patient’s age and constitution, the location, the weather and the season of the year. Galen held that blood could cause illness by stagnating in the extremities, a concept invalidated by Harvey’s discovery of the circulation in 1628; nonetheless, bloodletting remained an accepted medical practice until the second half of the nineteenth century, when its ineffectiveness was revealed by newly developed statistical methods.

The Middle Ages saw the rise of bleeding and purgation calendars, which used astrological data to determine the lucky and unlucky days for bloodletting or taking physic in a given year. Astrology at this time was considered an integral part of medicine: Authorities like Petrus de Abano (1257–1315), professor of medicine at Padua, “believed that every living being and event on Earth was affected by planetary influences . . . The phases of the Moon determined the optimal times for bloodletting, and the stars pointed to the best times for performing surgery. And the position of the constellations allowed an insightful physician to determine the best times for administering remedies” (Deming, *Science and Technology in World History*, Vol. 3, p. 90). Bloodletting calendars remained popular into the Renaissance and were among the first medical documents to be printed, with the earliest known printed example appearing in 1456 (see Garrison-Morton.com 6818). Our calendar, which bears Christian Egenolph’s Strasbourg imprint in the lower margin, most probably was published no later than 1530, the year that Egenolph left Strasbourg for Frankfurt-am-Main (it is possible, however, that our broadsheet dates from a few years later, as we know of at least one book—Ketham’s *Wundartznei*, 1531—issued from Egenolph’s Strasbourg press after 1530). The calendar is handsomely illustrated with 20 well-executed woodcuts comprising allegorical representations of the seven known planets (Saturn, Jupiter, Mars, Venus, Mercury, Sun, Moon), images of the twelve signs of the Zodiac and a schematic of the human body with numbered keys indicating specific bloodletting sites, explained in the broadsheet’s text. 44196



Presentation Copy

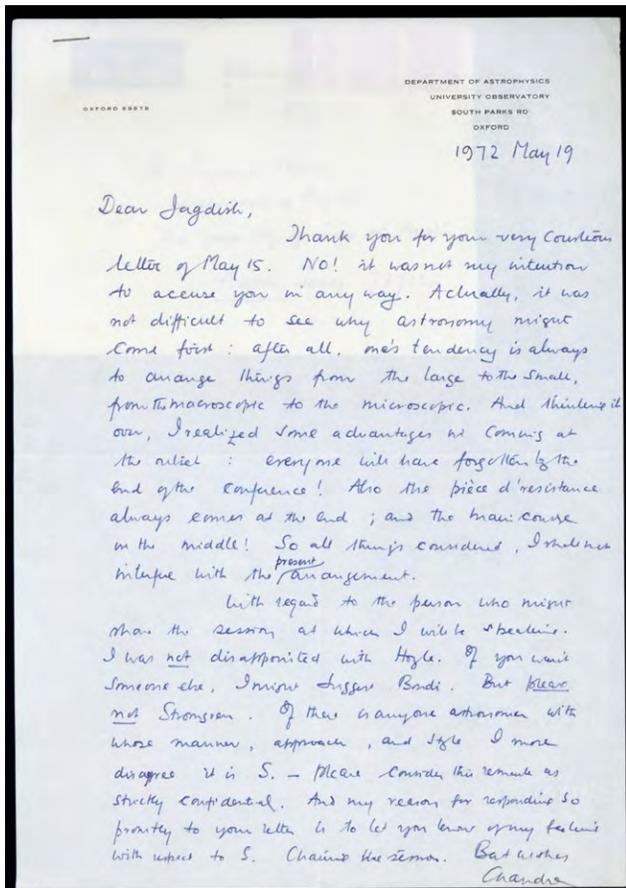
14. [Bridgman, Laura Dewey Lynn (1829–89).] Lamson, Mary Swift. Life and education of Laura Dewey Bridgman, the deaf, dumb and blind girl. xl, 373pp. Frontispiece portrait, plate, 3 folding facsimile leaves of Bridgman’s writing. Boston: New England Publishing Company, 1878. 192 x 122 mm. Original cloth stamped in gilt and black, light wear to extremities, front hinge barely cracked. Light toning but very good. Leaf with pencil signature “Laura D. Bridgman,” presumably in her hand, laid in. *Presentation Copy*, inscribed by Lamson on the flyleaf: “To my pastor, with grateful remembrances, M. S. Lamson.” Leaf with pencil signature “Laura D. Bridgman,” presumably in Bridgman’s hand, laid in.

\$1250

First Edition. Laura Bridgman, left blind and deaf at the age of two after a bout of scarlet fever, was the first person with deafblindness to learn verbal language, fifty years before the more famous Helen Keller. At that time deafblind people like Bridgman were considered to be feeble-minded, but Samuel Howe, the director of the Perkins Institute for the Blind, was convinced of Bridgman’s intelligence and persuaded her family to send her to his school. Shortly before her eighth birthday Bridgman was enrolled at the Perkins Institute, where Howe succeeded in teaching her how to communicate in English both by tactile sign language and by means of a writing board. During her youth and adolescence Bridgman became famous, attracting the attention of celebrities such as Charles Dickens, who devoted nearly an entire chapter of his *American Notes* to the “sightless, earless, voiceless child” he had visited in 1842 during his first American tour (Dickens’ account later inspired Helen Keller’s mother to hire Perkins graduate Annie Sullivan to teach her own deafblind daughter). After reaching adulthood Bridgman fell back into obscurity, spending most of her life at the Perkins Institute where she died at the age of 59.

Mary Lamson, the author of this biography, was a teacher at the Perkins Institute who spent three years as Bridgman’s special instructor. We are offering an inscribed presentation copy of the biography, with an example of Bridgman’s signature done with the aid of her writing board (presumably by Bridgman herself) laid in. Garrison-Morton.com 7745. 44155





15. Chandrasekhar, Subrahmanyan (1910–95).

Collection of correspondence, including three *Autograph Letters signed*, primarily with historian of physics Jagdish Mehra (1931–2008). 12 pages total. V.p., 1970–88. Fine. Complete listing available on request. \$4500

Chandrasekhar was awarded the 1983 Nobel Prize in physics (together with William A. Fowler) for “formulating the currently accepted theory on the later evolutionary stages of massive stars . . . Chandrasekhar determined what is known as the Chandrasekhar limit—that a star having a mass more than 1.44 times that of the Sun does not form a white dwarf but instead continues to collapse, blows off its gaseous envelope in a supernova explosion, and becomes a neutron star. An even more massive star continues to collapse and becomes a black hole. These calculations contributed to the eventual understanding of supernovas, neutron stars, and black holes” (“Subrahmanyan Chandrasekhar.” Timeline of Nobel Winners Company, 2003. Web. Accessed 21 Dec. 2016). Chandrasekhar’s correspondent on all but one of the letters was Jagdish Mehra, author of numerous important works on the history of physics including the magisterial multi-volume *Historical Development of Quantum Theory* (1982–2001; with Hans Rechenberg). The remaining correspondent was William C. Schieve,

professor of physics at the University of Texas, Austin.

Several of Chandrasekhar’s letters to Mehra from the early 1970s deal with the 1972 symposium on “The Development of the Physicist’s Conception of Nature in the Twentieth Century,” organized by Mehra and others in honor of Paul Dirac’s 70th birthday. Chandrasekhar was one of the participants in the symposium, delivering lectures titled “A chapter in the astrophysicist’s view of the universe” and “Remarks on Enrico Fermi”; these were later published in *The Physicist’s Conception of Nature* (1973), edited by Mehra. Two of Chandrasekhar’s letters regarding the symposium are particularly noteworthy. In his letter of February 15, 1972, he relates a conversation he had in the late 1950s with Jan Oort (1900–1992), the pioneering radio-astronomer who first suggested the existence of dark matter:

. . . [He] insisted that I say something about my work. I showed him then certain photographs (then on my desk) of some experiments that had been carried out by Nakagawa in a laboratory (in my charge!) They revealed (in a way that I thought was spectacular) the sudden enlargement of the convection cells in a rotating system when the impressed magnetic field increased beyond a certain limit . . . I showed these pictures to Oort. Oort looked at them & then turned to me and asked “All this is fine; but when will you turn again to the real problems of astronomy.” To which I replied: “I am sorry I do not yet feel that I can paint the Madonna.”

In his letter of May 19, 1972 Chandrasekhar reveals his poor opinion of Danish astrophysicist Bengt Strömberg (1908–87), who discovered the existence of huge interstellar shells of ionized hydrogen around stars (now known as Strömberg Spheres):

With regard to the person who might share the session [of the symposium] at which I will be speaking, I was not disappointed with [Fred] Hoyle. If you want someone else, I might suggest [Hermann] Bondi. But please not Stromgren. If there is any one astronomer with whose manner, approach, and style I more disagree with it is S.—please consider this remark as strictly confidential.

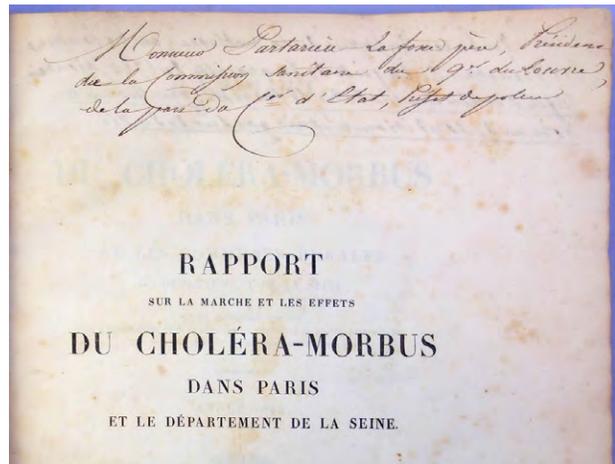
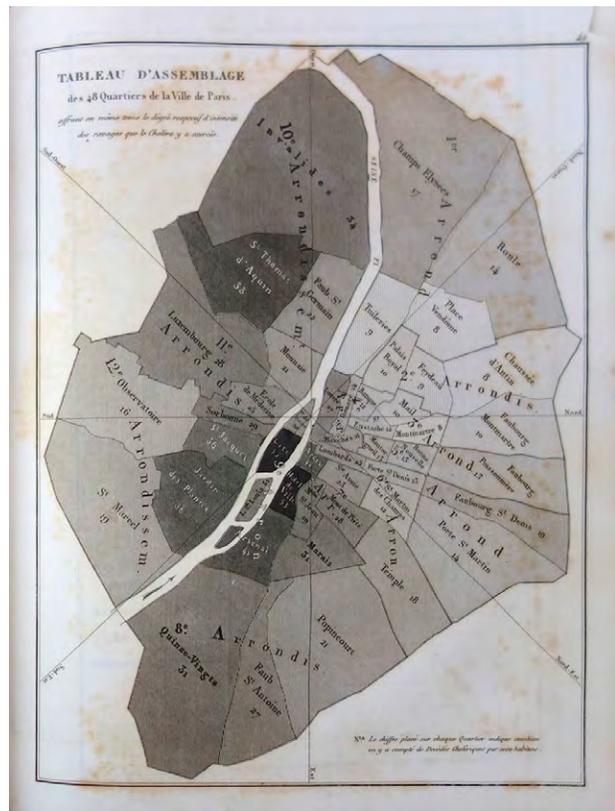
“One of the Earliest Applications of Spatial Analysis in Epidemiology”—
Presentation Copy

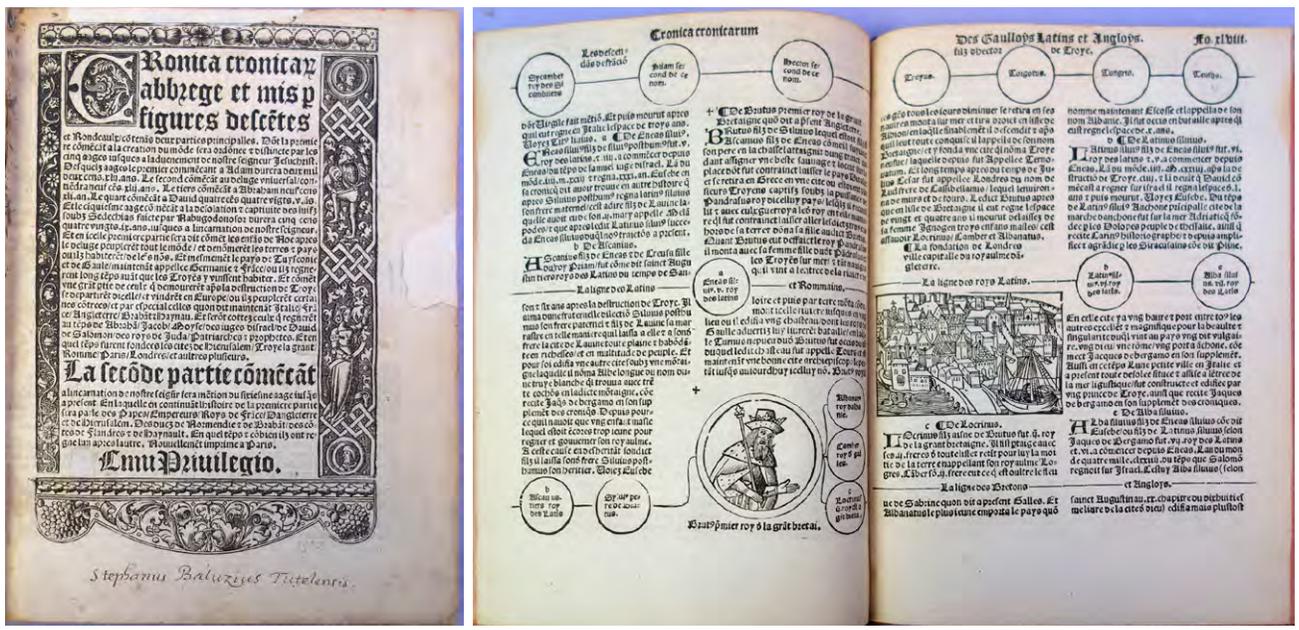
16. [Chateaneuf, Louis-François Benoiston (1776–1856).] *Rapport sur la marche et les effets du choléra-morbus dans Paris et les communes rurales du département de la Seine . . .* 205, [3], [220]pp. 51 lithographed maps. Paris: Imprimerie Royale, 1834. 265 x 210 mm. Quarter morocco, gilt spine, marbled boards ca. 1834, hinges splitting at upper extremity, light wear. Minor foxing but very good. *Presentation Copy*, inscribed to Partarieu-Lafosse père, a member of one of Paris’s Commissions de Salubrité [Health Commissions], on the half-title: “Monsieur Partarieu-Lafosse père, Président de la Commission sanitaire du q[uarti]er du Louvre, de la part du Cer. d’Etat, Préfet du police.” 19th-century inscription on verso half-title. \$2750

First Edition. An official report on the cholera epidemic (part of the worldwide cholera pandemic of 1829–51) that hit Paris in the spring of 1832, killing 18,000 people—2.3 percent of the city’s population—before its end four years later. The cholera epidemics that swept Europe in the 1830s and 1840s had a wide-ranging influence, inspiring reforms in city planning and public hygiene and the creation of the first public health departments.

The Chateaneuf report, prepared by a government commission, breaks down cholera deaths in the area by age, sex, profession, locality (including urban versus rural), temperature, elevation and other factors. The report includes detailed statistical tables for each of Paris’s original twelve *arrondissements*, complete with maps of each *arrondissement’s* four *quartiers*. An outstanding feature of the report is the map by geographer and cartographer Charles Picquet “contain[ing] one of the earliest applications of spatial analysis in epidemiology . . . in which the 48 districts of Paris were represented by grayscale gradient according to the percentage of deaths from cholera per 1000 inhabitants” (Garrison-Morton.com 7480; see illustration at top left).

This copy was presented by Paris’s Prefect of Police to M. Partarieu-Lafosse père, who is listed in the report as a member of the *Commission sanitaire* for the *quartier du Louvre* in what was then the fourth *arrondissement* (Paris’s *arrondissement* system was expanded and reorganized in the late 1850s; the Louvre and its environs are now part of the first *arrondissement*). On the verso of the half-title is an inscription in French in a different hand, referring to the disastrous historic plague epidemic in 1720 of Marseilles; this can be translated as follows: “A baron infatuated with his nobility, in recounting the disasters of the Marseilles plague of 1720, added [that] it was indeed a malady so terrible, that even a man of rank was not certain of his life.” 44154





17. **Cronica cronica[rum]** abbrege et mis p[ar] figures desce[n]tes et ron-deaulx . . . 3 parts in 1, 4to. lvi, xxx, xxii, [1]ff. Separate title-leaves for each part with woodcut borders; woodcut border for the second part includes the initials “FR” (for François Regnault) and the date 1529. Woodcut text illustrations and initials. Paris: F Regnault & J. Bonhomme, [1532]. 255 x 185 mm. 18th century mottled calf, gilt spine, hinges cracking, light edgewear, corners and top extremity a bit bumped. Repairs to title-leaf of part 1 and first 3 leaves of part 3, faint marginal dampstain on a few leaves, but very good. Signature of historian Étienne Baluze [Stephanus Baluzius] (1630–1718) on the title of the first part; woodcut armorial bookplate of Marguerite de Blotefière, Marquise de Sauzay (fl. mid-18th cent.); bookplate of writer and historian Guy Bechtel (b. 1931). \$7500

First Edition in Book Form of this “chronicle of chronicles” relating the history of the world from Genesis to the time of publication, in the manner of Schedel’s *Nuremberg Chronicle* but focusing on France, England and the

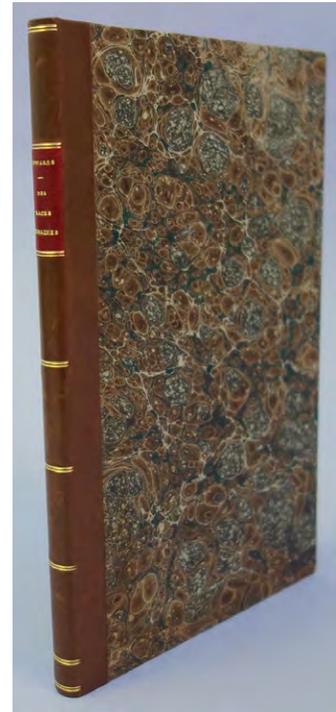
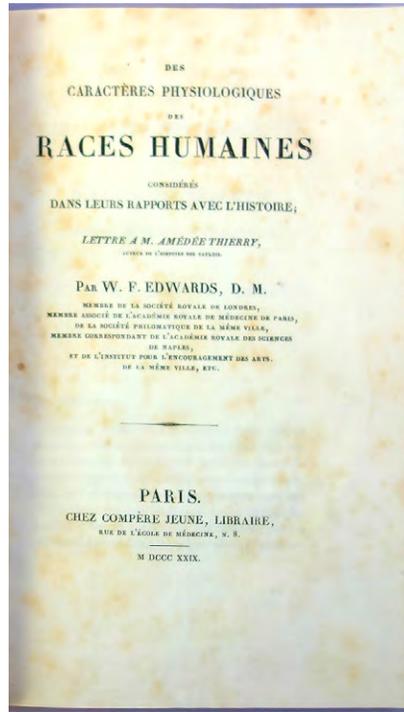


Brabant (a region now part of modern-day Belgium and Holland). The *Cronica cronica* was famously first published in 1521 on 32 leaves that could be assembled either as a scroll (measuring 11 meters long) or in codex form; this edition is also famous for containing the first reality-based printed image of the city of Paris, as opposed to the imaginary views of the city contained in the *Nuremberg Chronicle*. This important woodcut is reprinted in the 1532 edition, together with nearly 100 additional woodcuts including city views of London, Rome, Trier and Troy; portraits of Henry VIII, François I, Emperor Charles V and other rulers both secular and ecclesiastical; personages and scenes from the Bible; coats of arms; and numerous “roundels” containing genealogical information. The 1532 edition is updated with information about historical events that occurred between 1521 and 1532. Adams C-1495. 44132

18. Edwards, William Frédéric

(1777-1842). Des caractères physiologiques des races humaines considérés dans leurs rapports avec l’histoire; lettre à M. Amédée Thierry . . . 8vo. [4], 129pp. Paris: Compère jeune, 1829. 204 x 128 mm. Quarter calf, marbled boards in period style. Fine copy apart from foxing. \$600

First Edition. Edwards, a physiologist and anthropologist, established the subject of ethnology in France and pioneered the concept of “race” as determined by the shape of the face and head. He has been called the first anthropologist to discuss race. He founded the Société Ethnologique de Paris in 1839. 44029

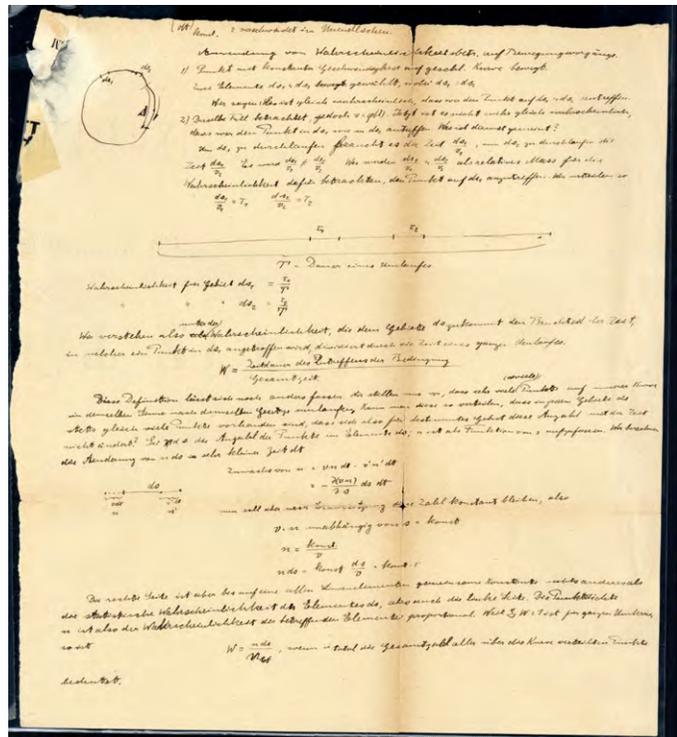


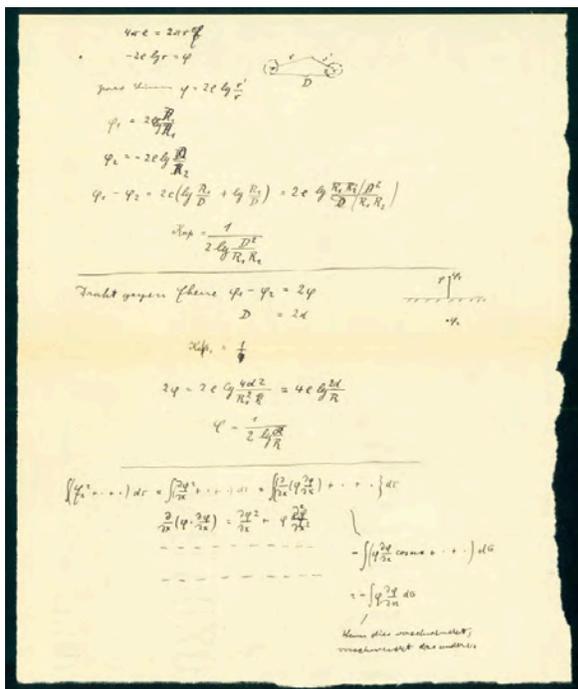
19. Einstein, Albert

(1879-1955). Autograph scientific notes. 2 leaves. [Bern or Zurich, after May 1909.] 289 x 264 mm.; 216 x 178 mm. Written in ink on the blank verso of two fragments of what may be proof sheets for a printed doctorate diploma for Walther Eberhard Boës, who obtained his doctorate from the University of Zurich in May 1909. Larger leaf slightly browned, with some tears along folds and margins mended with clear tape, but very good. From the library of historian of physics Jagdish Mehra (1931-2008). \$60,000

These notes, on statistical physics and electrostatics, exemplify Einstein’s occasional use of stray scraps of paper for his work. In the present case, he used what appear to be proofs of the doctorate diploma for Walther Eberhard Boës who obtained his doctorate for a thesis on “Nitro- und Nitroverbindungen der Metallammoniake, insbesondere der Kobaltiake” under the supervision of Einstein’s colleague Alfred Werner. The proofs bear a date of May 1909, which provides an earliest limit for the dating of these notes. In the spring of 1909, when Boës obtained his degree in Zurich, Einstein was still a clerk in the patent office in Bern, but at the beginning of May he was appointed Extraordinary (associate) professor of theoretical physics at the University of Zurich, a position he took up the following October.

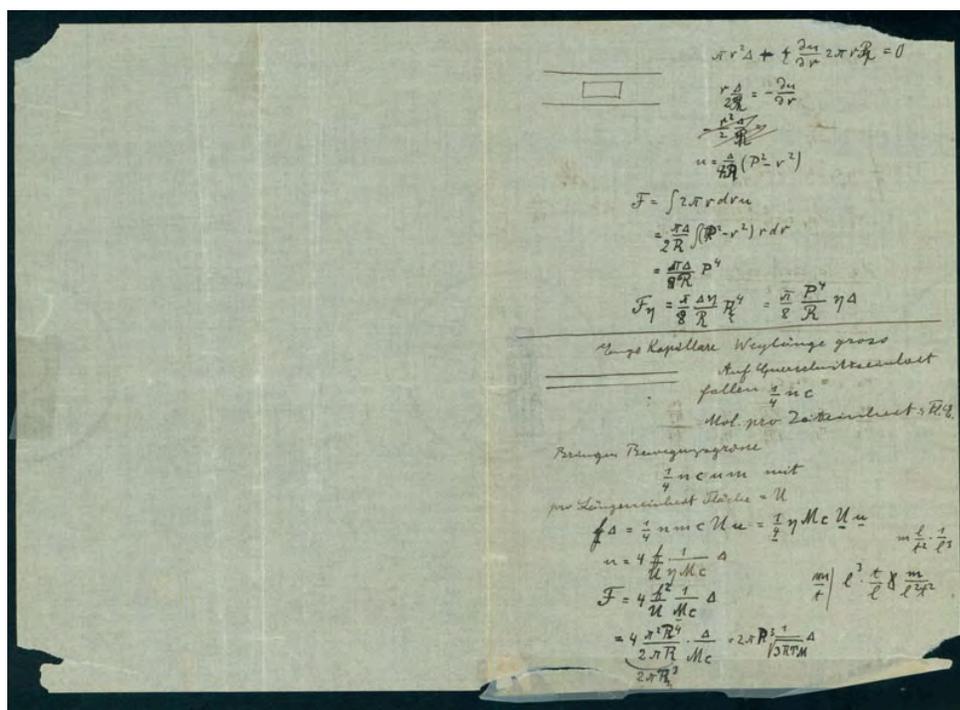
The first page of these notes, with section heading “Anwendung von Wahrscheinlichkeitsbetr[achtung] auf Bewegungsvorgänge” [Application of Probabilistic Analysis of Processes of Motion], was published in Einstein’s





Collected Papers. The editors of the *Collected Papers* worked from a photocopy found in a notebook in the Einstein archives which they identified as Einstein's notes for a lecture course on the kinetic theory of heat, delivered by him in the spring semester 1910. The notes discuss the fundamental concept of probability and its definition in terms of a time average and an ensemble average. See Einstein, *Collected Papers*, vol. 3, pp. 239–241. The second sheet contains notes pertaining to the calculation of electrostatic capacities for long cylinders. It appears to belong to Einstein's lecture notes for a course on electricity and magnetism held in the winter term of 1910/11 at the University of Zurich. Specifically, the notes appear to be related to *Collected Papers*, vol. 3, pp. 331 and 338.

