DE
NOVA ET INAVDITA
MEDICO-CHYRVRGICA
OPERATIONE
SANGVINEM
TRANSFVNDENTE
DE INDIVIDVO
AD INDIVIDVVM;
Prius in Brutis, & deinde in Homine Roma experta.
OPVSCVLVM SINGVLARE
AVCTORE
PAVLO MANFREDO LVCENSE
EX CAMAIORE
Philosopho & Medico Romano, & in Vrbis Archilyceo Medicina Practica Professore Extraordinario.
EM.MO ET REVER.MO PRINCIPI
IO: BAPTISTÆ SPADÆ
S.R.E. CARD. AMPLISSIMO
DICATVM.

Romæ, Typis Nicolai Angeli Tinassij. 1668. *Superiorum permissu.*
Sumptibus Benedicti Carraræ, Parione sub Signo Lucæ.

Manfredi's experiments with transfusion followed closely on those of Lower (1665, 1667) and Denis (1667), both of whom attempted transfusions between animals and between animals and humans; see G-M 2021, 2013, 2014. Manfredi was able to perform the operation in both animals and humans with some success, as described in the present work. He included a description of his method, which involved the introduction of a cannula into an isolated and denuded vein.

Extremely rare. This is the only copy we have seen on the market in forty years of trading. OCLC cites only 5 copies (Yale [2], NLM, U. Minn. and Well-come). Peumery, *Les origines de la transfusion sanguine*, pp. 42-44. 38024

Futurist Typography

73.   **Marinetti, Filippo Tommaso** (1876-1944). **(1)** Manifesto tecnico della letteratura futurista. [4]pp. Milan: Direzione del Movimento Futurista, 11 maggio 1912. 291 x 232 mm. Unbound as issued. **(2)** Supplemento al Manifesto tecnico della letteratura futurista. [4]pp. Milan: Direzione del Movimento Futurista, 11 agosto
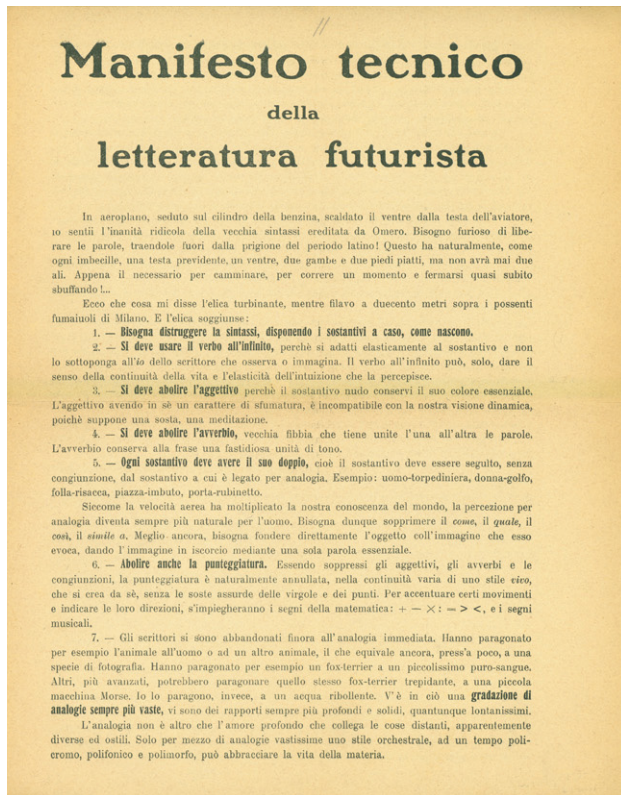
1912. 291 x 232 mm. Unbound as issued. Together 2 items. Both items creased horizontally and vertically from being folded in quarters, front margin of **(1)** a little frayed, light toning, but very good. $650

(1) Original Edition of the Futurist manifesto that set the tone and approach for Futurist typography, the most influential innovation of the Futurist movement; with **(2) Original Edition** of the supplement to the manifesto containing Marinetti's poem "Battaglia peso + odore," an early example of the new format. Marinetti and the German, Russian and other typographer / poets who followed his lead sought to destroy, as Marinetti later put it, "the monastic harmony, symmetry, equilibrious seriality of the page" which had dominated Western printing, because traditional typography could not express the simultaneous, fragmented, dynamic forces dominating life and thought. R. Cohen, "Italian Futurist typography" and A. Cohen, "Marinetti & Futurism," *Print Collectors' Newsletter* 8, no. 6 (1978): 166-71. See *Printing and the Mind of Man* 400. 40869

The Metric System, Ex Libris François Arago, Hero of the Project

74.   **Méchain, [Pierre F. A.]** (1744-1804) & **Delambre, [Jean B. J.]** (1749-1822). Base du système mètrique décimal. 3 vols. **With: Biot, [Jean Baptiste]** (1774-1862) & **Arago, [François]** (1786-1853). Recueil d'observations géodésiques, astronomiques et physiques. Together, 4 vols., 4to. c. 2500pp. 30 mostly folding engraved plates. Full period-style calf, elaborately gilt. Minor spotting. From the library of **François Arago,** with his signature on the title and his annotations on some of the folding plates. Bookplate of chemist Jean Augustin Barral (1819-84), who prepared the collected works of Arago, on the titles of all four volumes. Unobtrusive perforated stamp of the Franklin Institute Library on titles of vols. 1-3 & on 2 or 3 other leaves, ink stamp of the library on title of vol. 1 & a few other leaves. Very good set. Paris: Baudouin, 1806-10; veuve Courcier, 1821. $42,500

First Edition of the complete series establishing the metric system, *from the library of François Arago*, who was responsible for completing the project, and who endured heroic hardships and adventures to preserve the data. *Printing and the Mind of Man* 260.

In 1788 the French Academy of Sciences, at the suggestion of Talleyrand, proposed the establishment of a new universal decimal system of measurement founded upon some "natural and invariable base" to replace Europe's diverse regional systems. This project was approved by the National Assembly in 1790 and a basic unit or "meter" of measurement proposed, which was to be one ten-millionth of the distance between the terrestrial pole and the Equator. In 1792 Méchain and Delambre were appointed to make the necessary geodetic measurements of the meridian passing through Dunkirk and Barcelona, from which the meter would be derived. The project was hampered by France's political revolution, by the death of Méchain in 1804, and by the tedious calculations involved in converting one system to another; it was not until 1810 that Delambre was able to complete the final volume of the *Base du système mètrique décimal*.

Méchain and Delambre had determined the length of the meter by taking measurements over a meridian arc of 10 degrees. After Méchain's death in 1804, the Bureau of Longitudes proposed that the meter's length be redetermined more accurately by extending measurement of the arc of the meridian south to the Balearic Islands of Mallorca, Menorca and Ibiza. François Arago and Jean Baptiste Biot were assigned to this task. Arago was twenty years old at the start of this project. In 1806 he and Biot journeyed to Spain and began triangulating the Spanish coast. Their work was disrupted by the political unrest that developed after Napoleon's invasion of Spain in 1807. Biot returned to Paris after they had determined the latitude of Formentera, the southernmost point to which they were to carry the survey. Arago continued the work until 1808, his purpose being to measure a meridian arc in order to determine the exact length of a meter.

After Biot's departure, the political ferment caused by the entrance of the French into Spain extended to the Balearic Islands, and the population took Arago's movements and his lighting of fires on the top of Mola de l'Esclop for the activities of a spy for the invading army. Their reaction was such that he was obliged to give himself up for imprisonment in the fortress of Bellver in June 1808. On July 28 Arago escaped from the island in a fishing boat, and after an adventurous voyage he reached Algiers on August 3. From there he obtained a passage in a vessel bound for Marseille, but on August 16, just as the vessel was nearing Marseille, it fell into the hands of a Spanish corsair. With the rest

the crew, Arago was taken to Roses in Catalonia, and imprisoned first in a windmill, and afterwards in a fortress, until the town fell into the hands of the French, and the prisoners were transferred to Palamós.

After three months of imprisonment, Arago and the others were released on the demand of the dey (ruler) of Algiers, and again set sail for Marseille on the November 28, but when within sight of their port they were driven back by a northerly wind to Bougie on the coast of Africa. Transport to Algiers by sea from this place would have required a delay of three months. Arago, therefore, set out over land, on what had to be a strenuous journey, guided by a Muslim imam, and reached Algiers on Christmas Day. After six months in Algiers, on June 21, 1809, Arago set sail for Marseille, where he had to undergo a monotonous and inhospitable quarantine in the lazaretto before his difficulties were over, roughly one year after he had first been imprisoned. The first letter he received, while in the lazaretto, was from Alexander von Humboldt--the origin of a scientific relationship which lasted over forty years.

In spite of the successive imprisonments, voyages, and other hardships he endured, Arago had succeeded in preserving the records of his survey; and his first act on his return home was to deposit them in the Bureau des Longitudes in Paris. As a reward for his heroic conduct in the cause of science, he was elected a member of the Académie des sciences at the remarkably early age of twenty-three, and before the close of 1809 he was chosen by the council of the École Polytechnique to succeed Gaspard Monge in the chair of analytic geometry. At the same time he was named by the emperor one of the astronomers of the Obsérvatoire royale, which remained his residence till his death, and in this capacity he delivered his remarkably successful series of popular lectures on astronomy from 1812 to 1845. Most of his later scientific contributions were in physics, particularly optics and magnetism: he discovered the phenomena of rotary magnetism (the greater sensitivity for light in the periphery of the eye) and rotary polarization, invented the first polariscope, and performed important experiments supporting the undulatory theory of light. In his capacity as secretary of the Académie des Sciences, he championed the photographic process invented by Louis Daguerre, announcing its discovery to the Académie in 1839, and using his influence to obtain publicity and funding for its inventor.

Arago's results, together with geodetic data obtained in France, England and Scotland, were published in the *Recueil d'observations géodésiques*, issued as a supplement to Méchain and Delambre's work 11 years after he carried the data back to France, in 1821. Political opposition to the new system of measurement may have contributed to the unusually long delay in publication. As a tribute to Arago's contribution, in 1994 the Arago Association and the city of Paris commissioned a Dutch conceptual artist, Jan Dibbets, to create a memorial to Arago. Dibbets came up with the idea of setting 135 bronze medallions (although only 121 are documented in the official guide to the medallions) into the ground along the Paris Meridian between the northern and southern limits of Paris: a total distance of 9.2 kilometres/5.7 miles. Each medallion is 12 cm. in diameter and marked with the name ARAGO plus N and S pointers. One of these was shown in the film *The Da Vinci Code. Dictionary of Scientific Biography* under Biot. Daumas, *Arago: La jeunesse de la science,* ch. IV. Norman 1481. Alder, *The Measure of the World* (2003). 40311

Nuclear Fission

75.   **Meitner, Lise** (1878-1968) and **Frisch, Otto** (1904-79). Disintegration of uranium by neutrons: A new type of nuclear reaction. In *Nature* 143, no. 3615 (Feb. 11, 1939): 239-40. Whole number. 217-258pp. Illustrated. Bound in quarter calf gilt, cloth boards, original wrappers not preserved. Fine. $1750

   First Edition. PMM 422b. In 1938 Hahn and Strassmann, who were bombarding uranium with neutrons in the expectation of producing "transuranium" elements, discovered barium isotopes among the decay products produced by the bombarded nuclei. At a loss to interpret this, the two men communicated their result by letter to Hahn's former co-worker Lise Meitner, who had earlier fled to Stockholm to escape Nazi persecution. Meitner, at the suggestion of her nephew Otto Frisch, theorized that the uranium nucleus breaks up into two smaller nuclei through the mutual repulsion of the many protons in the uranium nucleus, 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 two 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."

Meitner and Frisch made their epochal discovery in the first days of January 1939. To speed publication, they decided to submit a note, rather than a full article, to *Nature*; however, they delayed doing so until Frisch could perform further experiments to confirm their initial data. On January 16 Frisch submitted "Disintegration of uranium by neutrons" to *Nature*; its publication on February 11 marked the first announcement of the discovery of fission. Frisch also submitted a longer paper, "Physical evidence for the division of heavy nuclei under neutron bombardment," which was published in *Nature* on February 18. The two Meitner and Frisch papers, together with papers by Fermi (PMM 422a), von Halban *et al.* (PMM 422d) and H. D. Smyth (PMM 422e) were selected for inclusion in the *Printing and the Mind of Man* exhibition and catalogue

under its entry for "The Atom Bomb." Pais, *Niels Bohr's Times,* pp. 452-56. Norman 1487. *Dictionary of Scientific Biography*. 40600

The First Computer Programs Ever Published

76.   **Menabrea, Luigi Federico** (1809–96). Notions sur la machine analytique de M. Charles Babbage. In *Bibliothèque universelle de Genève,* nouvelle série 41 (1842): 352–76. Whole volume, 8vo. 424pp. Folding table, plate. 210 x 137 mm. Blue boards, leather spine label, upper extremity of spine a bit worn, circa 1842. Fine copy. 19th cent. library stamps and markings on title and front free endpaper. Preserved in a quarter morocco folding box. $25,000

First Edition of the first computer programs ever published, though the word program did not exist during Babbage's era. Menabrea's paper is also the first published account of Babbage's Analytical Engine and the first account of its logical design. As is well known, Babbage's conception and design of his Analytical Engine—the first general purpose programmable digital computer—were so far ahead of the imagination of his mathematical and scientific colleagues that few expressed much curiosity regarding it. The only presentation that Babbage made concerning the design and operation of the Analytical Engine was to a group of Italian scientists.

In 1840 Babbage traveled to Torino to make a presentation on the Analytical Engine. Babbage's talk, complete with charts, drawings, models, and mechanical notations, emphasized the Engine's signal feature: its ability to guide its own operations-- what we call conditional branching. In attendance at Babbage's lecture was the young Italian mathematician Luigi Federico Menabrea (later prime minister of Italy), who prepared from his notes an account of the principles of the Analytical Engine. Reflecting a lack of urgency regarding radical innovation unimaginable to us today, Menabrea did not get around to publishing his paper until two years after Babbage made his presentation, and when he did so he published it in French in a Swiss

journal. Shortly after Menabrea's paper appeared Babbage was refused government funding for construction of the machine.

In keeping with the more general nature and immaterial status of the Analytical Engine, Menabrea's account dealt little with mechanical details. Instead he described the functional organization and mathematical operation of this more flexible and powerful invention. To illustrate its capabilities, he presented several charts or tables of the steps through which the machine would be directed to go in performing calculations and finding numerical solutions to algebraic equations. These steps were the instructions the engine's operator would punch in coded form on cards to be fed into the machine; hence, the charts constituted the **first computer programs** [emphasis ours]. Menabrea's charts were taken from those Babbage brought to Torino to illustrate his talks there (Stein, *Ada: A Life and Legacy,* p. 92).

