

[7] CHUN

HISTORY OF SCIENCE, MEDICINE NATURAL & APPLIED SCIENCES

Neuchâtel SWITZERLAND

JEFF WEBER RARE BOOKS

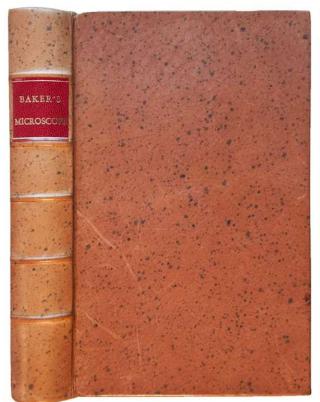
Catalogue 324

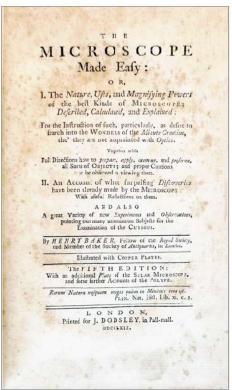


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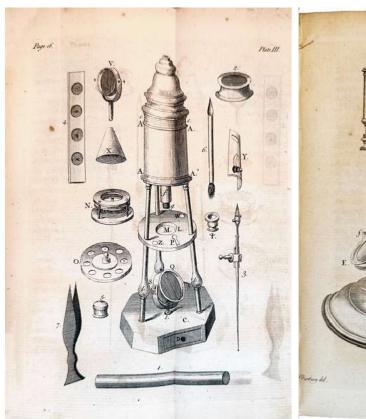


1. **BAKER, Henry** (1698-1774). The Microscope Made Easy. The fifth edition: with an additional Plate of the Solar Microscope, and some farther Accounts of the Polype. London: Printed for J. Dodsley, 1769. ¶ 8vo. xvi, 324 pp. 15 engraved plates (1 is unnumbered, facing p.22), folding table (p.36), index; some offsetting of plates, occasional foxing. Modern full speckled calf, raised bands, gilt-stamped red spine label, new endleaves. Bookplates of William Strong ["Fortis et Fidelis"] and Alfred M. Hellman, M.D.

\$ 500

Fifth edition, with additions (see title) of this extremely popular work which went into a number of editions. The first edition was issued in 1742, and was full of material that the author "compiled, abstracted and copied everything available about the instrument, even Leeuwenhoek's plates found in the archives of the Society" [Ratcliff, p.80]. This edition includes the discovery of the polyp. Even so, no one had studied Leeuwenhoek's instruments that were considered so valuable for his own pioneering and systematic research, until Baker took the task up some 20 years later: those instruments having been donated in 1723 on Leeuwenhoek's death. Arranged in two parts, the first

dealing with various types of microscopes, their employment and adjustment, including the instruments of Wilson, Leeuwenhoek, Culpepper, Scarlett, Cuff, and Lieberkuhn. The second part is devoted to the examination of natural specimens established by and similar to Hooke's *Micrographia*. This work and the author's Employment of the Microscope, contain the bulk of his more important communications to the Royal Society.



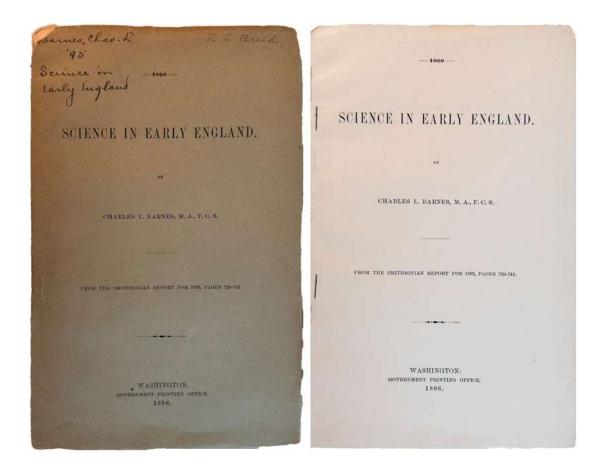


Ratcliff offers more insight to the relationship Baker had with the various persons involved with instrument making, including Cuff and Lieberkuhn. Some description of the distribution and translations of the edition are also mentioned. Ratcliffe also writes, "With, *The Microscope Made Easy*, Baker achieved an important place as microscopical observer in the Society. . " (p.180).

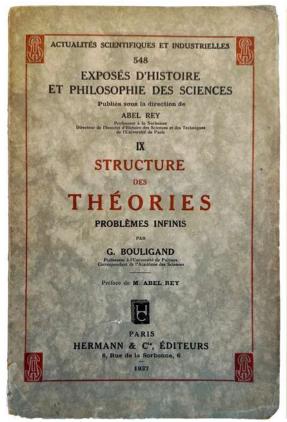
§ See: Dr. Marc J Ratcliff, *The Quest for the Invisible: Microscopy in the Enlightenment*, (2013), page 268.

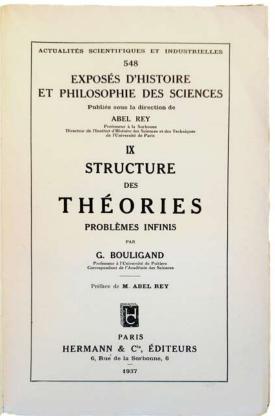
PROVENANCE: [1] William Strong ["Fortis et Fidelis"], D.D., Canon and 45 years Archdeacon of Northampton (1842-1886); [2] Alfred Myer Hellman, M.D. (1880-1955), took his medical degree at Columbia University, worked in New York, was a very well-known obstetrician. He was also an "avid" collector of medical books, represented by his bibliographical work: *A collection of early obstetrical books; an historical essay with bibliographical descriptions of 37 items, including 25 editions of Roesslin's Rosengarten*, New Haven, 1952.

§ See: Walter Debenham Sweeting, The New Guide to Peterborough Cathedral Comprising a Brief History of the Monastery. . ., (1893), p. 37.



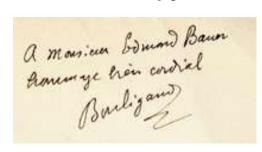
2. **BARNES, Charles L.,** F.C.S. *Science in Early England*. Washington: GPO, 1896. Series: *Smithsonian Report*, 1895. ¶ 8vo. pp. 729-741, [1]. Original printed wrappers; some brittleness to outer extremities. Signature of R.S. Breed. Good. \$7.50





3. **BOULIGAND, Georges** (1889–1979). *Structure des Theories Problemes Infinis*. Paris: Hermann & Cie, 1937. ¶ Series: *Actualites scientifiques et*

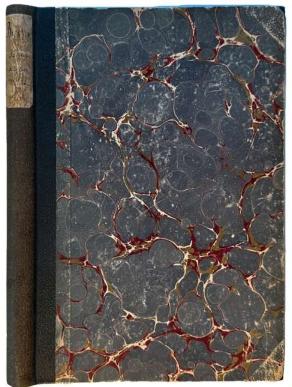
industrielles, 548; Exposes d'histoire et y philosophie des sciences, IX. 8vo. 57, [1], [3] pp. Original printed wrappers; spine end worn. Good. INSCRIBED BY THE AUTHOR to Edmond Henri Bauer (1880-1963). [S11541]



\$ 50

Georges Bouligand was a French mathematician who introduced paratingent cones and contingent cones.

PROVENANCE: Edmond Henri Bauer (1880-1963), French physicist born in Paris, worked at the *Ecole Superieure de Physique et Chimie Industrielles de la Ville de Paris* (ESPCI) under Langevin in 1905. See obituary of Bauer by Karl K. Darrow, Physics Today, June 1964, page 86.