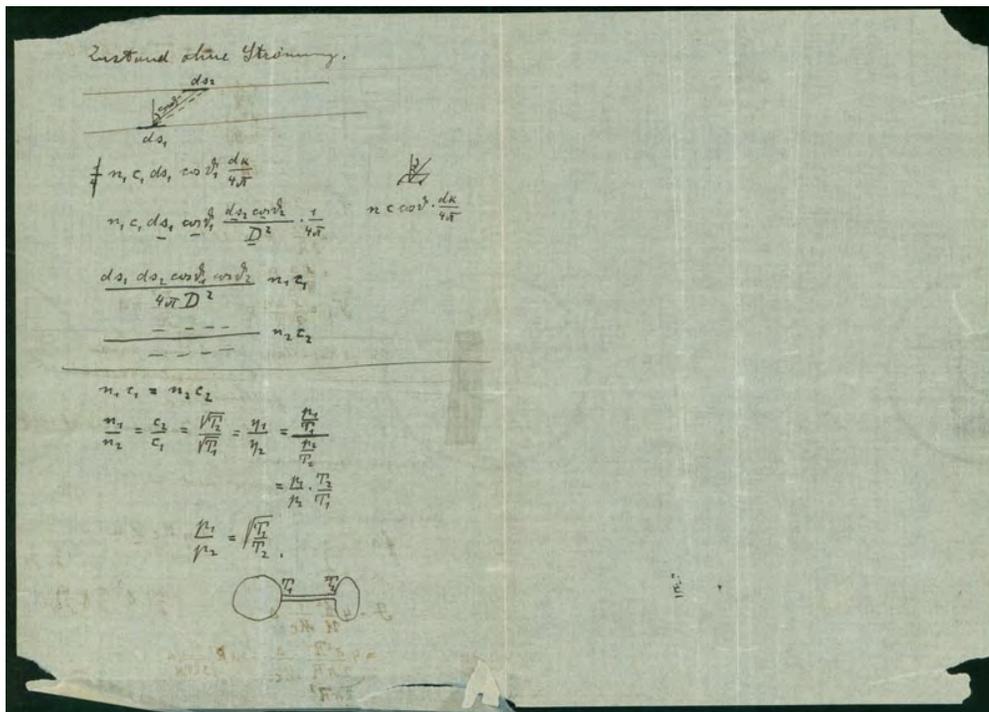
We are grateful to Dr. Tilman Sauer of the Einstein Papers Project at the California Institute of Technology for supplying suggestions about these notes and their apparent place in Einstein's body of work. 42417



20. Einstein, Albert (1879–1955). Autograph scientific notes. 2ff. [Milan or Zurich, summer 1910?] 178 x 124 mm. A few marginal chips and tears, some mended with clear tape, but very good. From the library of historian of physics Jagdish Mehra (1931–2008). \$60,000

The calculations on this sheet appear to be closely related to similar notes that Einstein made in preparation for a lecture course on the kinetic theory of gases that he held at the University of Zurich in the summer semester 1910 (Einstein, *Collected Papers*, Vol. 4, Doc. 4, pp. 192–195, 238–239).

On the recto, Einstein juxtaposes two expressions for the flow of viscous fluids and gases through pipes. In the upper half of the page, Einstein sketches a derivation of Poiseuille's law for laminar flow through circular tubes.



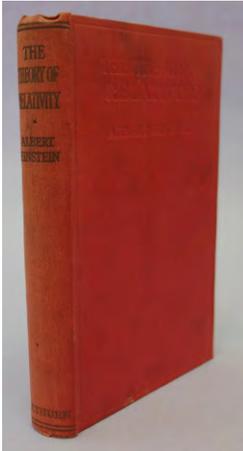
The mass flow F is proportional to the fourth power of the radius of the tube P , directly proportional to the mass density and the pressure difference, and inversely proportional to the viscosity R . In the bottom half, he sketches a derivation of a similar relation for the case of rarefied gases flowing through very narrow tubes. Here the flow is proportional only to the third power of P , and it is found to be dependent on temperature T . The latter relation was derived and empirically verified by the Danish physicist Martin Knudsen (1871–1949) in a paper of 1909. On the verso, Einstein derives another relation that is due to Knudsen which says that in gases of very low pressure, a difference in temperature causes a difference in pressure; specifically, it is found that the ratio of pressures is proportional to the square root of the ratio of temperatures. This relation was found and investigated by Knudsen in 1910.

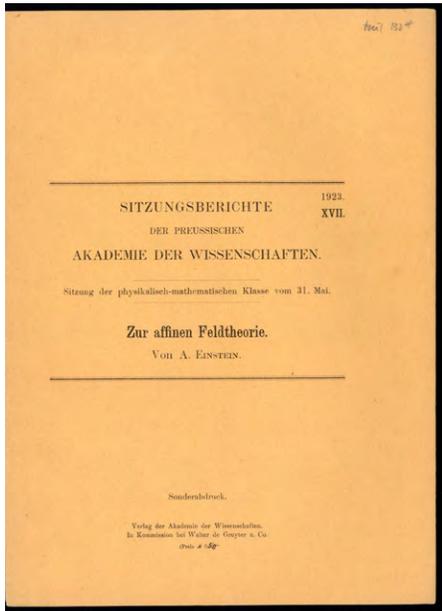
Einstein had a long-standing interest in capillarity phenomena, which was the subject of his first two scientific papers, as well as in the kinetic theory of gases and statistical mechanics. He would meet Knudsen in person a year later, in 1911, at the first Solvay Congress in Brussels.

We are grateful to Dr. Tilman Sauer of the Einstein Papers Project at the California Institute of Technology for providing suggestions about the content of these notes and their apparent place in Einstein’s body of work. 42416

21. Einstein, Albert (1879–1955). *Relativity: The special & the general theory*. A popular exposition. Authorized translation by Robert W. Lawson. xii, [3], 138pp, plus 8–page publisher’s catalogue. Frontispiece portrait. London: Methuen, 1920. 190 x 126 mm. Original red cloth, spine a bit faded, endpapers a little foxed. Very good. \$950

First English Edition of Einstein’s *Ueber die spezielle und die allgemeine Relativitätstheorie* (1916), and the first appearance of any of Einstein’s works in English. An American edition was published later the same year. The English translation contains an appendix (no. III) written especially for the translation, titled “Experimental confirmation of the general theory of relativity”; the appendix discusses the 1919 observations of the perihelion of Mercury that provided experimental support for Einstein’s theory. Weil, *Albert Einstein Bibliography*, 90a. 41830

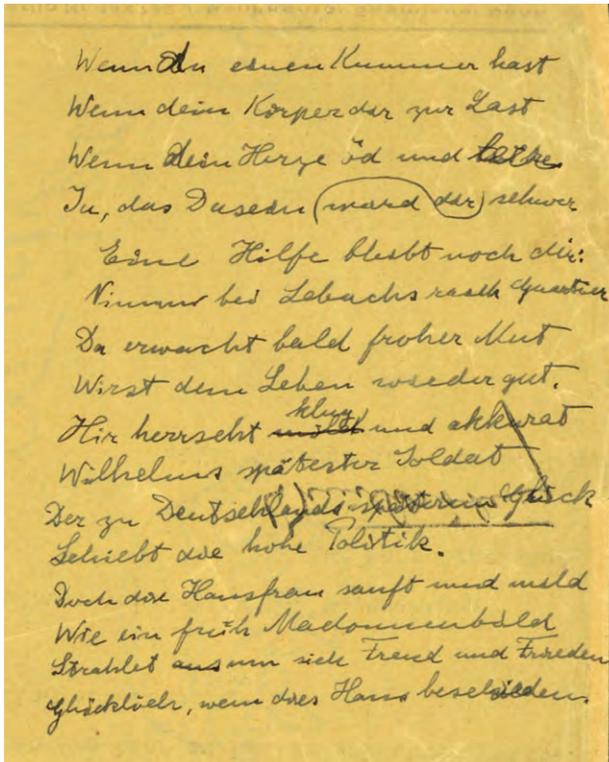




22. Einstein, Albert (1879–1955). Zur affinen Feldtheorie. Offprint from *Sitzungsberichte der preussischen Akademie der Wissenschaften* 17 (1923). 137–140pp. 256 x 185 mm. Original printed wrappers. Fine. \$750

First Edition, Offprint Issue. In 1923 Einstein published four short papers (of which “Zur affinen Feldtheorie” is the third) on Eddington’s attempt at a unified field theory, marking the beginning of a scientific passion that would dominate the remainder of his career. In 1921 British physicist Arthur Eddington had proposed a unified field theory inspired by the work of Hermann Weyl. “Einstein’s own initial reaction was that Eddington had created a beautiful framework without content. Nevertheless, he began to examine what would be made of these ideas and finally decided that ‘I must absolutely publish since Eddington’s idea must be thought through to the end.’ That was what he wrote to Weyl. Three days later, he wrote to him again about unified field theories: ‘Above stands the marble smile of implacable Nature which has endowed us more with longing than with intellectual capacity.’ Thus, romantically, began Einstein’s adventures with general

connections, adventures that were to continue until his final hours” (Pais, *Subtle is the Lord*, p. 343). This paper is included on Shields’s list of Einstein’s most significant papers; see *Albert Einstein, Philosopher-Scientist* (1949), p. 758. Shields 175. Weil, *Albert Einstein Bibliography*, 132*. 37407

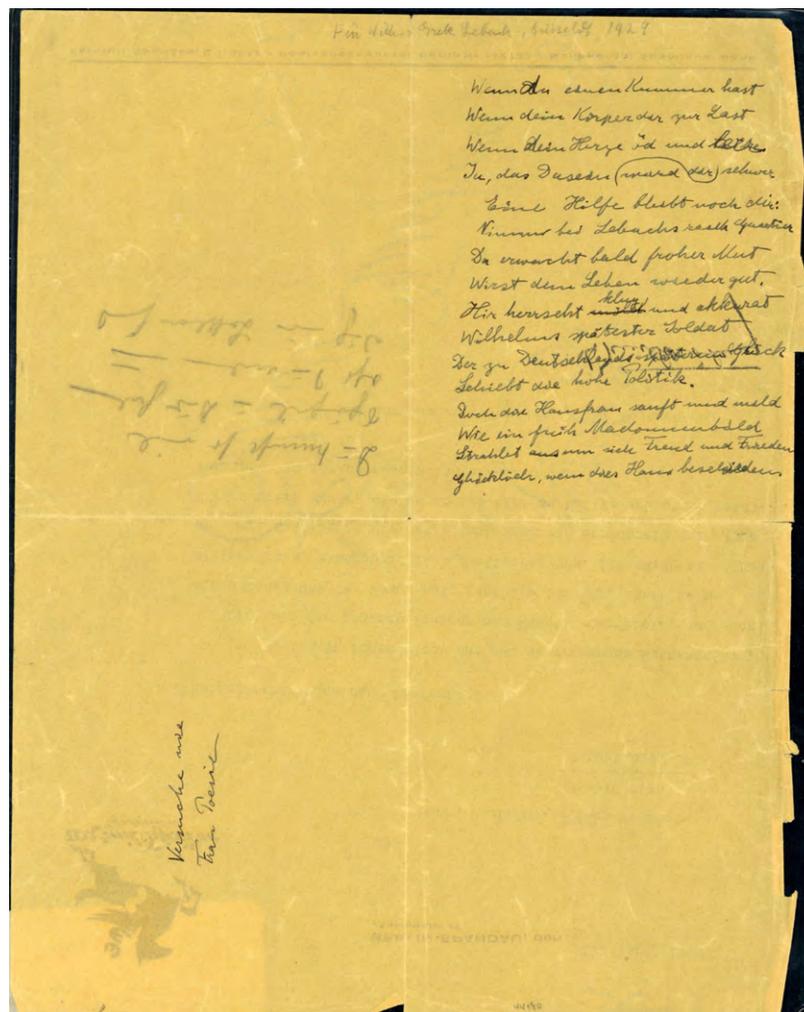


23. Einstein, Albert (1879–1955). Autograph draft of an untitled poem in German, written to Willibald and Margarete Lebach. 1 sheet, on verso of a typed letter signed to Einstein from German humorist Emil Schröder (1896–1977) dated 18 April 1929. Düsseldorf, [after 18 April] 1929 (dated in pencil by Einstein’s secretary, Helen Dukas, in the top margin). Creased where previously folded, margins a bit frayed and chipped, but very good. \$5000

Einstein had a gift for light verse, as is shown in this poem written to thank his friends Willi and Margarete (Grete) Lebach for their hospitality when he attended a conference of the German Physical Society in Düsseldorf in 1929. The poem dates from around the time that Einstein and Margarete Lebach became lovers, a relationship that appears to have lasted until Einstein left Germany permanently in 1933. In the early 1930s Margarete visited Einstein weekly, bringing home-baked pastries to placate Einstein’s jealous wife, Elsa, who would always leave the house to go shopping in Berlin on the days that Margarete was with her husband.

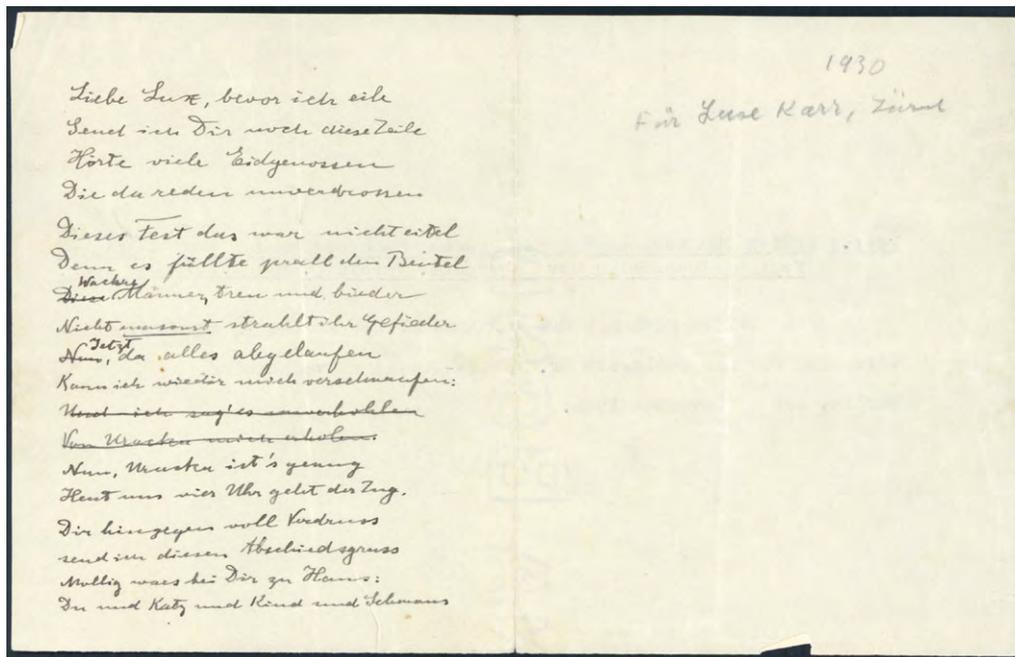
The poem can be translated as follows:

When you are in trouble
 When you are a burden to yourself
 When your heart feels empty and desolate
 When life weighs heavily on you



There is still help for you:
 Move quickly to the Lebach's house
 There good spirits rise again
 There you'll like life again.
 Here rules with clever precision
 Wilhelm's latest soldier
 Who for Germany's good fortune
 Conducts his elevated politics
 But the housewife sweet and gentle
 Like an early Madonna painting
 Radiating joy and peace
 Happy to whom this house belongs.

Next to the poem, in what may be Margarete Lebach's hand, is a penciled inscription in German, which can be translated as: "You can have so much beauty in you / That the others around you are beggars." Einstein wrote his poem on the back of a letter sent to him by Emil Schröder, a minor German writer and humorist, who had enclosed his own dialect poem (not present) to Einstein. Einstein appears not to have thought much of Schröder's poem, writing "Versuche nie /Frau Poesie" (Leave Lady Poetry alone) on the letter's verso. Hoffman, *Einstein's Berlin: In the Footsteps of a Genius*, p. 153. 44180

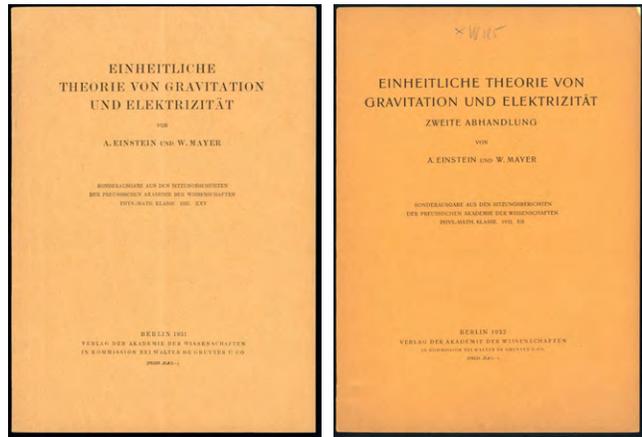


24. Einstein, Albert (1879–1955). Autograph draft of an untitled poem in German, written to Liese Karr. 1 sheet, written on the back of a mimeographed slip, two lines canceled but legible. Zürich, 1930 (dated in pencil by Einstein’s secretary, Helen Dukas, in the upper right corner). Tear at vertical crease, small chip in one margin, but very good. \$4500

A charming example of Einstein’s gift for light verse. In November 1930 Einstein visited Zürich to be fêted as a special guest of honor at the celebration of the 75th anniversary of the Swiss Federal Institute of Technology—the famous ETH, where he had received his diploma in physics in 1900 and later served as professor of theoretical physics. Einstein’s host during his stay in Zürich was Frau Liese Karr, widow of a grain merchant distantly related to Einstein’s mother; Einstein had known the Karr family since his student days, when the Karrs had kept “a watchful but discreet eye” on him during his time at the ETH (Clark, *Einstein: The Life and Times*, p. 25). Einstein’s poem, thanking Frau Karr for her hospitality, appears to have been drafted on the day of his departure by train for Berlin. The poem can be translated as follows:

Dear Liese, before I rush off
 I still send you this line
 I heard many Swiss citizens
 Who talked untiringly
 This celebration was not in vain
 For it filled up my purse
 Valiant men, true and worthy,
 Not for nothing sparkles their plumage
 Now that it’s all over
 Can I find rest again
 Now [...] it’s enough
 Today at four my train leaves
 To you, however, full of regret
 I say farewell
 It was cozy at your house
 You, your cat, your child and your feast.

25. Einstein, Albert (1879–1955) and **Walther Mayer** (1887–1948). (1) Einheitliche Theorie von Gravitation und Electricität. Offprint from *Sitzungsberichten der preussischen Akademie der Wissenschaften* (1931). 19pp. (2) Einheitliche Theorie von Gravitation und Elektrizität. Zweite Abhandlung. Offprint from *Sitzungsberichten der preussischen Akademie der Wissenschaften* (1932). 10pp. Together 2 offprints. 258 x 185 mm. Original printed wrappers, no. (1) lightly creased vertically. Fine copies.



\$600

First Editions, Offprint Issues. Einstein made several attempts at a five-dimensional unified field theory, including this two-part collaboration with mathematician Walther Mayer “in which a new unified field theory was proposed, one based on a four-dimensional space-time continuum with a five-dimensional tangent space attached at each point” (Pais, *Subtle is the Lord*, p. 492). This two-part paper is included on Shields’s list of Einstein’s most significant papers; see *Albert Einstein, Philosopher-Scientist* (1949), p. 758. Shields 251; 261. Weil *182; *185. 37425; 37426

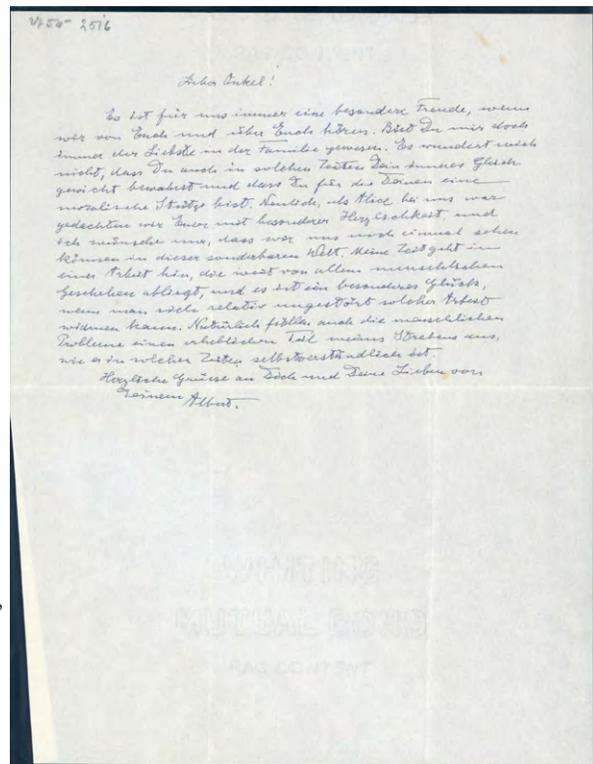
“You Have Always Been the One Dearest to Me in the Entire Family”

26. Einstein, Albert (1879–1955). Autograph letter signed, in German, to his maternal uncle, Caesar Koch (d. 1941). 1 page. N.p., n.d. [Princeton, 1941?]. 278 x 211 mm. Evidence of folding, 2 faint rust spots, but very good.

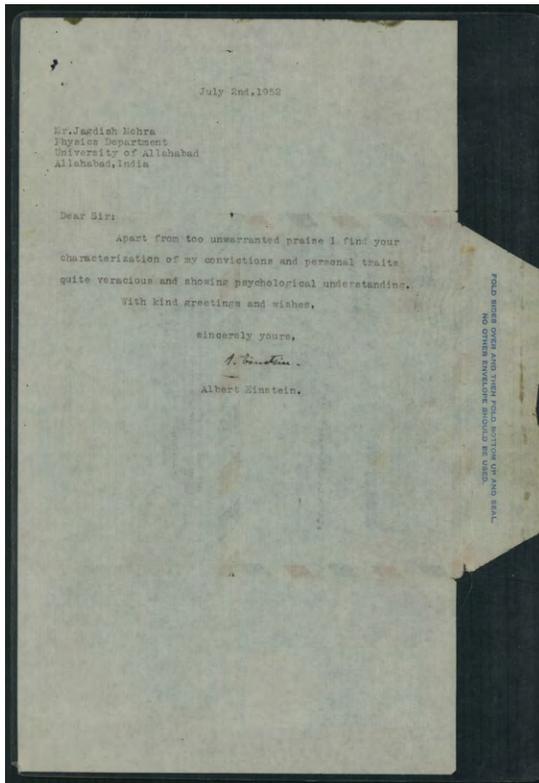
\$12,500

Einstein’s last letter to his favorite uncle, his mother’s younger brother Caesar Koch. Koch had long held a special place in Einstein’s affections; in 1895, when Einstein was still in his teens, he sent Koch one of his first scientific manuscripts, titled “Über die Untersuchung des Ätherzustandes im magnetischen Felde” (On the examination of the state of the ether in a magnetic field), together with a cover letter announcing his intent to go to the ETH in Zurich (see Pais, *Subtle is the Lord*, p. 130). Koch, a widely traveled grain merchant, eventually settled in Antwerp; in 1941 he was in his mid-eighties, but still very much in Einstein’s thoughts:

It is always a great joy to us when we hear from you and about you. You have always been the one dearest to me in the entire family. I am not surprised that you are still able to maintain in such times your inner equilibrium and that you remain such a pillar of moral strength for your family. Recently, when [Caesar’s daughter and Einstein’s cousin] Alice visited us, we thought of you with special warmth, and I only wish that we could meet one more time in this strange world [translation].



Einstein’s wish was not granted, as Koch died a few months after receiving this letter. The form of the signature used in the letter—“deinem Albert” (your Albert)—is quite unusual, but it is the same as the one Einstein used in his youthful 1895 letter to Koch. 42412



27. Einstein, Albert (1879–1955). Typed letter signed to historian of physics Jagdish Mehra (1931–2008). 1 page (air letter); permanently laminated in plastic. Princeton, July 2, 1952. 304 x 177 mm. Slight wear along folds, a few tiny holes not affecting text, laminate cracked in one margin, but very good. \$5000

Written in response to Mehra's 1952 essay, "Albert Einstein's Philosophy of Science and Life," which was awarded the Adams Essay Prize of the International Council of YMCAs. In the preface to his book *Einstein, Physics and Reality* (1999), Mehra recalls the circumstances giving rise to the letter:

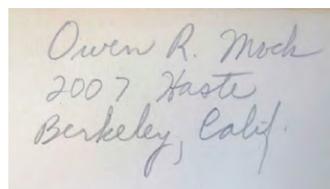
At a rather young age I wrote an essay with the pretentious title "Albert Einstein's Philosophy of Science and Life" for an open essay competition . . . I gave a copy of it to Paul Arthur Schilpp (Editor of *Albert Einstein: Philosopher-Scientist*, Einstein's 70th birthday volume), who was visiting my university to give a lecture; he forwarded it to Einstein. One fine morning I received an aérogram, marked "122 Mercer Street, Princeton, N.J.;" it contained a one-line message: "Dear Sir: Apart from too unwarranted praise I find your characterization of my convictions and personal traits quite veracious and showing psychological understanding. With kind greetings and best wishes, sincerely yours, Albert Einstein [signed]." Much more than the prize which I won for my essay, Einstein's letter greatly excited and inspired me for a long time (p. ix).