Menabrea's 23-page paper was translated into English the following year by Lord Byron's daughter, Augusta Ada, Countess of Lovelace, who, in collaboration with Babbage, added a series of lengthy notes enlarging on the intended design and operation of Babbage's machine (see following entry). Menabrea's paper and Ada Lovelace's translation represent the only detailed publications on the Analytical Engine before Babbage's account in his autobiography (1864). Menabrea himself wrote only two other very brief articles about the Analytical Engine in 1855, primarily concerning his gratification that Countess Lovelace had translated his paper. No offprints of Menabrea's paper are recorded, and this volume is extremely rare on the market. This is the second copy we have handled in more than forty years of trading. The previous copy was rebound. See Randell 1982a, 494. *Origins of Cyberspace* 60. 40364

Diagram for the computation by the Engine of the Numbers of Bernoulli. See Note G. (page 722 *et seq.*)

"The Most Important Paper in the History of Digital Computing before Modern Times"

77.   **Menabrea, Luigi Federico** (1809–96). Sketch of the Analytical Engine invented by Charles Babbage . . . with notes by the translator [**Augusta Ada King**, *Countess of Lovelace* (1815–52)]. In *Scientific Memoirs, Selected from the Transactions of Foreign Academies of Science and Learned Societies* 3 (1843): 666-731, plus folding chart. Whole volume, 8vo. [6], 734pp., 10 plates. 214 x 135 mm. 19th cent. half calf, cloth boards, rebacked, endpapers renewed. Light toning, otherwise fine. Library shelf-mark on title. $35,000

First Edition in English of the above. Menabrea's paper was translated into English by Babbage's close friend Ada, Countess of Lovelace, daughter of the poet Byron and a talented mathematician in her own right. At Babbage's suggestion, Lady Lovelace added seven explanatory notes to her translation, which run about three times the length of the original. Her annotated translation has been called "**the most important paper in the history of digital computing before modern times**" (Bromley, "Introduction" in Babbage, Henry Prevost, *Babbage's Calculating Engines*, xv). As Babbage never published a detailed description of the Analytical Engine, Ada's translation of Menabrea's paper, with its lengthy explanatory notes, represents the most complete contemporary account in English of this much-misunderstood machine.

Babbage supplied Ada with algorithms for the solution of various problems, which she illustrated in her notes in the form of charts detailing the stepwise sequence of events as the machine progressed through a string of instructions input from punched cards (Swade, *The Cogwheel Brain*, 165). This was the first published example of a computer "program," though neither Ada nor Babbage used this term. She also expanded upon Babbage's general views of the Analytical Engine as a symbol-manipulating device rather than a mere processor of numbers, suggesting that it

might act upon other things besides *number*, were objects found whose mutual fundamental relations could be expressed by those of the abstract science of operations. . . . Supposing, for instance, that the fundamental relations of pitched sounds in the science of harmony and of musical composition were susceptible of such expression and adaptations, the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent (p. 694) . . . Many persons who are not conversant with mathematical studies, imagine that because the business of the engine is to give its results in *numerical notation,* the *nature of its processes* must consequently be *arithmetical* and *numerical*, rather than *algebraical* and *analytical.* This is an error. The engine can arrange and combine its numerical quantities exactly as if they were *letters* or any other *general* symbols; and in fact it might bring out its results in algebraical *notation*, were provisions made accordingly (p. 713).

Much has been written concerning what mathematical abilities Ada may have possessed. Study of the published correspondence between her and Babbage (see Toole 1992) is not especially flattering either to her personality or mathematical talents: it shows that while Ada was personally enamored of her own mathematical prowess, she was in reality no more than a talented novice who at times required Babbage's coaching. Their genuine friendship aside, Babbage's motives for encouraging Ada's involvement in his work are not hard to discern. As Lord Byron's only legitimate daughter, Ada was an extraordinary celebrity, and as the wife of a prominent aristocrat she was in a position to act as patron to Babbage and his engines (though she never in fact did so).

Ada Lovelace's translation of Menabrea's paper was published in the *Scientific Memoirs,* a journal edited by the printer and naturalist Richard Taylor (1781-1858), and devoted entirely to the publication of English translations of important scientific papers. DSB. *Origins of Cyberspace* 61. Randell, *Origins of Digital Computers* (3rd ed.), p. 489. 40255
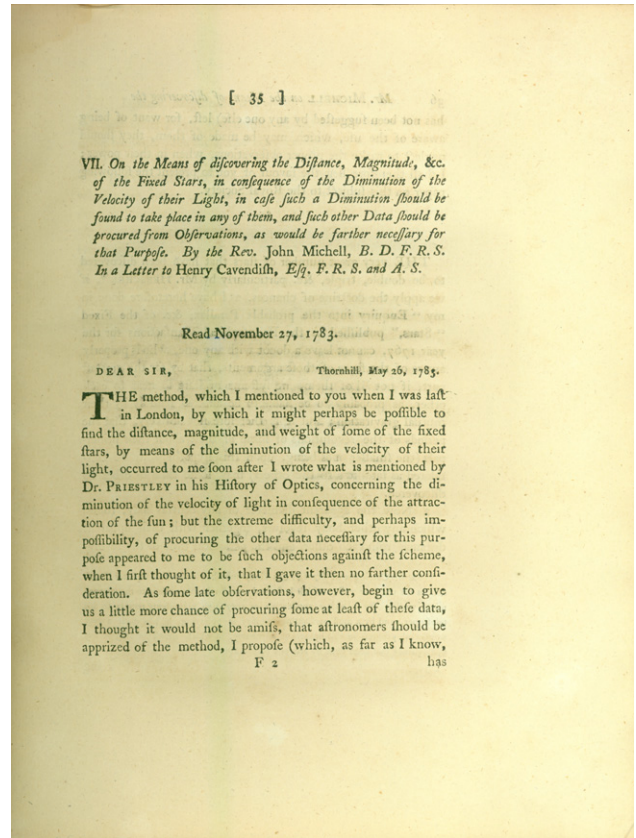
First Paper on "Black Holes," Plus Discovery of the Compound Nature of Water

78. **Michell, John** (1724[?]-93). On the means of discovering the distance, magnitude, &c. of the fixed stars, in consequence of the diminution of the velocity of their light . . . In *Philosophical Transactions* 74 (1784): 35-57; 1 plate. [**With:**] **(1) Cavendish, Henry** (1731-1810). Experiments on air. *Ibid.*: 119-153. **(2) Kirwan, Richard** (1733-1812). Remarks on Mr. Cavendish's *Experiments on Air. Ibid.*: 154-169. **(3) Cavendish.** Answer to Kr. Kirwan's *Remarks upon the Experiments on Air. Ibid.*: 170-177. **(4) Kirwan.** Reply to Mr. Cavendish's *Answer. Ibid.*: 178-180. Whole volume, 4to. vii, [1], 521pp. 21 plates. London: Lockyer Davis, and Peter Elmsly, 1784. 270 x 208 mm. Quarter calf, marbled boards ca. 1784, rebacked, some wear & rubbing. Light ton-

DOCTᴿ MILLER

Has erected a commodious House in FRANKLIN, a rural and healthy situation, where he treats persons labouring under the Cancer, Stone in the Bladder, Cataract, and other diseases of the Eye, Hydrocele, White Swellings, swelled Legs, Fistula, Polypus, Hare Lips, Wens, Eruptions of the Skin and Ulcerations in general. Much pains have been taken to make this a place of resort, where Invalids will receive every attention, which may render their situation comfortable & pleasant. Ladies WILL FIND SUITABLE ACCOMMODATIONS.

Letters rec'd thro' Medway P. Office 20 Miles S.W. from Boston.

ing and foxing, edges of 1 or 2 plates a little frayed. Ownership stamp of Joshua Russell. $3750

First Editions. Michell's paper, rediscovered in the 1970s, represents the first discussion of the idea of a "black hole," a region of space-time where the gravitational field is so strong that nothing, not even light, can escape it. Working with Newton's corpuscular theory of light and the Newtonian concept of escape velocity as the minimum velocity needed to escape from a body's surface to infinity, Michell postulated the existence of a body so massive that the escape velocity at its surface would equal the speed of light. Such bodies, or "dark stars," would of course be invisible, but could be identified by the motions of other bodies affected by its gravitational field. Speculation about dark stars ended in the early 1800s with the rise of the wave theory of light, but revived after the publication of Einstein's General Theory of Relativity (1915), which predicted the effect of gravity on light and allowed a modern scientific proof of Michell's 1784 hypothesis.

Cavendish's 1784 paper describes his experimental proof of the compound nature of water, thus destroying the elemental status of "water" in the Aristotelian system. Cavendish was the first to demonstrate experimentally that hydrogen ("inflammable air") and oxygen ("dephlogisticated air"), when mixed in the proper proportions and fired, produce their own weight in water. His work was inspired by Joseph Priestley's 1781 account of experiments performed by himself and John Warltire, in which electrically fired mixtures of common air and inflammable air in a closed vessel had produced a dew on the sides of the vessel while reducing the volume of common air by a fifth; Warltire also noted a loss in weight which he attributed to the escape of ponderable heat, but Cavendish was unable to duplicate this result. A believer in the phlogiston theory, Cavendish was unwilling to interpret water as a compound, instead concluding that water pre-existed in both inflammable and dephlogisticated airs, and was released when they combined. Cavendish's 1784 paper contains the main results of his experiments; a short supplement published in *Philosophical Transactions* the following year (not present here) investigates the nature of the acid produced by an excess of oxygen in the ignited gas mixture. Norman 420. 40518

Probably Unique Nineteenth-Century American Medical Broadside Advertisement

79.   **Miller, Dr.** Doctr. Miller has erected a commodious house in Franklin . . . Engraved advertising circular, illustrated with an engraving of

Miller's sanatorium by Thomas Wightman (fl. 1811) after I. R. [i.e., John Ritto] Penniman (1782-1841). N.p., n.d. [before 1884]. 173 x 210 mm. Laminated on paper, some marginal spotting, moderate toning. $1250

Probably Unique American Medical Broadside advertising Dr. Miller's sanatorium, located in Franklin, Mass., about 20 miles southwest of Boston. According to the advertisement, Dr. Miller's establishment treated "persons labouring under the Cancer, Stone in the Bladder, Cataract and other diseases of the Eye, Hydrocele, White Swellings, swelled Legs, Fistula, Polypus, Hare Lips, Wens, Eruptions of the Skin and Ulcerations in general." The advertisement further states that "much pains have been taken to make this a place of resort, where Invalids will receive every attention, which may render their situation comfortable & pleasant. Ladies will find suitable accommodations." The illustration of Miller's sanatorium that heads the circular was drawn by John Ritto Penniman, described as "perhaps the most skilled, inventive and versatile ornamental artist and draftsman of his time in America" (*Antiques Magazine*, July 1981). Penniman was also one of American's first lithographers, credited for making the first drawing on stone ever done in the United States (Zellman, *300 Years of American Art*, p. 94). An inscription on the back of the circular, partially obscured by the lamination, is dated Feb. 2, 1884. Benezit. 38080

Inscribed by William T. G. Morton

80.   [**Morton, William T. G.** (1819-68).] **Rice, Nathan Payson** (1829-). Trials of a public benefactor, as illustrated in the discovery of etherization. [2], xx, [13], 14-460pp. Engraved frontispiece, 3 plates. New York: Pudney & Russell, 1859. 185 x 124 mm. Original blind-stamped brown cloth, gilt-lettered spine, front hinge slightly cracked, extremities and corners slightly worn, but very good. *Presentation copy,* inscribed by Morton on the front free endpaper: "Dr. Sabine with respects of Wm. T. G. Morton."

$7500
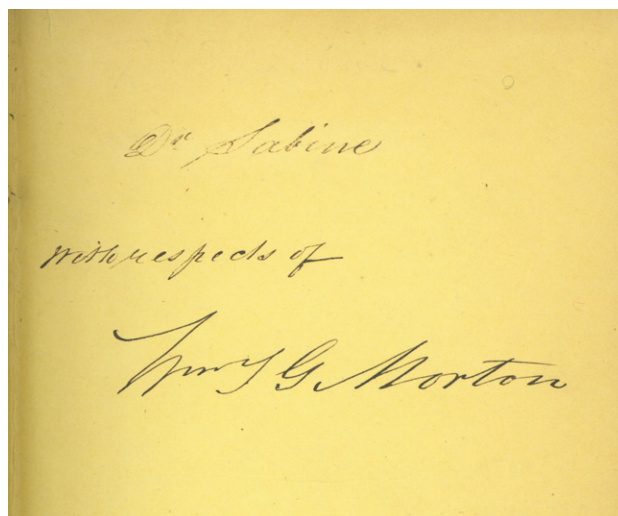
First Published Edition. The first—and until recently the only—full-length biography of William T. G. Morton, the Boston dentist who in 1846 demonstrated to the medical profession the efficacy of sulfuric ether as a general surgical anesthetic. Morton was not himself responsible for the discovery of ether's anesthetic properties, which he had learned of from Charles T. Jackson, but he lost no time in attempting to profit from ether anesthesia, first by patenting it (in conjunction with Jackson), and then, when the patent proved ineffective, by playing up his role in the discovery and petitioning Congress and other institutions for large cash awards. Morton's relentless opportunism provoked what is now known as the "ether controversy," a long-running battle between Morton, Jackson and others over who deserved credit for the discovery of surgical anesthesia.

As part of his ongoing campaign to promote his claim to priority, Morton hired Nathan Rice, a young physician, to "write for him [Morton] a sketch of his life & history of the discovery of etherization he to furnish all of the materials & be responsible for all the statements personal and otherwise" (quoted in Wolfe, p. 407). Completed in three months, *Trials of a Public Benefactor* unsurprisingly presented Morton as the hero of the anesthesia story. The book was first issued in October 1858 in an unillustrated advance "press copy" edition with title-page dated 1858. The published edition, with the date changed to 1859 and quotations from Shakespeare and Burns added to the title, appeared a few months later. Morton's questionable dealings with

both Rice and the publishers over the work's production and publication are detailed in Wolfe, pp. 407-11.