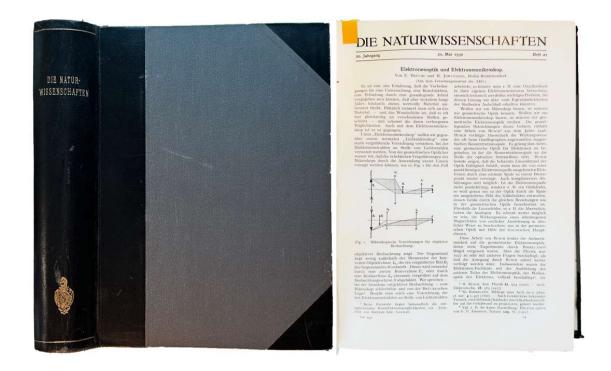


4. **BREUER, Adalbert**. Elementar entwickelte Theorie und Praxis der Functionen einer complexen Variabelen in organischer Verbindung mit der Geometrie. Vienna: C. Daberkow, 1898. ¶ 8vo. viii, 205 pp. Figs., index. Toned throughout, pencil signature on title-page, bookseller's ticket inside front cover. Quarter green pebbled cloth over marbled boards, paper spine title label; extremities rubbed, spine label worn. Ownership signature of Egon Ullrich. Rare. [S9014]

\$ 45

This work offers an 'elementary developed theory and practice of the functions of a complex variable in organic connection with geometry.'

PROVENANCE: Egon Ullrich (1902-1957) was an Austrian mathematician who worked on the theory of functions. His experiences included stays at University of Graz, University of Berlin, studied under Ernst Lindelof and Rolf Nevanlinna in Helsinki, assistant to Robert Konig in Jenaand, University of Marburg, Gottingen, University of Giessen, Frankfurt am Main, Tubingen.



5. **BRÜCHE, Ernst** (1900-1985) & **H. JOHANNSON**. "*Elektronenoptik* und Eletronenmikroskop." In: Die Naturwissenschaften, Vol. 20, No. 21, pp. 353-58. Berlin: Julius Springer, 1932. ¶ 4to. xxxvi, 984 pp. Illus. Contemporary half calf, small gilt crest on spine. Bookplate of Andras Gedeon. Very good.

\$ 150

The first announcement of the newly invented electron microscope.

It was Ernst Ruska and Max Knoll, a physicist and an electrical engineer, respectively, from the University of Berlin, who created the first electron microscope in 1931. This prototype was able to produce a magnification of four-hundred-power and was the first device to show what was possible with electron microscopy.

"Electron optics and its application in electron microscopy developed in the late 1920s and 1930s into a new branch of physics and physical technology. While some researchers like Ernst Ruska began their exploration of the new field in a university context, further developments soon concentrated in the research laboratories of the two major electro-technical companies in Germany, Siemens and AEG. Industrial research required new forms of cooperation of scientists, engineers and technicians, emphasized applied

science and - due to a stronger financial background - allowed a much easier access to large and expensive pieces of apparatus. An industrial research laboratory in Weimar Germany can therefore serve as an appropriate place to investigate the complex relationship of modernization and modernism in experimental physics. The talk will focus on developments in AEG's research institute which was founded in 1928. Carl Ramsauer, a former pupil of Philipp Lenard and professor of experimental physics in Danzig, was employed as its first director. Under his guidance, the institute explored a broad field of subjects, extending from the use of cinematic techniques to rationalize operation processes to the study of northern lights. Ramsauer's student Ernst Brüche, the head of the institute's general physics group, established the exploration of free electrons in electronic devices and the new field of electron optics as an important focus of the new laboratory. Electronics, however, was perceived as a domain of a limited and controllable modernization, as a means of an organic co-evolution of physical research and technical application." [Industrializing Electrons: Ernst Brüche and the Early Years of Electron Microscopy, Conference, Frankfurt am Main, 22-24 March 2006, Modernism in the Sciences, ca. 1900-1940].





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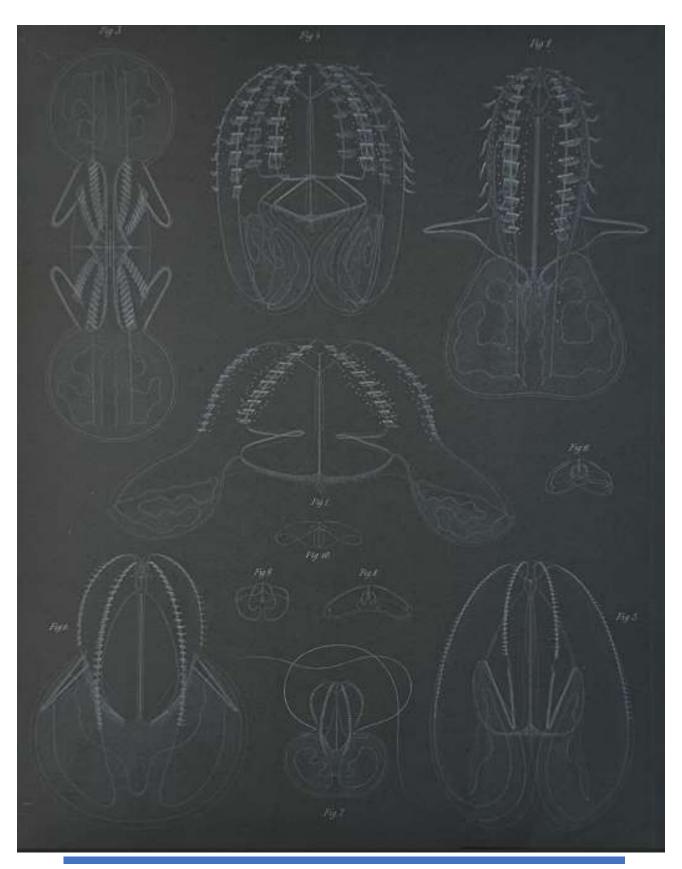
6. **CANCELLIERI, Francesco Girolamo** (1751-1826). Le due nuove campane di Campidoglio, con varie notizie sopra i campanili e sopra ogni sorta di orologi ed un'appendice di monumenti. Roma: Antonio Fulgoni, 1806. ¶ 4to. xvi, 200 pp. Full page engraved frontis-plate, engraved title-page vignette, two engraved vignettes in the text. Contemporary full vellum, ms. spine title; lightly soiled. Exlib bookplate St. Mary's College, Oscott, Birmingham, and spine label. Very good copy in the original vellum binding. [S14049]

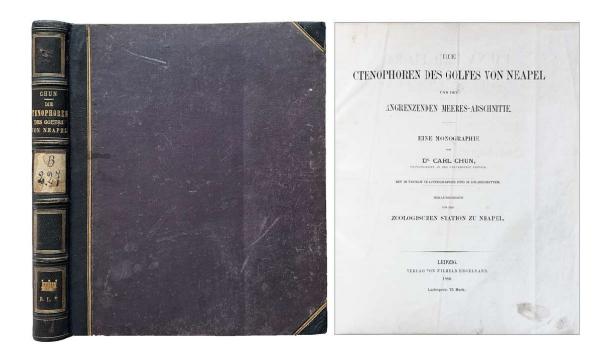
\$ 450

FIRST EDITION of this monograph on the two bells consecrated by Pope Pius VII on the Capitoline Hill in Rome. Michelangelo was responsible for the design of the square and the original buildings, and today the Piazza di Campidoglio is considered "... one of the most significant contributions ever made in the history of urban planning" [M. Trachtenberg, *Architecture: from Prehistory to Post-Modernism*, p. 31]. The first part of the work refers exclusively to bells; in the remaining half Cancellieri proceeds to detail the building history of the square and its palaces. There are many references to clocks and sundials (for civic buildings) in Milan, Venice, Padua, and Genoa, as well as a perpetual motion clock. The engraved plate shows the campidoglio and buildings surrounding a statue of Minerva, with Pius VII depicted on her shield. Cancellieri was appointed librarian for Cardinal Antonelli in 1775. The Cardinal's library was located in the Palazzo Pamphili in Piazza Navona; this post Cancellieri held till the latter's death in 1811.