Accompanying the letter is a computer typescript of Mehra's essay. 42408

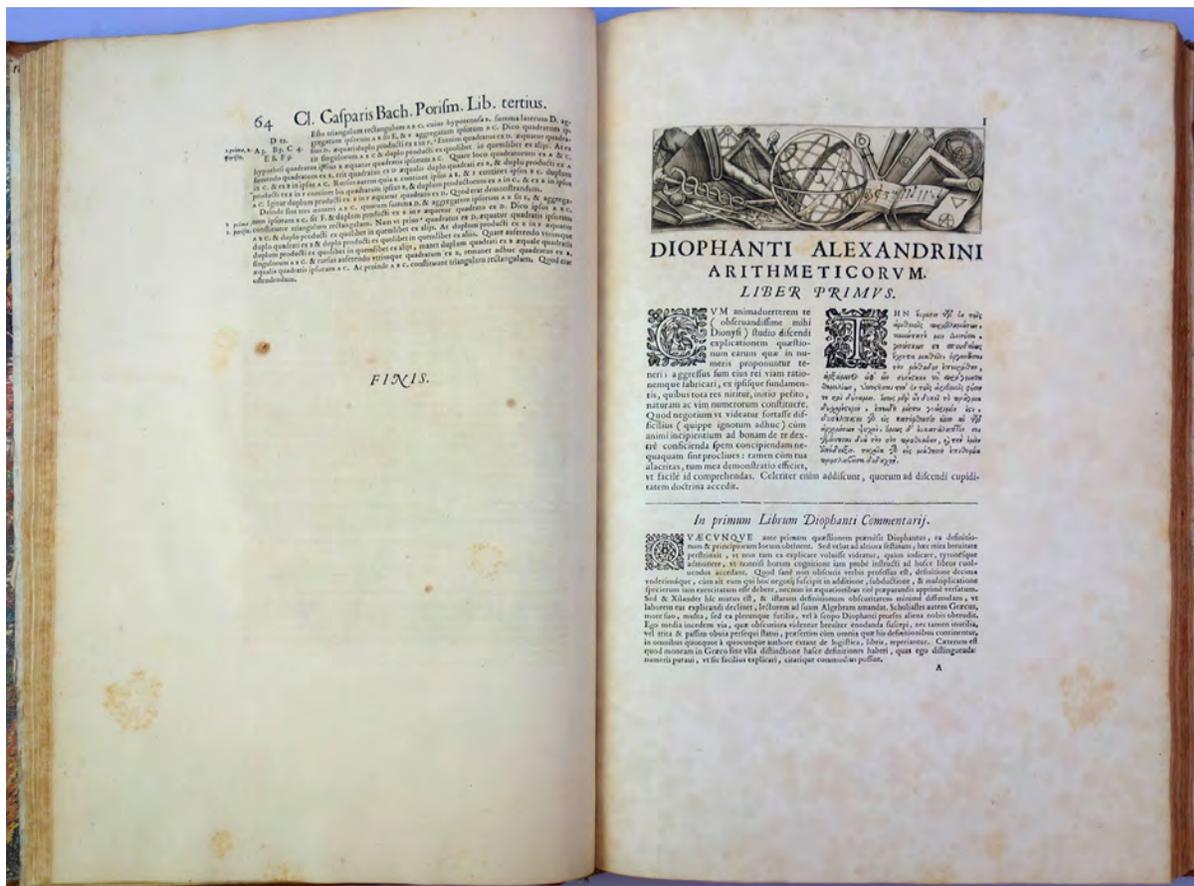


28. Engineering Research Associates. High-speed computing devices. xiii, [1], 451 [1]pp. Text diagrams. 228 x 154 mm. New York: McGraw-Hill, 1950. Original dark blue cloth, spine somewhat worn and faded, pictorial dust-jacket (chipped and with minor loss at folds). From the library of Owen R. Mock (ca. 1925 – ca. 2000), with his pencil signature on the front endpaper. \$650

First Edition of the first treatise on how to build an electronic digital computer, rare in the original dust-jacket. It provided a "cookbook" describing the available ingredients and how they worked for both digital and analog computers, explaining the principles involved and giving examples. The book was prepared under the supervision of Charles Brown Tompkins, vice-president for research at Engineering Research Associates (ERA), who wrote most of the text. This copy



was once owned by Owen R. Mock, a computer software designer and programmer who pioneered computer operations systems in the 1950s; in 1955 he was part of the group that installed the world's first functioning operating system in the IBM 701. *Origins of Cyberspace* 584. 44225

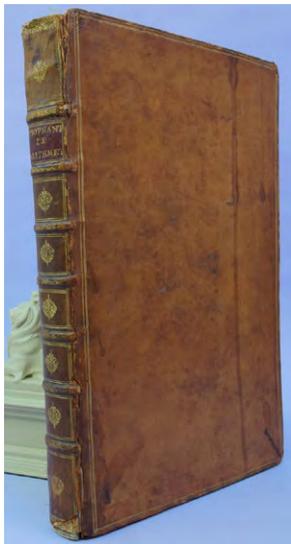
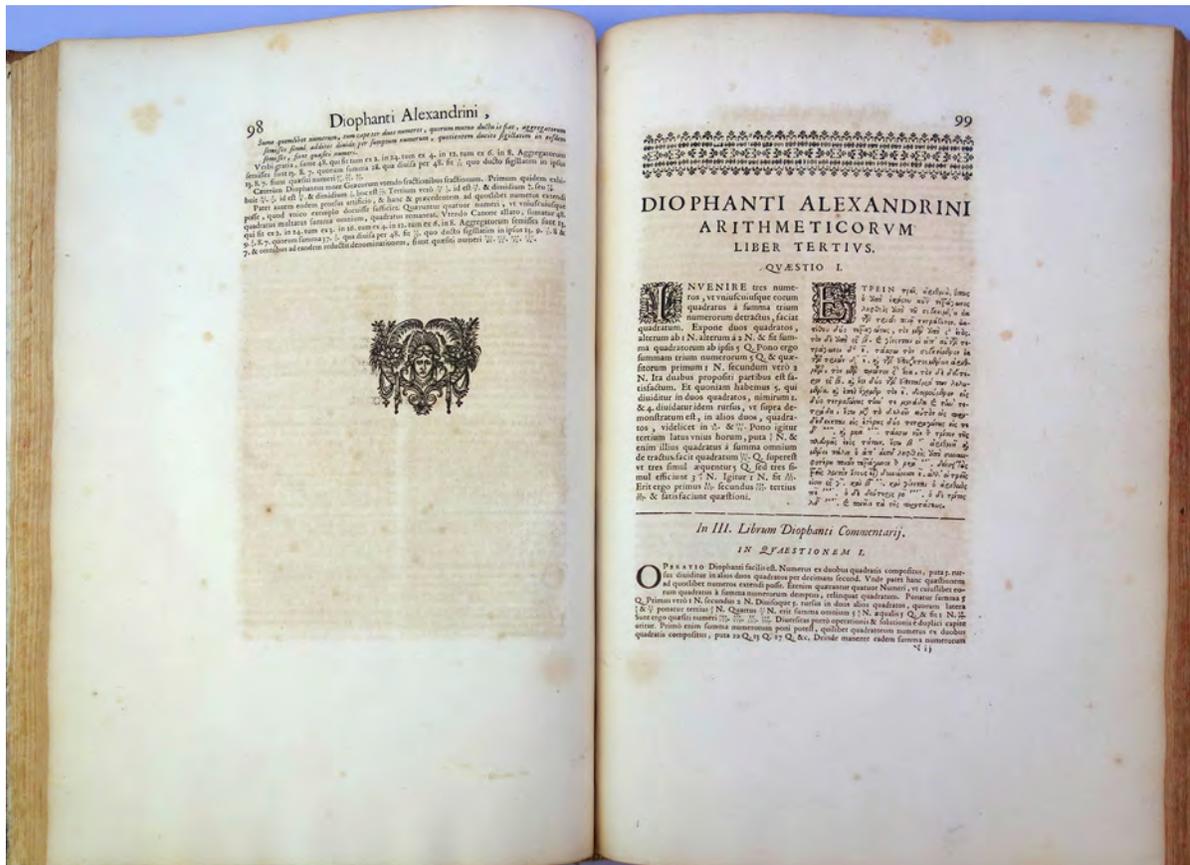


Large Paper Copy of “Fermat’s Last Theorem”

29. [Fermat, Pierre de (1601–1665)] Diophantus of Alexandria (fl. 250 CE). *Diophanti Alexandrini arithmeti-
corum libri sex, et de libris multangulis liber unus. Cum commentariis C. G.
Bacheti V. C. & observationibus D. P. de Fermat senatoris Tolo-
sani. Diophantus’s text edited by Claude Bachet de Méziriac
(1581–1638); Fermat’s notes edited by Clement-Samuel Fermat
(1630–1690). Toulouse: Bernard Bosc, 1670. Folio. [12], 64, 341
[i.e., 343], [1], 48pp. Without the errata leaf present in some cop-
ies. Engraved portrait of Fermat by F. Pouilly; engraved vignettes.
Large Paper Copy, measuring 415 x 280 mm. Calf gilt ca. 1670,
hinges cracking, spine and corners worn, a few stains but com-
pletely unrestored. Moderate toning, scattered foxing, small mar-
ginal dampstain on first few leaves, but very good. Early inscrip-
tion on title: “Collegii Paris. Soc. Jesu.” The Harrison D. Horblit
copy, with his bookplate. \$57,500*

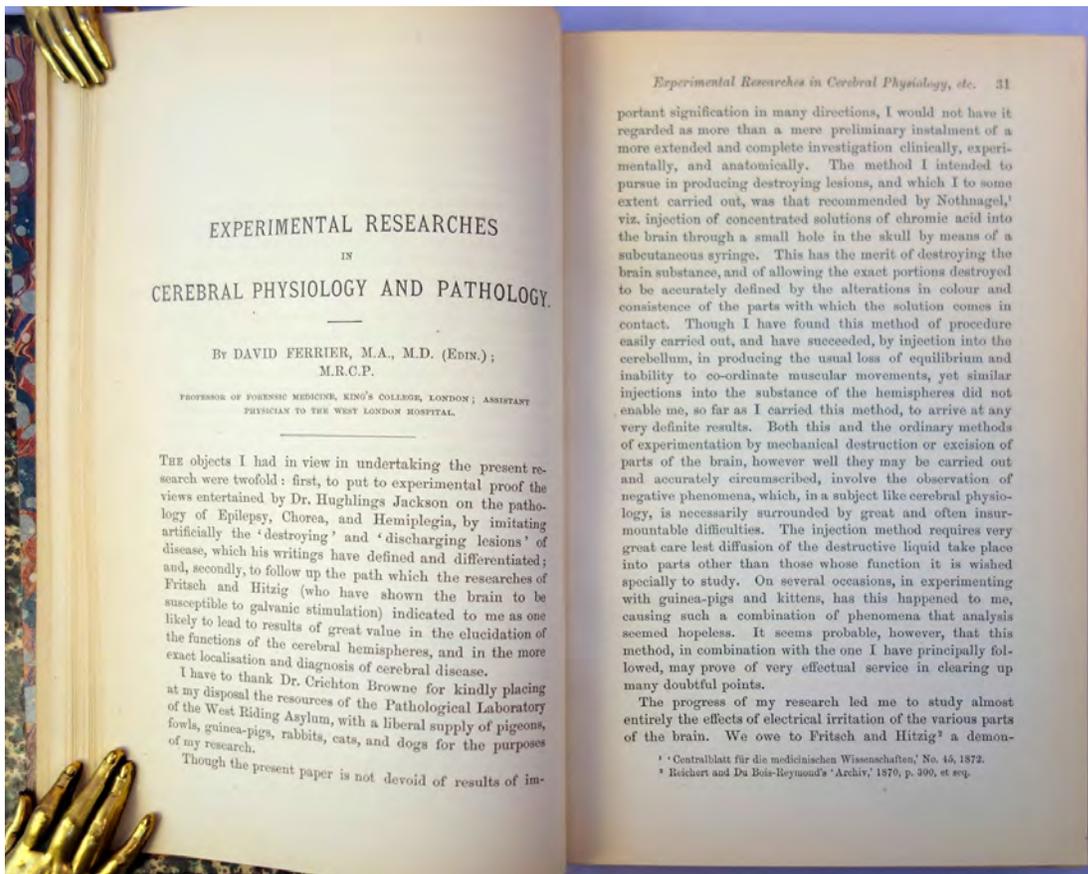


First Edition of Fermat’s notes; second edition of Bachet’s Dio-
phantus. This extraordinary large-paper copy, in an unrestored period binding, measures 415 x 280 mm. (16 –
3/8 x 11 inches); in contrast, the Norman copy, printed on regular paper, measures 340 x 230 mm. (13 – 3/8 x 9
– 1/16 inches). The engraved portrait of Fermat by F. Pouilly is extremely rare and may have been included only
in special copies like this one. The copy was once owned by noted science collector Harrison D. Horblit, author
of the Grolier Club’s *One Hundred Books Famous in Science* (1964).



Fermat was the first post-classical European to make extensive contributions to the theory of numbers, taking up the challenge in number theory posed in Diophantus's *Arithmetica*. Fermat owned a copy of the Greek *editio princeps* of Diophantus's work (1621), edited and annotated by Claude Bachet de Méziriac and published side by side with Wilhelm Xylander's Latin translation, which first appeared in 1575. Fermat often took issue with Bachet's statements, writing his own results for the most part in the margins of his copy. Five years after Fermat's death, his son Claude-Samuel published a second edition of Bachet's Diophantus, adding to it his father's marginal notes; these included the famous note stating what is now known as "Fermat's Last Theorem," regarding the impossibility of finding a positive integer $n > 2$ for which the equation $x^n + y^n = z^n$ for the positive integers x , y and z . Fermat claimed in his note to have discovered a "very wonderful demonstration" (*demonstratio sane mirabilis*) of this theorem that the margin was too narrow to contain; most historians of mathematics now believe that Fermat was probably mistaken in this assertion. After 358 years of effort by mathematicians, the first successful proof of Fermat's Last Theorem was released in 1994 by Andrew Wiles, who received many prizes for his achievement. The remainder of Fermat's notes contained many theorems on the theory of numbers, only one of which he himself proved; the rest were proven in the eighteenth century.

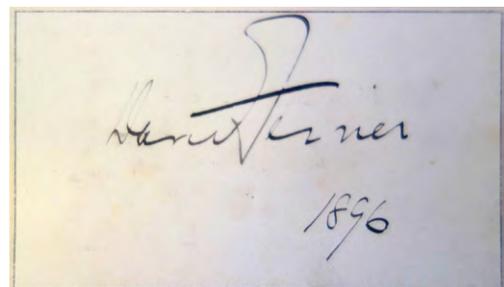
Of the original thirteen books of Diophantus's *Arithmetica*, only six survive. The work marks the high point of Alexandrian Greek algebra: Diophantus introduced symbolism into algebra, dealt with powers as high as six (in contrast to classical Greek mathematicians, who did not consider powers higher than three), and delved extensively into the solution of indeterminate equations, founding the branch of algebra now known as Diophantine analysis. *Dictionary of Scientific Biography*. Kline, *Mathematical Thought from Ancient to Modern Times*, pp. 274–278. Norman 777. 44228



Ferrier's Extremely Rare First Publication on Cerebral Localization

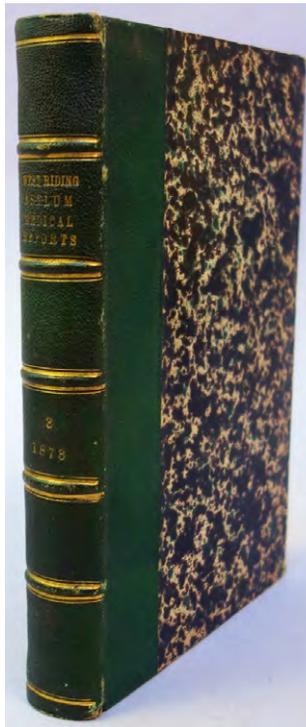
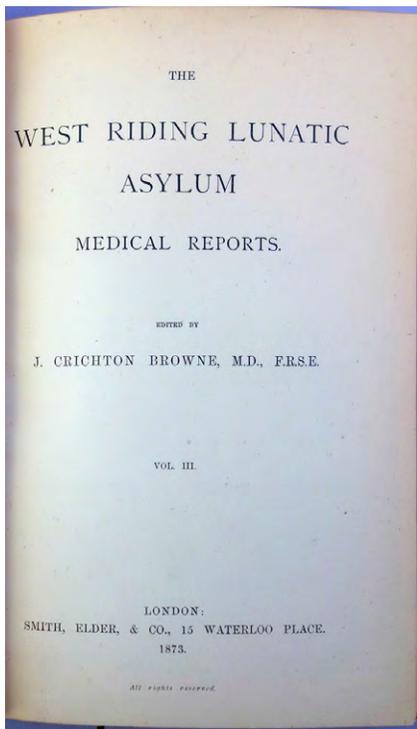
30. Ferrier, David (1843-1928). Experimental researches in cerebral physiology and pathology. In *The West Riding Lunatic Asylum Medical Reports* 3 (1873): 30-96. Whole volume. vi, 349pp. Text illustrations. London: Smith, Elder, 1873. 215 x 136 mm. Quarter morocco, marbled boards ca. 1873, top edge gilt, light edgewear. Light toning but very good. Clipped signature of David Ferrier, dated 1896, tipped to front flyleaf.

\$7500



First Edition of Ferrier's groundbreaking first publication on the localization of cerebral function, which made his fame as an experimental neurologist. Extremely rare on the market, with no auction records going back to the nineteenth century. This is a work that Haskell Norman never obtained during a forty year search., and it is the first copy we have ever seen on the market; thus this work has been *virtually unfindable for over sixty years*. Ferrier incorporated this paper into his classic *Functions of the Brain* (1876), which elaborated on the research described in "Experimental researches"; this book is considered "one of the most important publications in the field of cortical localization" (Clarke and O'Malley, p. 514).

In the 1860s the great British neurologist John Hughlings Jackson had suggested that bodily functions could be mapped in an organized fashion onto the cerebral cortex. Jackson's suggestion, based solely on clinical observations, was supported by experiments on dogs conducted by German physiologists Eduard Hitzig and Gustav Fritsch, who published their research in 1870. Wanting to confirm and extend the work of Hitzig and Fritsch, Ferrier, who was then working as a neurologist in London's National Hospital for Paralysis and Epilepsy, undertook a program of experimental research at the West Riding Lunatic Asylum, an institution in Wakefield, Yorkshire headed by his friend Sir James Crichton-Browne.



Over the spring and summer of 1873, using a variety of experimental animals, Ferrier obtained results demonstrating that various neurologic functions were controlled by separate parts of the cerebrum and that damage or loss of that part created an irrevocable and particular deficit. He showed that these areas were much more discrete as one ascended the phylogenetic scale and accordingly effects of brain damage in rabbits, dogs and cats etc. could not be compared to those in monkeys, apes and human beings. “[Ferrier] mapped much of the cerebral cortex and carefully delineated the ‘motor-region,’ as he termed it; the scheme of localized function that he put forward was based on the concept of ‘motor’ and ‘sensory’ regions. Like Fritsch and Hitzig, Ferrier carried out ablations of local areas of cerebral cortex as well as [electrical] stimulation and observed the resulting functional deficit. Jackson’s concept of ‘discharging’ and ‘destroying’ lesions was therefore reproduced

experimentally and his theories put to the test. As far as the primates were concerned, they were shown to be correct” (*Dictionary of Scientific Biography*).

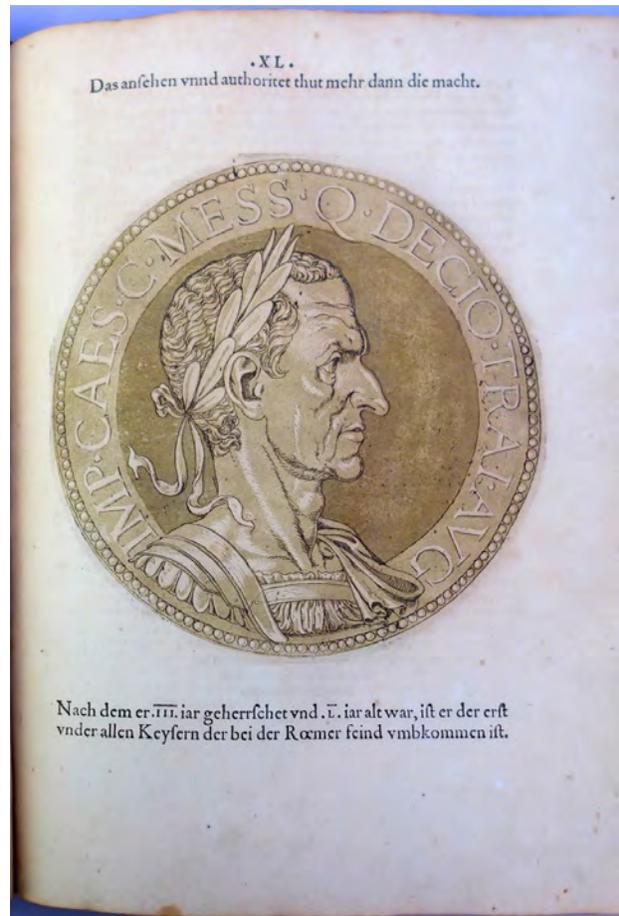
Ferrier published his “Experimental researches” in *The West Riding Asylum Reports*, an influential and well-regarded journal edited by Crichton-Browne. The *Reports*, issued between 1871 to 1876, was the precursor of the neurological journal *Brain*, founded two years after the *Reports* ceased publication. “James Crichton-Browne retired from the post of Superintendent of the Wakefield Asylum in 1875 . . . His successor was not willing to continue publishing the West Riding Asylum Reports, and there was no obvious medium in Great Britain suitable for representing neurological opinions. In 1878, under the joint editorship of J. C. Bucknill, James Crichton-Browne, David Ferrier and John Hughlings Jackson, the prestigious quarterly journal *Brain* was founded” (Critchley, *John Hughlings Jackson*, p. 157). Clarke & O’Malley, *The Human Brain and Spinal Cord*, pp. 513-14. Garrison-Morton.com 7803. 44188



31. Freud, Sigmund (1856-1939). *Der Witz und seine Beziehung zum Unbewussten*. 8vo. [2], 205pp. Leipzig & Vienna: F. Deuticke, 1905. 240 x 160 mm. Modern quarter morocco, cloth boards, original gray printed wrappers (a bit worn and frayed) bound in. Edges a bit frayed, but very good. Stamp of the Neuro-Biologisches Institut, Berlin on front wrapper.

\$1500

First Edition. Freud described the psychological processes and techniques of jokes, which he likened to the processes and techniques of dream-work; discussed the purpose of jokes, distinguishing between harmless and tendentious ones; and established the psychogenesis of jokes in the young child’s pleasure in playing with words as if they were objects. 1,050 copies of the first edition were printed, which took seven years to sell. Norman F54. Grinstein 256. Jones II, pp. 375-378. 31774



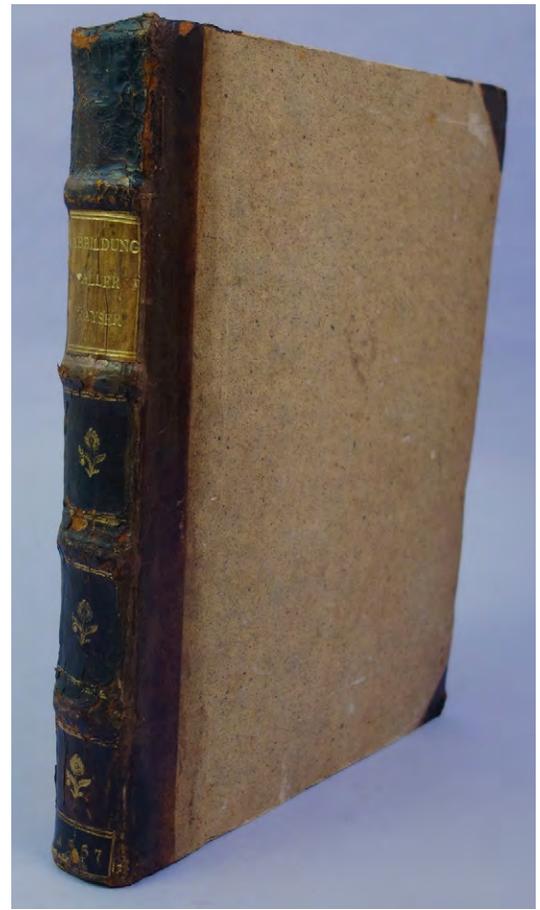
Rare First German Edition of a Classic Work of Chiaroscuro

32. Goltzius, Hubert (1526–83). *Lebendige Bilder gar nach aller Keysern, von C. Iulio Caesare, bisz auff Carolum V und Ferdinandum seinem Bruder, aus den alten Medalien . . .* Folio. 174 leaves, unpaginated (*⁶ a–b⁶ A–Z⁶ Az–Cc⁶). Title and 133 plates printed in chiaroscuro. Antwerp: In Aegidij Copenij Diesthemij Truckerey, 1557. 325 x 236 mm. 19th century half sheep, speckled boards, gilt spine (repaired), corners a bit worn. Some minor foxing and offsetting as is common with this title, otherwise a very good to fine copy. From the library of the Prince of Liechtenstein, with his bookplate.

\$12,500

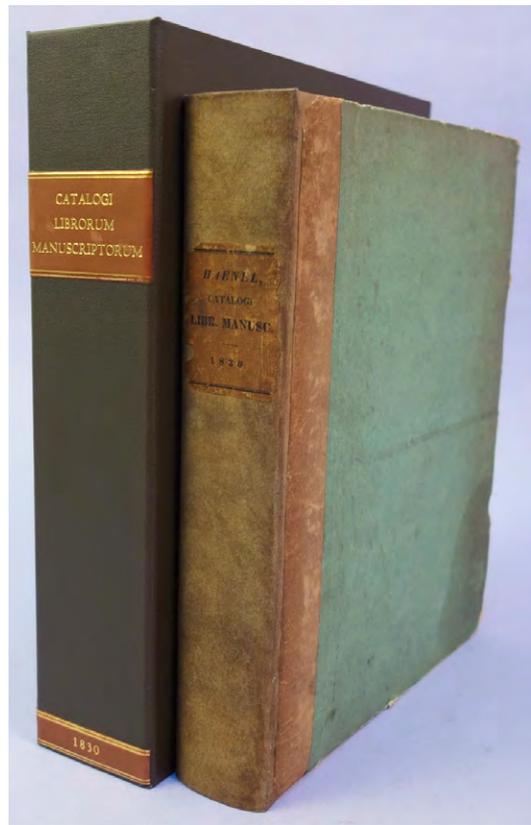
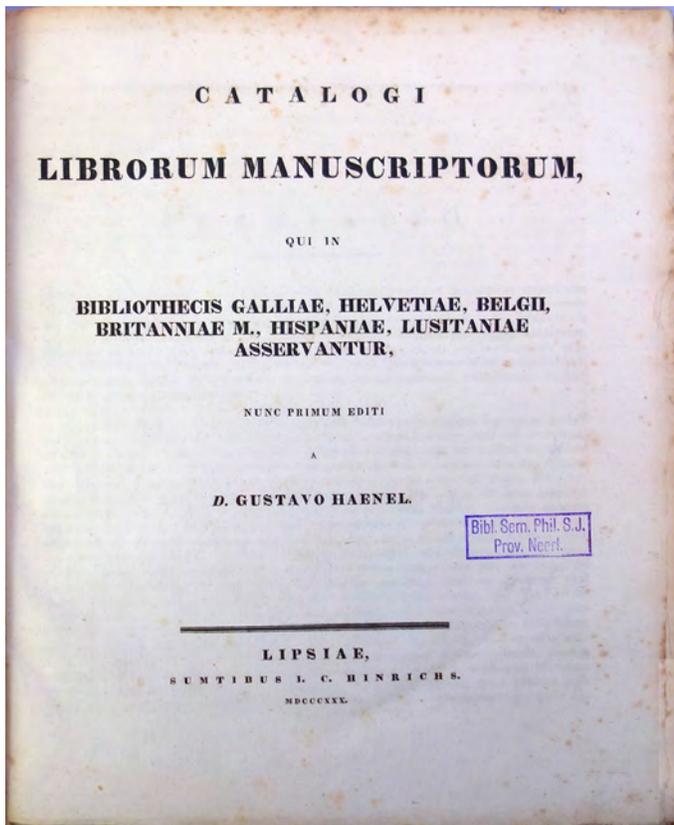
Rare First German Edition of the First Book Extensively Illustrated with Chiaroscuro Woodcuts. Goltzius, a German numismatist, employed the Dutch artist Josse van Gietleughen to prepare medalion portraits of the Roman and Holy Roman emperors from Julius Caesar to Charles V, using a combination of woodcut and intaglio printing to produce the final chiaroscuro images. Goltzius based the portraits on his extensive research into ancient and medieval coins and medals; where he could find no satisfactory image, as with several Carolingian and Ottonian monarchs, he printed a blank roundel. Goltzius published Latin, German and Italian editions of his book in 1557; a French edition appeared in 1559 and a Spanish one in 1560. The first German edition is considered to be much scarcer than the first Latin edition.

“For Goltzius’s *Imperatorum imagines* . . . Gietleughen cut two woodblocks per etched image . . . A darker tone provides the background for the effigy, a lighter tone the flesh-tone and the background for the inscription and the white of the paper the highlights . . . Goltzius’s combination of etching and woodcut and the careful selec-



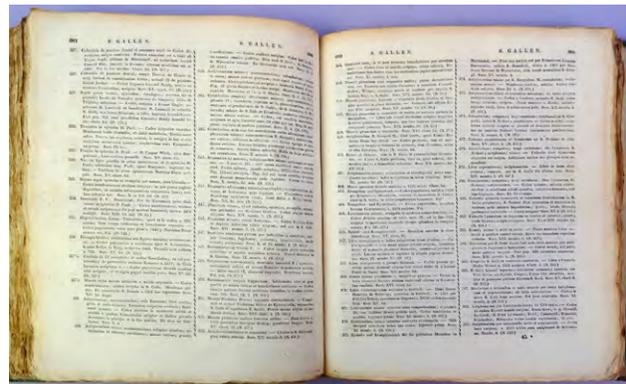
tion of tones yielded images that resembled in color and shape the coins and medals that were his sources. Yet, in their standardized and greatly enlarged size (nearly 18 cm. in diameter), uniform vertical orientation and high degree of completeness, they almost superseded their small referents, which were often degraded, damaged or mutilated” (Stijnman and Savage, eds., *Printing Colour 1400-1700: History, Techniques, Functions and Receptions*, pp. 154-155).