Trials of a Public Benefactor, with its self-serving rendition of Morton's role in the discovery of ether anesthesia, is a key document in the history of the ether controversy. "As the account most readily available, this has been the principal document that historians and researchers have depended upon for what they believed were the facts of the matter. . . . Overreliance on the Rice version, to the exclusion of looking beyond it, has largely been responsible for legitimizing the claim of William T. G. Morton while at the same time abrogating the claims of his principal rivals, Horace Wells and Charles T. Jackson, or, at least, diminishing the critical roles they played in Morton's ultimate success" (Wolfe, p. 62). The copy we are offering was presented by Morton to "Dr. Sabine"—possibly Massachusetts physician H. L. Sabin, author of "Administration of chloroform in convulsions in infants" (*Boston Medical & Surgical Journal* 38 [1848]: 199). Wolfe, *Tarnished Idol*, pp. 62; 407-11. Fulton & Stanton IV.66. 40599

81.   **Norman, Jeremy M.,** *ed.* From Gutenberg to the Internet: A sourcebook on the history of information technology. xvi, 899pp. Illustrated. Pictorial boards, laminated. $89.50

Presents 63 original readings from the history of computing, networking and telecommunications, arranged thematically by chapters. Most of the readings record basic discoveries from the 1830s through the 1960s that laid the foundation of the world of digital information. With an illustrated historical introduction, timeline and introductory notes. 38950

82.   **Norman, Jeremy M.,** *ed.* Morton's medical bibliography (Garrison & Morton). xxiv, 1243pp. Aldershot: Scolar Press, 1991. Boards, dust-jacket. Fine. $245

Fifth and Best Edition of this indispensable reference work. 40831

In the Original Parts

83.   **Owen, Richard** (1804-92). The principal forms of the skeleton. Parts 1-4 (complete). 161-304pp. Text illustrations. London: W. S. Orr & Co., [1854]. 204 x 140 mm. Original printed wrappers, a little chipped, spine of part 4 worn away. Very good set. $900

First Edition, in the Rare Original Parts. Published as part of William S. Orr's *Circle of the Sciences,*

Owen's *Principal Forms of the Skeleton* was a popular rendition of his *On the Archetype and Homologies of the Vertebrate Skeleton* (1849), the work in which he laid out his system of comparative osteology and developed his concept of the vertebrate archetype. "The vertebrate archetype (from the Greek *arkhe,* 'original,' and *tupos,* 'imprinted image') is one of the most fascinating constructs of what has been called the 'morphological period' in the history of biology (approximately 1800-1860). It represented the fullest expression of a belief in the fundamental relatedness, if not of all organisms, at least of all animals with endoskeletons. Moreover, as Darwin scholars have long recognized, the vertebrate archetype provided a direct stepping-stone to the notion of evolutionary ancestors" (Rupke, "Richard Owen's vertebrate archetype," 231). *The Principal Forms of the Skeleton* was issued in both parts and in book form, and went through at least a dozen English and American editions. Rupke, "Richard Owen's vertebrate archetype," *Isis* 84 (1993): 231-251; *Richard Owen, Victorian Naturalist* (1994), pp. 161-170. 40856

"Your Wicked Daughter has Notions in her Pate about Nursing"

84.   **Osler, William** (1849-1919). Autograph letter signed to Mrs. [John A.] Mullin, with stamped cover. [Baltimore], October 14, 1900. 1 page, on Osler's 1 West Franklin St. stationery. 160 x 115 mm. Light soiling, a few spots on cover, but very good. Docketed by recipient. $3750

A charming and humorous letter from Osler to the widow of his old friend Dr. John A. Mullin (1835-99) of Hamilton, Ontario. Osler had become acquainted with the Mullins in the 1870s, around the time he began teaching at McGill University. Osler credited Dr. Mullin with being the first to observe "Osler's nodes," the cutaneous nodes in subacute bacterial endocarditis; Mullin had apparently demonstrated the nodes to Osler at the Hamilton City Hospital (Buchanan, pp. 163-64). Osler's affectionate relationship with Mrs. Mullin is apparent in the present letter:

> Dear Mrs. Mullin, Mrs. Osler tells me that your wicked daughter has notions in her pate about nursing. Do you encourage them? If so I would
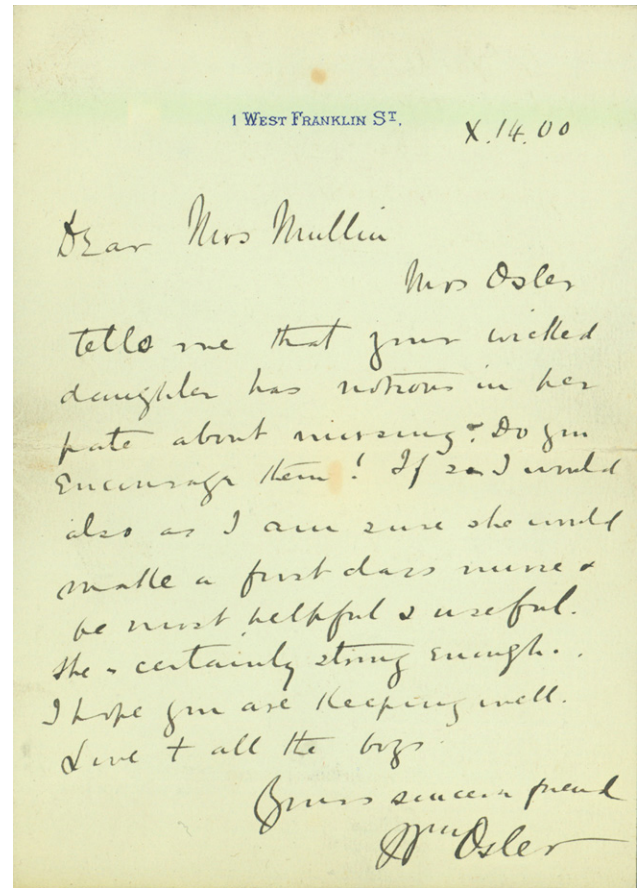
also as I am sure she would make a first class nurse & be most helpful & useful. She is certainly strong enough. I hope you are keeping well. Love to all the boys. You sincere friend, Wm. Osler.

Osler's letter is also of interest in that it demonstrates his approval of nursing as a career for women, an opinion that he expressed more fully in his *Medicine and Nursing* (1919). Buchanan, "Sir William Osler (1849-1919): The Early Years," *Proceedings of the Royal College of Physicians of Edinburgh* 31 (2001): 155-168. Cushing, *Life of Sir William Osler,* pp. 121, 487. 40797

Pasteur Autograph and Portrait

85.   **Pasteur, Louis** (1822-95). Signed autograph inscription in French (4 lines plus signature). N.p., n.d. Approx. 173 x 118 mm. Translation included. With: Lawford, T. Hamilton. Hand-colored mezzotint portrait of Pasteur, signed by the engraver in pencil, after the painting

by Albert Edelfelt (1854-1905). Printed on proof paper (323 x 238 mm.) and mounted on larger sheet. Bristol, England: Frost and Reed, 1934. The two items matted and framed together to archival standards under UV-free plexiglass; frame measures 343 x 616 mm. $5000

Pasteur's inscription reads: "Le plus grand dérèglement de l'esprit est de croire les choses parce qu'on veut qu'elles soient" (The greatest disorder of the mind is to believe things because one wants them to be true). The inscription, written on stationery with a red filigree border, is framed with Lawford's superb hand-colored portrait of Pasteur in his laboratory, after the painting by the 19th-century Finnish artist Albert Edelfelt, whose works "possess great qualities of light and a design alive with feeling" Edelfelt's painting is the most famous portrait of Pasteur. It is preserved in the Louvre. (Benezit). 38161

Quetelet on the Telegraph

86. **Quetelet, Lambert Adolphe Jacques** (1796-1874). Autograph letter signed to Charles Vincent Walker (1812-82). Brussels, July 14, 1850. 2pp. 207 x 132 mm. Pin-holes in upper margin, small inkstain in lower corner. Provenance: Latimer Clark. $950

From Quetelet, one of the first to apply statistical methods to the social sciences, discussing the construction of telegraph lines in Belgium, and some packages of books on electricity and other subjects that he was sending to Charles Wheatstone and Michael Faraday. Quetelet, an astronomer at the Brussels Royal Observatory, published several memoirs on atmospheric electricity, terrestrial magnetism, meteorology, and related subjects. His correspondent, Charles V. Walker, had been involved in telegraphy since the 1840s; in 1848 he sent the first submarine telegraph message from a ship connected by two miles of cable to London Bridge, and
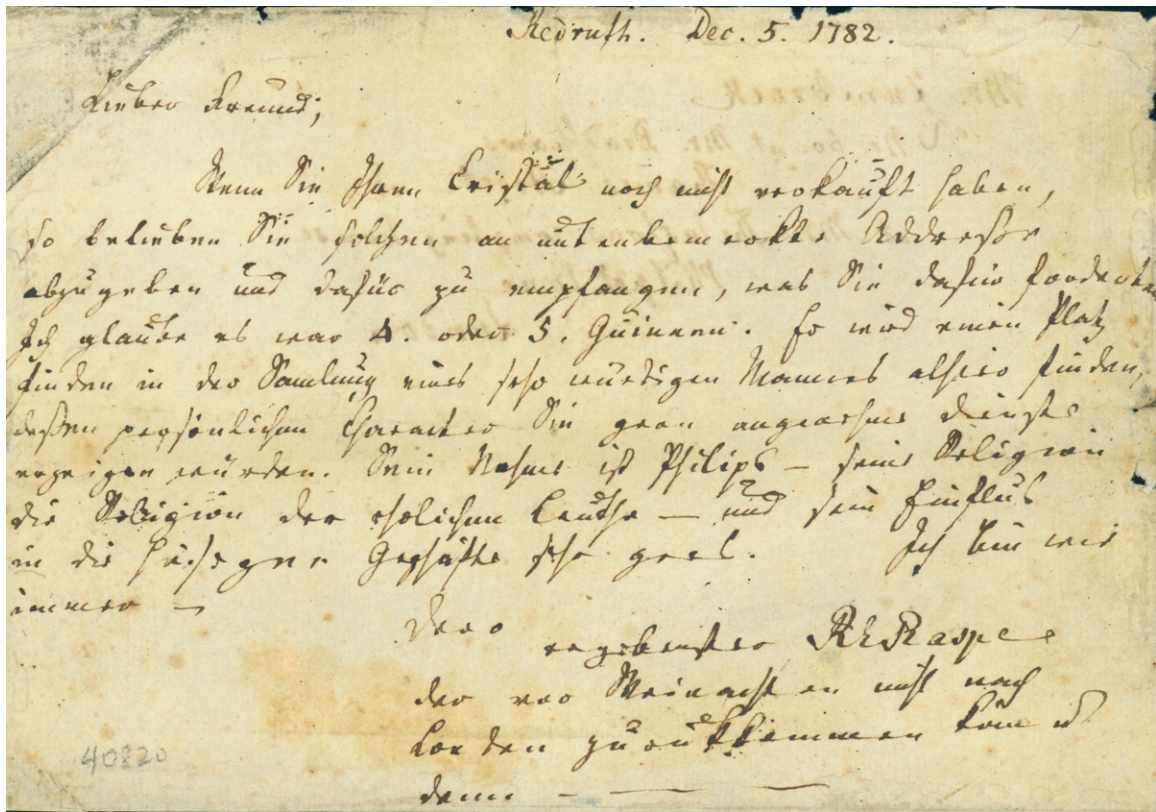
in 1876 he served as president of the Society of Telegraph Engineers and Electricians. *Origins of Cyberspace* 182. 40742

From Scholar / Scientist / Scoundrel
Raspe, Author of "Baron Munchausen"

87.   **Raspe, Rudolf Erich** (1736-94). Autograph letter signed, in German, to [Henry William] Zumbrock. Redruth [Cornwall], December 5, 1782. 1 page, address on verso. 124 x 180 mm. Minor soiling and spotting, traces of former mounting, but very good. Translation included.
$2750

Rare autograph letter from R. E. Raspe, author of the famous *Adventures of Baron Munchausen* (1785) and equal parts scholar, scientist and scoundrel. We can find no records in the databases of any Raspe autographs sold in the past 25 years.

A native of Hanover, Raspe enjoyed a successful career as a librarian and author before being appointed curator, in 1767, of the collection of rare antique gems and medals owned by Frederick II, Landgrave of Hesse-Kassel. In 1775 it was discovered that Raspe had been stealing from the Landgrave's collection and he was forced to flee Germany. He wound up in England, where he supported himself (barely) by writing on mineralogy and other scientific subjects, and working as a mining expert in Cornwall. Raspe's *Adventures of Baron Munchausen*, originally intended as a work of political satire, was issued anonymously in 1785. In the same year he began cataloguing the collection of copies of antique and modern gems assembled by James Tassie, a task that culminated in the monumental *Descriptive Catalogue of the Collection of Pastes and Impressions from Ancient and Modern Gems* (1791). After finishing this scholarly task Raspe returned to his criminal ways, attempting to swindle a Scottish landowner by "salting" one of his mines. He then moved to Ireland, where he managed a copper mine in Killarney before dying of typhoid fever in 1794.

Raspe's letter, written while he was working in Cornwall, deals with the sale of a mineralogical specimen. It can be translated as follows:

> Dear Friend, If you have not already sold your crystal, then please deliver it to the address indi-

cated below and receive for it what you were asking. I believe it was 4 or 5 guineas. It will find a place in the collection of a very worthy local man, of whose personal character you would surely be envious. His name is Philips — his religion the religion of honorable people — and his influence in local dealings very great. I am as always—yours humbly R E Raspe who cannot return to London before Christmas because—

The intriguingly unfinished postscript probably hints at Raspe's financial difficulties—he was arrested for debt in 1780. His correspondent was Henry Zumbrock, a young German bookkeeper who also worked as an agent in London for clients buying and selling materials. 40820

Portrait of Noted 19th-Century Microscopist

88.   **Reade, Joseph Bancroft** (1801-70). Portrait photograph from *Photographic Portraits of*

Living Celebrities (London, 1856-60). 305 x 254 mm. Light browning at edges. $950

Portrait of British scientist Joseph Bancroft Reade from Maull and Polyblank's *Photographic Portraits of Living Celebrities* (1856-60). Reade made important contributions to microscopy: In 1836 he discovered the method of using a pair of convex lenses to focus light on a subject without overheating it, and in 1861 he invented "Reade's kettledrum," a hemispherical condenser for the microscope. He also performed pioneering researches in photography, discovering that treating paper with gallic acid prior to silver nitrate greatly increases its photographic sensitivity. 40511

One of the Rarest Autographs in the History of Science

89.   **Rey, Jean** (ca. 1583- ca. 1645). Pour Monsieur le baron de Fourquevaux. Autograph document signed, in Latin and French. N.p., 1 October 1623. 2-1/2 pages. 261 x 187 mm. Lower part of center fold reinforced, minor soiling, but fine otherwise. 18th century inscription in French on the last page. [**With:**] **McKie, Douglas,** *ed.* The *Essays* of Jean Rey, a facsimile reprint of the original edition of 1630 with an introduction . . . xliv, 143, [1], xlv-lxxxiii pp. Illustrated. London: Edward Arnold, 1951. 184 x 122 mm. Quarter cloth, printed dust-jacket (a little worn). $15,000