CHUN





Beautifully Illustrated & Pioneering Study of Marine Ctenophores

7. CHUN, Carl (1852–1914). Die Ctenophoren des Golfes von Neapel und der Angrenzenden Meeres-Abschnitte. Eine Monographie . . . Herausgegeben von der Zoologischen Station zu Neapel. Leipzig: Wilhelm Engelmann, 1880. ¶ Series: Fauna und Flora des Golfes von Neapel. Large 4to. XVIII, 313, [1] pp. Series title with vignette, 22 figures, 18 plates (some folding, some in stunning lithography featuring a black background), each plate with printed leaves adjacent, tissues. Original half black morocco, purple cloth, gilt-stamping, raised bands and gilt compartments, marbled endleaves, foot of spine shows the ownership initials D.L.E.[or F, or P? – the last letter is partly rubbed away], ink-ms. paper shelf-label/location applied to spine; inner joints strengthened with cloth. Very nice copy.

\$ 1,500

First and only edition of this rare monograph written by a pioneering Carl Chung, who became a leading marine biologist of his day. This work is also beautifully designed and printed with lithographic plates featuring black backgrounds (suggesting the darkness of the sea) and delicately illustrated.

"In 1877, Chun spent several months in Naples, at Anton Dohrn's *Zoologischen Station Neapel*, a very popular destination for biologists at the time (see Dolan, 2023). In Naples, he devoted himself to the study of ctenophores, organisms

typical of the delicate gelatinous zooplankters easily destroyed in plankton nets. Chun's first publication on marine plankton was his "Habilitation Dissertation". The "Habilitation" was a terminal diploma allowing immediate academic appointment as "Privatdocent", who was paid for giving lessons, but more importantly, it was a qualification to be appointed eventually as a university faculty member (Goldschmidt, 1956). Chun's Habilitation Dissertation was on the anatomy of ctenophores, and like his Ph.D. dissertation, it was published first as a booklet (Chun, 1878) and then as an article (Chun, 1879). Chun's first monographic study, also on ctenophores, followed soon after. Entitled "Die Ctenophoren des Golfes von Neapel', it was a very large work composed of 313 pages of text and 18 plates (Chun, 1880). It was volume one of the famous series, the Flora und Fauna des Golfes von Neapel . . . Today, Chun is recognized as one of the early experts who elucidated the anatomy and development of siphonophores (e.g. Mackie et al., 1988). Recognized as an expert on gelatinous zooplankton, Chun would later author the Plankton Expedition reports on both siphonophores (Chun, 1897) and ctenophores (Chun, 1898)." – Dolan.

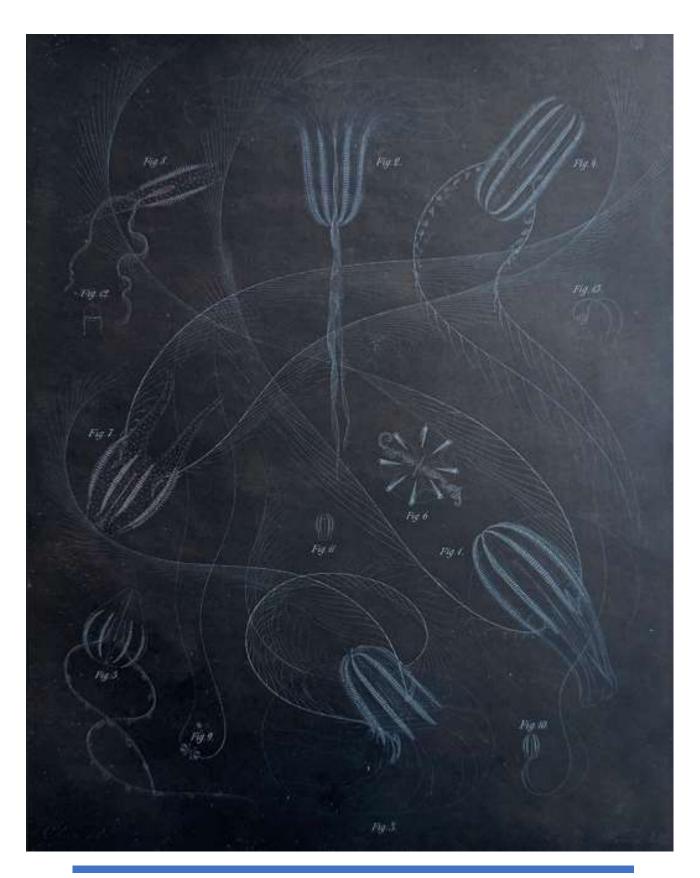
Chun was initially drawn to Carl Vogt (1817-1895) in 1882. Vogt was then Professor of Zoology and Geology at the University of Geneva. His work in Nepal also deeply interested Chun. It was Vogt's daughter Lilli, whom Chun would marry in 1884, and together they had two girls. I obtained this copy of Chun's work through a Swiss contact who had it in the family for a long time. There can be only a couple of reasons why someone would have a book like this in their collection, so I don't think it too presumptuous to suggest that either a family member of Vogt or a student in Geneva should have been the original owner of this copy. The only evidence of prior ownership is at the foot of the binding where the initials D.L.E.[or F, or P?] are stamped in gilt, suggesting ownership with those initials that date from the late 19th century. One of the girls, Lili, married Dr. Ernst Pringsheim Jr. (1881-1970), and it is not too distant to see a possible D.L.P. as the ownership of the book – could it be?

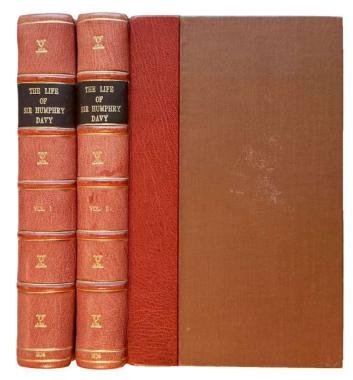
Dr. Carl Chun [Karl] (1852-1914), zoologist and deep-sea researcher, was a professor at the universities of Königsberg (1883) and Leipzig (1878). He was recognized as a specialist in ctenophores and squid. Chun used to take vacations on the Mediterranean to perfect his fishing techniques for pelagic marine animals. This is how he was in the region of the Gulf of Naples, Italy.

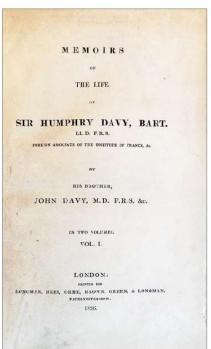
In 1881 Chun was elected a member of the German Academy of Natural Scientists Leopoldina.

§ DOLAN, John R. "Pioneers of plankton research: Carl Chun (1852–1914)." *Journal of Plankton Research*, Volume 45, Issue 6, November/December 2023, Pages 777–784.