“The chiaroscuro process, with its different shades of the same hue and white highlights, defines light and tone but not local color; it was thus especially appropriate for the reproduction of monochrome relief medals. One of the characteristics of Goltzius’s work, the use of an etched plate for the black outlines and details, had earlier been invented by Parmagianino, but was not widely adopted by the practitioners of chiaroscuro active in the sixteenth century” (Friedman, *Color Printing in England*, no. 2, citing the 1557 Italian edition). Strauss, *Chiaroscuro. The Clair-Obscur Woodcuts by the German and Netherlandish Masters of the XVIth and XVIIth Centuries*, no. 113. Le Loup, *Hubertus Goltzius en Brugge 1583-1983*, p. 47. 42456

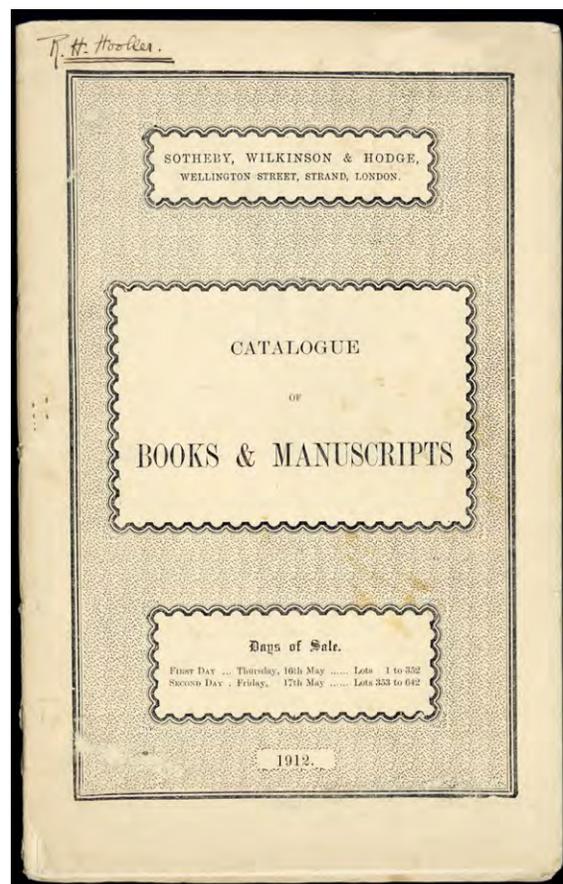
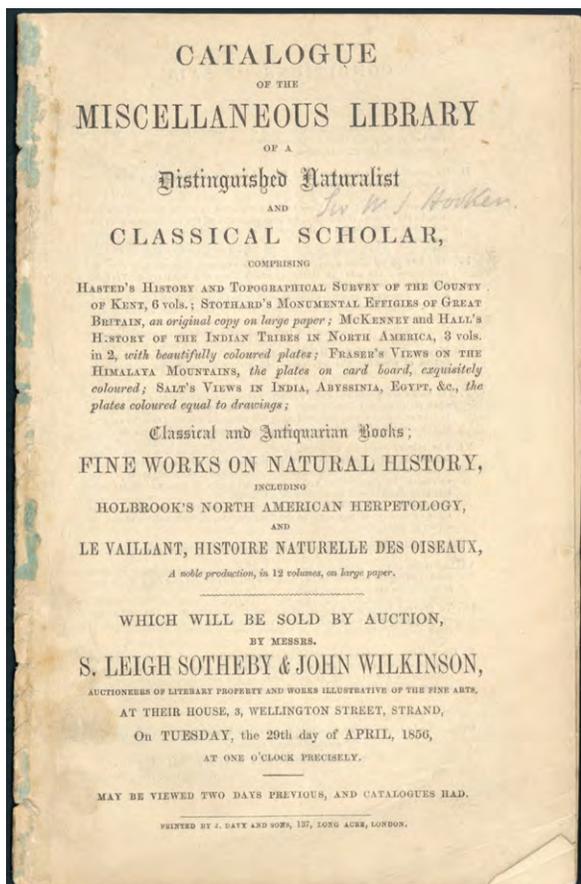


Union Catalogue of Manuscripts in European Libraries, Except for the Italian Peninsula

33. Haenel, Gustav Friedrich (1792-1878). *Catalogi librorum manuscriptorum, qui in bibliothecis Galliae, Helvetiae, Belgii, Britanniae M., Hispaniae, Lusitaniae asservantur.* 4to. x, [2]pp., 1238 cols., [3, including addenda and errata]pp. Leipzig: J. C. Hinrichs, 1830. 282 x 233 mm. (uncut). Original boards, rebacked preserving original printed label, light edgewear, minor staining; preserved in a cloth drop-back box. Very good. Bookplate and stamp of the Bibl. Res. Krijtberg S. J., Amsterdam. \$1750



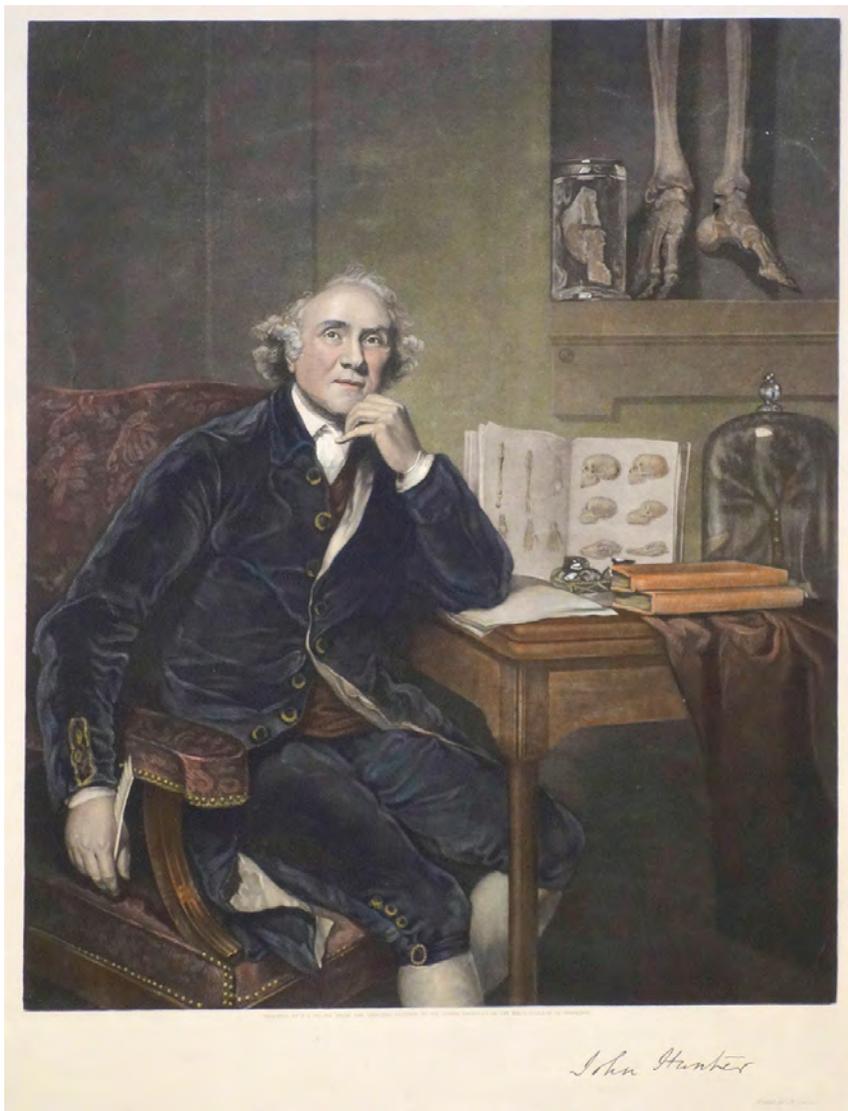
First Edition. Haenel, a jurist, legal historian and paleographer, was the first to attempt a union catalogue of manuscripts in European libraries since Montfaucon, who had published his *Bibliotheca bibliothecarum manuscriptorum nova* (1739) 91 years earlier. In this work Haenel included libraries in France, Switzerland, Belgium, Great Britain, Spain and Portugal, but left out the vast holdings of the entire Italian peninsula (much of which had been covered by Montfaucon) and Germany. Besides listings of manuscripts, Haenel, who visited many of the libraries covered, sometimes provided useful information regarding the history of each library, the number of printed works held, and the number of manuscripts in each library. 42632



The Libraries of Hooker, Father and Son

34. [**Hooker.**] (1) [**Hooker, William Jackson** (1785–1865).] Catalogue of the miscellaneous library of a distinguished naturalist and classical scholar . . . which will be sold by auction, by Messrs. S. Leigh Sotheby & John Wilkinson . . . on Tuesday, the 29th day of April, 1856 . . . 24pp. London: Printed by J. Davy and Sons, 1856. 212 x 137 mm. Disbound from sammelband, oversewn, remains of original printed wrappers visible at spine, last leaf loose. Light soiling, edges a bit frayed, but a good copy, with prices realized supplied in ink in a contemporary hand. (2) [**Hooker, Joseph Dalton** (1817–1911).] Catalogue of books & manuscripts comprising the property of a gentleman . . . important works on botany, scientific voyages, and works in general science, the property of the late Sir Joseph Dalton Hooker . . . which will be sold by auction, by Messrs. Sotheby, Wilkinson & Hodge . . . on Thursday, the 16th of May, 1912 . . . 60pp. London: Dryden Press, 1912. 254 x 159 mm. Original printed wrappers, spine a bit worn, light spotting. Very good copy. Prices realized for Hooker's library, along with purchasers' names, added in ink in a contemporary hand on pp. 46–60; clipping from the Times of London noting the sale tipped to inside front wrapper. Signature of R[eginald] H[awthorn] Hooker (1867–1944), Joseph Hooker's fourth son, on the front wrapper. Together 2 items. \$650

First Editions. Catalogues recording the sales of the libraries of botanist Sir William Jackson Hooker, the first full-time director of the Royal Botanic Gardens at Kew and author of over two dozen works on botany; and of his son, Joseph Dalton Hooker, the eminent British taxonomic botanist, plant geographer, and supporter of Darwinian evolution, who served as director of Kew Gardens (succeeding his father) from 1865 to 1885. The catalogue for Joseph Hooker's library bears the signature of his fourth son, Reginald Hawthorn Hooker, a noted statistician and pioneer in the application of correlation analysis to economics and agricultural meteorology. 35359, 35360



35. Hunter, John (1728–93). Hand-colored mezzotint portrait by William Overend Geller after the painting by Sir Joshua Reynolds (1723–92). London: H. Benham, 1841. Image measures 425 x 342; platemark 510 x 384 mm.; margins extending to 577 x 468 mm. mm. Tear in upper margin repaired not affecting image, slight crease in upper left corner, but very good. \$1250

Rare Hand-Colored Example of Geller’s fine mezzotint engraving of the famous portrait of Hunter by Sir Joshua Reynolds, now at the Royal College of Surgeons. Reynolds’s portrait, completed in 1789, shows Hunter seated at a table on which is an open folio of drawings showing a series of forelimbs and skulls; behind him can be seen part of the skeleton of Charles Byrne, the famous “Irish Giant,” whose remains Hunter secretly arranged to have removed from Byrne’s coffin after his death in 1783. Qvist, in his biography of Hunter, notes the significance of the drawings as demonstrating Hunter’s evolutionary belief in the mutability of species, particularly his “concept of the evolutionary series associated with the head and hand of man” (p. 188).

Geller’s engraving exists in both uncolored and hand-colored versions. The hand-colored version is quite rare; this is the only copy we have ever handled. The original oil from which this engraving was made suffered extensive damage through poor preservation and chemical deterioration of pigments, and has undergone several restorations. Our hand-colored copy of Geller’s engraving, made prior to any of repairs to Reynolds’ portrait, is likely a fairly accurate representation of the painting’s original coloring. Taylor, “John Hunter and his painters,” *Annals of the Royal College of Surgeons of England*, special number (1993): 1–8. 44210



36. [Japan and Western Medicine.]

Oranda jin Geka ryoji no zu [Dutch Surgery in Nagasaki]. Original pen, ink and watercolor drawing on light brown-toned silk, with 4 vertical lines of Japanese characters in the upper left corner. Japan: late 18th or early 19th century]. 483 x 363 mm., mounted as a scroll at a modern date on light grey silk backed with paper, with a half-round hanging rail (with braided ribbon attached) at the top and a suspension bar at the foot, measuring 914 x 443 mm. overall; preserved in a custom-made wooden box. A few tiny pinholes in upper corners of image, but fine, with the coloring fresh and bright.

\$3750

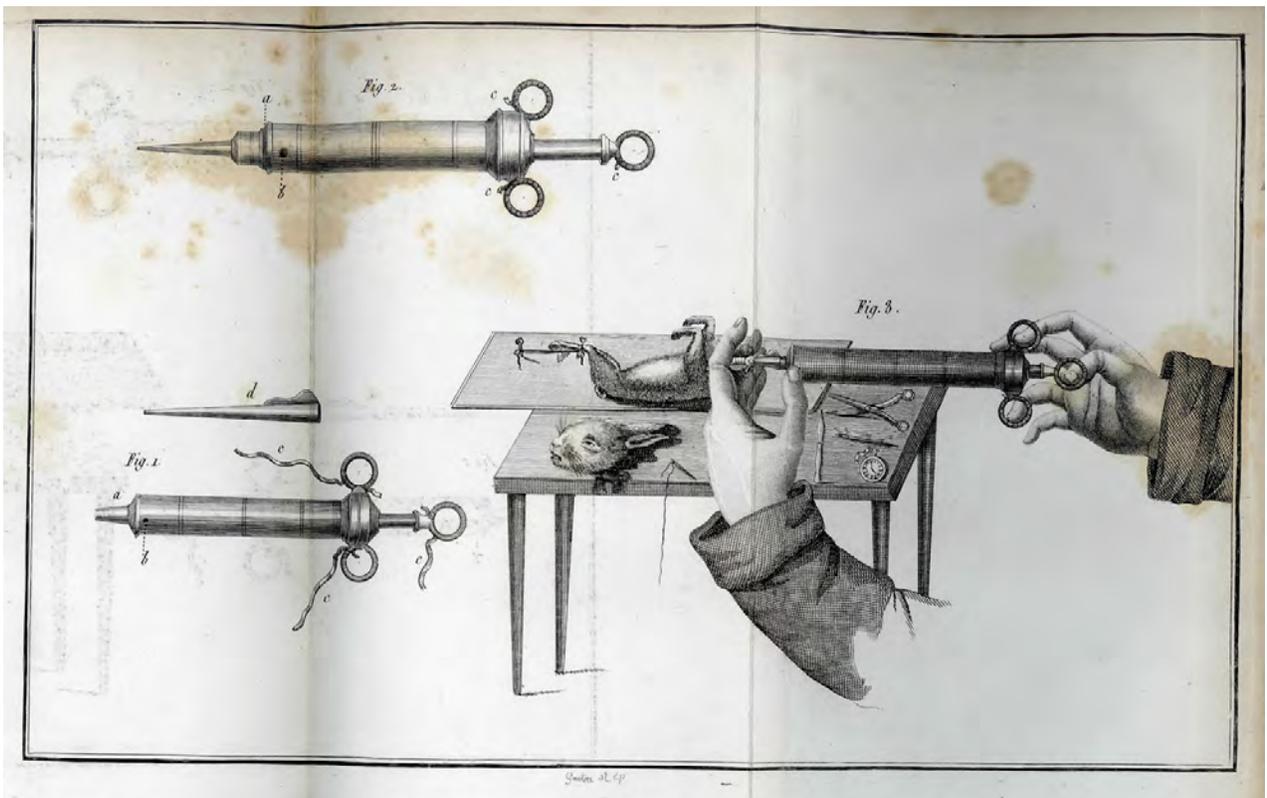
This striking image, showing an amputation carried out by a Dutch surgeon in Japan, was most likely painted in the late eighteenth or early nineteenth century, during Japan's self-imposed period of national isolation. The hand-painted image is related but not identical to a Nagasaki woodblock print titled "Surgery by a Dutch Physician," one of many popular souvenir prints depicting scenes unique to Nagasaki, which at the time was the sole point of contact between Japan and the outside world (see illustration below, reproducing a copy of the print owned by the Nagasaki Municipal Museum). It may be that our scroll is the original of the image; however, it is also possible that both hand-painted and woodcut versions of the image were produced simultaneously.



Western surgery came to Japan in the sixteenth and seventeenth centuries via the Portuguese, who in 1543 became the first Europeans to make direct contact with Japan, and the Dutch, who became the only European nation allowed to trade with Japan after Japan's expulsion of the Portuguese in 1639. Surgeons attached to the Dutch East India Company established practices at the island of Dejima in Nagasaki Bay, which led to the formation of several Japanese schools of surgery based on European methods. "This aspect of Western medicine, known as *Komo-ryu geka* or 'Surgery of the Red-Haired,' has had a profound effect on the development of surgical practice in Japan" (Van Gulik, p. 37). Van Gulik, "Dutch surgery in Japan," in *Red-Hair Medicine: Dutch-Japanese Medical Relations*, ed. Beukers et al., pp. 37-50. 44211

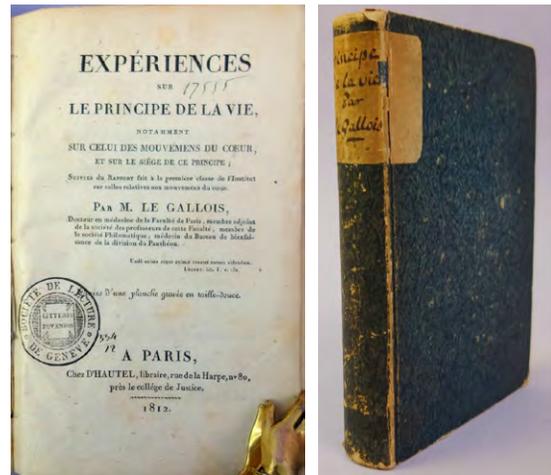


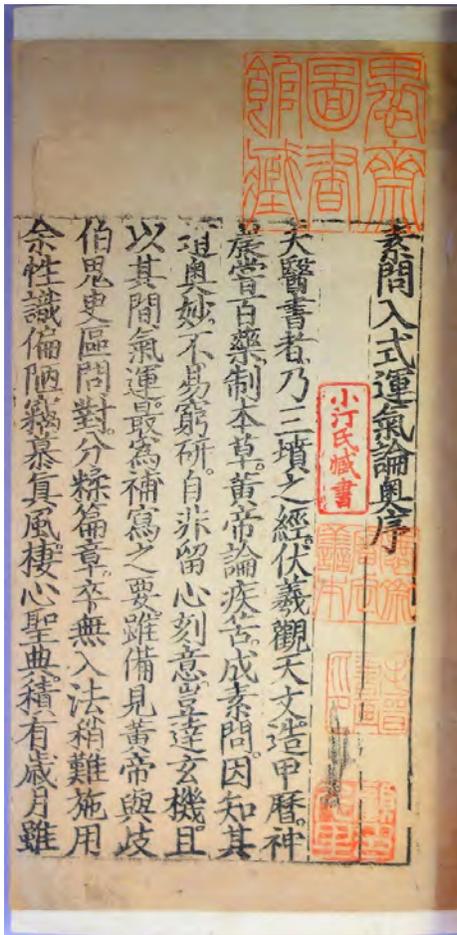
"Surgery by a Dutch Physician." Woodcut print in the Nagasaki Municipal Museum



37. Le Gallois, Jean Julien César (1770–1814). *Expériences sur le principe de la vie, notamment sur celui des mouvemens du coeur, et sur le siege de ce principe . . .* 8vo. [6], xxiv, 364, [2, errata]pp. Folding engraved plate. Paris: Chez d’Hautel, 1812. 192 x 124 mm. Paste paper boards ca. 1812, light wear, label with title in manuscript pasted to spine. Minor occasional spotting, some offsetting on plate but very good. \$1250

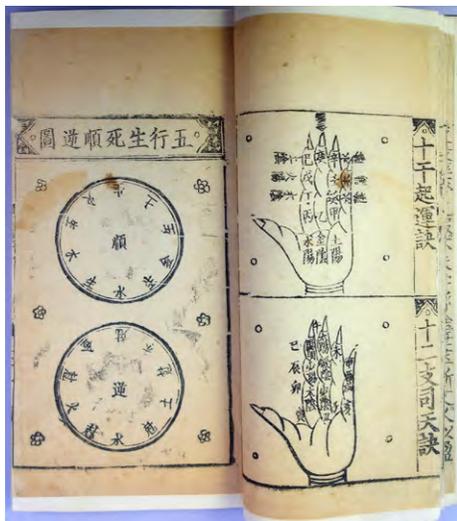
First Edition. Le Gallois conducted a series of physiological experiments exploring the mechanism of respiration, in which he determined that respiration is controlled by a respiratory center in the medulla oblongata—the first time that “an area of brain substance . . . having a specific function had been defined accurately by experiment” (Clarke and Jacyna, *Nineteenth-Century Origins of Neuroscientific Concepts*, p. 246). Le Gallois also developed a primitive isolated heart-lung preparation in rabbits and was the first to suggest the possibility of a heart-lung machine: “If the place of the heart could be supplied by injection, and if, for the regular continuance of this injection, there could be furnished a quantity of arterial blood, whether natural or artificially formed . . . then life might be indefinitely maintained” (quoted in Fye, p. 599). Garrison–Morton.com 928. Fye, “Julien Jean César Legallois,” *Clinical Cardiology* 18 (1995): 599–600. 44026



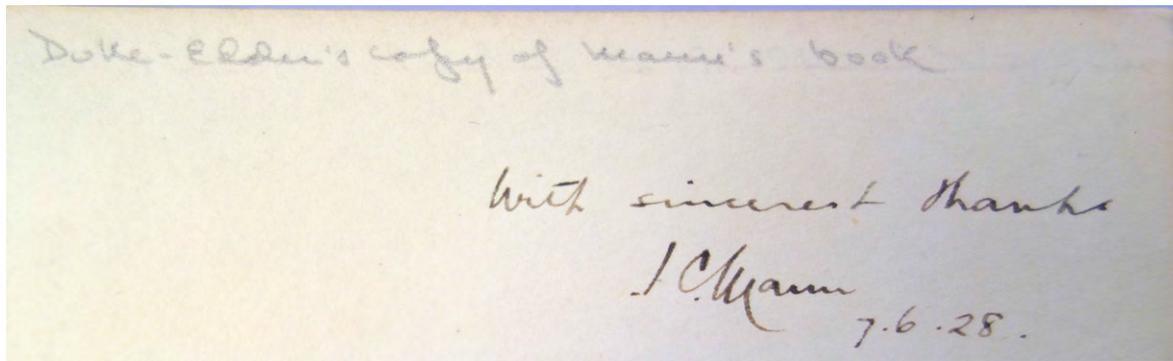


38. Liu Wen-Shu (fl. 1099). [in Chinese:] Suwen rushi yunqi lun'ao [Marvelous introductory remarks on the theory of the circulatory phases and the seasonal influences according to the Suwen]. 45 leaves, stitched, accordion-folded, interfoliated with blank paper. Text woodcuts. No place indicated. According to Sotheby's, "between 1279 and 1339." Modern blue wrappers, beige slipcase with flaps, bone fasteners. 283 x 162 mm. A few tears and small lacunae, a few waterstains, minimal spotting, but fine otherwise. Three red stamps of earlier Chinese owners and stamp of a Japanese owner on the first page. From the library of Jean Blondelet, with correspondence laid in regarding his purchase of this work. \$19,500

Extremely Rare Chinese Xylographic Medical Classic. "A great classic of traditional Chinese medicine, and the oldest on the subject of the cyclical movements of the 'elements' Wood, Fire, Water, Metal and Earth in the science of acupuncture. A rare edition from the Yuan era (1279-1339) of a key work of Chinese medicine composed under the Sung dynasty (1099). Xylographic printing on 45 folded sheets, illustrated with 28 woods in the text. 3 red seals of Chinese private provenance, and a Japanese seal on the front page" (Sotheby's Paris, *Livres et Manuscrits*, sale catalogue PF1603 [31 May 2016], lot no. 17 [this copy]; translation ours).

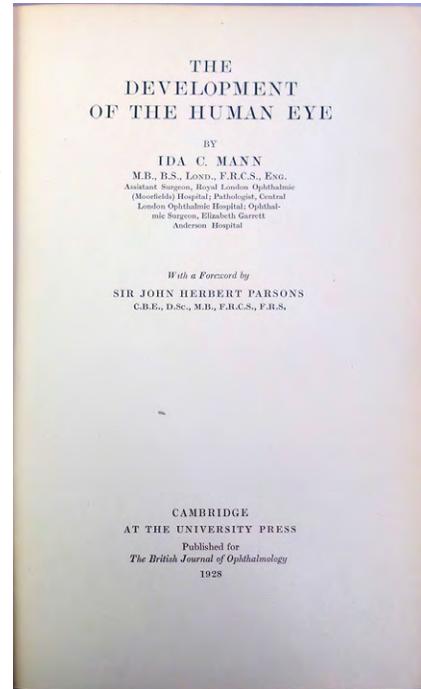


Liu's work, with a preface dated 1099, is the earliest known treatment of the *wu yun liu qi* system relating medical treatment to the cyclical motions of the Five Elements (wood, fire, water, metal and earth) and the six *qi* (pneuma or vital forces). "[The system] was based on a conviction that it was no use giving treatment, and particularly acupuncture, unless one took account of what we should nowadays call diurnal or circadian rhythms, . . . longer cycles of flow such as the monthly period, where me might think of endocrine changes analogous with the lunation . . . and thirdly, the cycle of the seasons of the year, widely differing in the illnesses that could be expected, and the courses which they would probably pursue . . . The oldest treatment of this appears to have been contained in a work of + 1099 (again in that brilliant age of the emperor Hui Tsung), the *Su wen ju shih yun chhi lun ao*" (Lu and Needham, *Celestial Lancets*, pp. 138-39. As Paul Ulrich Unschuld notes, "The functions of the human organism, it was believed, are to a great extent determined by the influences that affect it during each season. Liu Wen-shu, who in 1099 published one of the best-known works on the theory of the five phases of circulation and six climatic influences, went so far as to claim that each season was dominated by certain climatic influences that inevitably caused certain illnesses, giving rise to the concept of 'illness caused by seasonal influence'" (Unschuld, *Medicine in China: A History of Ideas*, p. 171). I.C.K. (Taki Mototane, *A Comprehensive Annotated Bibliography of Chinese Medical Literature*), p. 1394. Gwei-Djen Lu and Joseph Needham, *Celestial Lancets, A History and Rationale of Acupuncture and Moxa*, 2002, p. 232. Bollet, Thierry, "Les 5 éléments et la médecine traditionnelle chinoise." I.E.A.T.C., Nov. 2014. Web. Accessed 23 Jan. 2017. 44083



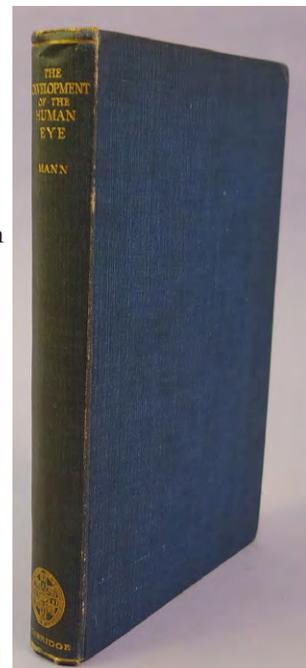
Inscribed to Duke-Elder

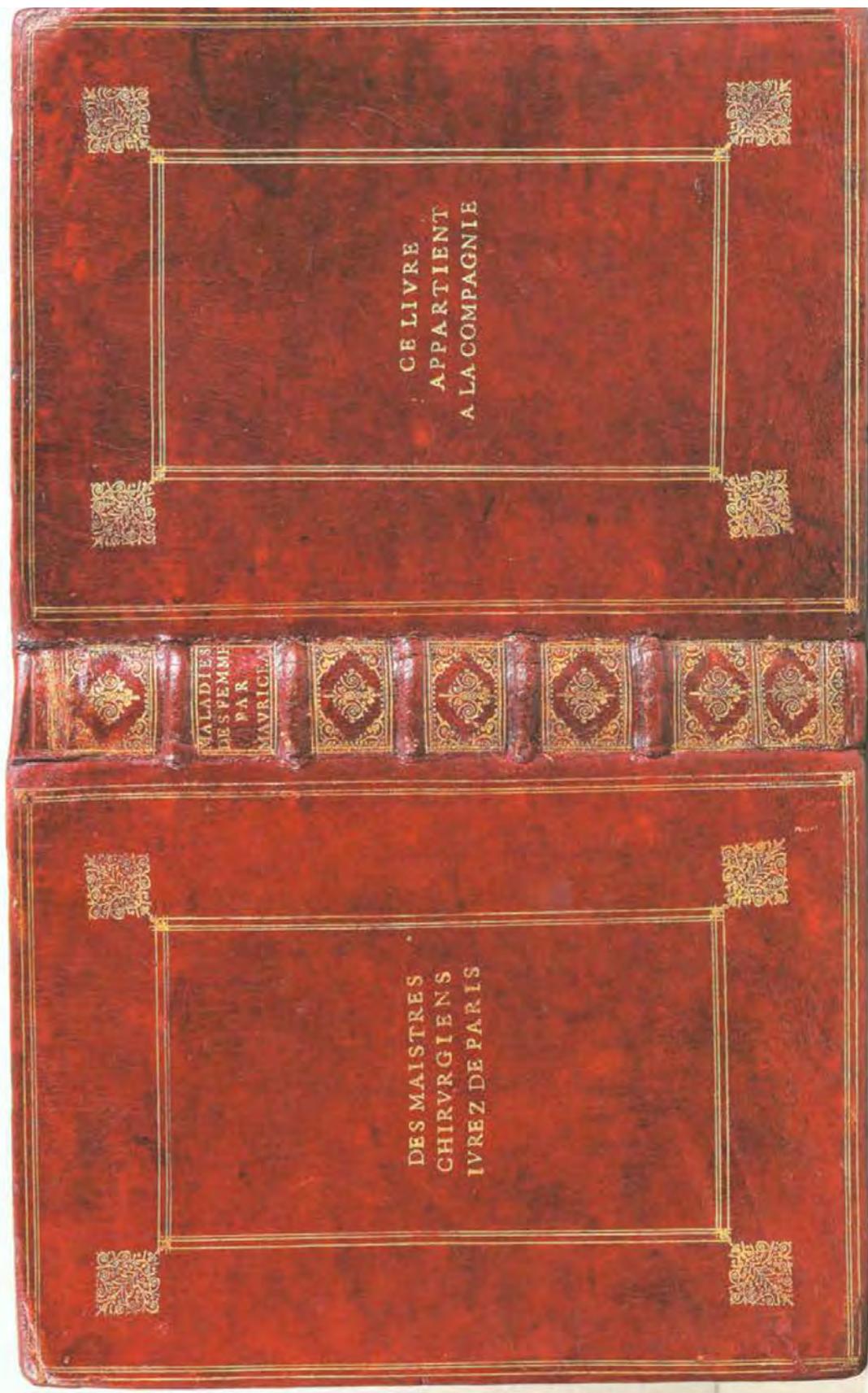
39. Mann, Ida Caroline (1893-1983). The development of the human eye. x, 306pp. Numerous text illustrations after the author's drawings. Cambridge: At the University Press, published for *The British Journal of Ophthalmology*, 1928. 248 x 159 mm. Original cloth, gilt-stamped spine, light wear, spine a bit darkened. One leaf (pp. 221-222) repaired, otherwise very good. *Presentation Copy*, inscribed by the author on the front endpaper: "With sincerest thanks, I. C. Mann 7.6.28." Bookplate of Dr. Paul Henkind (1932-86), former chairman of the department of ophthalmology at Montfiore Medical Center and Albert Einstein College of Medicine, with his pencil note stating that Mann presented this copy to Sir William Stewart Duke-Elder (1898-1978). \$750



First Edition of the first monograph on the embryology of the human eye. Mann, a graduate of the London School of Medicine for Women, was "a distinguished ophthalmologist . . . equally well known for her pioneering research work on embryology and development of the eye, and on the influences of genetic and social factors on the incidence and severity of eye diseases throughout the world" (*Oxford Dictionary of National Biography*). For her research Mann obtained access to "probably the most comprehensive series of human embryos available in [Great Britain]. It has thus been possible to illustrate every stage of human ocular development by an actual specimen, independent of reference to other doubtfully related species. In this way certain debatable points, resting hitherto on comparative observations only, have been placed on a sounder foundation, and certain other processes, for example, those involving growth rates and consequent alteration of position, have been studied for the first time on human material" (p. ix).