The Only Autograph in Private Hands from the hand of French physician and chemist Jean Rey, author of *Essays de Jean Rey . . . Sur la recherche de la cause pour laquelle l'estain & le plomb augmentent de poids quand on les calcine* (1630). This extraordinarily rare book, of which only seven copies are known, was Rey's only publication; it anticipated by more than one hundred years Lavoisier's discovery that the calcination of metals involves combination with air—a discovery fundamental to the overthrow of the phlogiston theory and the foundation of modern chemistry. Lavoisier published his discovery in 1774; the following year, chemist Pierre Bayen alerted Lavoisier to the existence of Rey's *Essays.* Lavoisier was so impressed with "the apparent modernity of Rey's ideas" (McKie, p. xl) that he at first believed Rey's work to be a forgery; he later spoke of
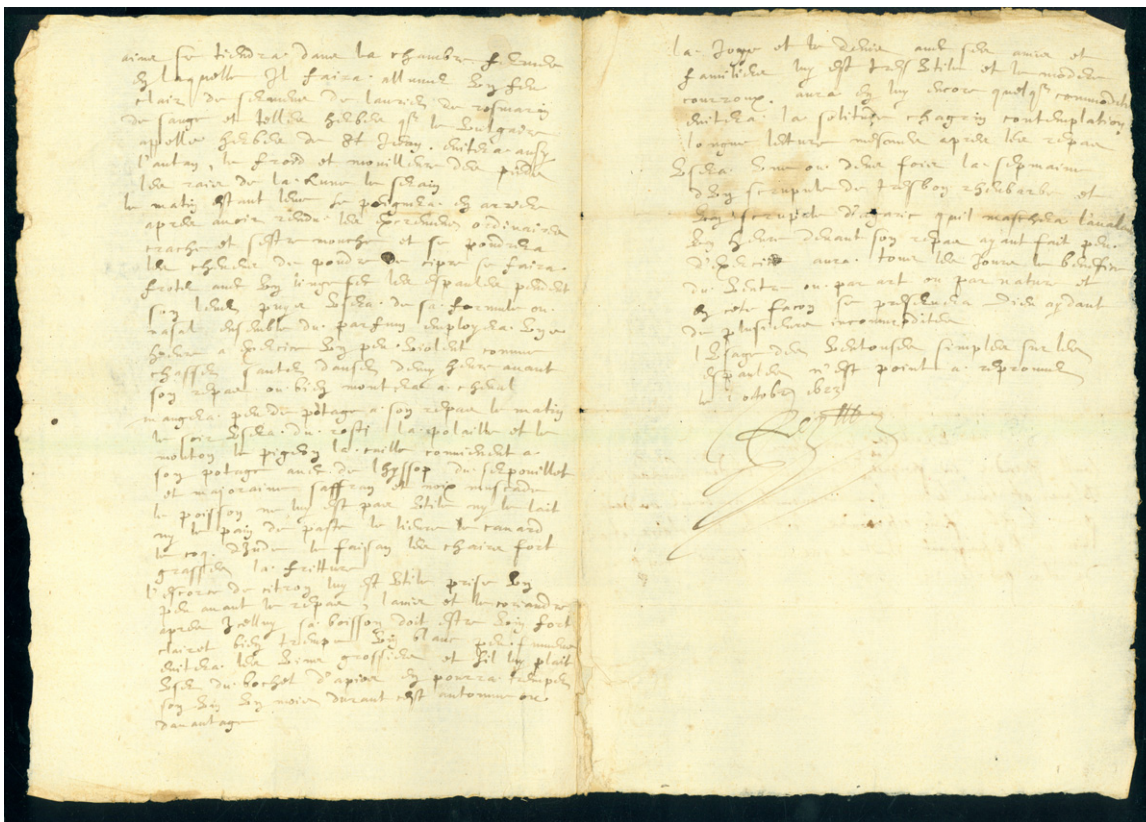
the work with admiration. In 1777 a second edition of Rey's *Essays,* edited by Nicolas Gobet, was published in Paris; this edition—the earliest obtainable—has also become rare (see Duveen, *Bibliotheca alchemica et chemica,* p. 505 and Neville, *Historical Chemical Library,* II, p. 372).

Douglas McKie, in the historical introduction to his facsimile edition of Rey's *Essays* (1951), relates what little is known of Rey's life, describing in detail the scant documentary evidence that remains, and reproducing examples of Rey's handwriting. The University of Montpellier, where Rey studied medicine from 1605 to 1609, preserves a signed 6-line inscription in Latin written by Rey when he matriculated at the University (1605), as well as four other documents bearing Rey's signature: two *consilia* (1608 and 1609), Rey's *licence en medicine* (1609) and a document Rey signed upon receiving his doctorate (1609). Apart from these, the only other signed autograph document of Rey's is the one we are offering here,

> containing his signed prescriptions and dietary for a distinguished patient living near Toulouse, Baron de Fourquevaux, whose father had been Governor of Narbonne and ambassador of several

French Kings, and had escorted to Scotland Marie de Guise, bride of James V and mother of Mary Stewart . . . After 1623 we have no further record of Rey until the appearance of his *Essays,* dated from Le Bugue, *lieu de ma naissance,* on 1 January 1630 (McKie, p. xix).

It is hard to imagine any autograph in the history of science that would be rarer than this! Our 2-1/2 page autograph document was at one time owned by Dr. Pierre Lemay, who published a study of Rey in the *Bul-létin de la Société française d'histoire de la médecine* 32 (1938): 148; see McKie, p. xix (n). *Dictionary of Scientific Biography.* Partington, *History of Chemistry,* II, pp. 631-36. 40656

Essential Reference on Anatomical Illustration

90.   **Roberts, K. B. & J. D. W. Tomlinson.** The fabric of the body: European traditions of anatomical illustration. xx, 638pp. Illustrated. Oxford: Oxford University Press, 1992. 270 x 220
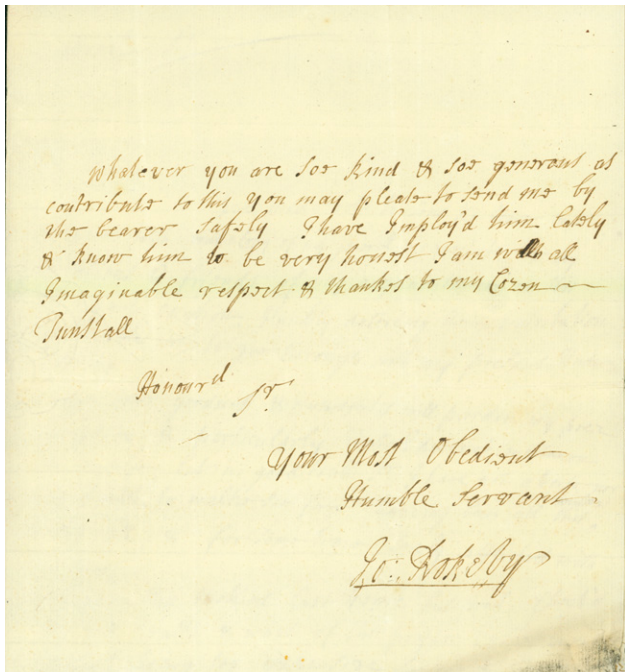
mm. Cloth, slipcase. Fine. Burndy Library book-plate; Huntington Library release stamp. $375

First Edition of this essential reference on the history of anatomical illustration. 40808

From One of Henry VIII's Attorneys

91.   **Rokeby, John** (d. 1573). Autograph letter signed to "my cozen Tunstall," most likely Bishop Cuthbert Tunstall (1474-1559). 1 – 1/2pp. N.p., n.d. 223 x 184 mm. Fine apart from light soiling. $1750

From ecclesiastical lawyer John Rokeby, who acted as one of Henry VIII's counsel in his divorce from Katharine of Aragon and later served as a member of the Council of the North, a regional administrative body originally established by Richard III and later reinstated by Henry VIII in 1530 as a means of exerting control over England's pro-Catholic northern counties. His correspondent was most likely Bishop Cuthbert Tunstall, who served as president of the Council in 1530 and 1537; Tunstall is best known today as the author of *De arte supputandi libri quattuor* (1522), the first book published in England devoted exclusively to mathematics.
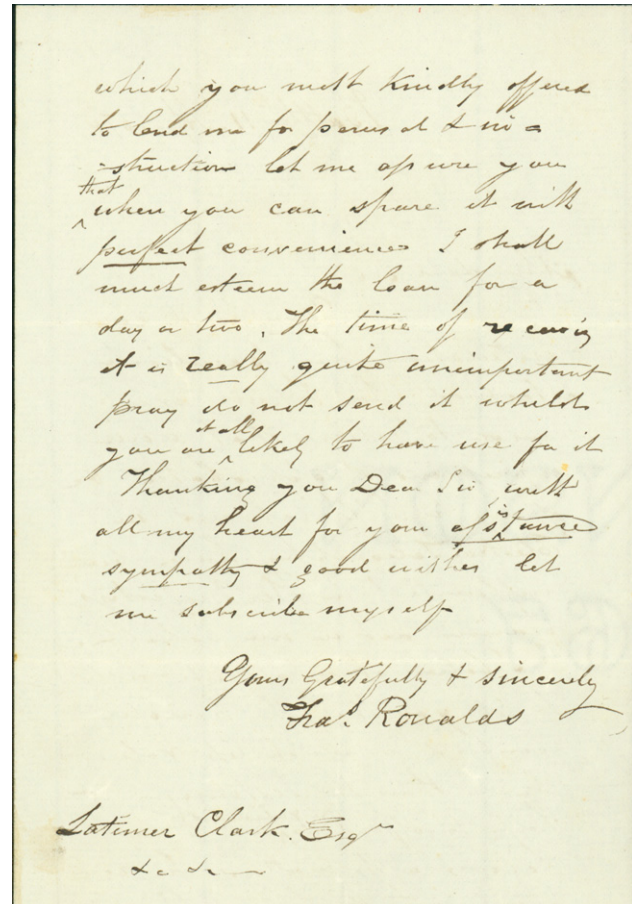
In his letter Rokeby asks Tunstall for a "contribution to enable me to go through with my presant Undertaking . . . I began this Method last yeare but was check'd by ill health & want of the proper Instrument Lond. being too expensive for me & some necessary Cloaths awanting however am now determin'd to goe by sea as soon as possablely I can . . ." Rokeby and Tunstall may have been related, as they were both from the same part of England and Rokeby addressed Tunstall as "cozen." 40853

From the Inventor of the First Working Electric Telegraph

92.   **Ronalds, Francis** (1788-1873). A.L.s. to Latimer Clark. Battle, April 11, 1870. 2pp. 181 x 114 mm. Provenance: Latimer Clark. $950

Ronalds invented the first working electric telegraph in 1816. His device involved two synchronized clocks whose dials were marked with the letters of the alpha-

bet; instead of hands, each clock had a rotating disk with a notch cut into it so that only one letter on the clock face was visible at a time (Standage 1998, 19). Ronalds placed one clock at each end of eight miles of insulated wire that he had laid down in his garden, and used electrical impulses to transmit signals between them. He wrote to Lord Melville of the British Admiralty offering to demonstrate his telegraph, but was rejected: John Barrow, secretary to the admiralty, wrote back to Ronalds saying that "telegraphs of any kind are now [after the conclusion of the Napoleonic wars] totally unnecessary, and that no other than the one now in use [a semaphore telegraph] will be adopted" (quoted in DNB). Ronalds did not pursue his telegraphy venture any further, but left a record of it in his Descriptions of an Electric Telegraph and of Some Other Electrical Apparatus (1823; reprinted in 1871 at the suggestion of Latimer Clark). It was left to Charles Wheatstone and William Fothergill Cooke, both of whom knew of Ronalds's experiments, to develop the first telegraph adopted for public use in Britain in 1845.

In 1871, in response to a petition submitted the previous year to Prime Minister William Gladstone, Ronalds received a knighthood for his contribution to telegraphy. His letter to Clark expresses his gratitude for this honor and for Clark's part in it:

> Your kind congratulations are peculiarly esteemed; for I have every reason to believe that your expressions of approbation &c. of my humble labours in Electro-Telegraphy have been influential in Her Majesty's gracious act in my behalf.
>
> I believe it is almost needless to tell you that the honour conferred is much less valued by me than the testimony it helps to afford to the validity of my early labours in the matter. . . . "

Origins of Cyberspace 187. 40745

"Resurrection Men"

93.　**Royal College of Surgeons.** Anatomy. Copy of a letter from the Council of the Royal College of Surgeons in London, to Viscount Melbourne; dated 10 December 1831. Folio. 3pp. [London:] House of Commons, 17 December
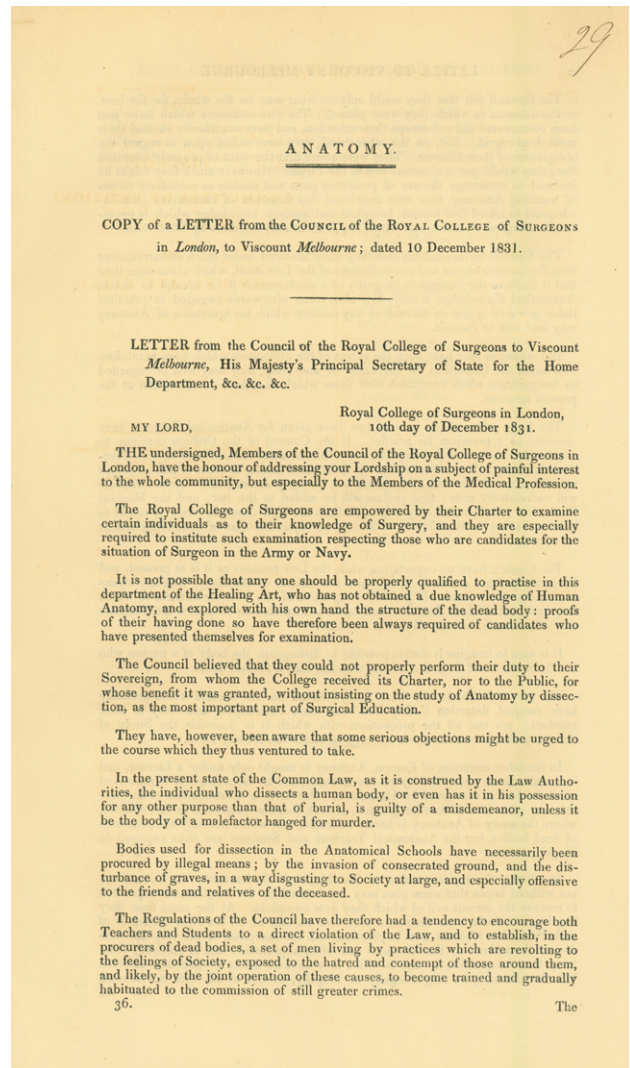
1831. 333 x 208 mm. Disbound, gutter margin a little frayed. Light toning but very good.　$950

　　First Edition. On December 5, 1831, the notorious London "resurrection men" John Bishop and Thomas Williams were executed for the murder of an itinerant fourteen-year-old (known only as the "Italian Boy"), whose corpse they had then attempted to sell to the anatomical demonstrator at King's College. Five days later, the Council of the Royal College of Surgeons—whose members included such luminaries as Astley Cooper, William Lawrence, Benjamin Collins Brodie, Charles Bell and Benjamin Travers—sent the present letter to Viscount Melbourne, the British Home Secretary, urging reform of the antiquated British laws governing procurement and possession of cadavers for dissection in medical schools. The work is

very rare on the market—this is the first copy we have handled in more than 40 years of trading.