8. [DAVY, Sir Humphry (1778-1829)] DAVY, John (1790-1868). *Memoirs of the Life of Sir Humphry Davy, Bart., by his brother John Davy.* London: Longman, Rees, Orme, Brown, Green, & Longman, 1836. ¶ Two volumes. 8vo. xii, 507; [4], 419, [1 errata] pp.; lacks frontispiece portrait, cellophane tape repair vol. I, pp. 253-4, vol. II, pp. 209-210. Figures (vol. II, p.8), index, errata. Modern quarter brown morocco over brown cloth, raised bands, gilt-stamped black leather spine labels and spine panels; small scuff on one cover. Former ownership signatures (vol. II) of Edward Lund, 1888 and G. Knacklow[?!], T. Davies, 1904. Very good.

\$ 125

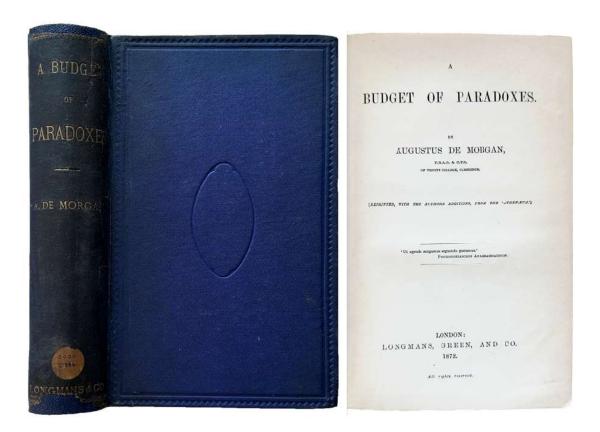
FIRST EDITION. This biography of Sir Humphry Davy was written by his brother John, himself a distinguished physician. "Sir Humphry Davy was British chemist and inventor who invented the Davy lamp and a very early form of arc lamp. He is also remembered for isolating, by using electricity, several elements for the first time: potassium and sodium in 1807 and calcium, strontium, barium, magnesium and boron the following year, as well as for discovering the elemental nature of chlorine and iodine. Davy also studied the forces involved in these separations, inventing the new field of

electrochemistry. Davy is also credited with discovering clathrate hydrates." [Wikip.].

The author, "Davy received the M.D. In 1814, submitting a dissertation on the blood, and was soon after commissioned in the army as hospital assistant. Shortly before the battle of Waterloo he was assigned to the hospital at Brussels, and his experience there determined him on a career in the army medical service, in which he spent his entire professional life, eventually attaining the rank of inspector general of hospitals. . . A diligent researcher and indefatigable writer, Davy derived his major scientific works from his medical service. Researches Physiological and Anatomical appeared in 1839, Diseases of the Army in 1862, and Physiological Researches in 1863. . . Davy was a persistent and oversensitive defender of his brother's reputation. He wrote a two-volume biography in 1836 and edited the Collected Works of Sir Humphry Davy in 1839-40 and a collection of letters and fragmentary works in 1858. He created a trivial quarrel with the gentle Faraday in the 1830's, and as late as the 1860's he was still defending Humphry's conduct as president of the Royal Society against renewed attacks by Charles Babbage." [DSB].

PROVENANCE (possibly): Edward Lund, MD, F.R.C.S. (1823-1898), Manchester Royal Infirmary, Professor of Surgery.

§ BM Readex Vol. 6, p. 1120; *DSB* Vol. III, pp. 604-5.



Presentation Copy from De Morgan's widow

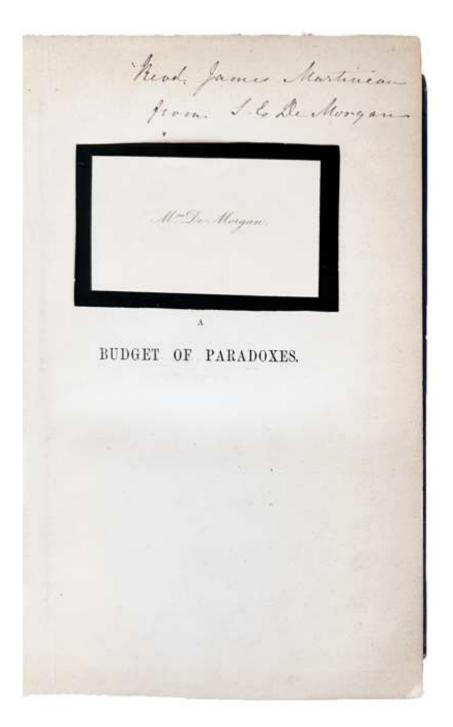
9. **DE MORGAN, Augustus** (1806-1971). *A Budget of Paradoxes*. London: Longmans, Green, 1872. ¶ 8vo. vii, [1], 511, [1], 24 pp. Ads dated March 1872. Original Royal blue blind- and gilt-stamped cloth; recased, rebacked with original spine mounted, preserving original cloth covers, original endleaves; inner joints neatly reinforced. Very good copy. INSCRIBED to Reverend James Martineau, a Unitarian minister, from S. E. De Morgan, written in her hand, with her mourning card outlined in black, mounted on the half- title. Martineau was a friend of Augustus De Morgan.

\$ 150

First book edition, previously issued in the 'Athenaeum'.

"Published posthumously in 1872, A Budget of Paradoxes is a compilation of De Morgan's column of the same name for the Athenaum, consisting mostly book reviews and focusing on so-called paradoxers, also referred to as pseudomaths (a De Morgan neologism) and pseudoscientists.

The pseudomaths De Morgan describes are mostly circle-squarers, such as Thomas Baxter, cube-duplicators, and angle-trisectors. One such angle-trisector was James Sabben, whose work received a one-line review from De Morgan:



"The consequence of years of intense thought"; very likely, and very sad.

Another pseudomath identified by De Morgan was James Smith, a successful merchant of Liverpool, who claimed that x = 31/8. De Morgan writes:

"Mr. Smith continues to write me long letters, to which he hints that I am to answer. In his last of 31 closely written sides of note paper, he informs me, with reference to my obstinate silence, that though I think myself and am thought by others to be a mathematical Goliath, I have resolved to play the mathematical snail, and keep within my shell . . . But he ventures to tell me that pebbles from the sling of simple truth and common sense will ultimately crack my shell . . . "

Among the many pseudoscientific ideas De Morgan discredits are Alfred Wilks Drayson's expanding Earth theory and Samuel Rowbotham's Zetetic Astronomy, or the flat Earth theory.

In his discussion of calculations of π De Morgan discusses at length Buffon's approximation and his own results using the method.

De Morgan gives space to non-technical subjects in Budget as well, religion in particular. De Morgan gives a favorable review of Godfrey Higgins Anacalypsis and provides several anecdotes about the views of great mathematicians on religion, notably Laplace and Euler.

De Morgan frequently displays humor in Budget, including various anagrams such as, "Great Gun, do us a sum!" ("Augustus De Morgan"), The Astronomer's Drinking Song, and the poem Siphonaptera, Budget was well-received but hard to categorize." [Wikip.].