According to ophthalmologist Paul Henkind, a later owner of this copy, Mann presented this copy to Sir William Stewart Duke-Elder, whose many textbooks, articles and other writings served as the educational foundation for most of the world's ophthalmologists in the twentieth century; see Garrison.Morton.com 1530 and 1531. Garrison-Morton.com 7392. 44089

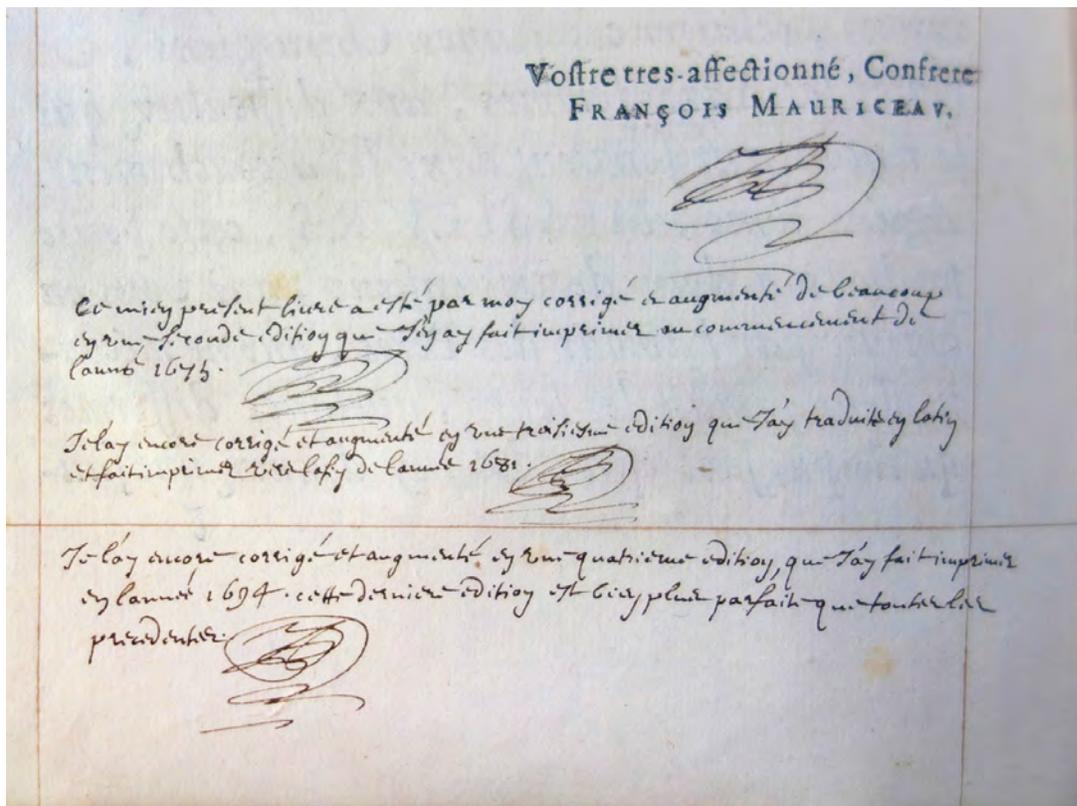




CE LIVRE
APPARTIENT
A LA COMPAGNIE

MALADIES
DES FEMME
PAR
MAURICE

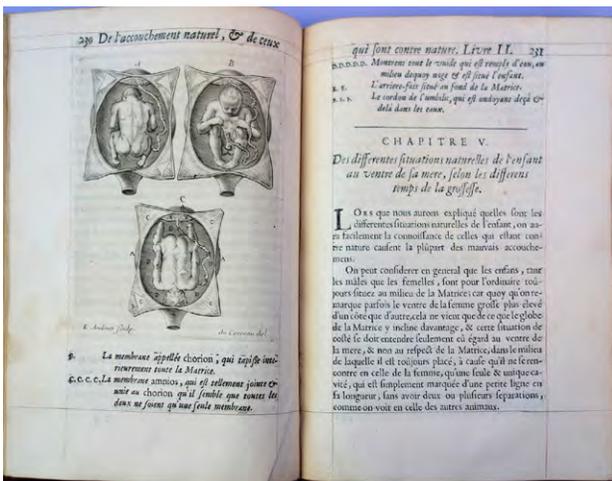
DES MAISTRES
CHIRVRS GIENS
IVREZ DE PARIS



The Dedication Copy: “Ce Livre Appartient à la Compagnie Des Maistres Chirur-
giens Iurez de Paris”—With Three Dated Inscriptions in Mauriceau’s Hand

40. Mauriceau, François (1637-1709). *Des maladies des femmes grosses et accouchées*. Avec la bonne et véritable méthode de les bien aider en leurs accouchemens naturels . . . 4to. [24, including engraved frontispiece by Guillaume Vallet after Antoine Paillet and letter-press title], 536 pp., including 11 full or nearly full-page, 15 half-page and 3 quarter page engravings in text. Paris: Henault, d’Houry, Ninville, 1668. 245 x 185 mm. In a presentation binding of red morocco gilt ca. 1668, spine in 7 compartments richly tooled, covers triple-gilt-ruled with fleurons at corners, tooled in the center of the upper and lower covers: “Ce Livre Appartient à la Compagnie / Des Maistres Chirur-
giens Iurez de Paris.” Extremities and corners expertly repaired, preserved in a cloth box. Ruled throughout. Mauriceau’s autograph cipher at the end of the printed dedication followed by three inscriptions signed by Mauriceau’s cipher at the end of the printed dedication, dated 1675, 1681 and 1694. Correction in manuscript on p. 196. Some minor toning in extreme outer margin, but generally a broad-margined magnificent copy, in a splendid binding with an important historic association. \$65,000



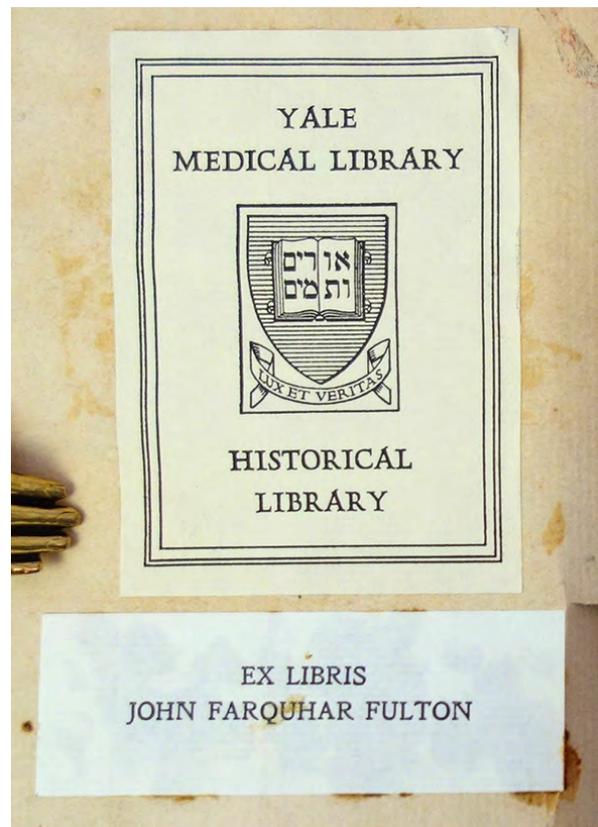
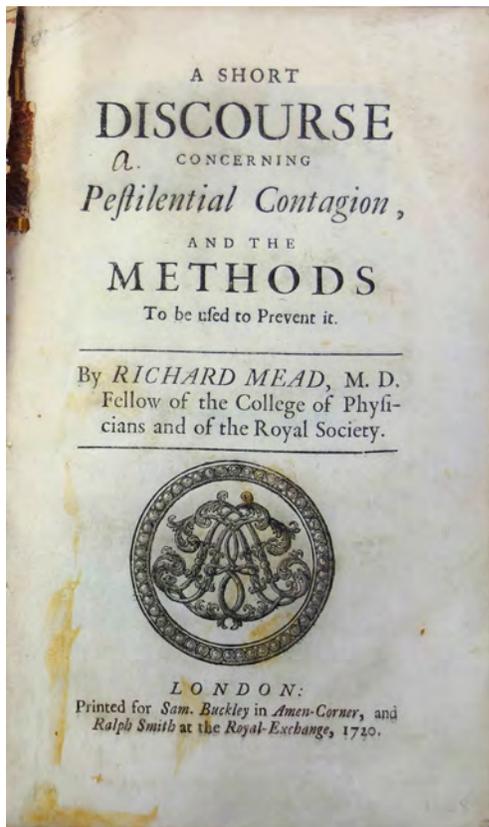


The Dedication Copy of the First Edition of this groundbreaking medical work establishing obstetrics as a separate science, in a presentation binding of contemporary red morocco stamped with the name of the dedicatees—Les Maîtres Chirurgiens Jurez de Paris—and with three signed inscriptions by the author at the end of the printed dedication, announcing the publication of his work’s later 17th century revised editions. The present copy’s presentation binding, in splendid red morocco, testifies directly to Mauriceau’s practical training in obstetrics and importance in the Parisian medical community: its covers declare its owner to be a member of Les Maîtres Chirurgiens Jurés (also known as the Confraternity of Saint-Comé), the venerated guild of Paris surgeons established in the 13th century. Mauriceau’s printed dedication, similarly addressed to “Mes chers Confrères,” has manuscript addenda in this copy: Three inscriptions written by the author and signed with his cipher, the first noting the publication of the corrected and augmented second edition of *Des maladies des femmes grosses* in 1675, the second the publication of the third French and the first Latin editions in 1681, and the third noting the publication of the revised fourth edition “bien plus parfaite que toutes les précédentes.” It seems probable that after Mauriceau originally presented this copy to the library of the Confraternity he continued to revisit the copy on their shelves and documented, in this dedication copy of the first edition, the fact that he had continued to make improvements to his text in later editions.

Mauriceau’s relationship with the Confraternity is also worth noting. The prestigious society had originally served to distinguish its members, usually academics, from “barber-surgeons” who had no university training. Yet in 1655 the two guilds had merged—in large part because the practical skills of itinerant surgeons often surpassed those of their academic competitors! In this context, Mauriceau’s hands-on apprenticeship at the Hôtel-Dieu is significant, as is the publication of his work in French instead of Latin—a fact noted by the Bibliothèque Natio-

nale’s inclusion of the present work in its exhibition catalogue *En Français dans le texte* (1990). Of interest also is Mauriceau’s advertisement of his medical practice at the foot of the engraved frontispiece, which includes his portrait. He states, admittedly in small print, that his office is on rue St. Severin at the corner of rue Zacharie, etc., etc.

“This book was without question the most practical, explicit and accurate of the then known treatises on midwifery” (Cutter & Viets, *A Short History of Midwifery*, p. 51). Mauriceau was “the first to write on tubal pregnancy, epidemic puerperal fever, and the complications that arise in labor from misplacement of the umbilical cord” (Le Fanu, *Notable Medical Books from the Lilly Library*, p. 85). For more than seventy years and through numerous translations and editions, *Des maladies des femmes grosses* contributed to the spread of good obstetric practice throughout Europe. Garrison-Morton.com 6147. *En français dans le texte* 107. Norman 1461, Norman, *One Hundred Books Famous in Medicine*, no. 33. 44222



Precursor of the British Public Health System

41. Mead, Richard (1673-1754). A short discourse concerning pestilential contagion, and the methods to be used to prevent it. London: Sam. Buckley; and Ralph Smith, 1720. 8vo. [8], 1-59 [1] pp. 197 x 120 mm. Later marbled wrappers, chipped, tear in back wrapper, spine mended with clear tape. Internally very good. Bookplates of John Farquhar Fulton (1899-1960) and the Yale Medical Historical Library. \$750

First Edition. In 1719, in response to the public alarm over the outbreak of plague in Marseilles, the British government asked Mead to prepare a statement concerning the prevention of the disease. Mead's *Short Discourse* anticipated the development of the English public health system in concluding that isolation of the sick in proper places is more effectual in checking the spread of contagion than either general quarantine or fumigation. Mead's book enjoyed a great popularity, going through seven editions within a year of its publication. This copy is from the library of physiologist and bibliophile John Farquhar Fulton, author of the definitive biography of Harvey Cushing and of several important medical bibliographies; see Garrison-Morton.com (7 entries). Garrison-Morton.com 5123. Norman 1476. 44033



*From One Co-Discoverer of Nuclear Fission to Another—
Autograph Postcard Signed from Lise Meitner to Otto Hahn, Mentioning Einstein*

42. Meitner, Lise (1878–1968). Autograph picture postcard signed, in German, to Otto Hahn (1879–1968). Utrecht, 14 September 1923 (postmarked the next day). 89 x 138 mm. One corner a bit bent, but very good. \$5850

A fascinating postcard documenting not only the decades-long friendship and research collaboration between Meitner and Hahn, co-discoverers of nuclear fission, but also Meitner's friendships with Einstein and with the important Dutch physicist Paul Ehrenfest, whom she had known since her student days. The postcard can be translated as follows:

I have just traveled here from Leiden and am sitting in the railway station, for the first time without accompanying protection. In Leiden Einst[ein], with whom I spent two wonderful days in Ehrenfest's house, escorted me to the train. I must leave from here at 4 o'clock. I will most probably return on Sunday morning; on the evening of the 16th I must [...] in Einthoven, where I am going tomorrow. I hope you are all well. Many hearty greetings, your Lise M. Greetings also to the Institute youth.

In the postcard Meitner used creative abbreviations for names in order to save space. She wrote the postcard during her first visit to the Netherlands, a lecture tour arranged by her friend Dirk Coster, professor of physics at the University of Groningen. Coster would later play a critical role in Meitner's life: In 1938 he persuaded her to leave Nazi Germany to avoid persecution as a Jew and accompanied her during her the first leg of her escape, from Germany to the Netherlands.

Meitner obtained her doctorate in physics from the University of Vienna in 1905, where she became friends with her fellow student Paul Ehrenfest. In 1907 Max Planck invited her to Berlin to continue her post-doctoral studies; there she met radiochemist Otto Hahn, who would be her research partner for the next thirty years,

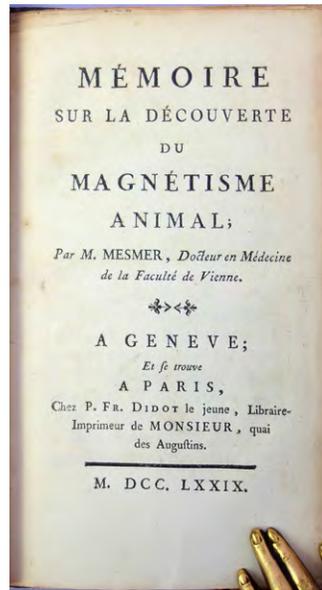
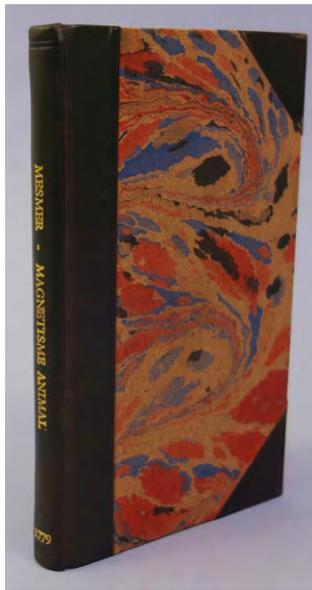
and also made the acquaintance of Einstein. During those early years in Berlin, before the outbreak of World War I, Einstein, Ehrenfest, Meitner and others would often gather at Planck's home for long evenings of music and conversation.

In 1912 Hahn and Meitner joined the Kaiser Wilhelm Institute for Chemistry in Berlin (Meitner as an unpaid "guest" due to the fact that she was a woman), where they investigated the complex physical properties of radioactive elements and discovered the element protactinium (Pa). In 1919 Meitner was made a professor at the KWI, where she served as head of the Institute's physics department, and in 1926 she was appointed full professor of physics at the University of Berlin—the first woman in Germany to hold such a post. Between 1924 and 1934 the Hahn-Meitner team gained international prestige with their work in what became known as nuclear physics. In 1934, after learning about the results of Fermi's neutron bombardment of uranium, Meitner persuaded Hahn and his assistant, Fritz Strassmann, to join her in a thorough investigation of these phenomena. During the next four years (1934–38) the Meitner-Hahn-Strassmann team identified numerous radioactive "transuranes" resulting from neutron bombardment of uranium; although the chemical evidence for these elements appeared strong, the physics of their creation—which conformed to no known pattern—puzzled Meitner deeply. Meitner also had other

problems to contend with: As a Jew in Nazi Germany, she found her career and even her life becoming steadily more endangered, and in July 1938, with the aid of Dirk Coster, she fled to safety in Stockholm. Although forced to abandon her hands-on investigations at the KWI, Meitner maintained a constant scientific correspondence with Hahn, and was thus kept abreast of their ongoing researches.

In 1938 Hahn and Strassmann, continuing with the irradiated uranium investigations, discovered barium isotopes among the decay products produced by the bombarded nuclei. At a loss to interpret this result, the two men communicated their result by letter to Meitner, who, with the help of her nephew Otto Frisch (a member of Bohr's Copenhagen Institute for Theoretical Physics), came up with the correct explanation: The large uranium nucleus breaks up upon bombardment into two or more smaller nuclei through the mutual repulsion of its many protons, which makes it behave like a droplet of water in which the surface tension has been reduced. By taking the difference between the mass of the original nucleus and the slightly smaller total mass of the fragment nuclei, and using Einstein's mass-energy equivalence, Meitner calculated the large amount of energy (equal to 200 million electron volts) that would be released during the splitting process, which she and Frisch named "fission." Sime, *Lise Meitner*, p. 99. 44102





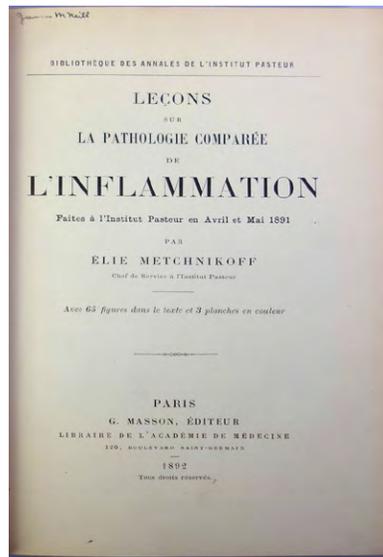
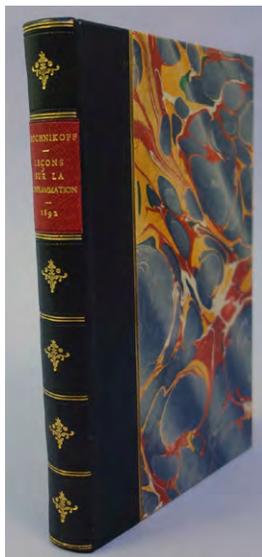
Mesmerism

43. Mesmer, Franz Anton (1734-1815).

Mémoire sur la découverte du magnétisme animal. 8vo. [2], vi, 85pp. Geneva & Paris: Didot, 1779. 160 x 95 mm. Half calf, marbled boards in period style. Small tear in lower margin of title, but very good otherwise. \$3750

First Edition. The manifesto of animal magnetism. On the eve of the French Revolution, Mesmer captured the imagination of the Parisian public with his remarkable ability to effect cures by throwing his patients into “mesmeric” trances. As much a social movement as a medical practice, mesmerism spread quickly throughout Europe and America, and became such a mania in pre-Revolutionary France that

between 1779 and 1789 more literature was generated on mesmerism than on any other single topic. At first Mesmer used actual magnets to perform his cures but later dispensed with these on the ground that nearly all substances could be magnetized by touch. He employed either direct contact between physician and patient, or contact via the “baquet,” a tub-like apparatus which could be charged with the universal fluid like a Leyden jar. Mesmer always insisted on the physical nature of his cures, which he initially ascribed to magnetic forces or electricity; later he devised the theory of a “universal fluid” acting on the nervous system, which was susceptible to this fluid on account of its inherent property of “animal magnetism.” Mesmer’s discovery of what would later be called hypnosis led to the large-scale investigation of psychological phenomena, and is thus an ancestor of psychopathology and psychotherapy. Crabtree 10. Garrison-Morton 4992.1. *Printing and the Mind of Man* 225. Norman M4. 44024



44. Metchnikoff, Elie (1845-1916). *Leçons sur la pathologie comparée de l'inflammation* faites à l'Institut Pasteur en avril et mai 1891. xi, 239pp. 3 chromolithograph plates. Paris: G. Masson, 1892. 216 x 135 mm. Quarter morocco gilt, marbled boards in period style. Light toning but very good. Ownership signatures on half-title and title.

\$950

First Edition. Metchnikoff was awarded half of the 1908 Nobel Prize in Physiology / Medicine for his pioneering research on phagocytes (infection-fighting cells) and their role in physiology and pathology; he was the first to demonstrate experimentally the part that phagocytes play in inflammation. A native of Russia, Metchnikoff moved to Paris in 1888 at the invitation of Louis Pasteur, who gave

Metchnikoff a position at the Pasteur Institute. In 1891 Metchnikoff gave a series of lectures at the Institute dealing with “the history of various theories of inflammation and their investigation, and chiefly with the roles of phagocytes in the animal kingdom” (*Dictionary of Scientific Biography*). The collected lectures were published in 1892, with an English translation appearing the following year. Garrison-Morton.com 2307. 44036

The First Continent-Wide Union Catalogue of Manuscripts

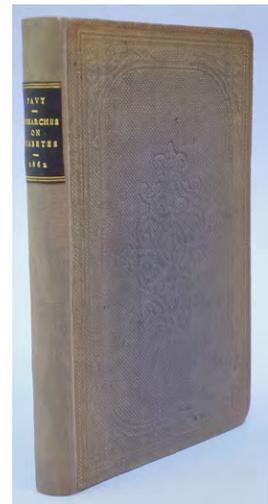
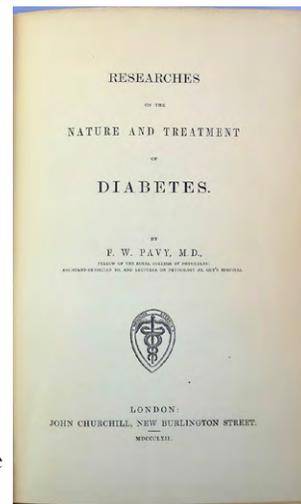
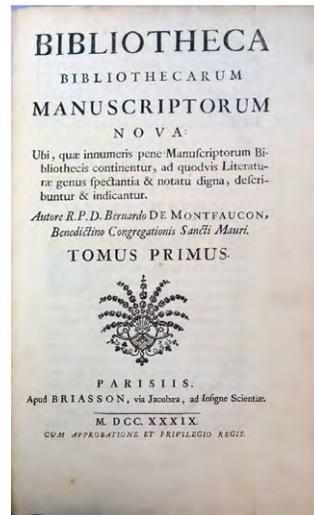
45. Montfaucon, Bernard de (1655-1741). *Bibliotheca bibliothecarum manuscriptorum nova . . .* 2 vols., folio. [8], ccli, 708; [4], 709-1669pp. Paris: Briasson, 1739. 390 x 250 mm. Blind-stamped vellum ca. 1739, leather spine labels, vellum on spines cracked and peeling with some loss in Vol. 2, light soiling. Occasional faint foxing but very good. Bookplate of the Ramsgate Monastery in each volume. \$2250

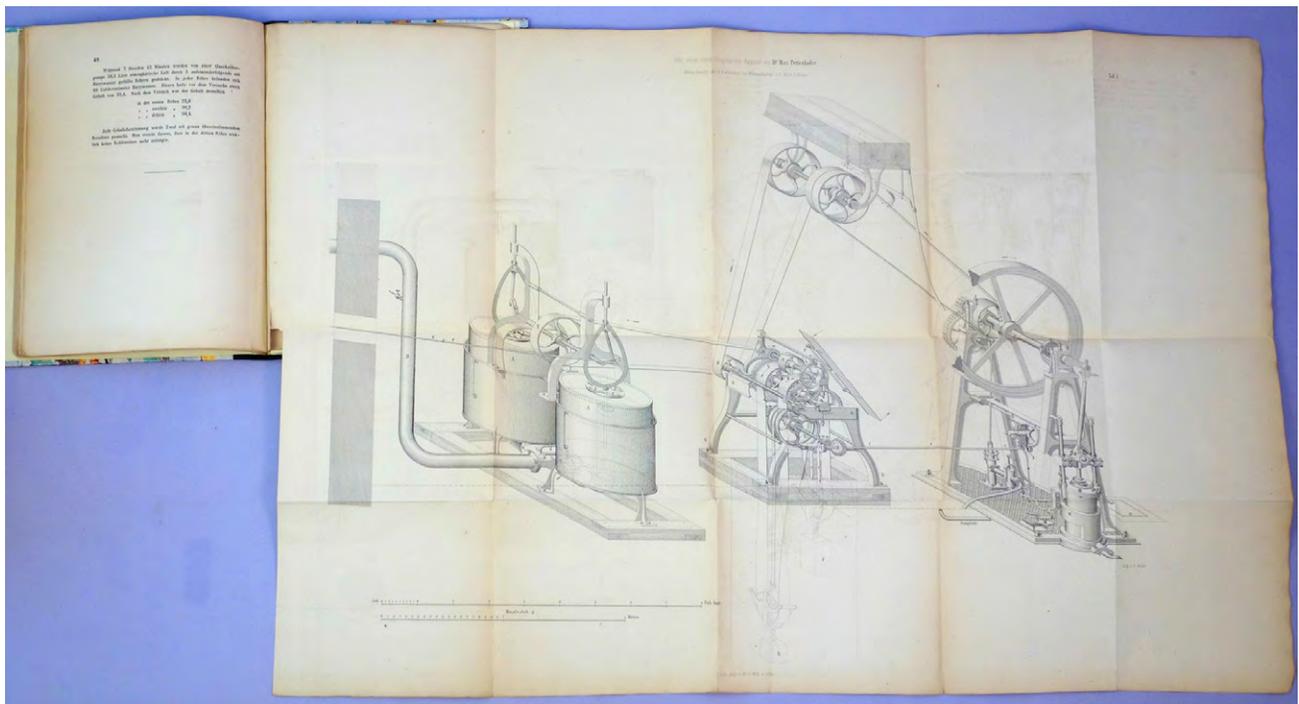
First Edition of the first continent-wide union catalogue of manuscripts, compiled by Bernard de Montfaucon, a scholar and Benedictine monk best known for founding the discipline of paleography with his *Palaeographia Graeca* (1708; see *Printing and the Mind of Man* 175). The 1669-page *Bibliotheca bibliothecarum* catalogued all the manuscript libraries in France and Italy with which Montfaucon was familiar, as well as a few in Germany, the Netherlands and England. Its emphasis was on medieval and Renaissance texts.