Since the mid-eighteenth century, obtaining cadavers for teaching purposes had been regulated in Britain by the Murder Act of 1752, which stipulated that only the corpses of executed criminals could be used for dissection. By the beginning of the nineteenth century, however, improvements in medical science, coupled with a substantial drop in the number of executions, caused the demand for cadavers to far outstrip the legal supply. This situation was ripe for exploitation by "resurrection men," criminals who robbed the graves of the newly deceased and sold their corpses to teachers of anatomy, who of necessity turned a blind eye to the illegality of these transactions. Some grave-robbers even resorted to murder, including the infamous William Burke, who in 1828 was tried and executed in Edinburgh for the murders of over a dozen victims whose corpses he and his partner Hare sold to an anatomical demonstrator connected to Edinburgh University.

Calls for reform of the 1752 Murder Act began to arise as early as 1810, and in 1828, the year of Burke's execution, Parliament appointed a select committee to "enquire into the manner of obtaining subjects for dissection by schools of Anatomy and the State of law affecting persons employed in obtaining and dissecting bodies." The horrific nature of the crimes committed by Burke, Bishop and Williams aroused public sentiment in favor of reform, a sentiment echoed in the present letter from the RCS Council, which spells out in detail the untenable position of students and teachers of anatomy under the then-current law. In 1832 Parliament passed the Anatomy Act, granting licenses to teachers of anatomy and giving physicians, surgeons and medical students legal access to corpses unclaimed after death. Wise, *The Italian Boy: A Tale of Murder and Body Snatching in 1830s London* (2004). 40747

Schrödinger's Cat

94.   **Schrödinger, Erwin** (1887-1961). Die gegenwärtige Situation in der Quantenmechanik. In *Die Naturwissenschaften* 23 (1935): 807-12; 823-28; 844-49. Whole volume. xix, [1], 870, 12pp. Berlin: Julius Springer, 1935. 264 x 192 mm. Quarter cloth ca. 1935, hand-lettered paper spine label, light wear to corners. Library stamps
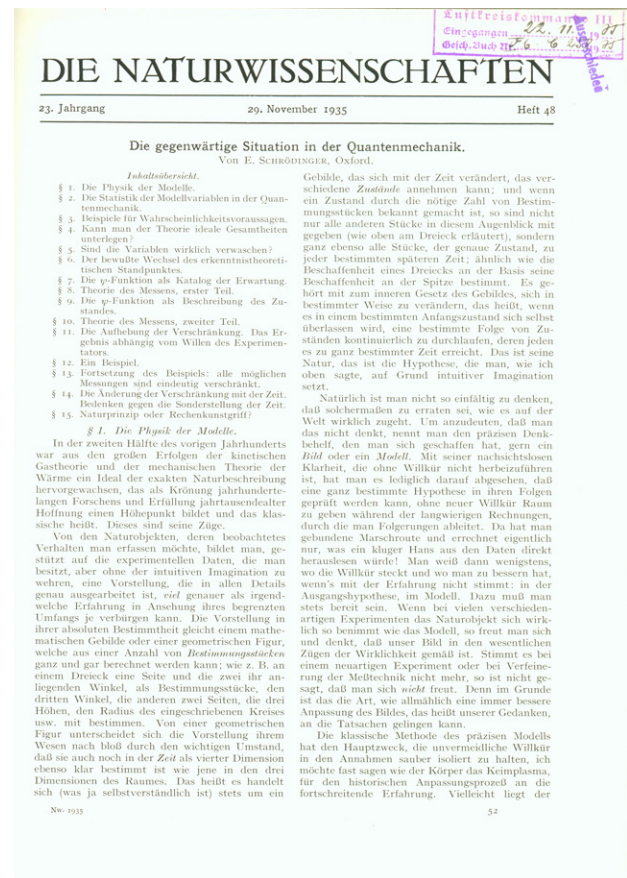
on general title and on first leaves of some numbers. $2500

 First Edition, journal issue. Schrödinger's paper contains the famous thought experiment now known as "Schrödinger's Cat," illustrating a fundamental problem in the "Copenhagen interpretation" of quantum mechanics put forth by Niels Bohr and Werner Heisenberg. In this interpretation, a quantum superposition—the combination of all possible states of a system, such as the possible positions of a subatomic particle—collapses into a definite state only at the exact moment of quantum measurement; prior to measurement, all states exist within a certain range of probability. Einstein had published a rebuttal to the Copenhagen interpretation in his famous "EPR" paper of 1935, in which he argued that the quantum-mechanical description of physical reality, as it stood, was incomplete. Inspired by Einstein's line of reasoning, Schrödinger continued the discussion in his "Die gegenwärtige Situation in der Quantenmechanik," pointing out the absurdity of applying quantum

mechanics to visible and tangible objects. In the fifth section of his paper (p. 812), he set forth the "quite burlesque" case of a cat

> penned up in a steel chamber, along with the following diabolical apparatus (which must be secured against direct interference by the cat): in a Geiger counter there is a tiny bit of radioactive substance, *so* small, that *perhaps* in the course of the hour one of the atoms decays, but also, with equal probability, perhaps none; if it happens, the counter tube discharges and through a relay releases a hammer which shatters a small flask of hydrocyanic acid. If one has left this entire system to itself for an hour, one would say that the cat still lives *if* meanwhile no atom has decayed. The psi-function of the entire system would express this by having in it the living and dead cat (pardon the expression) mixed or smeared out in equal parts.

> It is typical of these cases that an indeterminacy originally restricted to the atomic domain becomes transformed into macroscopic indeterminacy, which can then be *resolved* by direct observation. That prevents us from so naively accepting as valid a "blurred model" for representing reality. In itself it would not embody anything unclear or contradictory. There is a difference between a shaky or out-of-focus photograph and a snapshot of clouds and fog banks (Schrödinger, "The present situation in quantum mechanics," translated by John D. Trimmer [*Proceedings of the American Philosophical Society* 124 (1980): 323-38]).

This conclusion sets forth what has been called the principle of state distinction: "states of a macroscopic system which could be told apart by a macroscopic observation are distinct from each other whether observed or not" (Moore, p. 308). Schrödinger's paper represents "his definitive statement about the theory that he and Heisenberg had discovered" (Moore, p. 307). Moore, *Schrödinger: Life and Thought,* pp. 306-9. 40521

From One of the Founders of Modern Geology

95.   **Sedgwick, Adam** (1785-1873). Two autograph letters signed to [James] Marshall. Dent
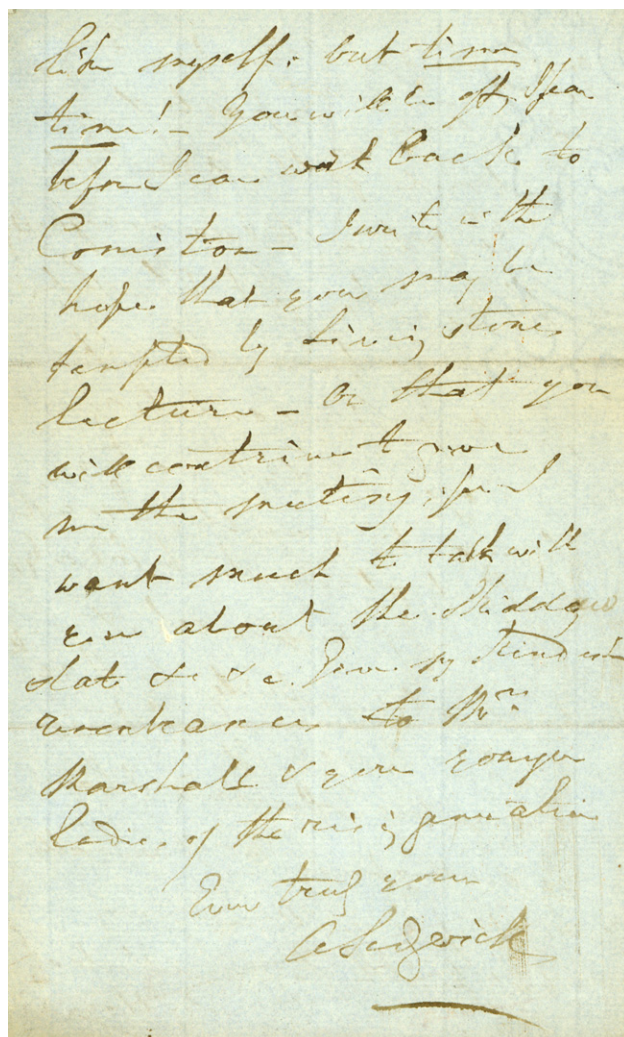
[Yorkshire], Oct. 7, 1857; Trinity College [Cambridge], Oct. 31, 1857. 8pp. total. 186 x 113 mm. Light soiling along folds, but very good. $950

Letters with excellent scientific content from one of the founders of modern geology. Sedgwick was responsible for defining the Devonian and Cambrian ages in the geological time scale, and his immensely popular lecture courses on geology, delivered annually at Cambridge between 1819 and 1870, had an enormous influence on succeeding generations of English geologists. One of his students was Charles Darwin, who began attending Sedgwick's lectures in January 1831 and accompanied Sedgwick on a geological field tour of Wales the following summer. The two men remained friends until Sedgwick's death, even though Sedgwick was never able to accept Darwin's theory of evolution by natural selection.

In his Oct. 7 letter to Marshall, Sedgwick discusses his current geological researches:

> I mean D.V. to work my way to Ulverston; & on Saturday or possibly Monday to transfer my head quarters to Broughton. I want to connect our work in all quarries on the east side of the road, with the great open quarries in the Ireleth country; which we failed to do. The beds in the great open quarries strike very differently from those you & I saw; yet the strike of the cleavage (?) is unchanged in direction & from end to end almost perpendicular—I think it highly probable that the beds between the Ireleth slate & the Ulverston estuary are nearly all from the flag or flag & grit—And I suspect that some hard gritty ridges I remember to have seen in a part of Cartmell Fell, are but a repetition (by enormous fault) of the Coniston grits. . . .

Sedgwick also notes his intention to "hear Dr. Livingstone's evening lecture"; this is a reference to famous explorer David Livingstone (1813-73).

In his Oct. 31 letter, Sedgwick touches on his precarious health—"On Monday I ought to have begun my course of lectures but on that day I had a severe relapse of vertigo & was obliged to put off my lectures until Friday (yesterday)"—and continues his discussion of his work:

> All the rocks from the Ireleth country to the ~~Coniston~~ Ulverston sands are Coniston flag—But in our final traverse we found the hard Coniston grits in the hills S. W. of Penny Bridge—just where they ought to be—I think there is an enormous break down the valley meeting the complicated faults (which come down from the hill a little North of Seathwaite) at an angle.—In short the country from Ireleth Moor inclusive, to the Sand of Ulverston, has had a shove southwards of about five miles!

The recipient of these letters, James Marshall, was an amateur geologist and Fellow of the Geological Society. A friend of both Sedgwick and John Herschel, Marshall was "a keen advocate of scientific education" (Briggs, *Victorian Cities* [1993], p. 161). Olroyd, *Earth, Water, Ice and Fire* (2002), p. 20. *Dictionary of Scientific Biography.* 40858
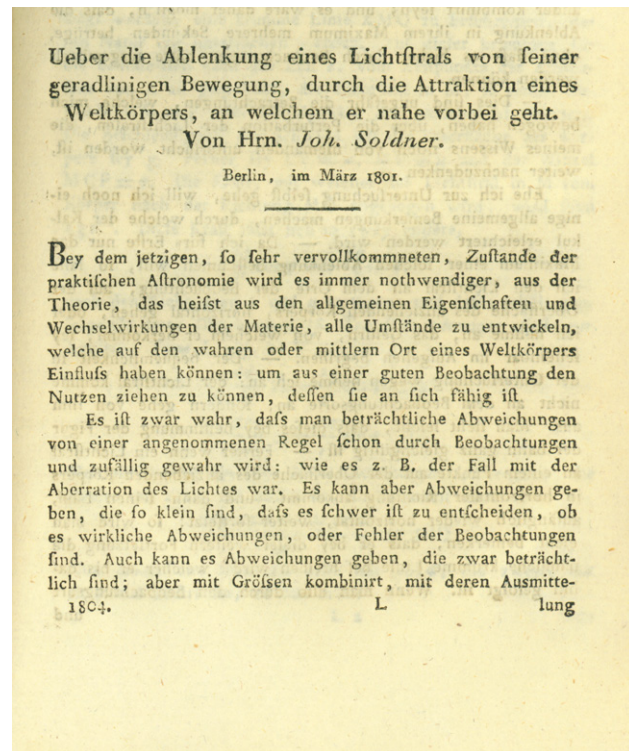
Earliest Work on Gravitational Bending of Light

96. **Soldner, Johann Georg von** (1776-1833). Ueber die Ablenkung eines Lichtstrals von seiner geradlinigen Bewegung, durch die Attraktion eines Weltkörpers . . . In *Astronomisches Jahrbuch für das Jahr 1804* (1801): 161-172. Whole volume, 8vo. [4], 268pp. 2 folding plates. Berlin: bey dem Verfasser, und in Commission bey G. A. Lange, 1801. 200 x 115 mm. Half sheep, marbled boards ca. 1801, minor worming in front cover, lightly rubbed but sound. Fine copy. Small ownership stamp on title, occasional marginal annotations.

$3750

First Edition. Soldner's paper represents "the earliest work on the deflection of light in the gravitation field of the sun . . . On the assumptions that light has weight, and that it is deflected according to Newton's law of gravitation, [Soldner] computed the bending of a ray passing the limb of the sun." (Wylie, "The path of light in a gravitational field," *Am. Math. Monthly* 32 [1925]: 404). Soldner's calculations "are based on

Newton's emission theory, according to which light consists of particles. On this picture the scattering of light by the sun becomes an exercise in Newtonian scattering theory. . . . Soldner made the scattering calculation, put in numbers, and found ? [the value of the deflection]= 0."84" (Pais, p. 200)—a result remarkably close to the actual value of 0."87. In 1911 Einstein, in his paper "Ueber den Einfluss der Schwerkraft auf die Ausbreitung des Lichtes" (*Ann. Phys.* 35: 898-908), used a different method but the same basic assumptions to come up with a similar value for this "Newtonian deflection." The gravitational bending of light by the sun was one of three tests Einstein posed in 1916 to confirm the general theory of relativity; in 1919, Sir Arthur Eddington and his collaborators became the first to observe and record this phenomenon. Pais, *Subtle is the Lord,* pp. 198-200. 40861

Stern-Gerlach Experiment

97. **Stern, Otto** (1888-1969) et al. **(1)** Ein Weg zur experimentellen Prüfung der Richtungsquantelung im Magnetfeld. In *Zeitschr. f. Physik* 7 (1921): 249-253. **(2)** (with **Walter Gerlach** [1889-1979]). Der experimentelle Nachweis des magnetischen Moments des Silberatoms. In *ibid.* 8 (1921): 110-111. Together 2 whole volumes. [iii]-vi, 414; iv, 419pp. Braunschweig: Fried. Vieweg & Sohn; Berlin: Julius Springer, 1921-22. 224 x 149 mm. Vol. 7 in half morocco, cloth boards, a little rubbed; Vol. 8 in half cloth, marbled boards. Library stamps on titles. $950

First Editions. Stern, whom Emilio Segrè considered "one of the major physicists of the century" (p. 138), developed Dunoyer's molecular beam method and used it to devise what is now known as the Stern-Gerlach experiment, which demonstrates the reality of space-quantization of atoms. This experiment had an enormous impact on modern physics, and has become a paradigm of quantum measurement.