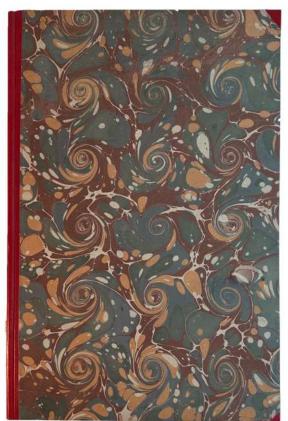
Sophia Elizabeth De Morgan (1809-1892), married Augustus De Morgan in 1837. She contributed the introduction to this volume. Relative to James Martineau, Sophia had written: "In accordance with the laws of the

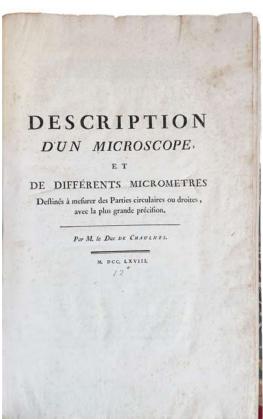
College the testimonials of all candidates were submitted to the Senate of Professors, who examined and reported on them to the Council, in whose hands rested the final appointment. From the first foundation the Unitarians had been among the most powerful supporters of the College, which could never have risen to its then condition without their assistance in money and effort. When it was first known that the Rev James Martineau, a Unitarian minister and a distinguished scholar, was a candidate for the chair of Mental Philosophy and Logic, a gossiping rumour came to the ears of my husband and myself that the Unitarians on the Council were working to bring in their own candidate. This was merely foolish talk among a few persons, but I mention it to show what my husband's feelings were on the subject of the appointment. When he heard the report he declared his disbelief in it, but said he would make inquiries, as there must be no suspicion of the preponderance of any one party in religion in that place. He inquired about the rumour, and, as he expected, found it false. No member of the Council at that time knew anything of the relative merits of the candidates. It was evident, even if any one who knew him well could have supposed it possible, that friendship for Mr Martineau, for whom he had a sincere, respect, did not influence his subsequent conduct." [Wikip.]

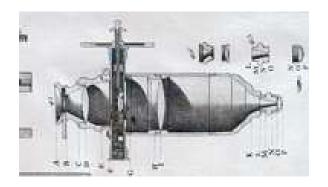
Augustus De Morgan was a British mathematician and logician. He is best known for De Morgan's laws, relating logical conjunction, disjunction, and negation, and for coining the term "mathematical induction", the underlying principles of which he formalized.

PROVENANCE: Sophia Elizabeth De Morgan Rev James Martineau (1805-1900) – George Ellery Hale (1868-1938) (his name does not appear in this copy, but it was his copy nonetheless] – Carnegie Foundation, Washington (ie., Mount Wilson Observatory) – Weber.

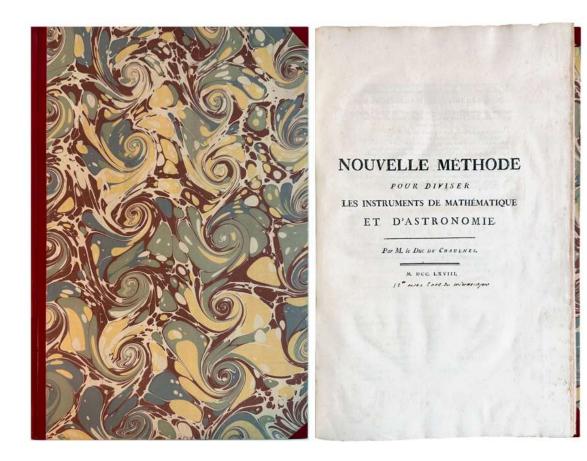
See: Despaux, Sloan Evans, Rice, Adrian C. "Augustus De Morgan's anonymous reviews for The Athenasum. A mirror of a Victorian mathematician" *Historia Mathematics*. 43 (2): 148-171, 2016.







10. **DUC DE CHAULNES, Le [Albert d'Ailly, Michel-Ferdinand d']** (1714-1769); **Académie Royale des Sciences (Paris).** *Description d'un Microscope, et de différents micromètres destines a mesurer des Parties circulaires ou droites, avec la plus grande précision.* [Paris], Académie Royale des Sciences de Paris, 1768. ¶ Series: *Description des Arts et Métiers.* Folio. [2]-18 pp. 6 engraved plates (including a total of 118 figures). Modern quarter red calf, gilt-stamped spine title, marbled boards, red calf tips. Near fine.

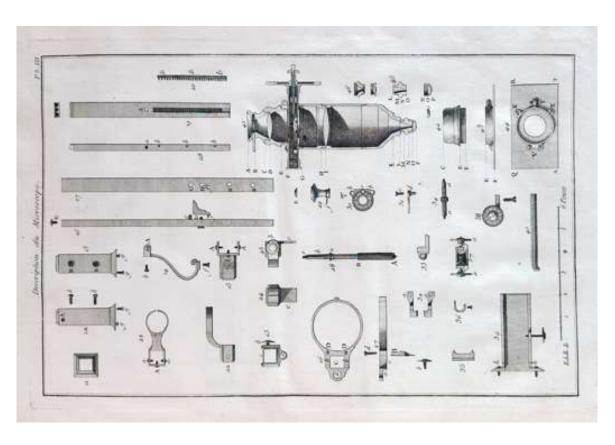


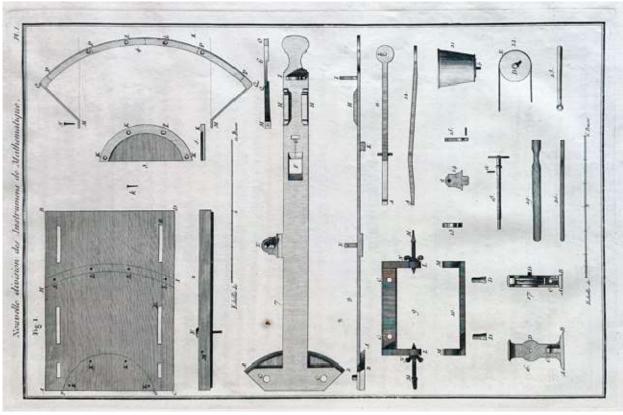
[WITH]: Nouvelle méthode pour diviser les instruments de mathématique et d'astronomie. [Paris], Académie Royale des Sciences de Paris, 1768. ¶ Series: Description des Arts et Métiers. Folio. [2], 44 pp. 15 engraved plates (including a total of 166 figures). Modern quarter red calf, gilt-stamped spine title, marbled boards, red calf tips. Near fine.

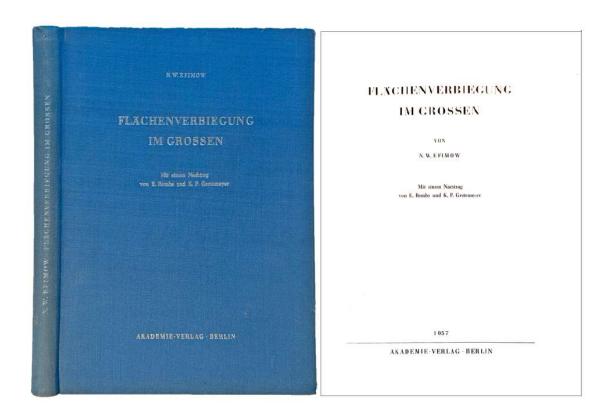
2 volumes: \$ 400

The first item describes a microscope of his own design, as he states, with "increased precision". Added to this he describes a micrometer, a depth gauge and a spherometer which was used for the precise measurement of the radius of curvature of a curved surface. The second paper describes mathematical and astronomical instruments.

Michel Ferdinand d'Albert, 5th Duke of Chaulnes, Duke of Picquigny and then Duke of Chaulnes from 1744, was a French astronomer, physicist and freemason. He was particularly interested in scientific instruments and used most of his income to build and collect them.







11. **EFIMOW, N. W. [Nikolai Wladimirowitsch]** (1910-1982).