Montfaucon began with a list of all the libraries, institutional and private, for which he published holdings. These included the well-known collections and those of medieval monasteries such as Bobbio, Corbie and Fulda, as well as lesser-known monastic libraries. This was followed by a 250-page index of authors and codices, and then with a list of the manuscript contents of libraries by country beginning with Italy and the Vatican Library. The work ended with another 160-page index of authors and “rerum” (things). The comprehensive indices make it possible to locate manuscript texts by author and subject. As such it remains the most useful tool for checking the distribution of manuscript texts in European libraries, and their survival in institutions up to the first third of the eighteenth century. 42504

46. Pavy, Frederick William (1829-1911). *Research on the nature and treatment of diabetes.* ix, 210pp., plus 32-page publisher’s catalogue. Plate, folding table. London: John Churchill, 1862. 222 x 140 mm. Original blind-stamped cloth, rebacked, new spine label. Light toning but very good. \$1250

First Edition. Pavy, the last of the English physician-chemists, decided to make diabetes research and treatment his life’s work after studying with Claude Bernard in Paris. In the first part of the present work, Pavy described how he modified Fehling’s solution (copper sulfate, potassium bitartrate, sodium hydroxide, water) by adding an ammoniacal salt so that the resulting solution could be used to analyze the amount of glucose in the blood and urine. He later gave a classic description of diabetic neuropathy, and was among the first to recognize the significance of acetone and other ketones discharged in the acute stages of diabetes. Garrison-Morton.com 3936. 44039



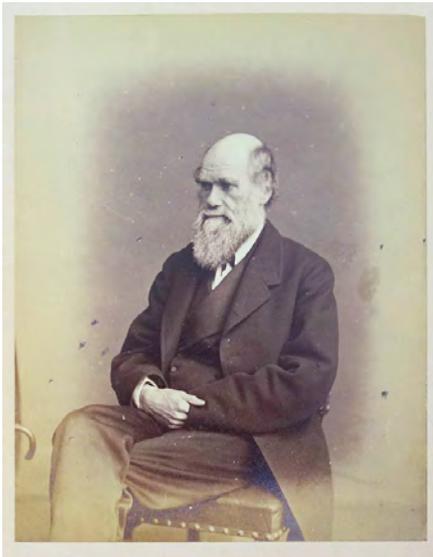


*First Combined Feeding-Respiration Experiments—
Presentation Copy with Enormous Plates*



47. Pettenkofer, Max Josef von (1818–1901). Ueber einen neuen Respirations-Apparat. Offprint from Abh. k. bayer. Akad. Wiss. 9 (1861). 4to. 48pp. 3 fold. lith. plates, text illustrations. Munich:Verlag der k. Akademie, 1861. 282 x 215 mm. Modern quarter morocco, marbled boards in period style; original printed front wrapper bound in. Lightly browned, front wrapper a little soiled, a few edges sl. frayed, but very good. Pettenkofer’s presentation inscription to Dr. Ernst Buchner (1812–70) on front wrapper: “Herrn Professor Dr. Ernst Buchner, freundschaftlich, der Verfasser.” Bookplate of Herbert M. Evans (1882–1971), discoverer of Vitamin E; see Garrison-Morton.com 1055. \$2750

First Edition of what appears to be Pettenkofer’s first account of his respiratory apparatus, predating Garrison-Morton.com 937 and 938. Pettenkofer created the science of experimental hygiene, spending the greater part of his career investigating the effects of physiological and environmental factors on health. In 1860 or 1861 he invented an airtight metallic respiratory apparatus, with which he performed the first combined feeding-respiration experiments. Pettenkofer’s device, illustrated on the plates, “comfortably housed a human subject or large experimental animal for a given period while the gaseous exchange and all bodily gains or losses were measured exactly. Thus, in collaboration with Carl Voit, one of his earliest pupils, Pettenkofer established many basic nutritional facts, such as the dietetic requirements of normal people at rest and in various activities, the vital necessity of adequate protein intake, the protein-sparing properties of carbohydrate and fat during starvation, and the need of the diabetic for extra protein and fat to replace unused carbohydrate” (*Dictionary of Scientific Biography*). The offprint of Pettenkofer’s paper was apparently published before its appearance in the journal volume, which was not issued until 1863. The recipient of this copy, Ernst Buchner, was a colleague of Pettenkofer at Munich; see Hirsch. 44034



Left to right: Charles Darwin, Thomas Huxley, Elizabeth Blackwell

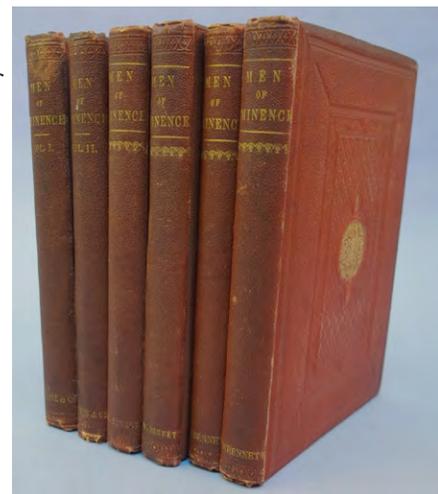
With 144 Original Albumen Photographs

48. Reeve, Lovell Augustus (1814-65), editor. Portraits of men of eminence in literature, science, and art, with biographical memoirs. 6 vols. 144 albumen print portrait photographs by Ernest Edwards (1837-1903). London: Lovell Reeve & Co. [Vols. I – II]; A. W. Bennett [Vols. III – VI], 1863-67. 227 x 170 mm. Original cloth, Vols. I and II skillfully recased, light wear. Edges a bit frayed, scattered foxing, but with fine examples of all the images. \$12,500

First Edition of the largest collection of original albumen photographs of Victorian celebrities in science, medicine, technology, literature and art published before the development of photomechanical reproductions such as Woodburytypes, heliotypes or half-tones. All 144 albumen photographic prints in this set were individually printed from negatives and hand-mounted into the volumes, resulting in a relatively small number of sets produced. In addition, hardly any of the portraits reproduced in this series were reproduced elsewhere. The set is rarely found complete.

Among the most noteworthy portraits is a hardly-known image of Charles Darwin, whose portrait and biography appear in Volume V. "In 1866 . . . Darwin was asked if he would sit for Ernest Edwards for a series of photographs and biographical memoirs edited by Lovell Reeve (a series soon taken over by Edward Walford, the genealogist from Balliol), called *Portraits of Men of Eminence* (1863-67), and he said he would be proud to do so" (Lawrence and Shapin, eds., *Science Incarnate: Historical Embodiments of Natural Knowledge*, p. 269). Ernest Edwards, the photographer for the *Men of Eminence* series, later invented the heliotype process of photomechanical reproduction; one of the first books illustrated with Edwards' new process was Darwin's *Expression of the Emotions in Man and Animals* (1872).

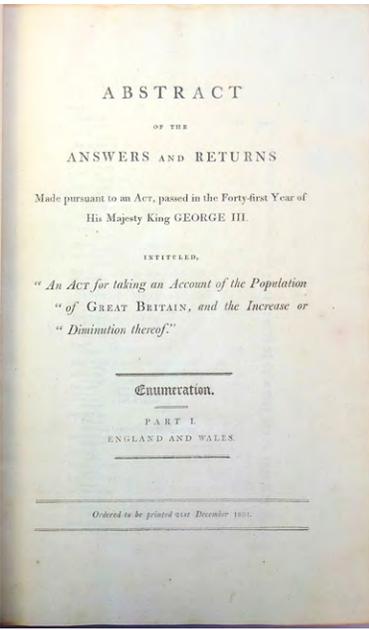
Other "men of eminence" featured in the series include Elizabeth Blackwell, the first woman to receive a medical degree in the United States; Joseph William Bazalgette, the engineer who designed London's sewer network; novelists Charles Dickens and William Makepeace Thackeray; botanists William Jackson Hooker and his son, Joseph Dalton Hooker; oceanographer Matthew Fontaine Maury; naturalists Thomas Huxley, John Gray and Richard Owen; geologist Charles Lyell; statistician William Farr; explorer Richard Burton (shown in what appears to be Persian dress); and poet Robert Browning. As noted above, Reeve edited only the first two volumes of series; the remaining four volumes were edited by Edward Walford (1823-97). Darwin, *The Correspondence of Charles Darwin*, Vol. 14, pp. xvii-xviii. 44142



201 ABSTRACT OF THE ANSWERS AND RETURNS TO THE POPULATION ACT, &c. Geo. III. 1800. 209

County of MIDDLESEX—continued.

RISHWORTH, No.	TOWNSHIP, or Unincorporated Place.	HOUSEHOLDS		PERSONS		OCCUPATIONS		Total
		Number	Value	Males	Females	Parish Clergy, and other persons, who are not rated for the Poll.	Parish Militiamen, and other persons, who are not rated for the Poll.	
1	St. Andrew's	10	10	10	10	10	10	10
2	St. Martin's	15	15	15	15	15	15	15
3	St. James's	20	20	20	20	20	20	20
4	St. George's	25	25	25	25	25	25	25
5	St. Peter's	30	30	30	30	30	30	30
6	St. Paul's	35	35	35	35	35	35	35
7	St. John's	40	40	40	40	40	40	40
8	St. David's	45	45	45	45	45	45	45
9	St. Elizabeth's	50	50	50	50	50	50	50
10	St. Anne's	55	55	55	55	55	55	55
11	St. Agnes's	60	60	60	60	60	60	60
12	St. Margaret's	65	65	65	65	65	65	65
13	St. Mary's	70	70	70	70	70	70	70
14	St. Michael's	75	75	75	75	75	75	75
15	St. Thomas's	80	80	80	80	80	80	80
16	St. Richard's	85	85	85	85	85	85	85
17	St. Lucy's	90	90	90	90	90	90	90
18	St. Constantine's	95	95	95	95	95	95	95
19	St. Edmundo's	100	100	100	100	100	100	100
20	St. Eustachius's	105	105	105	105	105	105	105
21	St. Andrew's	110	110	110	110	110	110	110
22	St. Martin's	115	115	115	115	115	115	115
23	St. James's	120	120	120	120	120	120	120
24	St. George's	125	125	125	125	125	125	125
25	St. Peter's	130	130	130	130	130	130	130
26	St. Paul's	135	135	135	135	135	135	135
27	St. John's	140	140	140	140	140	140	140
28	St. David's	145	145	145	145	145	145	145
29	St. Elizabeth's	150	150	150	150	150	150	150
30	St. Anne's	155	155	155	155	155	155	155
31	St. Agnes's	160	160	160	160	160	160	160
32	St. Margaret's	165	165	165	165	165	165	165
33	St. Mary's	170	170	170	170	170	170	170
34	St. Michael's	175	175	175	175	175	175	175
35	St. Thomas's	180	180	180	180	180	180	180
36	St. Richard's	185	185	185	185	185	185	185
37	St. Lucy's	190	190	190	190	190	190	190
38	St. Constantine's	195	195	195	195	195	195	195
39	St. Edmundo's	200	200	200	200	200	200	200
40	St. Eustachius's	205	205	205	205	205	205	205
41	St. Andrew's	210	210	210	210	210	210	210
42	St. Martin's	215	215	215	215	215	215	215
43	St. James's	220	220	220	220	220	220	220
44	St. George's	225	225	225	225	225	225	225
45	St. Peter's	230	230	230	230	230	230	230
46	St. Paul's	235	235	235	235	235	235	235
47	St. John's	240	240	240	240	240	240	240
48	St. David's	245	245	245	245	245	245	245
49	St. Elizabeth's	250	250	250	250	250	250	250
50	St. Anne's	255	255	255	255	255	255	255
51	St. Agnes's	260	260	260	260	260	260	260
52	St. Margaret's	265	265	265	265	265	265	265
53	St. Mary's	270	270	270	270	270	270	270
54	St. Michael's	275	275	275	275	275	275	275
55	St. Thomas's	280	280	280	280	280	280	280
56	St. Richard's	285	285	285	285	285	285	285
57	St. Lucy's	290	290	290	290	290	290	290
58	St. Constantine's	295	295	295	295	295	295	295
59	St. Edmundo's	300	300	300	300	300	300	300
60	St. Eustachius's	305	305	305	305	305	305	305
61	St. Andrew's	310	310	310	310	310	310	310
62	St. Martin's	315	315	315	315	315	315	315
63	St. James's	320	320	320	320	320	320	320
64	St. George's	325	325	325	325	325	325	325
65	St. Peter's	330	330	330	330	330	330	330
66	St. Paul's	335	335	335	335	335	335	335
67	St. John's	340	340	340	340	340	340	340
68	St. David's	345	345	345	345	345	345	345
69	St. Elizabeth's	350	350	350	350	350	350	350
70	St. Anne's	355	355	355	355	355	355	355
71	St. Agnes's	360	360	360	360	360	360	360
72	St. Margaret's	365	365	365	365	365	365	365
73	St. Mary's	370	370	370	370	370	370	370
74	St. Michael's	375	375	375	375	375	375	375
75	St. Thomas's	380	380	380	380	380	380	380
76	St. Richard's	385	385	385	385	385	385	385
77	St. Lucy's	390	390	390	390	390	390	390
78	St. Constantine's	395	395	395	395	395	395	395
79	St. Edmundo's	400	400	400	400	400	400	400
80	St. Eustachius's	405	405	405	405	405	405	405
81	St. Andrew's	410	410	410	410	410	410	410
82	St. Martin's	415	415	415	415	415	415	415
83	St. James's	420	420	420	420	420	420	420
84	St. George's	425	425	425	425	425	425	425
85	St. Peter's	430	430	430	430	430	430	430
86	St. Paul's	435	435	435	435	435	435	435
87	St. John's	440	440	440	440	440	440	440
88	St. David's	445	445	445	445	445	445	445
89	St. Elizabeth's	450	450	450	450	450	450	450
90	St. Anne's	455	455	455	455	455	455	455
91	St. Agnes's	460	460	460	460	460	460	460
92	St. Margaret's	465	465	465	465	465	465	465
93	St. Mary's	470	470	470	470	470	470	470
94	St. Michael's	475	475	475	475	475	475	475
95	St. Thomas's	480	480	480	480	480	480	480
96	St. Richard's	485	485	485	485	485	485	485
97	St. Lucy's	490	490	490	490	490	490	490
98	St. Constantine's	495	495	495	495	495	495	495
99	St. Edmundo's	500	500	500	500	500	500	500
100	St. Eustachius's	505	505	505	505	505	505	505



The First British Census

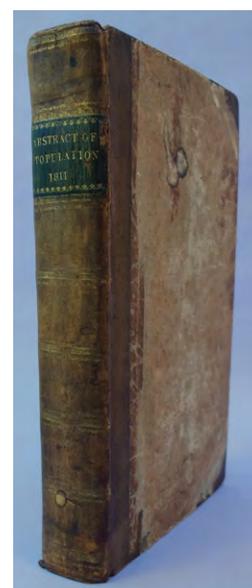
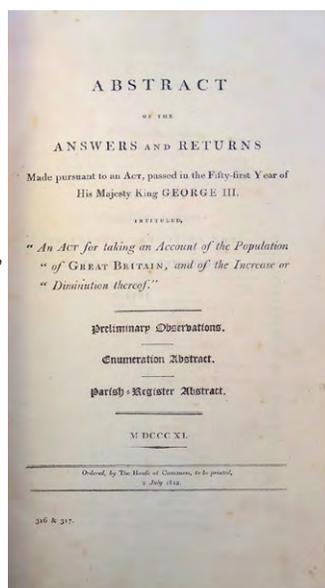
49. [Rickman, John (1771-1840).] Abstract of the answers and returns made pursuant to an act, passed in the forty-first year of His Majesty King George III. Intituled, "An act for taking an account of the population of Great Britain, and the increase or diminution thereof." 2 vols. in 3, folio. [4], 503; [2], 509-547, [1], 13; [4], 459, [1], 13pp. The final 13 pages in Vol. I, part 2 duplicated in Vol. II. [London: His Majesty's Stationery Office], 1801-2. 322 x 198 mm. (Vol. I, part 2 measures 304 x 203 mm.). Half calf, marbled boards ca. 1802; Vol. I, part 2 in modern half calf to match; slight wear and darkening to spines. Very good set apart from some soiling in Vol. I, part 2. Engraved armorial bookplate of Tory politician John Pollexfen Bastard (1756-1816) in two of the three volumes. \$1500

First Edition of the First English Census. Rickman, a British government official and statistician, drafted the bill that became the 1800 Census Act, establishing for the first time a national decennial census of Britain's general population. Rickman had been arguing for a national census since at least 1798, claiming that it would deliver essential information to Britain's political, military and industrial leaders—as well as provide a stimulus to the life insurance business! His arguments were given an additional boost with the publication of Malthus's *Essay on the Principle of Population* (1798), which spurred concerns about Britain's population and helped to break down resistance to the idea of compiling national population statistics. After the Census Bill passed Rickman helped to carry out the first four British censuses, which included not only a population count but also the collection and analysis of parish register returns. 44215

50. [Rickman, John (1771-1840).] Abstract of the answers and returns made pursuant to an act . . . intituled, "An act for taking an account of the population of Great Britain, and of the increase or diminution thereof" . . . Folio. xxxi, [3], 511, [3], 200, [2]pp. [London:] House of Commons, 1812. 339 x 202 mm. Half calf, gilt spine, boards ca. 1812, some wear and rubbing, a few small stains but sound. Very good. Stamp and inscription noting that this copy was once part of the library of the Bishopric of Worcester; notice printed on recto of last leaf: "This book is to be preserved in the Episcopal Library of Worcester, at Hartlebury."

\$750

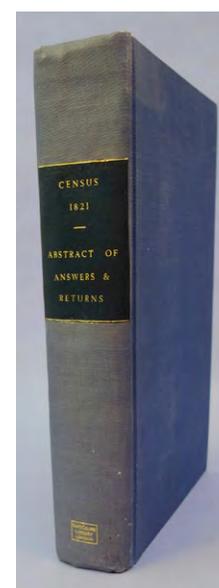
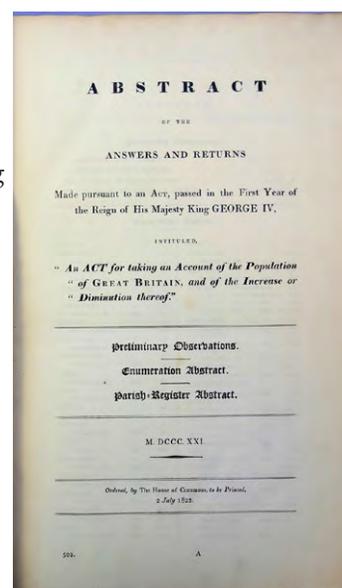
First Edition of Great Britain's second census, taken in 1811, ten years after the first census. The returns gave a total population of 12.6 million people, an increase of 1.6 million over 1801. The second census followed the model of the first: The first part detailed the number of people, their occupations, and numbers of families and houses in each of the British counties, while the second part, based on parish registers, listed the numbers of baptisms and burials per county. John Rickman, who drafted the bill that became the 1800 Census Act, supervised the first four British censuses and prepared the abstracts and reports for each. 44216

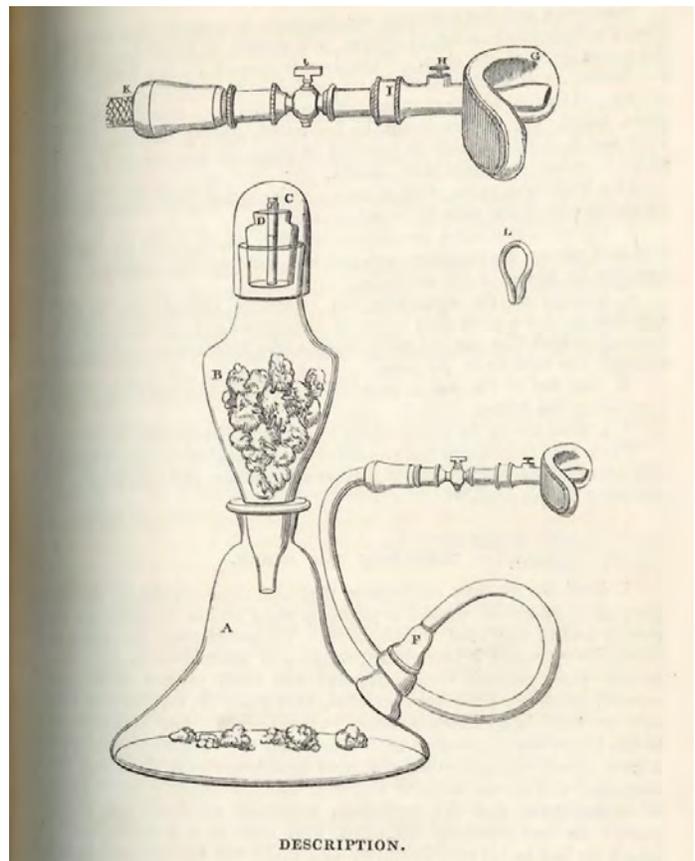
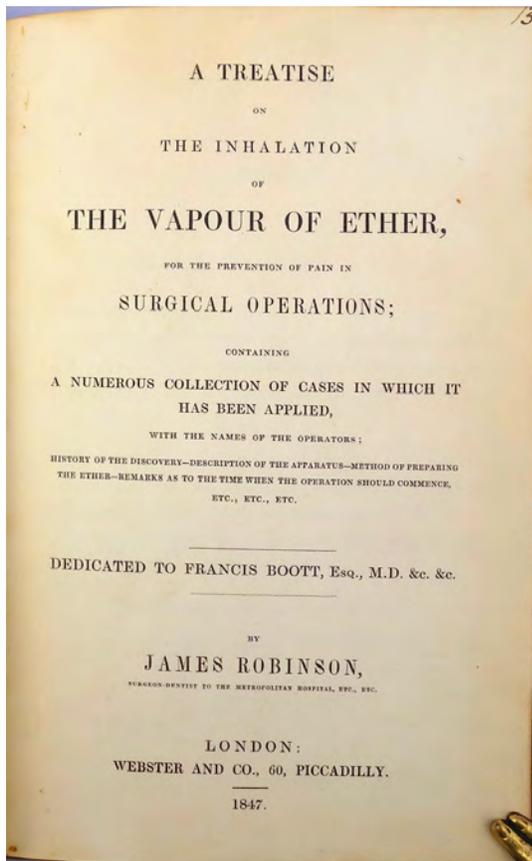


51. [Rickman, John (1771-1840).] Abstract of the answers and returns made pursuant to an act . . . intituled, "An act for taking an account of the population of Great Britain, and of the increase or diminution thereof" . . . Folio. [2], xxxv, [3], 551, [3], 160pp. Folding table on p. xv. [London:] House of Commons, 1822. 334 x 207 mm. Library buckram, spine a bit faded, slight wear, stamp of King's College Library, London on spine. Very good.

\$500

First Edition of Great Britain's third census, showing a population of 14.4 million people, an increase of 1.8 million over the census of 1811. The 1821 census was the first to break down Great Britain's population by age; the data showed that about half the British population was under 20 years of age, in contrast to about 25% today. 44217





The First Textbook of Anesthesia; Extremely Rare

52. Robinson, James (1813–62). A treatise on the inhalation of the vapour of ether, for the prevention of pain in surgical operations . . . [6], 63pp.; lacking half-title. Text illustration. London: Webster & Co., 1847. 203 x 128 mm. Half morocco gilt, marbled boards in period style, all edges gilt. One or two marginal notes in a contemporary hand. Fine copy apart from the missing half-title. \$4500



First Edition of the First Textbook of Anesthesia, preceding John Snow's *On the Inhalation of the Vapour of Ether in Surgical Operations* by five months. *Rare on the market*, with no auction records going back to the 19th century. This is the first copy we have handled in our 50+ years in the trade.

The first public demonstration of ether anesthesia, as is well known, was made on October 16, 1846 by William T. G. Morton, who administered ether during a surgical operation at Massachusetts General Hospital. Robinson, a prominent British dentist, learned of this momentous event from his friend and neighbor Dr. Francis Boott, who in early December had received a letter from American physician Jacob Bigelow giving an account of “the new anodyne process lately introduced here” (p. 1). Boott and Robinson immediately began conducting their own experiments with ether inhalation, and on December 19, using an inhaler of his own design, Robinson administered ether to a patient before painlessly removing her diseased molar, thus becoming the first in England to use ether as an anesthetic agent. Two days later Robert Liston and William Squire, who had witnessed Robinson’s demonstrations of ether anesthesia, conducted the first major surgical operation performed under ether in Britain, amputating a man’s leg at what is now University College Hospital in London.

Within a few weeks ether anesthesia became generally accepted in Britain, with Robinson playing a prominent role in assuring its success. Armed with an improved version of his inhaler, “Robinson became adept at giving ether for dentistry and for more prolonged surgical operations. He demonstrated ether anesthesia to hundreds of medical and lay onlookers at his own practice, and a number of London’s leading hospitals . . . [being] called in to anesthetize patients when the attempts of others had failed. By so doing he was able to dispel the doubts about ether’s efficacy” (Ellis, p. x).

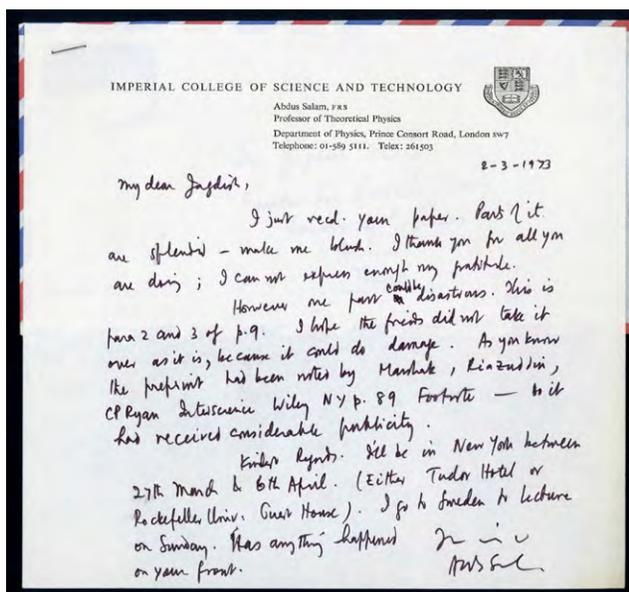
In early 1847, seven weeks after performing his initial etherization, Robinson published his *Treatise on the Inhalation of the Vapour of Ether*, the world’s first anesthesia textbook. “The introduction consists of Boott’s famous letters to *The Lancet* [of December 21, 1846] announcing the discovery of anesthesia. There follow sixteen pages of original text to which are appended 38 pages of case reports . . . The sixteen pages of original text comprise the only lengthy account of the earliest days of anesthesia in Britain to be written at the time when the events described were actually happening by one of those who was most closely involved. They merit the closest study” (Ellis, p. x). Ellis, “Preface to the facsimile edition,” in Robinson, *A Treatise on the Inhalation of the Vapour of Ether* (1983), pp. vii–xi. Fulton and Stanton, *Centennial of Anesthesia*, 130. Garrison-Morton.com 5657.1. 44202

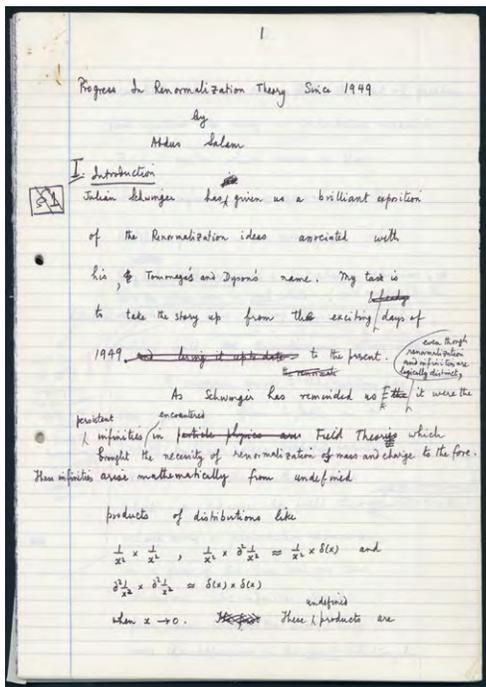
The First Muslim to Receive a Nobel Prize in the Sciences

53. Salam, Abdus (1926–96). Collection of correspondence consisting of five typed / autograph letters signed to historian of physics Jagdish Mehra (1931–2002), plus three letters (one carbon, one photocopy) to foundations regarding grants for Mehra’s *Historical Development of Quantum Theory*; complete list available on request. 13 sheets total, plus covers for several of the letters. V.p., 1971–79. Very good. \$4500

Salam, one of the leading figures in 20th century theoretical physics, made notable contributions to quantum mechanics and quantum field theory, receiving a share of the 1979 Nobel Prize in physics for his contribution to the electroweak unification theory (the unified description of the weak and electromagnetic interactions between two elementary particles). He was the first Pakistani and first Muslim to receive a Nobel Prize in science, and the second person from a Muslim country, after Anwar Sadat (Peace, 1977), to receive any type of Nobel award.