Spatial quantization had been introduced as a theoretical concept by Sommerfeld in 1916, but no one before Stern had ever demonstrated its existence, and some quantum physicists even considered it to be nothing more than a mathematical tool. In his 1921 paper, Stern proposed an empirical test: "If an electron in an

Ein Weg zur experimentellen
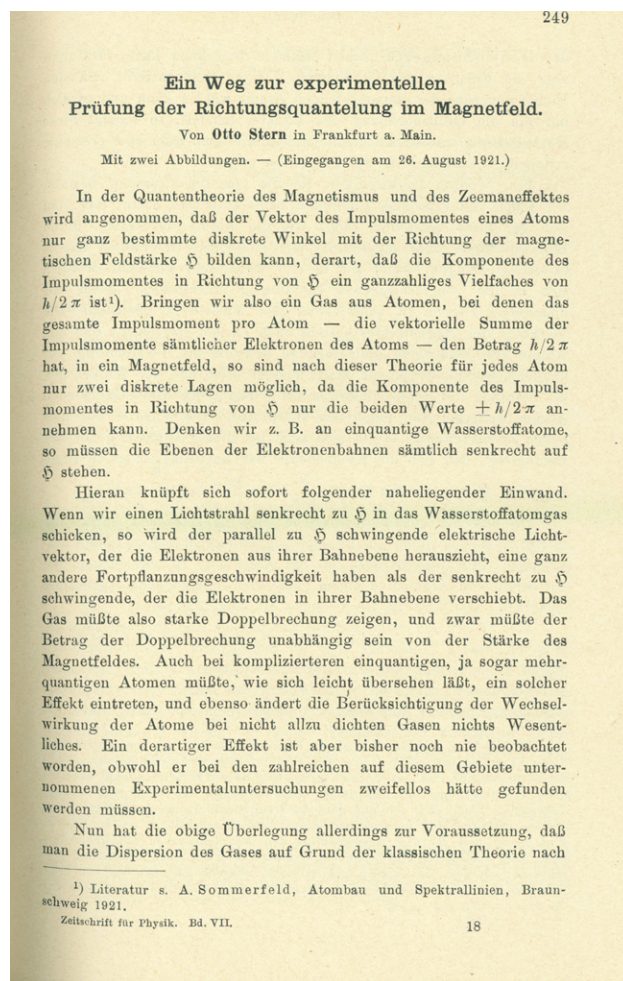Prüfung der Richtungsquantelung im Magnetfeld.

Von **Otto Stern** in Frankfurt a. Main.

Mit zwei Abbildungen. — (Eingegangen am 26. August 1921.)

In der Quantentheorie des Magnetismus und des Zeemaneffektes wird angenommen, daß der Vektor des Impulsmomentes eines Atoms nur ganz bestimmte diskrete Winkel mit der Richtung der magnetischen Feldstärke $\mathfrak{H}$ bilden kann, derart, daß die Komponente des Impulsmomentes in Richtung von $\mathfrak{H}$ ein ganzzahliges Vielfaches von $h/2\pi$ ist[1]). Bringen wir also ein Gas aus Atomen, bei denen das gesamte Impulsmoment pro Atom — die vektorielle Summe der Impulsmomente sämtlicher Elektronen des Atoms — den Betrag $h/2\pi$ hat, in ein Magnetfeld, so sind nach dieser Theorie für jedes Atom nur zwei diskrete Lagen möglich, da die Komponente des Impulsmomentes in Richtung von $\mathfrak{H}$ nur die beiden Werte $\pm h/2\pi$ annehmen kann. Denken wir z. B. an einquantige Wasserstoffatome, so müssen die Ebenen der Elektronenbahnen sämtlich senkrecht auf $\mathfrak{H}$ stehen.

Hieran knüpft sich sofort folgender naheliegender Einwand. Wenn wir einen Lichtstrahl senkrecht zu $\mathfrak{H}$ in das Wasserstoffatomgas schicken, so wird der parallel zu $\mathfrak{H}$ schwingende elektrische Lichtvektor, der die Elektronen aus ihrer Bahnebene herauszieht, eine ganz andere Fortpflanzungsgeschwindigkeit haben als der senkrecht zu $\mathfrak{H}$ schwingende, der die Elektronen in ihrer Bahnebene verschiebt. Das Gas müßte also starke Doppelbrechung zeigen, und zwar müßte der Betrag der Doppelbrechung unabhängig sein von der Stärke des Magnetfeldes. Auch bei komplizierteren einquantigen, ja sogar mehrquantigen Atomen müßte, wie sich leicht übersehen läßt, ein solcher Effekt eintreten, und ebenso ändert die Berücksichtigung der Wechselwirkung der Atome bei nicht allzu dichten Gasen nichts Wesentliches. Ein derartiger Effekt ist aber bisher noch nie beobachtet worden, obwohl er bei den zahlreichen auf diesem Gebiete unternommenen Experimentaluntersuchungen zweifellos hätte gefunden werden müssen.

Nun hat die obige Überlegung allerdings zur Voraussetzung, daß man die Dispersion des Gases auf Grund der klassischen Theorie nach

¹) Literatur s. A. Sommerfeld, Atombau und Spektrallinien, Braunschweig 1921.

Zeitschrift für Physik. Bd. VII. 18

atom carried a magnetic moment of about 1 Bohr magneton (= $eh/4\pi m_e$), an atomic beam of silver atoms should split in passing through a magnetic field of strong inhomogeneity" (*Twentieth Century Physics*, p. 164). In the 1922 paper, written jointly with Walther Gerlach, Stern described the initial results of their experimental work. In three later papers (not included here) Stern and Gerlach continued their investigations, which provided direct experimental proof of directional [space-] quantization in a magnetic field. 40522

Portrait of Mineralogist to Queen Victoria

98. **Tennant, James** (1808-81). Photograph portrait by Maull & Polyblank. Albumin print mounted on paper, subject identified beneath the photograph in a 19th century hand. [London,

1856-60.] 191 x 148 mm. (image); 283 x 230 (mount). Fine apart from one or two small stains on the mount. $1250

Fine photographic portrait of geologist, mineralogist, and mineral dealer James Tennant, from Maull & Polyblank's *Photographic Portraits of Living Celebrities* (London, 1856-60). At the age of 16 Tennant was apprenticed to a dealer in minerals, taking over the business on his master's death. "In 1838, on [Michael] Faraday's recommendation, Tennant was appointed teacher of geological mineralogy at King's College, the title being afterwards changed to professor. In 1853 the professorship of geology was added . . . He was also from 1850 to 1867 lecturer on geology and mineralogy at Woolwich. He had an excellent practical knowledge of minerals, and, when diamonds were first found in South Africa, maintained the genuineness of the discovery, which at first was doubted. He was an earnest advocate of technical education, giving liberally from his own purse to help on the cause, and persuading the Turners' Company, of which he was master in 1874, to offer prizes for excellence in their craft. . . . When the koh-i-nor [diamond] was recut Tennant superintended the work, becoming mineralogist to Queen Victoria in
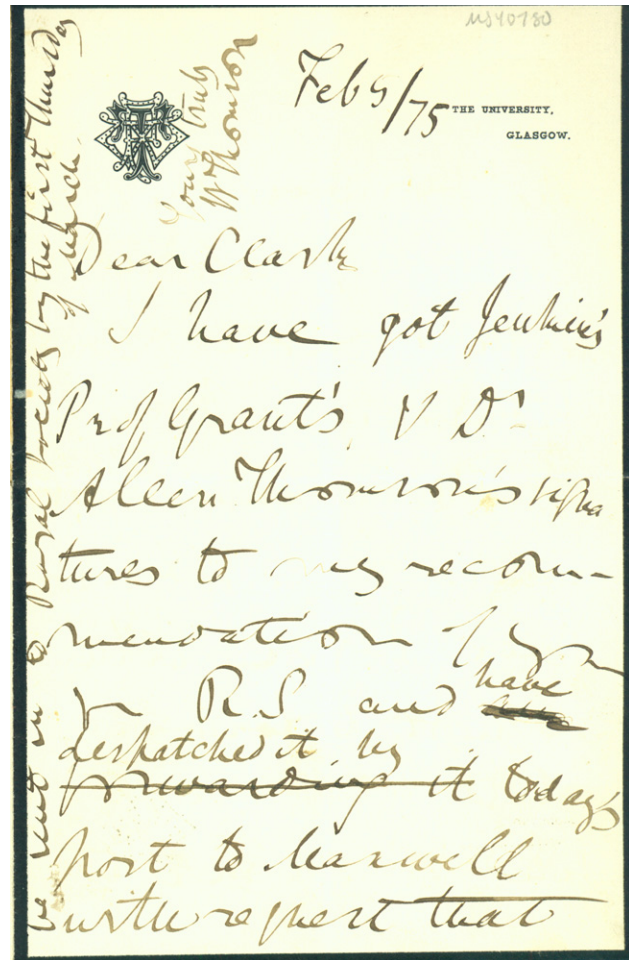
1840, and he had the oversight of Miss (afterwards Baroness) Burdett-Coutts's collection of minerals. He was elected a fellow of the Geological Society in 1838, and president of the Geological Association (1862-3)" (*Dictionary of National Biography*).

Tennant is shown seated at a table on which are displayed a number of objects representing his interests, including a nautilus shell, several crystals and a model of a crystal structure. In his hands is a lathe, representative of his involvement with the Turners' Company. 40529

Getting into the Royal Society

99.   **Thomson, William, first Baron Kelvin** (1824-1906). Autograph letter signed to Latimer Clark. Glasgow, February 5, 1875. 4pp. 177 x 112 mm. Traces of mounting present. Provenance: Latimer Clark. $1500

The Scottish physicist William Thomson (later Lord Kelvin) became involved in Cyrus Field's Atlantic cable enterprise in late 1856 or early 1857, when he was named to the board of directors of the Atlantic Telegraph Company. Thomson, who "saw telegraphy as an integral part of mathematical physics" (Smith and Wise 1989, 666), took a scientific approach to the design and construction of long-distance submarine cables and signaling equipment, applying theoretical principles he had learned through his studies of electrical phenomena. Thomson's recommendations were opposed by the Atlantic Telegraph Company's supervising electrician, E. O. Wildman Whitehouse, a self-taught engineer whom Field had put in charge of designing and manufacturing the cable. Whitehouse had little use for theory, which he believed had no place in the practical world of commercial enterprise; however, his disdain for theoretical knowledge proved disastrous, for his designs were fundamentally unsound, and the first complete Atlantic cable, laid in 1858, failed only weeks after it had been installed. The superiority of Thomson's scientific approach to submarine telegraphy was brought out in a subsequent government investigation, and later undersea cables were constructed to Thomson's recommendations.

Thomson's letter to Clark is concerned with his attempt to get Clark into the Royal Society, for which he had solicited the support of no fewer than seven Royal Society members including British engineer Fleeming Jenkin (1833-85), who served with Thomson and Clark on the important Committee on Standards of Electrical Resistance of the British Association for the Advancement of Science; Allen Thomson (1809-84), "the first of the great biological teachers of the nineteenth century" (DNB); Scottish astronomer Robert Grant (1814-92); Astronomer Royal George Biddell Airy (1801-92), with whom Clark had worked to develop a country-wide telegraphic system for reporting Greenwich Mean Time; electrical engineer Charles Walker (1812-82), sender of the first submarine telegraph message; and Thomson's close friend George Gabriel Stokes (1819-1903), Lucasian professor of physics at Cambridge, whose discovery of the nature of fluorescence had important ramifications for spectroscopy. Also mentioned as helping in this project is James Clerk Maxwell (1831-79). Thomson's attempt apparently failed, as Clark was not elected to the Royal Society until 1889. *Origins of Cyberspace* 205. 40780

The Most Comprehensive Reference Work on the Historical Literature of Computing

100. **Tomash, Erwin & Michael R. Williams.** The Erwin Tomash library on the history of computing. An annotated and illustrated catalog. 3 vols. 1572 pages, with approximately 4000 illustrations. Privately printed, 2009. 277 x 214 mm. Soft covers, in slipcase. $600

This extensively annotated catalogue with approximately 4000 illustrations describes the library formed by computing pioneer Erwin Tomash of over 3000 books and manuscripts on the history of mathematics and computation issued between 1180 and 1955. It is the most comprehensive reference work ever published on the historical literature of computing from its beginnings to the early years of electronic computers.

In his introduction, Tomash writes: "The collection as a whole documents the roots of the history of

computing. Included in its scope are books on all forms of reckoning, including finger reckoning, and on other aids to calculation such as the slide rule and the abacus. . . . I included early aids to measurement (instruments), not to mention the very basis of calculation (arithmetic), planetary calculations (astronomy), volumetric computation (gauging), calendric calculation (computus), land measurement (surveying), position reckoning (navigation), calculations associated with erecting sundials (dialing), and, of course, the slide rule, the sector, and mathematical tables. In this admittedly broad view, the modern computer is the natural outgrowth of the continuing search for better, more accurate 'scientific instruments' and of an associated need for 'aids to calculation' to analyze the date arising from measurements made with these instruments." 40512

On the Fabric of the Human Body—Complete Translation in English

101. **Vesalius, Andreas** (1514-64). On the fabric of the human body. A translation of *De humani corporis fabrica libri septem.* Translated by William Frank Richardson and John Burd Carman. 5 volumes. San Francisco and Novato: Norman Publishing, 1998-2009. Cloth, pictorial dust-jackets. All volumes printed on 80-pound Mohawk Superfine acid-free paper. $275 per volume

Vesalius's *De humani corporis fabrica* (1543) is one of the world's most famous books, and probably the greatest book in the history of anatomy. This award-winning translation by Richardson and Carman is now complete, and available in five volumes:

Vol. I: *Book I, The Bones and Cartilages*

Vol. II: *Book II, The Ligaments and Muscles*

Vol. III: *Book III, The Veins and Arteries; Book IV, The Nerves*

Vol. IV: *Book V, The Organs of Nutrition and Generation*

Vol. V: *Book VI, The Heart and Associated Organs; Book VII, The Brain*

All of Vesalius's famous woodcut anatomical illustrations are reproduced, and each volume contains historical introductions and extensive notes. The last volume

concludes with a series of indexes to the fifth volume and the complete set, which will greatly add to the usefulness of the translation. These include Dr. Richardson's translation of Vesalius's original index to the *Fabrica*, which represents Vesalius's outline of key discoveries and ideas in the *Fabrica*, and a set of cumulative indexes to all five volumes of *On the Fabric of the Human Body*.