Flachenverbiegung im Grossen. Berlin: Akademie, 1957. ¶ Mathematische Lehrbucher und Monographien. Herausgegeben von der Deutschen Akademie der Wissenschaften zu Berlin Forschungsinstitut fur Mathematik, Band 7. 8vo. xi, 233 pp. Figs., bibliography; stamp on front flyleaf. Blue cloth, silverstamped cover and spine title. Rare. [S9017]

\$ 45

German translation with supplemental information, an appendix, supplied by Eduard Rembs (1890-1964) and Karl Peter Grotemeyer (1927-2007), to reflect the current state of affairs. Translated by Marianne Rembs.

Large-scale surface bending was then a relatively new topic in mathematics. In 1900 Heinrich Liebmann (1874-1939) published the first work on the subject, being his dissertation. He offered the first conclusive proof of the rigidity of egg surfaces. Since then, the range of problems applied with this method, expanded. In 1936, a German mathematician, Stefan Cohn-Vossen (1902-1936), who had emigrated to Russia because of the political situation, brought to the attention of Russian mathematicians the elegant results and promising questions of bending theory with work that was both instructive and

captivating. His paper brought 'rich fruit' and influenced a number of Russian researchers who turned to bending theory and emerged with excellent success. Efimov's work gives an account of everything achieved up to 1948.

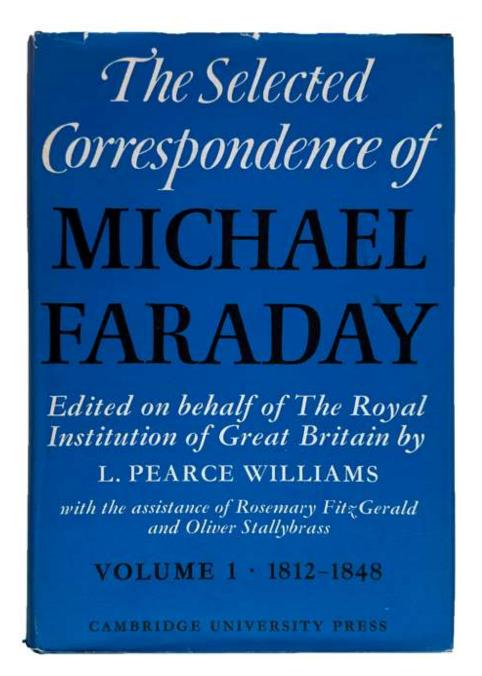
Nikolai Vladimirovich Efimov, a Soviet mathematician, was known for his work in geometry and his books at *Editions Mir*.

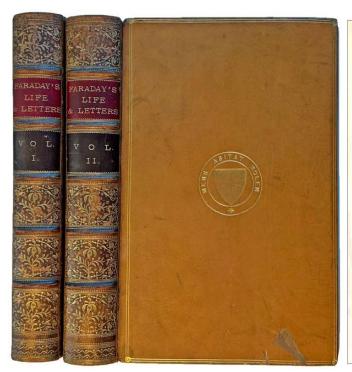
12. **FARADAY, Michael** (1791-1867). The Selected Correspondence of Michael Faraday. Volume 1, 1812-1848. [Volume 2, 1849-1866]. Edited on behalf of the Royal Institution of Great Britain by L. Pearce Williams with the assistance of Rosemary FitzGerald & Oliver Stallybrass. Cambridge: University Press, 1971. ¶ 2 volumes. Royal 8vo. xii, 538; viii, [2], 541-1078 pp. 2 frontispieces, index. Blue cloth, dust-jacket; jacket extremities showing some wear. Bookplates of Bern Dibner, the Burndy Library. Very good. \$100

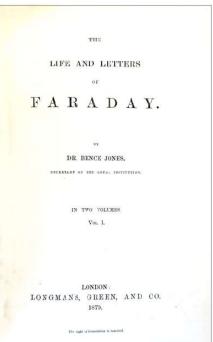
"This beautifully produced edition is of great interest to all historians of nineteenth-century science. Michael Faraday was not only a physical scientist whose ideas are of great importance in the history of physics, but a man who was intimately associated with one of the most important transformations in science itself, its development into a professional activity. These pages bear witness to Faraday's involvement with the growing recognition of the practical applications of science for industry, as in his interest in the electric telegraph cable. However, the bulk of these volumes is concerned with scientific ideas, and Faraday's wide correspondence with his fellow scientists-much of it previously unpublished -forms an important addition to the documentary sources of nineteenth-century physical science."

"There is one feature of Professor Williams's edition that raises serious doubts about its reliability as a scholarly source. This is a selected correspondence, and Professor Williams's concern is stated as follows: 'to illustrate all the facets of Faraday's life. Most of the letters by Faraday in this collection are previously unpublished but I have not hesitated to reprint those which contribute to an understanding of the hitherto unpublished letters and to crucial events in Faraday's life (pp. vii-viii); though he notes that he has not included the letters which passed between Faraday and Schönbein, as these are readily available. However, his statement that his 'selection from these letters has been guided by my desire to present historians of nineteenth-century science with sources of interest to them' (p. viii) is, in fact, extraordinary when one turns to the

correspondence itself, for it would seem that Williams's selection is an extremely personal one. It seems hard to deny that the correspondence between Faraday, Maxwell, and William Thomson is of the greatest interest to historians." – P. M. Heimann, Review, *The British Journal for the History of Science*, vol. 6, no. 4, December 1973, pp. 451-452.







13. [FARADAY, Michael (1791-1867)] JONES, Bence (1814-1873). The life and letters of Faraday. London: Longmans, Green & Co., 1870. ¶ Two volumes. 8vo. vi, 427, [1]; 499, [1] pp. Engraved frontis., 7 engraved illus., index. Original full polished calf, gilt-stamped red and black spine labels, gilt-stamped spine panels, gilt-stamped cover ornaments and motto (Mens Agitat Molem, motto of the University of Warwick), marbled edges; joints lightly rubbed. Armorial bookplate in Vol. II. Very good. Scarce. [S10032]

\$ 400

FIRST EDITION. A standard biographical source for Faraday, by his friend and loyal admirer, Jones, himself an accomplished physician and chemist. "Henry Bence Jones (1814-1873) was Faraday's close friend, and, after his death, collected a large number of letters to and from Faraday, which together with excerpts from diaries, etc., were published as Life and letters of Faraday. . . (1870). This volume must be used with great caution, since the editor was not averse to correcting and amending Faraday's language." [DSB].

§ *DSB*, Vol. IV, p. 539; Mottelay p. 498.



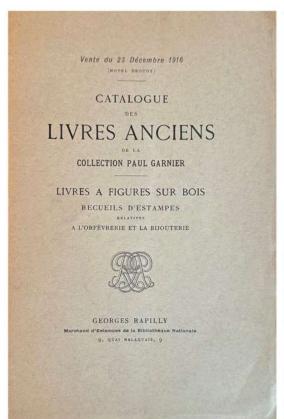
14. **FISCHER, Herman Emil** (1852-1919); **Joseph von MERING** (1849-1908). *Ueber eine neue Klasse von Schlafmitteln.* Contained in: *Die Therapie der Gegenwart*, pp. [97]-101. March 1903. Berlin & Vienna: Urban & Schwarzenberg, 1903. ¶ 4to. (265 x 177 mm) pp. [97]-144. Modern black cloth boards, gilt-stamped spine title. Bookplate of Andras Gedeon. Fine.