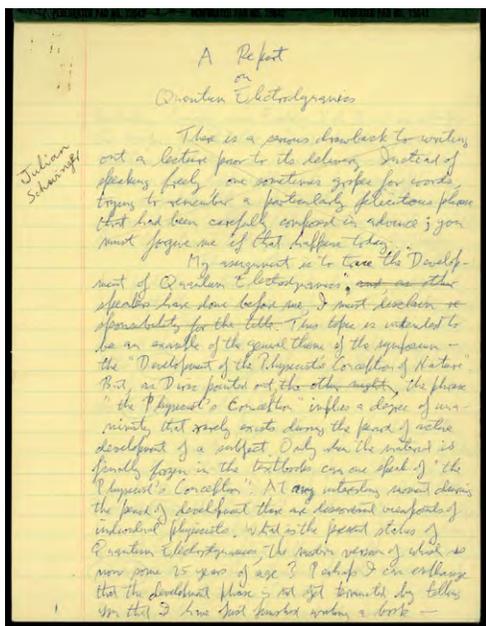
The correspondence includes four typed letters signed from Salam to Mehra regarding Mehra’s contribution to *Aspects of Quantum Theory* (1972), a festschrift in honor of Paul Dirac’s seventieth birthday edited by Salam and E. P. Wigner. Salam praised Mehra’s paper (“‘The golden age of theoretical physics’: P. A. M. Dirac’s scientific work from 1924 to 1933”) as “a wonderful article” and told Mehra that “Dirac saw and liked your paper.” Also present is an autograph letter signed from Salam to Mehra discussing an unidentified paper by Mehra: “Parts of it are splendid—make me blush . . . However, one part could be disastrous . . . I hope the friends [?] did not take it over as it is, because it could do damage . . .” The remaining three pieces are letters of recommendation from Salam to officials at various foundations to whom Mehra had applied for grants to complete his *Historical Development of Quantum Theory* (1982–2001). 44200





54. Salam, Abdus (1926–96). Progress for renormalization theory since 1949. Autograph manuscript signed. 55ff., written on lined paper, rectos only, in black and blue ink with numerous autograph emendations mostly in red. [1972.] 303 x 211 mm. Staple holes in upper left corner, one or two tiny rust stains, but very good. \$8500

In 1972 Salam and several other distinguished physicists helped to organize a “Symposium on the Development of the Physicist’s Conception of Nature in the Twentieth Century,” held in Trieste in honor of Paul Dirac’s 70th birthday. The present paper, which Salam delivered at the symposium, was published on pp. 430–446 of *The Physicist’s Conception of Nature*, edited by Jagdish Mehra. 44178

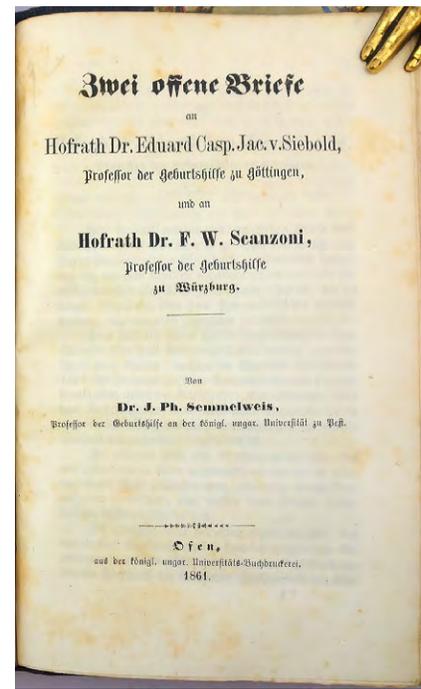
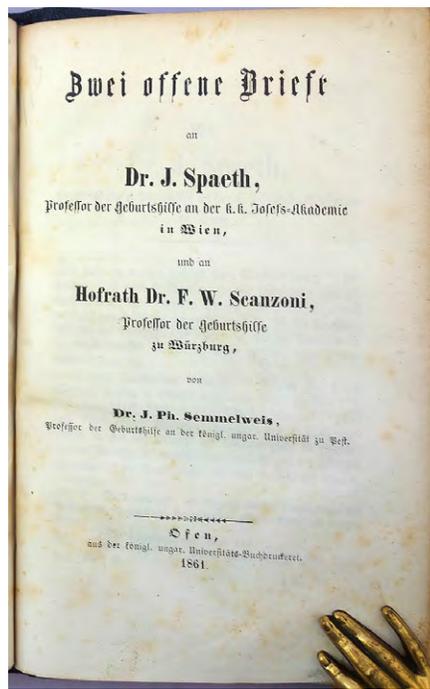


55. Schwinger, Julian (1918–94). A report on quantum electrodynamics. Autograph manuscript. 31ff., on yellow lined pad. N.p., n.d. [1972.] 294 x 218 mm. Small rust stains on first leaf, but fine otherwise. “Julian Schwinger” written in the hand of physics historian Jagdish Mehra (1931–2002) on the first sheet, a few editorial marks probably by Mehra throughout. \$3500

Schwinger was one of the architects of modern quantum electrodynamics, receiving a share of the 1965 Nobel Prize in physics (together with Richard Feynman and Shin’ichiro Tomonaga) for his contribution to QED theory. QED, a synthesis of quantum field theory and special relativity, originated in the 1920s with the work of Heisenberg, Dirac, Pauli and other physicists as a means of describing the behavior of subatomic particles; by the 1940s, however, experimental anomalies and inherent mathematical errors were eroding faith in its validity. Schwinger helped to restore confidence in the theory by developing a method called “mathematical renormalization” to calculate the proper masses and charges of subatomic

particles. “[Schwinger’s] aim was to determine to what extent quantum electrodynamics could account for the observed deviations from the Dirac theory when the requirements of relativistic invariance and gauge invariance were rigidly enforced and the ideas of mass and charge renormalization were incorporated into the existing formalism. His efforts culminated in the acceptance of quantum field theory as the proper representation of microscopic phenomena, and he was awarded the Nobel Prize for this achievement” (Schweber, *QED and the Men Who Made It*, p. 274).

Schwinger presented his “Report on Quantum Electrodynamics” at the symposium on “The Development of the Physicist’s Conception of Nature in the Twentieth Century,” held in 1972 in honor of Paul Dirac’s 70th birthday; the paper was published the following year on pp. 413–426 of *The Physicist’s Conception of Nature* (1973), edited by Jagdish Mehra. Schwinger’s manuscript of the paper includes an opening paragraph that was removed from the printed version. Magill, *The Nobel Prize Winners: Physics*, vol. 2, pp. 893–900. Mehra, *Climbing the Mountain: The Scientific Biography of Julian Schwinger* (2000). 44198

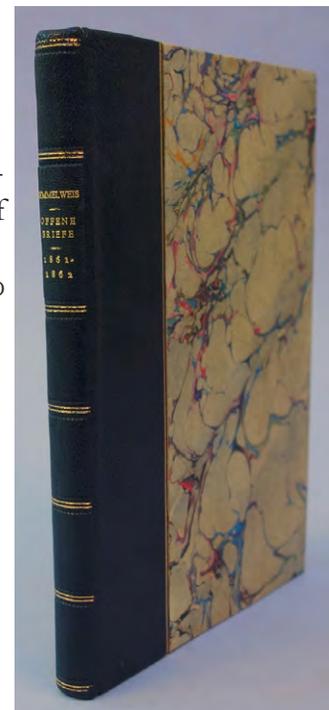


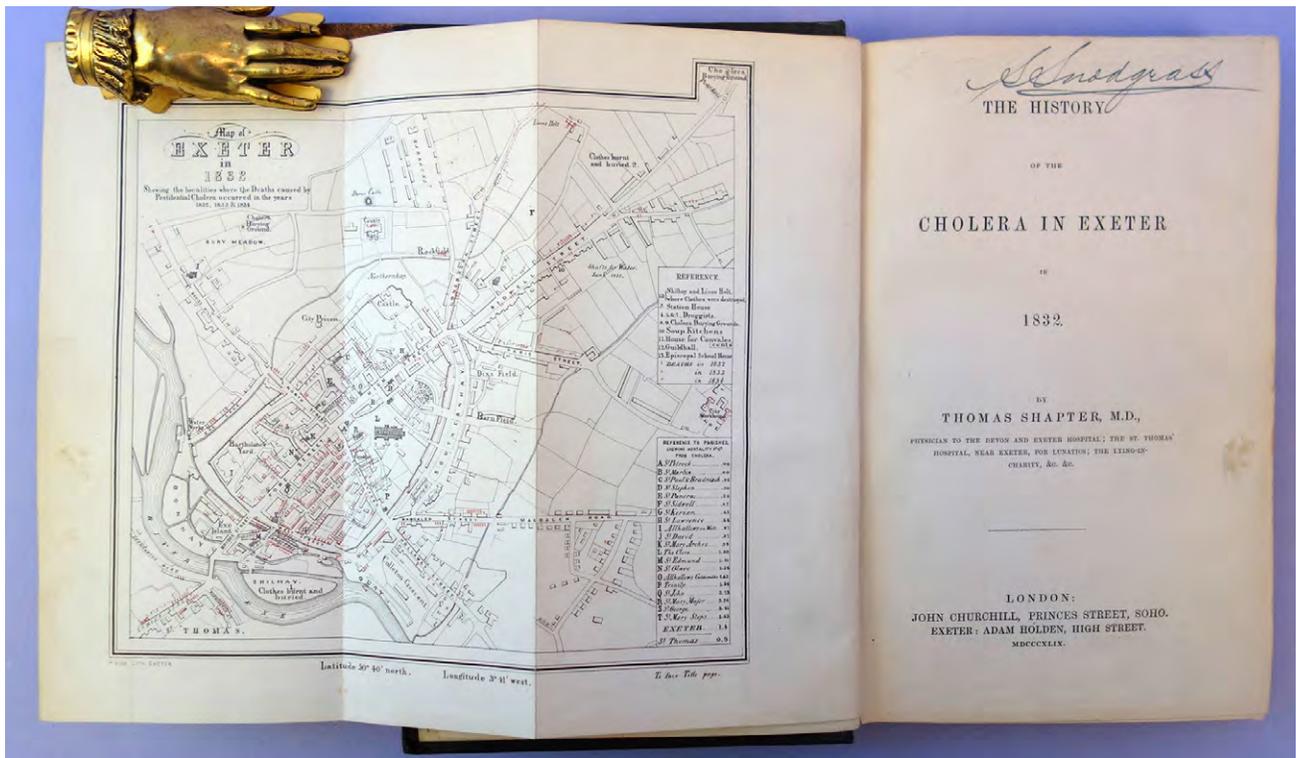
56. Semmelweis, Ignaz Philipp (1818-65). (1) Zwei offene Briefe an Hofrath Dr. Eduard Casp. Jac. v. Siebold, . . . und an Hofrath Dr. F.W. Scanzoni . . . 40pp. Ofen: K. ungar. Universitäts-Buchdruckerei, 1861. (2) Zwei offene Briefe an Dr. J. Spaeth, Professor der Geburtshilfe an der k. k. Josefs-Akademie in Wien, und an Hofrath Dr. F.W. Scanzoni, Professor der Geburtshilfe zu Würzburg. 8vo. 21, [1]pp. Pest: Gustav Emich, 1861. (3) Offener Brief an sämtliche Professoren der Geburtshilfe. 8vo. viii, 92pp. Ofen: K. ungar. Universitäts-Buchdruckerei, 1862. Together 3 items in one volume. 200 x 130 mm. Quarter morocco, marbled boards in period style, original front wrapper of no. (3) preserved. Moderate foxing but very good. \$5000

First Editions of Semmelweis's last publications on antisepsis in obstetrics. Although the information and conclusions that Semmelweis drew in his landmark *Die Aetiologie, der Begriff und die Prophylaxis des Kindbettfiebers* (1861) were of the first importance, its publication failed to bring about a widespread acceptance of Semmelweis's views and methods; instead, the connection he had made between cadaverous infection and puerperal fever was rejected by a large proportion of the medical establishment. *Die Aetiologie* was subject to several unfavorable reviews, to which Semmelweis responded with a series of "Open Letters", published in pamphlet form in 1861 and 1862, in which he bitterly attacked his critics. These he wrote to

Joseph Späth, Friedrich Wilhelm Scanzoni von Lichtenfels, and Siebold in 1861 full of desperation and fury for reluctance to accept his doctrine. He called upon Siebold to arrange a meeting of German obstetricians somewhere in Germany to provide a forum for discussions on puerperal fever where he would stay "until all have been converted to his theory." (Hauzman, Erik E [2006]. "Semmelweis and his German contemporaries". 40th International Congress on the History of Medicine, ISHM 2006. Retrieved from Wikipedia July 8, 2008).

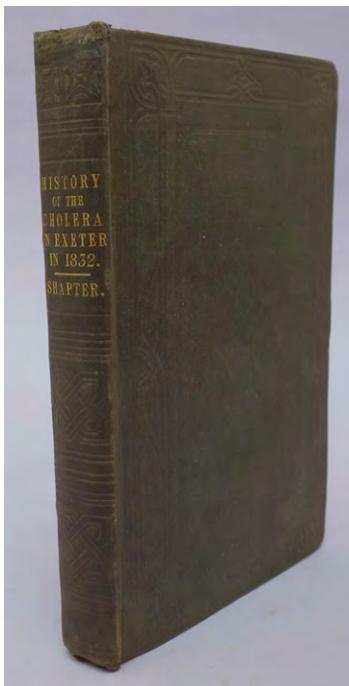
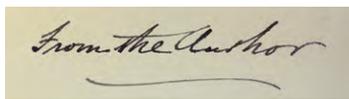
The abusive language Semmelweis used in these letters was an indicator of his increasing mental instability. He eventually suffered a mental breakdown in 1865 and died the same year—ironically, due to septicemia from an infected finger. Norman 1928 (no. [3]). 44031



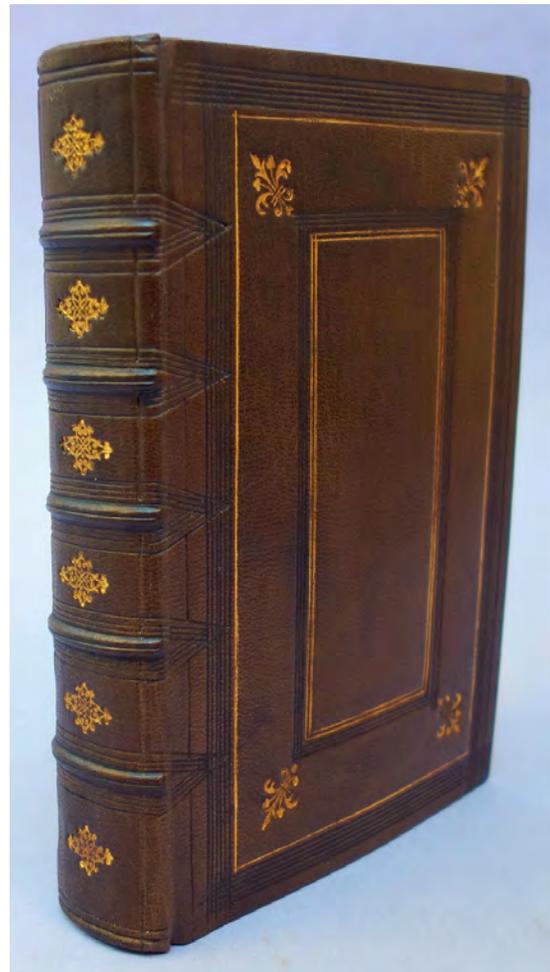
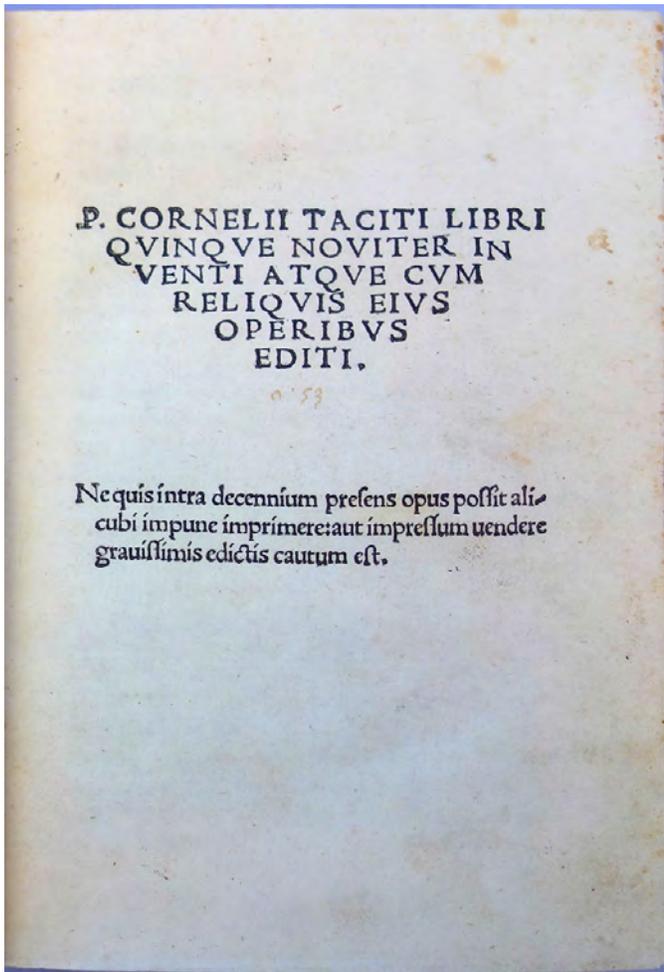


One of the First Examples of an Epidemic “Spot Map”; Presentation Copy

57. Shapter, Thomas (1809–1902). The history of the cholera in Exeter in 1832. xxviii, 297, [1]pp. Folding map, text wood-engravings. London: John Churchill; Exeter: Adam Holden, 1849. 223 x 142 mm. Original blindstamped cloth, gilt-lettered spine, light wear at extremities. Fore-edges a bit frayed but very good. *Presentation Copy*, inscribed “From the Author” on the front pastedown; manuscript captions for the book’s illustrations in what may be the same hand. Modern bookplate. \$1250



First Edition. Shapter’s history of Exeter’s 1832 cholera epidemic—part of the worldwide cholera pandemic of 1829–51—includes his “Map of Exeter in 1832 shewing the localities where the deaths caused by pestilential cholera occurred in the years 1832, 1833 & 1834,” one of the first examples of an epidemic “spot map.” “Shapter’s text and map presented a ‘topography of disease’ in which the incidence of cholera over three years was considered within the city of Exeter. Shapter recorded both mortality and morbidity across the outbreak in a chart of epidemic occurrence. He then used official mortality reports that included decedents’ street addresses to locate cholera mortality in a map of the city. A mortality ratio based on parish population was recorded in the map legend. This amounted to a spatial description of mortality data . . . mapped clusters of cholera appearing to occur more frequently in parishes along the low-lying riverbanks of the city . . . than at higher altitude away from the river where air was purer” (Koch, *Disease Maps: Epidemics on the Ground*, p. 156). Shapter’s map, which did not mark wells or pump locations, appeared to confirm his theory that cholera was a miasmatic disease caused by “bad air.” John Snow, whose *On the Pathology and Mode of Communication of the Cholera* appeared the same year as Shapter’s work, interpreted Shapter’s data differently, using it to help demonstrate the link between disease outbreaks and contaminated water sources. Garrison-Morton. com 7689. 44157

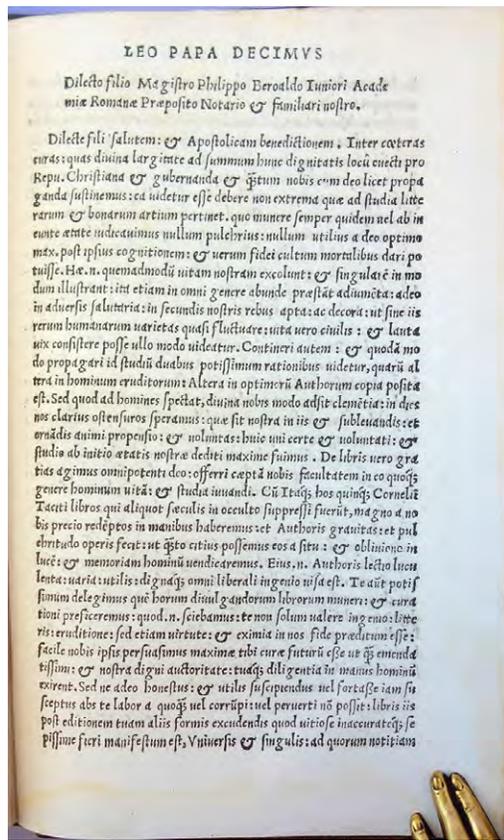
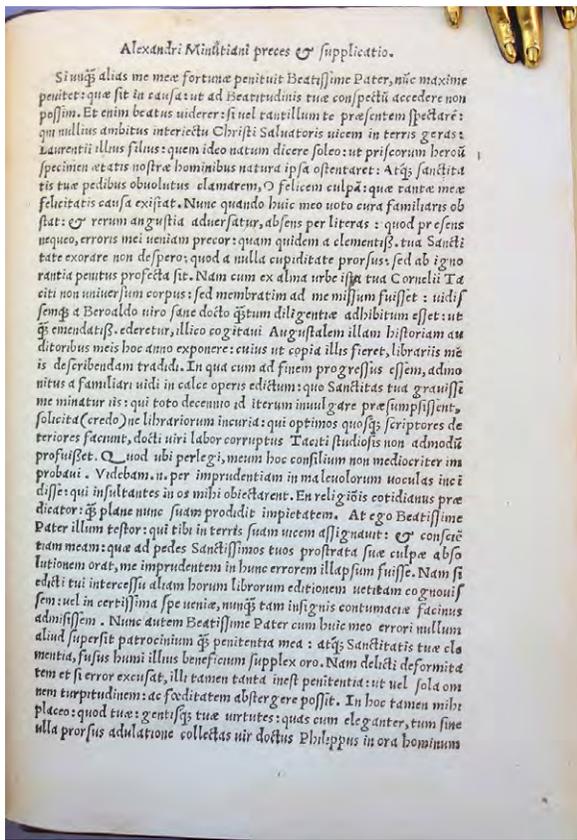


First Example of a Challenge to a Copyright

58. Tacitus, Publius Cornelius (ca. 56 – ca. 120 CE). P. Cornelii Taciti libri quinque noviter in venti atque cum reliquis eius operibus editi. Small 4to. [20], 233, [3]ff. Signatures H-K bound in reverse order in this copy. [Milan:] Ex officina Minutiana, 1517. 192 x 127 mm. Full morocco tooled in gilt and blind in antique style. Occasional faint dampstaining, but a fine copy. Engraved armorial bookplate of Count D[mitri] Petrovich Boutourlin (1790–1849). \$9500

First Minuziano Edition, and the **First Example of a Challenge to a Copyright, a Landmark in Book History**. In 1508 Pope Leo X (formerly Cardinal Giovanni de’Medici) purchased the only surviving manuscript of the “lost” first six books of Tacitus’s *Annals*, which had earlier been stolen from the monastery of Corvey in Westphalia. Six year later Leo granted the Vatican librarian, humanist Filippo Beroaldo the younger, the exclusive right or *privilegio* to issue a printed edition the complete works of Tacitus, including the previously unpublished “lost” books from the Corvey manuscript. Violators of the privilegio were threatened with excommunication. Beroaldo’s Tacitus, printed in Rome by Stephanus Guilleretus de Lotheringia, was published in 1515.

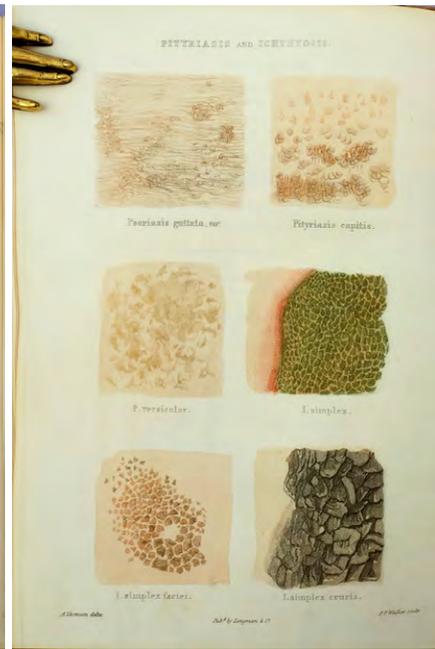
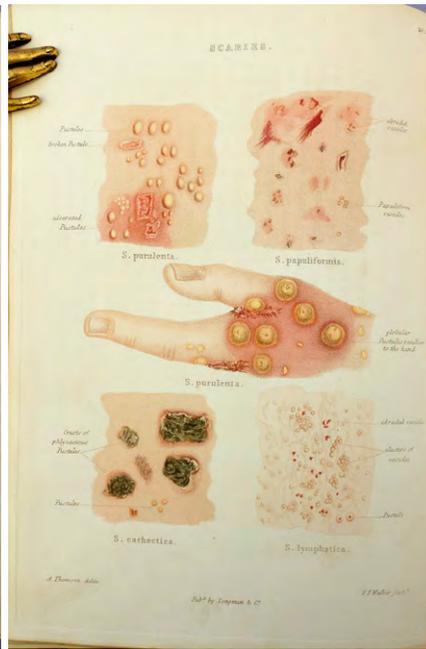
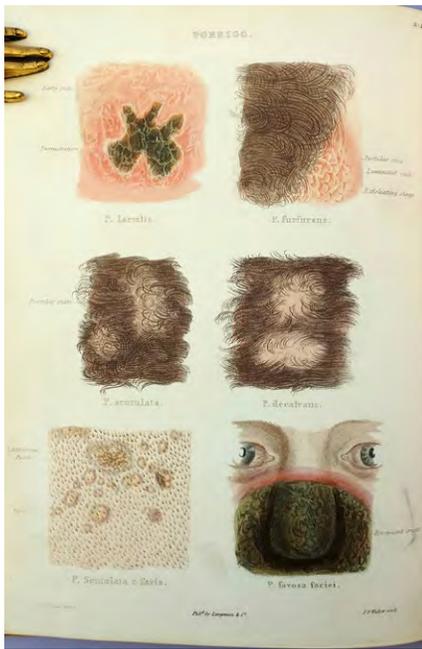
At the same time the Milanese printer Alessandro Minuziano, undaunted by the fear of papal displeasure, began preparing a word-for-word reprint of the Beroaldo Tacitus, probably bribing one of Lotheringia’s employees for sheets of the work as it was being printed. It is likely that Minuziano intended to issue his pirated edition around the same time as the legitimate one, but the Pope got word of his scheme and the subsequent dispute



Left to right: Printer Alessandro Minuziano's "supplication and prayers" to Pope Leo X; Leo X's letter of pardon

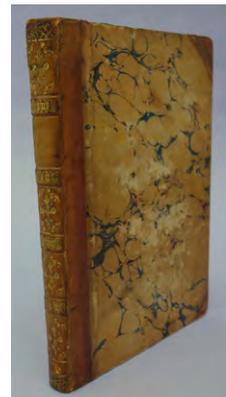
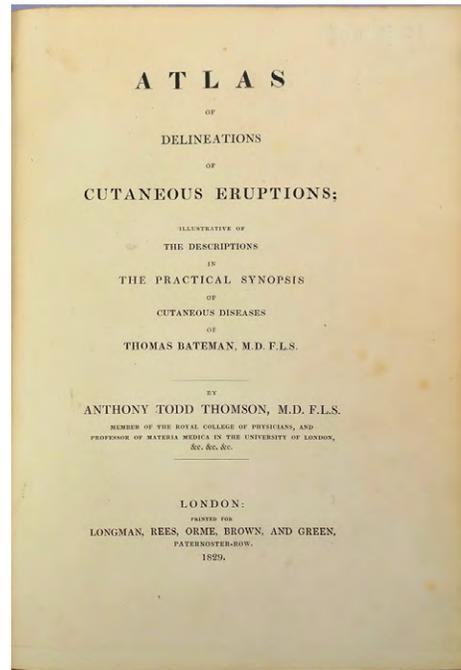
over the privilegio forced Minuziano to suspend publication until the matter was resolved. The matter was serious, especially as Leo X actively involved himself in issues of publication and censorship. The case was eventually resolved in Minuziano's favor, and he added an appendix to the edition containing the key documents pertaining to the case. These included the papal privilege of November 14, 1514, Minuziano's "supplication and prayers" to Leo X of March 30, 1516 (in which he defended himself, remarkably, by claiming ignorance of the Pope's *privilegio*), and the papal letter of pardon dated September 7, 1516, reiterating Minuziano's defense and granting Minuziano permission to publish his edition.