Important Scientific Library

102. [**Vrolik, Willem** (1801-63).] Catalogue de la superbe bibliothèque d'ethnographie, de zoologie, d'anatomie comparée, etc. . . . 8vo. xii, 105pp. (last page printed on inside back wrapper). Amsterdam: Frederik Muller, 1865. 220 x 151 mm. Modern quarter morocco, marbled boards in period style, original printed wrappers bound in. Wrappers a bit soiled, otherwise very good. Ownership inscription of Dr. G. J. Fisher on front
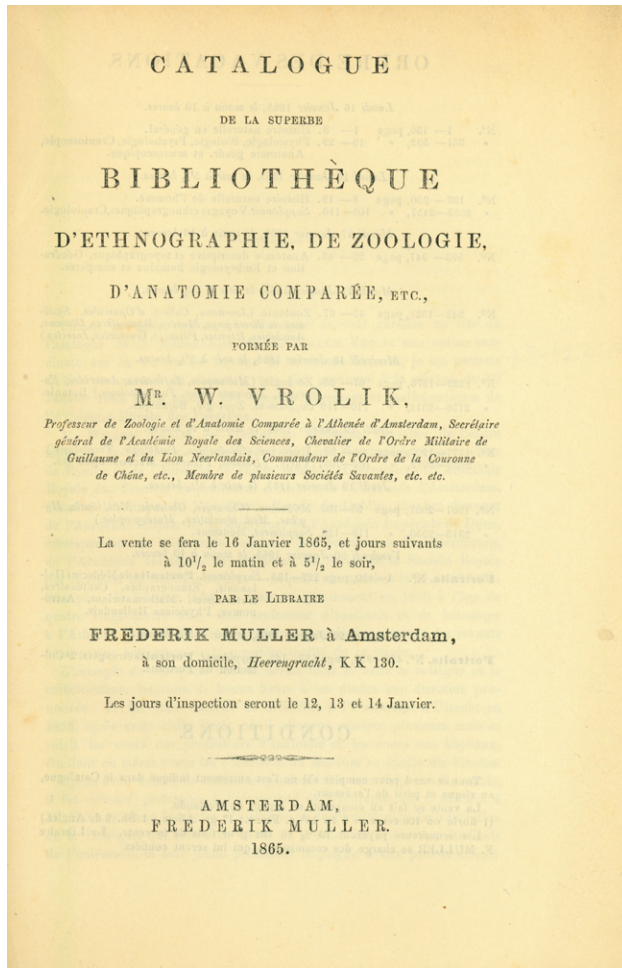
wrapper; a few marginal notes probably his.

$1500

First Edition. The Dutch physician Vrolik made significant contributions to comparative anatomy and to pathology, publishing anatomical studies of the chimpanzee, the manatee and other animals, and issuing several works on teratology, embryology and pathological anatomy, including the magnificent folio *Tabulae ad illustrandam embryogenesin hominis et mammalium* (1849). His library, consisting of over 2000 volumes on zoology, comparative anatomy, ethnography and related subjects, was sold at auction two years after his death; it included important works by Cuvier, Gould, Owen, Darwin, Humboldt, etc. An interesting association copy from the library of Dr. 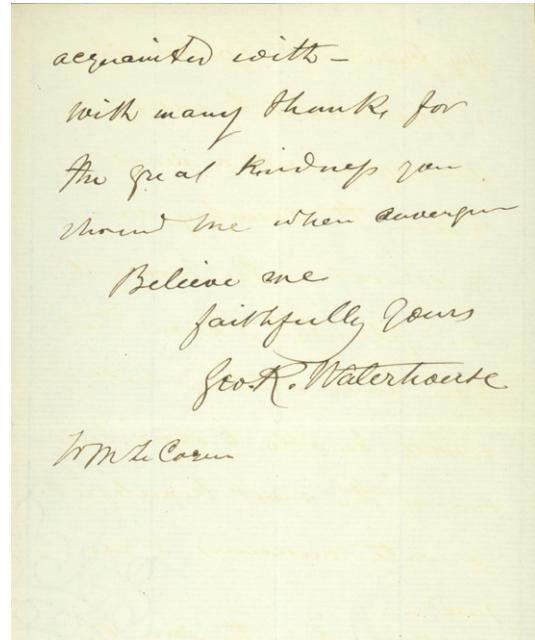G. J. Fisher of Sing Sing, NY, founder of the Brooklyn Academy of Medicine; Dr. Fisher made important contributions to the literature of teratology himself. For Vrolik, see Hirsch. 40838

From One of the Editors of Darwin's "Zoology of the Voyage of the Beagle"

103. **Waterhouse, George Robert** (1810-88). Autograph letter signed to Henri Lecoq (1802-71). [London] British Museum, August 26, 1852. 2 – 1/2 pages. 183 x 115 mm. Light soiling along folds, but fine otherwise. $1750

From British naturalist George Waterhouse, curator of the Zoological Society of London's museum and compiler of Part II (Mammalia) of Darwin's *Zoology of the Voyage of the Beagle* (1838), to French botanist and geologist Henri Lecoq, professor of botany and mineralogy at the University of Clermont-Ferrand and author of several scientific treatises, including *Principes élémentaires de botanique* (1828) and *Étude de la géographie botanique de l'Europe* (1854). Darwin referred to the latter work, and to Lecoq's views on species modification, in the preface to the third edition of *On the Origin of Species* (1861): "A well-known French botanist, M. Lecoq, writes in 1854 (*Etudes sur géograph. bot.*, tom. I, p. 250), 'On voit que nos recherches sur la fixité ou la variation de l'espèce, nous conduisent directement aux idées émises par deux homes justement célèbres, Geoffroy Saint-Hilaire et Goethe.' Some other passages scattered through M. Lecoq's last work, make it a little doubtful how far he extends his views on the modification of species."

In his letter to Lecoq Waterhouse introduces the young geologist Charles Gould (1834-93), son of the famous ornithologist John Gould (1804-81); like Waterhouse, the elder Gould had also worked on the *Zoology of the Voyage of the Beagle*, preparing Part III (Birds), published between 1838 and 1841. Charles Gould was the first geological surveyor of Tasmania, holding this post from 1859 to 1869. Charles graduated from the University of London in 1853, so he was still a student at the time Waterhouse wrote this letter. The letter reads as follows:

> Some few years back I visited Clermont on my way to Neschers to see M. Croizet, and upon that occasion I received much information from you about Auvergne, and especially about the mineral products of the neighbourhood of Clermont.

> May I upon the strength of this short acquaintance venture to introduce to you my friend Mr. Gould who is just about to visit Auvergne with a view of seeing the country, and of collecting the minerals and plants—I know that you have studied both, & will be able to show him one of the most beautiful private museums I ever saw.

> Mr. Gould is the son of the great ornithologist of that name whose splendid works you are no doubt acquainted with.

In the second paragraph Waterhouse refers to Lecoq's extensive collections of natural history specimens, which he left to the city of Clermont-Ferrand on his death. These collections provided the foundation of the Muséum Henri Lecoq, the most important natural history museum in the Auvergne region. 40702

First Report on Programming a Stored-Program Computer

104. **Wilkes, Maurice** (1913-) *et al.* Report on the preparation of programmes for the EDSAC and the use of the library of subroutines. N.p., 1950. Dittoed document in two colors. Original tan printed wrappers, cloth spine. Signed by Wilkes on the front wrapper. Boxed. [3], 40 [2], 26, 39, xi ff. Laid in are a single dittoed errata sheet
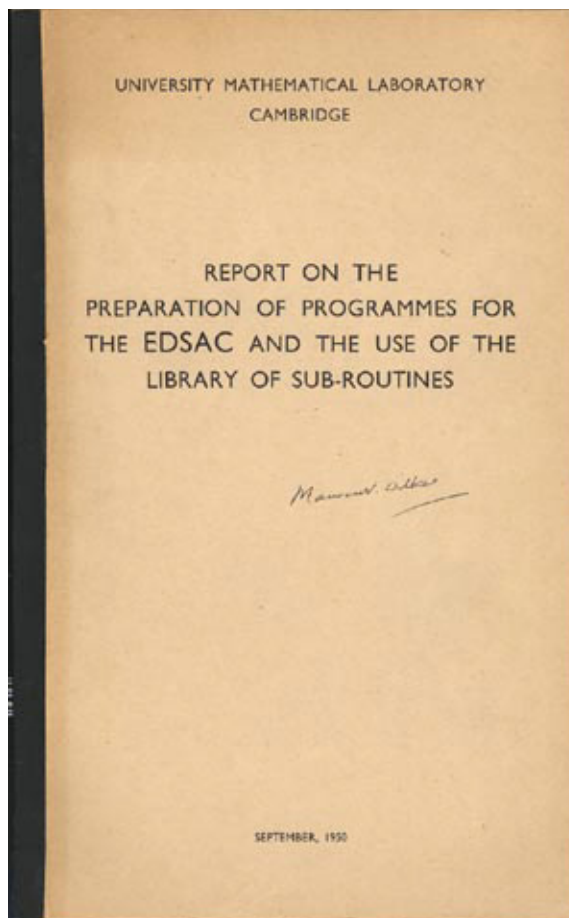
and a two-sheet dittoed and stapled document titled "University Mathematical Laboratory, Cambridge. Applications of the EDSAC, to 1st September 1950," describing supplementary material. 323 x 201 mm. Provenance: Andrew D. Booth. Occasional insignificant spotting. $25,000

The first report on how to program an operational stored-program computer. The dittoed report was prepared by Wilkes and a fifteen-man team of researchers at Cambridge's University Mathematical Laboratory, and distributed to no more than one hundred people— "everyone we thought would be interested, both in the United Kingdom and abroad" (Wilkes 1985, 149). The material in this report was published the following year with very few changes in Wilkes, Wheeler, and Gill's *Preparation of Programs for an Electronic Digital Computer* (1951).

When *Origins of Cyberspace* was written this report was not cited in OCLC or NUC, and RLIN noted only the Harvard Library copy. The copy we are offering is from

Dear Sir

I have the pleasure to inform you that our friend's picture is arrived without having suffered any injury, except that the canvas has been shaken loose and wants stretching, which can easily be done. I also beg to return my best thanks for the very elegant specimens of Mrs. Turner's arts which you have sent me, and I hope at some future time you will make good your obliging offer of letting me have a few more, as there are several of my friends who will be disposed to be beggars on the occasion

Believe me Dear Sir
very truly yours
Thomas Young

Dawson Turner Esq

the library of computer pioneer Andrew D. Booth, director of the Birkbeck College Computation Laboratory in the 1940s and 1950s. While at Birkbeck College Booth developed several all-purpose digital computers, including the Automatic Relay Calculator (ARC), the Simple Electronic Computer (SEC), the APE(X)C, and the MAC, and also developed large-scale magnetic-drum memory systems for long-term data storage. *Origins of Cyberspace* 1027. 39248

From the Author of the Wave Theory of Light

105. **Young, Thomas** (1773-1829). Autograph letter signed to Dawson Turner (1775-1858).

[London] Welbeck Street, 7 December 1819. 1 page. 215 x 180 mm. Mounted. Fine. $1500

From British scientist Thomas Young, the founder of physiological optics and author of the wave theory of lights (see Garrison-Morton 1486-88, *Printing and the Mind of Man* 259, Dibner 152), to botanist and antiquary Dawson Turner, author of *The Botanist's Guide through England and Wales* (1805), the four-volume illustrated *Fuci, sive, Plantarum fucorum generi a botanicis ascriptarum icones descriptiones et historia* (1808-19), *Account of a Tour in Normandy* (1820), *Guide . . . towards the Verification of Manuscripts by Reference to Engraved Facsimiles* (1848) and several other works. Young's letter reads as follows:

Dear Sir, I have the pleasure to inform you that our friend's picture is arrived without having suf-

fered any injury, except that the canvas has been shaken loose and wants stretching, which can easily be done. I also beg to return my best thanks for the very elegant specimens of Mrs. Turner's arts which you have sent me, and I hope at some future time you will make good your obliging offer of letting me have a few more, as there are several of my friends who will be disposed to be beggars on the occasion. Believe me Dear Sir very truly yours Thomas Young.

"The very elegant specimens of Mrs. Turner's arts" that Young had received were most likely drawings or prints. Mary Turner was a skilled artist who had studied under both John Crome and John Sell Cotman; together with her equally talented daughters, she produced an enormous number of drawings, paintings, etchings and lithographs, which Turner used both in his own publications and as additional illustrations for the 8000 volumes in his library.