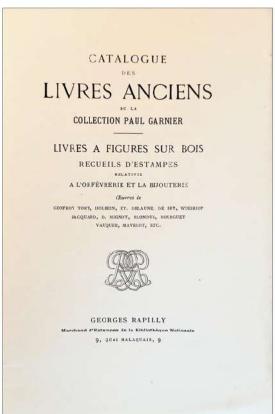
\$ 450

FIRST PRINTING of the discovery of diethyl barbituric acid. Fischer received the Nobel Prize in Chemistry in 1902. "Berlin chemist Emil Fischer and Joseph von Mering synthesized diethyl barbituric acid or barbitone (Veronal) in 1902. They described their discovery in "Ueber eine neue Klasse von Schlafmitteln", Therapie Gegenwart 44:97-101, 1903. The parent compound, barbituric acid, was first synthesised by Adolf von Baeyer in 1864, but barbituric acid is not itself pharmacologically active. Fischer and von Mering soon realized that their new drug was a sedative. Veronal represented a huge improvement on the medley of existing agents. It didn't taste unpleasant. It had few adverse side effects. Unlike foul-tasting potassium bromide, Veronal acted at therapeutic

levels far beneath the toxic dose. Some 2,500 barbiturates were synthesized over the next century. More than fifty have been marketed as sedatives. In 1912, phenobarbital was introduced under the brand-name Luminal. From 1912 until around 1960 barbiturates were the mainstay of pharmacological treatments of anxiety and insomnia. The development of soluble barbiturates suitable for use as intravenous anaesthetics still lay in the future." [BLTC Research, UK].

§ Cole, Milestones of Anesthesia, 29; Garrison & Morton 1892; Gedeon, Science and technology in medicine, pp. 372-5.





15. [GARNIER, Paul] Catalogue des Livres Anciens de la Collection Paul Garnier. Livres a figures sur bois recueils d'estampes relatives a l'Orfèvrerie et la Bijouterie. [Paris]: Georges Rapilly, 23 December 1916. 169 x 255 mm. 24 pp. Original printed wrappers. 57 lots. RARE. [S2772]

\$ 80

Catalog of antiquarian books from the Paul Garnier collection, including books with figures on wood, collections of prints relating to goldsmiths and jewelers.

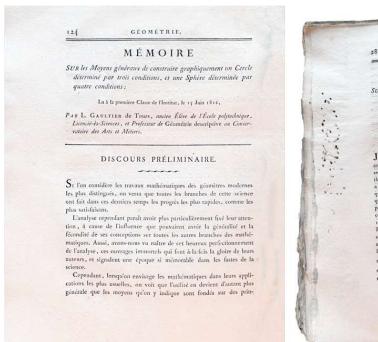


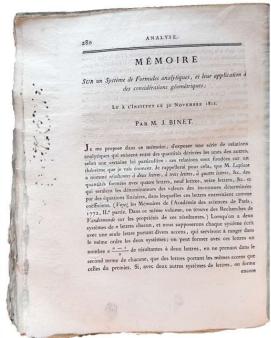
16. GAULTIER DE TOURS, Louis (1776-1848). Mémoire sur les Moyens généraux de construire graphiquement un Cercle détermine par trois conditions, et une Sphère détermine par quatre conditions; Lu a la première Classe de l'Institut, le 15 Juin 1812. [Within:] Journal de l'Ecole Polytechnique, Vol. IX. Paris: L'Imprimerie Impériale, 1813. ¶ 4to. 124-214 [article]; [iv], 354, [2] [entire journal] pp. 3 folding plates; some stains. Original printed wrappers, untrimmed; blue kozo spine, edges somewhat worn. Front cover ink holograph "Tome 16 Cahier" in contemporary hand, rear cover ink holograph "2/150" in modern hand. Title-page signature of M. Demouthier [de Boisroger, ca.1813 - ?]. Very good copy. [S11642]

\$ 175

FIRST EDITION of Gaultier's pioneering work on orthogonal circles. "Certain parts of the elementary geometry of circles. . . did not make their appearance until the nineteenth century . . . Though one can see the notion of a power of a point with respect to a circle foreshadowed in Propositions 35 and 36 of Book III of Euclid's *Elements*, the concept was first crystallized and developed by Louis Gaultier in a paper published in 1813 in the *Journal de L'Ecole Polytechnique*. Here we find, for the first time, the terms radical axis and radical center; the term power was introduced somewhat later by Jacob Steiner.

The initial studies of orthogonal circles and coaxial pencils of circles were made in the early nineteenth century by Gaultier, Poncelet, Steiner, J. B. Durrende, and others" (Eves, p. 86).





Gaultier was appointed as a professor at the Conservatory of Arts and Crafts at *l'Ecole Polytechnique*, to teach the drawing of applied mechanics and descriptive geometry with Natalis de Wailly.

OTHER SELECTED PAPERS WITHIN THIS ISSUE: BINET, Jacques Philippe Marie (1786-1856). Mémoire sur un Système de Formules analytiques, et leur application a des considérations géométriques. (p.280+); HACHETTE, Jean Nicolas Pierre (1769-1834). De l'heliostate. (p. 263+); POISSON, Simeon Denis (1781-1840). Mémoire sur les Integrales Définies. (p.215+); CAUCHY, Augustin Louis (1789-1857). Recherches sur les Nombres. (p.99+); PETIT, Alexis Therèse (1791-1820). Théorie Mathématique de l'Action Capillaire. (p.1).

§ Eves, Howard Whitley. *College Geometry*. Burlington, MA: Jones & Bartlett Learning, 1995.

DE L'HÉLIOSTATE;

PAR M. HACHETTE.

PAR M. HACHETTE.

[13] La machine que les astronomies nomment hiliostate, est destinée à diriger une lunette vers le centre d'un satre qui tourne autour de l'axé du monde; en optique, on nomme hiliostate, un instrument qui a pour objet de faire tourner un miroir plan, de telle manière que les rayons da soleil, dont l'inclinaion varie à chaque instant, solent toujours rélichis par ce miroir mobile, suivant une droite donnée, ou suivant une parallelé à cette droite. La premitée idée de cette machine parallé de les regons de la terre, et l'aute les rélichis rayons solaires parallélement à l'axé de la terre, et l'aute les rélichissait dans une direction donnée. En n'ayant pas égard un changement de déclinaison du soleil entre deux midis conscientis ni au diamètre de cet astre, les rayons solaires pour un jour quelconque de l'année, appartiennent à la surface d'un cône droit dont l'axe est paralléle à l'axe du monde, et dont les artes font avec et ave un angle égal au complément de la déclinaison du soleil pour ce même jour. Un miroir entre plane de manière qu'il refléchis suu equéconque des artètes du cône auivant l'axe de ce cône, et qu'il tourne autour de cet axe, en même temps que le soleil, il réfléchis suu equéconque des artètes du cône auivant l'axe de ce cône, et qu'il tourne autour de cet axe, en même temps que le soleil, il réfléchis suu equéconque des artètes du cône auivant l'axe de confine qui affaibit considerablement la lumière réfléchie au double réflexion qui affaibit considerablement la lumière réfléchie lune des l'axes de l'adouble réflexion qui affaibit considerablement la lumière réfléchie lune l'est extrement les rayons solaires suivant ce même axe. On fait rarement usage de cette machine, a cause de la double réflexion qui affaibit considerablement la lumière réflexine que l'axes l'axes de l'axes

par le second miroit.

[2.] Sgenerande a décrit dans ses Élimens de physique, un heliostate à un seul miroir, dont ill est l'inventeur. M. Maha s'est proposé de donner à cet instrument plus de précision; il y a fait quelques changemens qui ont pour ob et de diminuer, autant que possible, la déviation

(*) Gabriel-Daniel Fahirnheit, ne à Danteit en 1686 ; mort en 1736

MÉMOIRE

SUR LES INTÉGRALES DÉFINIES;

Par M. Poisson.