This copy of the Minuziano Tacitus bears the bookplate of Dmitri Petrovich Boutourlin (or Buturlin), a Russian general, statesman and military historian who became director of the Russian Imperial Public Library in 1843. A catalogue of Boutourlin's extensive private library was published in 1831. 42431



59. Thomson, Anthony Todd (1778-1849). Atlas of delineations of cutaneous eruptions; illustrative of the description in the practical synopsis of cutaneous diseases of Thomas Bateman, M.D. F.L.S. 8vo. vii, 112pp. 29 hand-colored engraved plates (numbered 1-17, 18a, 18b, 18-27), some with tissue guards. London: Longman, Rees, Orme, Brown, and Green, 1829. 232 x 166 mm. Half calf gilt, marbled boards ca. 1829, light wear and rubbing. Occasional scattered foxing, but very good. Engraved bookplate of William Edmund Image (1807-1903), surgeon and well-known stamp collector. \$1500

First Edition. Thomson, one of the British pioneers of dermatology, worked with Thomas Bateman at the latter's Carey Street clinic and prepared updated editions of Bateman's *Practical Synopsis of Cutaneous Diseases* after the author's death in 1821. "Realizing the value of Bateman's *Delineations of Cutaneous Diseases* [1817] in the instruction of students, which on account of expense was out of reach of most of them, [Thomson] published in 1829 an *Atlas of Cutaneous Eruptions* [sic] which reproduced on a smaller scale many of the illustrations from Bateman's *Atlas* and added a number of others" (Gray, p. 458). In 1838 Thomson was appointed professor of materia medica and therapeutics at the newly founded University of London (now University College, London), where he conducted a clinic for skin diseases at University College Hospital, the first clinic of its kind to be established at a teaching hospital. Gray, "Dermatologists at University College Hospital," *British Journal of Dermatology* 75 (1963): 457-464. 44111

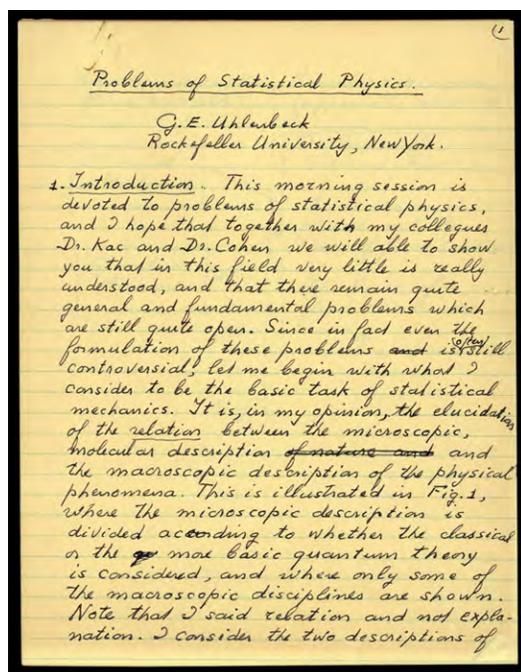




60. Torresani, Giovanni Benedetto. Discorso sopra il male delle petecchie, peste, e ghiandussa, con il modo, che se deve tenere à curare le febri pestilentiali, & altri simili mali . . . Raccolta da varii autori . . . 4to. 53, [3]pp. Bologna: Theodoro Mascheroni & Clemente Ferroni, 1623. 193 x 143 mm. Carta rustica ca. 1623, minor worming on covers, spine worn. Occasional foxing but very good. \$1750

First Edition of this collection of remedies for plague, pestilential fevers and similar maladies, taken from various medical authorities. The work includes several

chapters on diet—what to consume and what to avoid—along with a number of recipes for remedies against the plague, swellings, rashes, fevers, etc. (one recipe features crushed scorpions!). The work is scarce, with only two copies (Yale, NLM) cited in OCLC and one (Italian Union Catalogue) in KVK. 44218



61. Uhlenbeck, George Eugene (1900–1988). Problems of statistical physics. Autograph manuscript signed, on yellow lined paper. 30 sheets numbered 1, 1a, 2–21, 23–27, a–c; manuscript is complete despite break in numbering. [1972.] 280 x 215 mm. First sheet a little discolored, small rust stains from paper clip on first and last leaves. Very good.

\$2000

The Dutch–American physicist G. E. Uhlenbeck is best known for his discovery, with Samuel Goudsmit, of electron spin, one of the cornerstones of quantum mechanics. Uhlenbeck and Goudsmit's paper on electron spin was published in October 1925, when Uhlenbeck was just 24; afterwards, he taught physics at the University of Michigan and several other universities before joining the Rockefeller Institute in 1960.

The present paper, describing some of the fundamental problems in statistical physics, was presented at the 1972 symposium on “The Development of the Physicist's Conception of Nature in the Twentieth Century,” held in honor of Paul Dirac's 70th birthday. The paper was published the following year on pp. 501–510 of

The Physicist's Conception of Nature (1973), edited by Jagdish Mehra. 44176

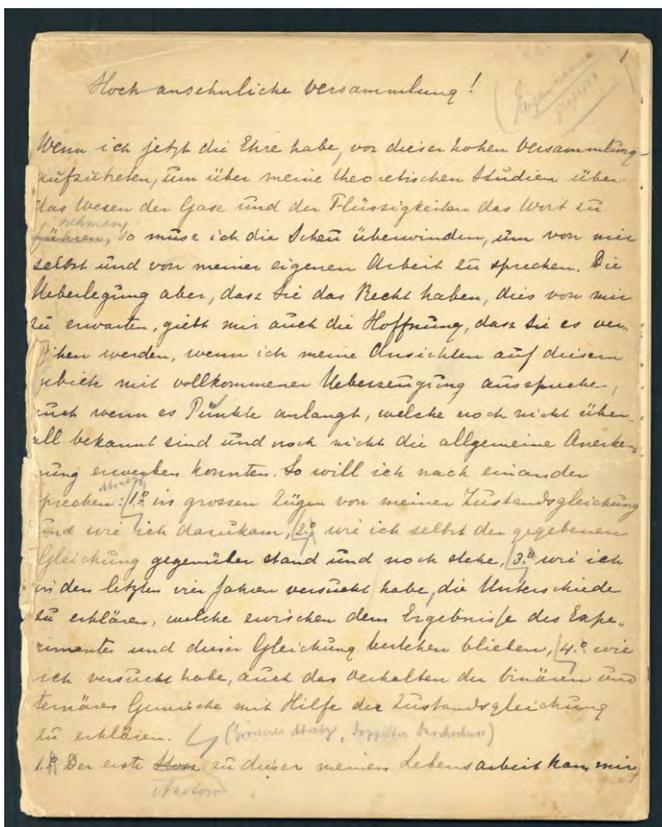
Autograph Manuscript of van der Waals's Nobel Lecture

62. Van der Waals, Johannes Diderik

(1837-1923). [The equation of state for gases and liquids.] Autograph manuscript in German, written in ink with ink and pencil emendations; marked for use as printer's copy. 24ff. 210 x 171 mm. Light toning, small marginal dampstain on last leaf, left margins a bit frayed minimally affecting text, but very good. \$60,000

Original Manuscript of van der Waals's Nobel lecture, delivered in December 1910. Holograph manuscripts of Nobel lectures are very rare, and this is an exceptionally early example from a major figure in the history of modern physics.

Van der Waals was awarded the Nobel Prize for physics that year for his work on the equation of state of gases and liquids, in particular for the "van der Waals equation" approximating the behavior of real fluids, introduced in his classic 1873 dissertation on the continuity of gaseous and liquid states.

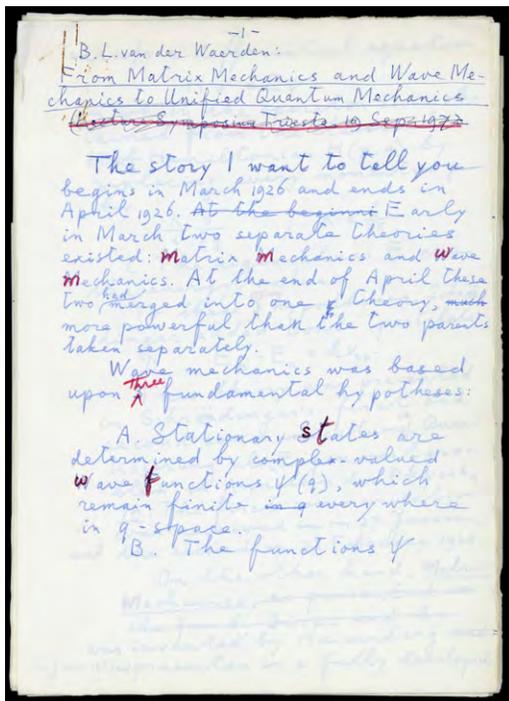


Van der Waals' idea of continuity was that there is no essential difference between gaseous and liquid states of matter, although one must consider other factors in addition to motion of the molecules in the determination of pressure. The important factors are the attraction between particles and their proper volume. . . . From these considerations van der Waals arrived at the equation

$$(p + a/v^2)(v-b) = RT$$

where a expresses the mutual attraction of the molecules, and b is their volume. . . . Other experimenters have suggested different models and equations of state, but van der Waals's model is probably the most useful because it emphasizes the essential features of molecules that determine liquidity, without introducing too many "realistic" complications. . . . An important practical application of the theory is the prediction of conditions necessary for the liquefaction of a gas; this was an important guide in the liquefaction of the "permanent" gases" (Weber, *Pioneers of Science*, p. 41; see also p. 40).

In his Nobel lecture van der Waals summarized his life's work on equation of state theory, describing how he had come to formulate the van der Waals equation and the equation's experimental corroboration by Sydney Young, an event that had given van der Waals "great joy." "The laureate went on to detail his most recent work, which he termed 'pseudo association' (the 'van der Waals force') to distinguish it from chemical bonding. The only way to achieve agreement between the equation of state and laboratory data, he maintained, was to postulate the existence of large complexes of molecules, especially in liquids. . . . In the conclusion to his address, van der Waals said, 'In all my studies I was quite convinced of the real existence of molecules. . . . I never regarded them as a figment of my imagination, nor even as mere centers of force effects.' He noted that 'the real existence of molecules is universally assumed by physicists,' and that his theory 'may have been a contributing factor' (Magill, *The Nobel Prize Winners: Physics*, pp. 150-51. 42419



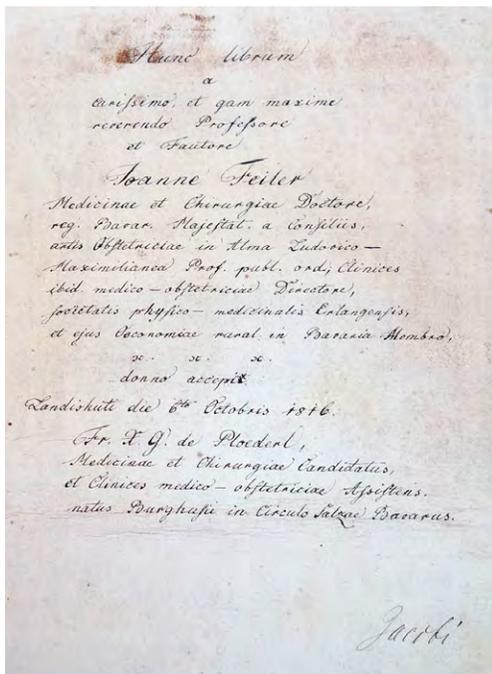
63. Van der Waerden, Bartel Leendert (1903–96). From matrix mechanics and wave mechanics to unified quantum mechanics. Autograph manuscript and typescript signed. 26, 10pp. 1972. Approx. 298 x 218 mm. Minor rust stains from paper clips, but very good. \$1500

The Dutch mathematician B. L. van der Waerden, a colleague of Werner Heisenberg at the University of Leipzig, made important contributions to quantum mechanics, the most significant being his invention in 1929 of spinor calculus “to prove the relativistic invariance of the Dirac equation in the spirit of classic tensor analysis” (Zeidler, *Quantum Field Theory III: A Bridge between Mathematicians and Physicists*, p. 285). He was also the author of *Moderne Algebra* (1930), considered to be the most influential textbook on abstract algebra published in the twentieth century.

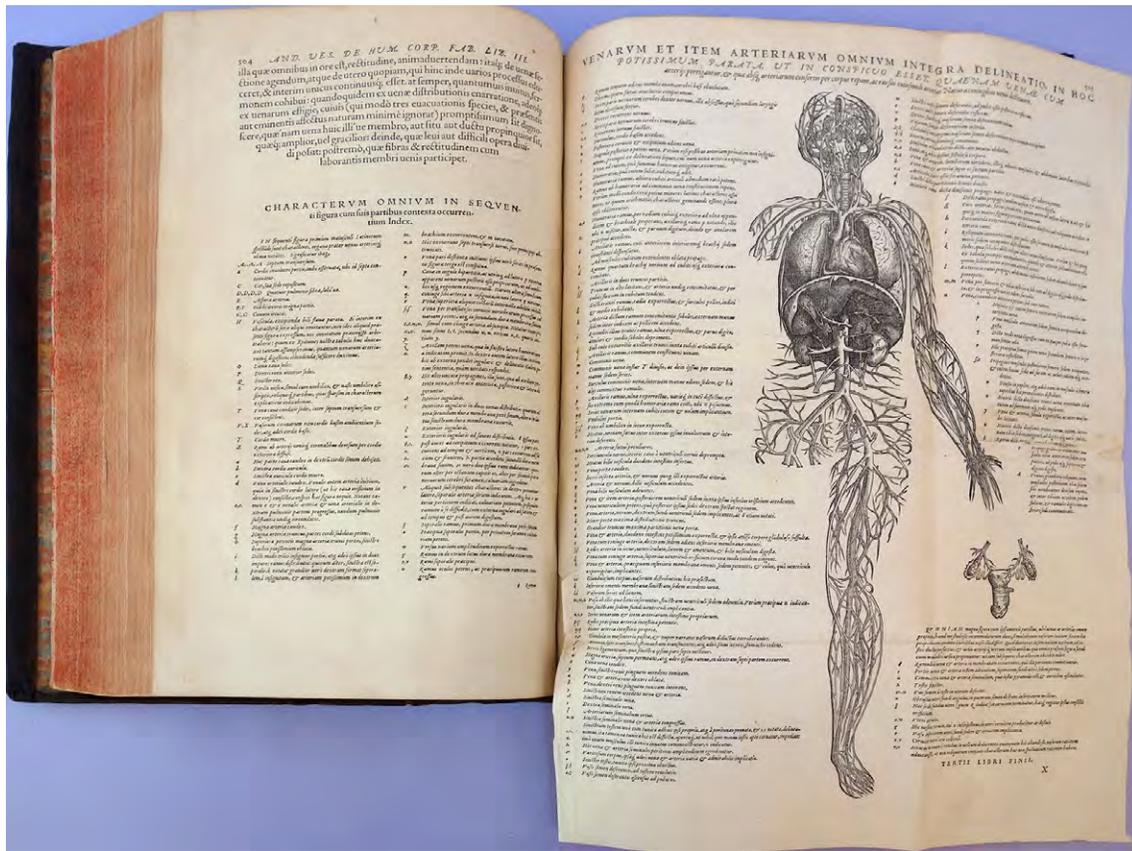
In the above paper van der Waerden described the events in March and April 1926 that led to the merging of matrix mechanics and wave mechanics into a new unified quantum mechanics. Van der Waerden presented the above paper at the symposium on “The Development of the Physicist’s Conception of Nature in the Twentieth Century,” held in 1972 in honor of Paul Dirac’s 70th

birthday; the paper, along with the discussion that followed, was published the following year on pp. 278–289 of *The Physicist’s Conception of Nature* (1973), edited by Jagdish Mehra. The manuscript consists of 18 sheets in van der Waerden’s hand augmented with a reproduced typescript transcription of a letter from Wolfgang Pauli to Pascual Jordan written on April 12, 1926; at the end is a typed transcript of the discussion held at the end of van der Waerden’s presentation, heavily edited in Mehra’s hand. 44177

Abraham Jacobi’s Copy of the 1555 *Fabrica*



64. Vesalius, Andreas (1514–64). *De humani corporis fabrica libri septem*. Folio. [12], 824, [48]pp. Five-page manuscript index in the hand of Bavarian obstetrician Johann Feiler (1786–1822), a former owner of this copy, bound in the back. Woodcut title, portrait, 2 woodcut folding plates, text woodcuts. Basel: Oporinus, 1555. 407 x 260 mm. 18th century calf, rebacked preserving original gilt spine and leather label, edges and corners repaired. Light toning, title a bit soiled and with small marginal lacuna, tears in first folding plate repaired at an early date, but a fine, clean copy with large margins. Long Latin inscription dated October 6, 1816 and signed “Jacobi” on the front flyleaf, noting that this copy was a gift from Feiler to “Fr. X. G. de Ploederl”; i.e. Franz Xavier Georg Plöderl (fl. early 19th cent.), author of a treatise on hysterectomy (*De hysterotomia*, 1820). Faint stamp on title and another leaf of pioneering American pediatrician Abraham Jacobi (1830–1919), who opened the first children’s clinic in the U.S.; bookplate of the Medical and Chirurgical Faculty of Maryland noting Jacobi’s gift of this copy. \$125,000



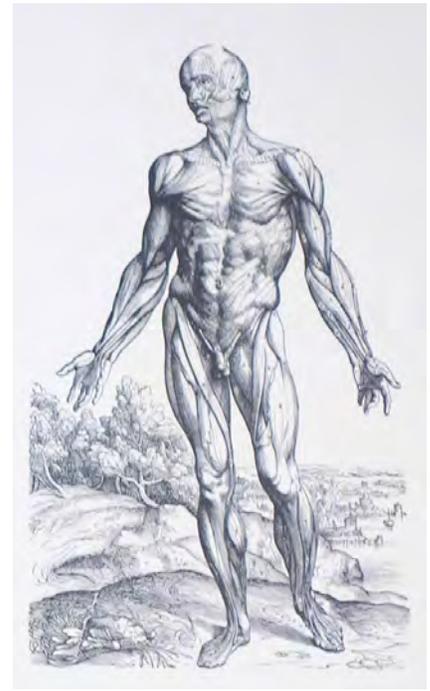
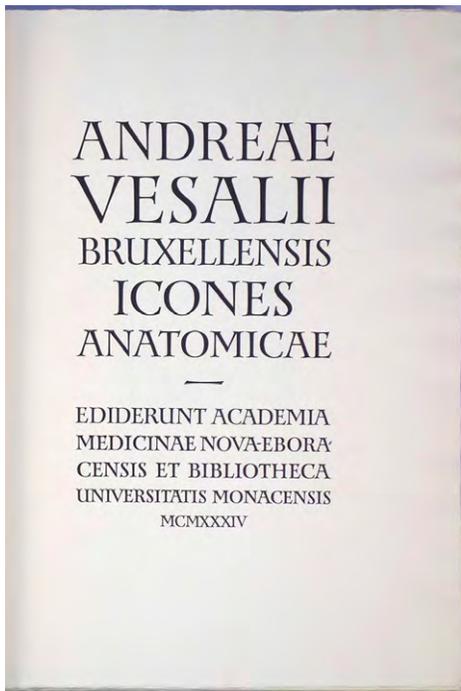
Second edition of the founding work of modern anatomy, containing the most beautiful and famous illustrations in the history of medicine, attributed to Jan van Calcar of the school of Titian. The 1555 edition was printed on heavier paper with larger type “with only 49 instead of 57 lines to the page, thus necessitating the recutting of all the small initial letters so that they would now fit seven lines of the new type. Indeed, an entirely new wood-block was cut for the frontispiece . . .

“Vesalius made some definite improvements in the text which have been cited by Garrison, such as concern the ethnic aspects of craniology, but more particularly in connection with his physiological observations in the last chapter, viz., (i) the effect of nerve section [p. 810, lines 22–34], (ii) persistence of life after splenectomy [p. 820, lines 26–31], (iii) collapse of the lungs on puncture of the chest [p. 821, lines 25–31], (iv) aphonia from section of the laryngeal nerve [p. 823, lines 25–31], (v) prolongation of life by artificial intratracheal inflation of collapsed lungs [p. 824, lines 8–14]” (Cushing, pp. 90–92).

This copy includes an 18th-century manuscript index to the work by Bavarian obstetrician Johann Feiler, which clearly indicates that Feiler had both read the *Fabrica* and regarded it as an important reference. Feiler later gave this copy to Franz X. G. Plöderl, who was most likely Feiler’s student. Cushing, *Bio-Bibliography of Andreas Vesalius*, VI.A.–3. For Feiler see Hirsch, *Biographisches Lexikon herforragender Aerzte vor 1880*. 43495

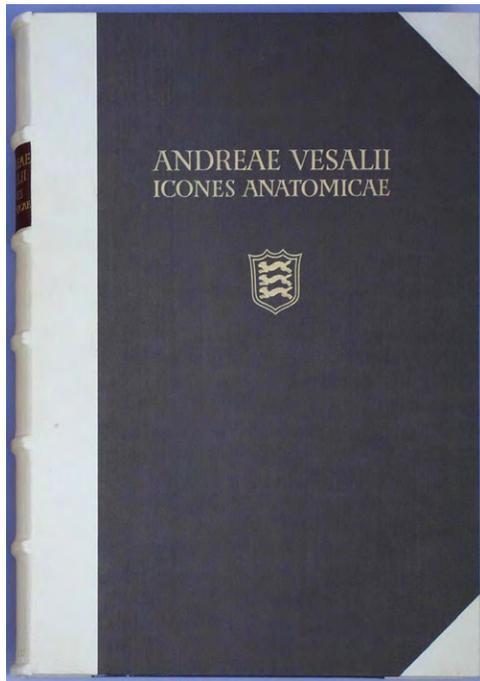
ex libris Joann. Feiler.





Finest Scientific Book by a Modern Private Press

65. Vesalius, Andreas (1514–64). *Icones anatomicae*. Large folio. 189ff. (Supplementary leaf “To the Reader,” issued in 1936, laid in loosely). Original half white pigskin over dark grey boards, morocco label on spine, gilt supra-libros, by Frieda Thiersch, plain dust-jacket (a little worn and chipped); preserved in original box (faded, slightly worn, one or two corners separated). 540 x 375 cm. New York & Munich: Printed by the Bremer Press for the New York Academy of Medicine and the University of Munich, 1934. Very fine copy. \$9500

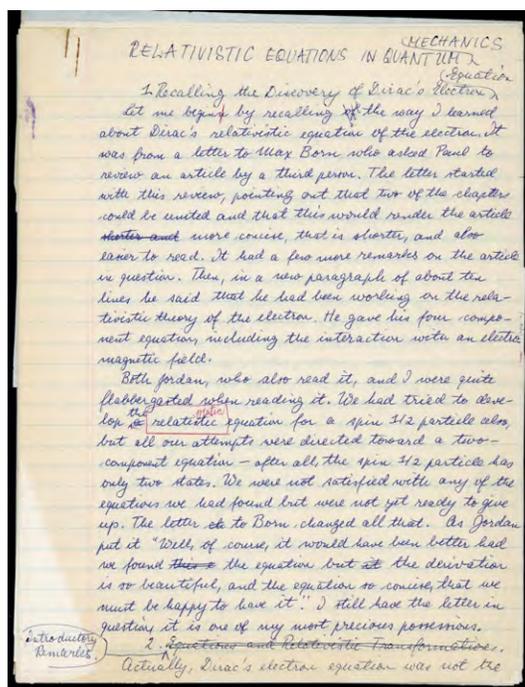


Reprints on the finest hand-made rag paper, and with the greatest possible care and craftsmanship, the 227 original woodblocks from the *Fabrica* found in the University of Munich together with the woodblock for the titlepage of the second edition of the *Fabrica* found in the University of Louvain. The missing woodblocks were reproduced photographically, along with all the illustrations from Vesalius’s other works. The original descriptive Latin text for the illustrations taken from the 1555 edition is interspersed in finely set letterpress on thinner paper. One of 615 numbered copies. 110 other copies without the text were sold in Munich in a different binding. This is the last, and also the mostly finely printed edition, to reproduce the original woodblocks for the 1543 *Fabrica*. All of the original woodblocks were destroyed in the bombing of Munich in 1943. Cushing VI.A.-16. 43329

66. Wigner, Eugene Paul (1902-95). Relativistic equations in quantum mechanics. Autograph manuscript. 23ff. N.p., n.d. [1972]. 282 x 216 mm. First leaf a bit toned, small rust-stain from paper clip on first and last leaves, but very good otherwise. \$5000

The manuscript of Wigner's lecture delivered at the 1972 Symposium on the Development of the Physicist's Conception of Nature, organized by Jagdish Mehra and Abdus Salam in honor of Paul Dirac's seventieth birthday. The manuscript bears a number of corrections and a few editorial notes in the margins, and several of its sheets have been put together by the "cut-and-paste" method to incorporate Wigner's more extensive revisions. Wigner's lecture was subsequently published on pp. 320-329 of *The Physicist's Conception of Nature* (1973), the festschrift volume, edited by Mehra, prepared from the 43 lectures delivered at the symposium.

Wigner, who shared the 1963 Nobel Prize in physics for his discovery and application of fundamental principles of symmetry to the theory of atomic nuclei particles, played an essential role in the development of quantum and nuclear physics. In 1926-27 he and Heisenberg pioneered the first explicit applications of group-theoretical methods to the physical problems of many-electron systems; in 1927 he introduced the idea of parity as a conserved property of nuclear reactions; between 1928 and 1932 he and John von Neumann developed the theory of energy levels in atoms on the basis of group theory; and in 1931 he published a classic book on group theory and quantum mechanics (*Gruppentheorie und ihre Anwendung auf die Quantenmechanik der Atomspektren*), the first work on this subject to be written by a physicist. In 1932 Wigner devised the "Wigner function" of momenta and coordinates, which has become a major tool in the study of quantum chaos; the following year he and his student Frederick Seitz provided a basis for solid state physics in their method of treating electron wavefunctions in a solid; and in 1936 he and Gregory Breit worked out the "Breit-Wigner" formula explaining neutron absorption by a compound nucleus. Wigner also played an important role in the United States' development of the atomic bomb and nuclear reactors, working on the Manhattan Project during World War II and serving as director of the AEC Laboratory at Oak Ridge in 1946-47. 43074



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