Young wrote this letter from his Welbeck Street address in London, where he had lived and practiced medicine since 1799. Autograph letters from Thomas Young are *rare*—this is the first we have handled in our nearly forty years in business. 40834
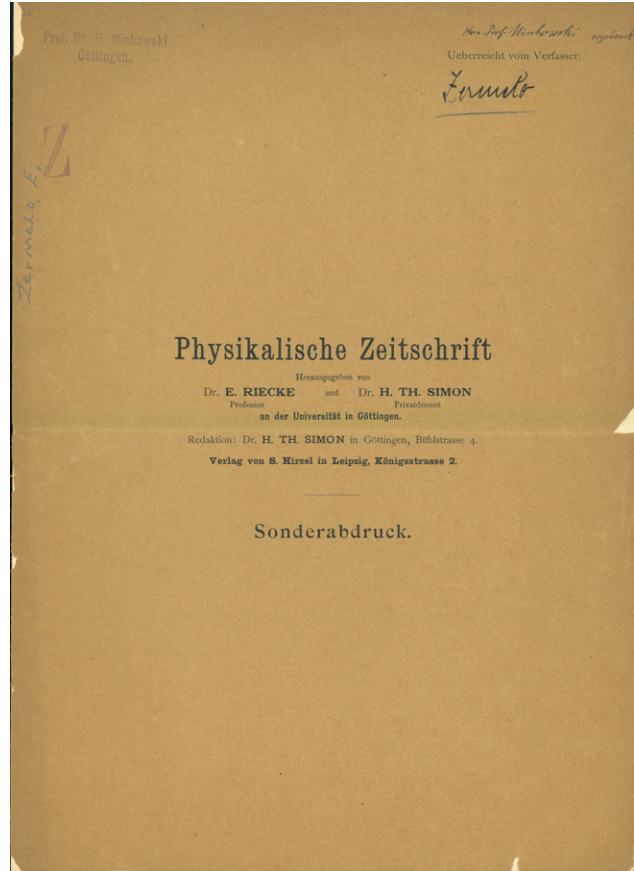
Presented to Minkowski

106. **Zermelo, Ernst** (1871-1953). Über die Anwendung der Wahrscheinlichkeitsrechnung auf dynamische Systeme. Offprint from *Phys. Zeit.* 1 (1900). 4pp. 281 x 200 mm. Original printed wrappers, creased horizontally, a few minor chips. *Inscribed to Hermann Minkowski* (1864-1909) on the front wrapper: "Hrn. Prof. Minkowski ergebenst." Minkowski's ownership stamp on front wrapper. From the library of *Theodore von Karman* (1881-1963), with his characteristic catalogue stamp and docketing. $750

    First Separate Edition. Zermelo, like David Hilbert, was a mathematician with a strong interest in physics. In the early part of his career Zermelo wrote several papers on kinetic theory and statistical mechanics, including the present paper on the application of probability theory to dynamic systems; his work in this area led to "a penetrating discussion with Boltzmann on the explanation of irreversible processes" (DSB). He also translated into German two important works in physics, Glazebrook's *Light* (1897) and Gibbs' *Elementary Principles of Statistical Mechanics* (1905). Einstein first learned of Gibbs' work by reading Zermelo's German translation. Zermelo presented this copy of his paper to Hermann Minkowski, originator of the concept of the space-time continuum; it later passed into the library of Theodore von Karman, founder of modern aviation and space travel. (Zermelo and von Karman were at Göttingen together; once, after hearing a talk given by von Karman on applied mathematics, Zermelo told him that "of all the applied idiots I think you are the only one with the possibility of being educated.") DSB. Von Karman, *The Wind and Beyond,* p. 50. 36965

Rare Anatomical Fascicules

107. **Zimmermann, Johann Carl E.** Anatomische Darstellungen zum Privat-Studium. Small
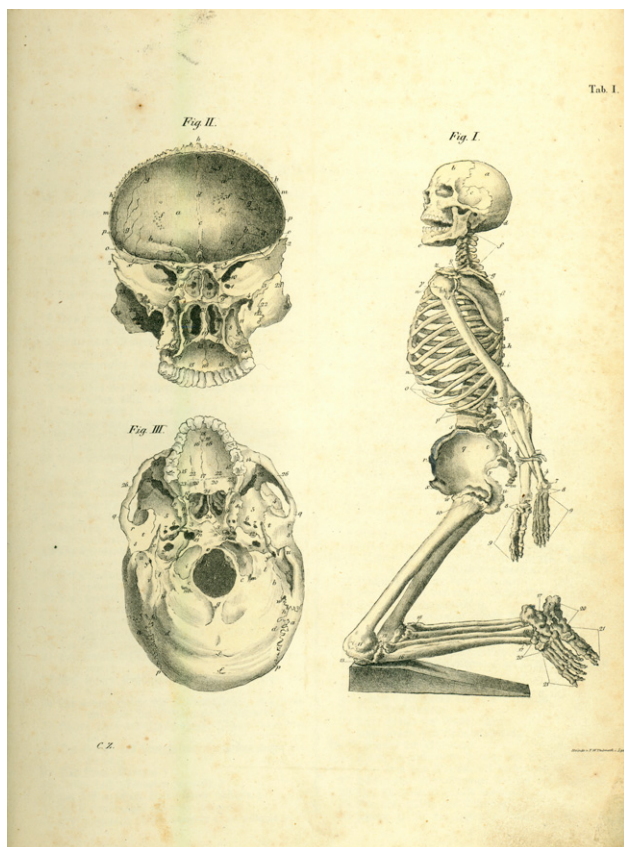
folio. 20 fascicules bound in one volume. Variously paginated. 78 plates, some with hand coloring. Leipzig: Fischer, n.d. [1828-35]. 290 x 200 mm. 19th century half sheep, hinges cracked, light wear. Minor foxing and toning, but very good. 19th century ownership signature ("F. A. Hofmann") on verso of front free endpaper. $2750

First Edition of these anatomical fascicules, published for the benefit of impecunious students to provide them an inexpensive way to gain "a more detailed knowledge of the human body and its parts." *Rare*—OCLC cites only four copies, three of them held outside the United States (the fourth is at the National Library of Medicine). 31818
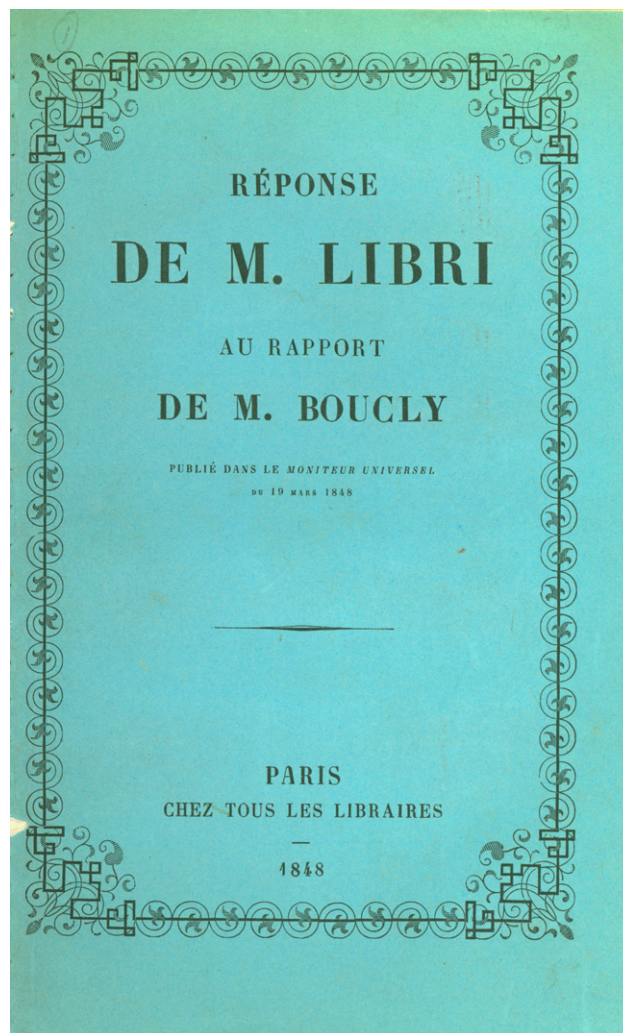
The Libri Affair: A Collection of Books and Pamphlets on History's Most Notorious Book Thief

108. **Libri, Guglielmo** (1803-69). Collection of 19 books and pamphlets on the "Libri Affair," as described below. V.p., 1848-80. Various sizes. Most items in modern wrappers; see below for detailed condition statements. $7500

Like many of the greatest villains, Count Guglielmo Libri Carucci dalla Sommaja (1803-69), more generally known as Guglielmo Libri, combined brilliance and creativity with deep criminality. An outstanding mathematician, pioneering historian of science, political reformer, paleographer and overall savant, Libri applied his expert knowledge of rare

books and manuscripts to the production of legitimate scholarly works; however, in a time when security was very lax or virtually non-existent in French and Italian libraries, he also used his knowledge to commit book thefts and book crimes on a virtually unimaginable scale. Libri collected a library that may have exceeded 40,000 volumes, many of which he stole from French and Italian institutions. He was also an active antiquarian bookseller who sold primarily at numerous auctions both pseudonymously or under his own name. Nicolas Barker wrote of Libri that "no single person did more to change the face of bibliophily in the nineteenth century."[1]

For his thefts in France Libri was indicted in 1848, eventually convicted in absentia in 1850, and sentenced to ten years in prison, which included hard labor. Before his conviction in France he was able to escape to England, which did not recognize French courts, with much of his enormous library. From London Libri waged his own propaganda and disinformation war, publishing numerous lengthy books and pamphlets in his defense, both in London and Paris. Much of his disinformation consisted of focusing attention on the scandalous or non-existent state of security in French and other European libraries, many of which had not been catalogued for decades or centuries, or had only been very inadequately catalogued. The result of these security lapses, Libri showed, was the wide circulation in the book trade of thousands of books and manuscripts stolen from institutional collections. Another issue that Libri took up was the lack of adequate descriptions of library-owned copies of rare books, which caused institutional copies to be confused with copies circulating in the trade. Of course Libri also cleverly exploited these security lapses while committing his crimes.

Remarkably, most of the pamphlets published throughout the Libri Affair defended Libri, creating an environment so confused and heated with accusations on both sides that Libri was able to go about his business in England with impunity, selling huge numbers of rare books and manuscripts at public auction to some of the greatest collectors in the world. All of the 19 items listed below concern the accusations against him and their defense. They include some of the numerous and very lengthy documents that Libri published in his own defense and writings by his supporters. Even after his conviction his friends in France appealed his case until 1861. Only after Libri's death did the French paleographer Leopold Delisle prove Libri's thefts incontrovertibly. In the 1880s large numbers of books and manuscripts that Libri stole were sold back to the Bibliothèque nationale de France and to the Bibliotheca Medicea Laurenziana in Florence.

In spite of the cloud over title to much of his library, Libri held a series of four famous auction sales at Sotheby's between 1859 and 1864 with catalogue descriptions only he could have written, and his library was widely dispersed. These sales

> ". . . could fairly be said to have changed and enlarged the pattern of book-collecting in the English-speaking world. The first, of no less than 1190 manuscripts, added an important dimension to the Bibliotheca Lindesiana and had a significant impact on the veteran Sir Thomas Phillipps; the last, the 'Reserved Portion', added pre-Columbian gold, the Becket *chasse*, old master drawings and jeweled bindings to the staple of manuscripts. But the objects were less important than the cataloguing, in which the full range of Libri's scholarship and salesmanship, both far ahead of their time, were deployed. These are the monuments by which Libri's extraordinary book-learning should be judged." [2]

The Libri Affair may be the most extensive and long-lasting controversy in the history of book collecting, bookselling, and book theft, involving more people and evidence and more important items stolen than any other. Most of the pamphlets in this collection were issued in small numbers, and are very difficult to obtain.

The collection of 19 items as listed below: $7500.

1. **Libri.** Réponse de M. Libri au rapport de M. Boucly. 115pp. Paris: Chez tous les libraries, 1848. Original printed wrappers (spine lacking). 211 x 167 mm. Traces of stab sewing.

2. **Libri.** Réponse de M. Libri au rapport de M. Boucly. xii, 86, [1, errata]pp. London: Rivington; Barthes & Lowell [etc.], 1848. 214 x 132 mm.

---

1. [Barker, Nicolas]. "Libri", *The Book Collector* XLVI, no. 1, 9.

2. Barker, *op. cit.*, 22. The primary reference for Libri is Ruji & Mostert, *The Life and Times of Guglielmo Libri (1802-1869),* Hilversum, 1995.

19th cent. paste paper boards, spine a bit faded and worn; original printed wrappers bound in.

3. **Libri.** Lettre a M. de Falloux . . . contenant le récit d'une odieuse persécution et le jugement porté sur cette persécution par les hommes les plus compétents et les plus considérables de l'Europe . . . xvi, 327pp. Paris: Paulin, 1849. 214 x 133 mm. 19th cent. quarter calf, mottled boards. Minor foxing, library stamp on title.

4. **Lacroix, Paul.** Cent et une lettres bibliographiques. [1st series, 3rd livraison]. 73-116pp. 1849. 208 x 134 mm. Modern wrappers.

5. **Brunet, Gustave.** Lettre au bibliophile Jacob au sujet de l'étrange accusation intentée contre M. Libri . . . 32pp. Paris: Paulin, 1849. 211 x 135 mm. Original printed wrappers, stab-sewn.

6. **Jubinal, Achille.** Lettre à M. Paul Lacroix (bibliophile Jacob), member de la Commission des Monuments Historiques . . . 14pp. Paris: Paulin, 1849. 208 x 134 mm. Modern wrappers.

7. **Libri.** Lettre de M. Libri à M. le Président de l'Institute de France. 72pp. London: Barthès & Lowell, 1850. 208 x 134 mm. Modern wrappers.

8. **Libri.** Lettre de M. Libri à M. Barthélemy Saint-Hilaire, administrateur du Collège de France. 31pp. London: Barthès & Lowell, 1850. 208 x 134 mm. Modern wrappers.

9. **Lamporecchi, Ranieri.** Mémoire sur la persécution qu'on fait souffrir en France à M. Libri. Second edition. 82pp. London: Barthes & Lowell, 1850. 208 x 134 mm. Modern wrappers.

10. **Jubinal, Achille.** Une lettre inédit de Montaigne . . . précédée d'un avertissement et suivie de l'indication détaillée d'un grand nombre de soustractions et mutilations qu'a subies depuis un certain nombre d'années des manuscrits de la Bibliothèque Nationale. 116pp. 2 folding plates. Paris: Didron, 1850. 208 x 134 mm. Modern wrappers.

11. **Lepelle de Bois-Gallais, Fr.** Encore une lettre inédite de Montaigne, accompagné d'une lettre à M. Jubinal, relative aux livres imprimés et manuscrits, aux autographes et aux divers fragmens précieux qui ont été soustraits à différentes époques de la Bibliothèque Nationale de Paris, et qui se trouvent en Angleterre. 32pp. Folding plate. London: Barthès & Lowell, 1851. 208 x 134 mm. Modern wrappers.

12. **Jubinal, Achille.** Un nouvel épisode de l'affaire Libri . . . 8pp. Paris: la librairie archéologique de Didron, 1851. 208 x 134 mm. Modern wrappers.

13. **[De Morgan, Augustus.]** The case of M. Libri. Reprinted from "Bentley's Miscellany" for July 1, 1852. 12pp. London: Richard Bentley, 1852. 208 x 134 mm. Modern wrappers.

14. **Celliez, Henry.** Mémoire sur les irrégularités de la procédure criminelle suivie contre M. Libri . . . iv, 92, 16pp. Paris: Ad. R. Lainé & J. Havard, 1861. 208 x 134 mm. Modern wrappers.

15. **Celliez, Henry.** M. Libri n'est pas contumax. [2], 14pp. Paris: Ad. R. Lainé & J. Havard, 1861. 208 x 134 mm. Modern wrappers.

16. Pétition addressée au Sénat sur l'affaire de M. Libri . . . 8pp. Paris: Ch. Lahure, 1861. 208 x 134 mm. Modern wrappers.

17. A petition addressed to the Senate in the case of M. Libri . . . 8pp. London: W. Jeffs, 1861. 208 x 134 mm. Modern wrappers.

18. Catalogue of the magnificent collection of precious manuscripts and objects of art and vertu, of M. Guglielmo Libri . . . which will be sold at auction, by Messrs. Sotheby, Wilkinson, & Hodge . . . on Wednesday, June 1, 1864 . . . [London:] Sotheby, Wilkinson & Hodge, 1864. [4], 44pp. 15 lithograph plates. 234 x 196 mm. Disbound.

19. **Stiattesi, Andrea.** Commentario storico-scientifico sulla vita e le opere del Conte Guglielmo Libri . . . Second edition. [6], 134pp. Florence: G. B. Campolmi, 1880. 212 x 135 mm. Original printed wrappers, stab-sewn, portion of back wrapper lacking.