Loss qu'une intégrale, prise entre des limites données, renferme une constante qui n'a pas reçu une valeur déterminée, on peut souvent, en différenciant sous le signe f par rapport à ceur constante, éliminer fintégrale, et parvenir à une équation différentielle qui ne la tontient plus. Si cette équation est intégrale par les méthodes conness, elle peut servir à déterminer la valeur de l'intégrale définie; si, au contraire, elle ne l'est pas, c'est alos l'intégrale de cine qui ser à représent en l'est pas, c'est alos l'intégrale de la cette équation. Euler a donné, dans son Calel intégral plauleurs exemples du second de ces deux est ; mais in à considére aule part le premier, qui paraît expendant d'une plus grande importance. Nous en avons fait l'objet spécial de ce mémoire, dans lequel nous allons traiter différentes espèces d'intégrales définies qui conduisent à des équations différentielles intégrables.

[1.] Soit, pour premier exemple,

 $\int e^{-bx} \cdot \cos_x ax \cdot x^{n-1} dx = y$, $\int e^{-bx} \cdot \sin_x ax \cdot x^{n-1} dx = z$;

les intégrales étant prises depuis x=o jusqu'à $x=\pm$, a designant une constante indéterminée, et b et n des exposans quelconques, pourvu qu'ils soient réels et positifs. En différenciant par rapport à a, il vient

 $\frac{dy}{dx} = -\int e^{-bx} \sin ax \cdot x^a dx$, $\frac{dz}{dx} = \int e^{-bx} \cos ax \cdot x^a dx$;

RECHERCHES

SUR LES NOMBRES;

PAR A. L. CAUCHY, Ingénieur des Ponts et Chaussies.

M. Lagrange a démontré le premier dans les mémoires de Berlin (année 1770) le théorème suivant : Étant donné un nombre premier p, et deux autres nombres entiers θ et C positifs ou négatifs, mais non divisibles par p, on peut toujours trouver deux nombres t et u, tels que la formule

Ce théorème a quelque analogie avec un autre plus simple, et dont

Etant donné un nombre premier p, et deux autres nombres entiers A et B positifs ou négatifs, mais non divisibles par p, on peut toujours trouver un nombre x, tel que la formule Ax + B,

soit divisible par p.

Ce dernier théorème ayant été démontré très - simplement par M.

Legendre dans son Introduction à la théorie des nombres, l'analogie m'à porté à croire qu'il devait existee une démonstration semblable du théorème de M. Logrange. Le travail que j'avais entrepris dans le dessein de parvenir à cette démonstration, m'à conduit, en outre, à la démonstration



JOURNAL DE L'ÉCOLE POLYTECHNIQUE.

THÉORIE MATHÉMATIQUE

DE L'ACTION CAPILLAIRE;

PAR M. PETIT, Professeur de Physique au Lycée Bonaparte, Répétiteur à l'École polytechnique (*).

[1.] Tous les corps sont composés de molécules matérielles qui s'attirent entre elles. Cette force attractive est la cause des affinites chimiques. Les modifications qu'elle éprouve par la forme des molécules et par la force expansive du calorique, produient les divers districtions ou les lequels les corps se présentent. La réfaction et l'élévation ou la dépression des liquides dans les espaces capillaires en résultent immédiatement, avec cette différence pourtant, que la réfaction est produite par l'attraction totale des molécules du corps réfringent, tundis que les phénomènes capillaires sont, comme nous le ferons voir par la suite, le résultat de la même cause modifiée pur la courbure des surfaces.

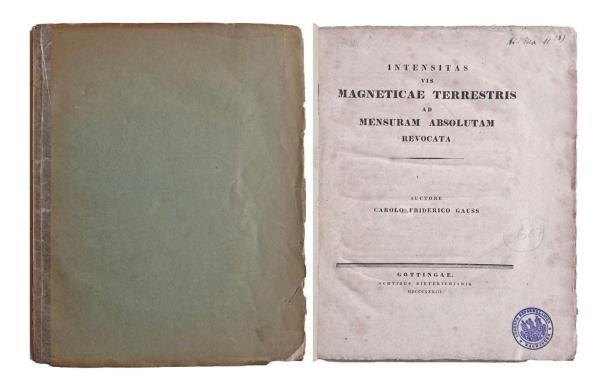
Aucun des phénomènes dont nous venons de parler n'est propre à

(*) Ce Mémoire a été le sojet d'une thôre que M. Petit a rostenue l'année dernière (30 novembre 1811) devant le Faculté des sciences de Paris.

XVI.* Caliter.

A

[16] Journal de l'Ecole Polytechnique. 1813.



17. **GAUSS, Carl Friedrich** (1777-1855). *Intensitas vis Magneticae Terrestris ad Mensuram Absolutam Revocata*. Gottingae: Dieterich, 1833. 4to. (268 x 215 mm) 44 pp. Original plain wrappers; edges chipped. Exlib stamp on titlepage Hoehere Reformklassen, Magdeburg [Germany], bookplate of Andras Gedeon. Housed in a modern clamshell box. Very good.

\$ 1,250

FIRST SEPARATE EDITION of Gauss' most important geomagnetic work, from *Gesellschaft der Wissenschaften zu Gottingen*. "An account of the measurement of magnetic force, containing the first systematic use of absolute units (distance, mass, time) to measure a non-mechanical quantity." [Honeyman].

The DSB (vol. V, p. 305), written by Kenneth O. May (1915-1977), offers: "In 1832 Gauss presented to the Academy the Intensitas vis Magneticae Terrestris ad Mensuram Absolutam Revocata (1833), in which appeared the first systematic use of absolute unites (distance, mass, time) to measure a nonmechanical quantity. Here Gauss typically acknowledged the help of [Wilhelm] Weber but did not include him as joint author."

"The great publication of Gauss, in which he measures magnetic action in ordinary mechanical or absolute units." [Merzbach].

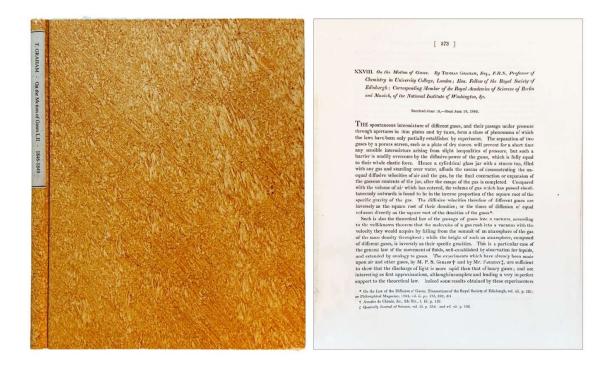
Preceding the work of Mayer, this was the basis for the exhaustive and monumental researches of Wilhelm Eduard Weber (1804-1891). This most important work "was done in collaboration with the physicist Wilhelm Weber, with whom, from 1831-1837, he performed a series of studies on the nature and intensity of the earth's magnetism. Their first collaborative work, *Intensitas vis magneticae terrestris*, is an account of the measurement of magnetic force, containing the first systematic use of absolute units to measure a non-mechanical quantity. Weber's name does not appear on the title, but his contributions are acknowledged in the text." [Norman].

Gauss "contains the first systematic use of absolute units (distance, mass, time) to measure the Earth's magnetic field." – Wenner, *History of Physics*. p. 214.

PROVENANCE: Andras Gedeon.

§ Darmstaedter S. 403; *DSB* Vol. V, p. 305; Ekelöf 892; Gedeon, *Science and Technology in Medicine*; Honeyman 1455; Merzbach, Uta C., *Carl Friedrich Gauss: A Bibliography.* Wilmington, (1984), no. 1841a; Norman 881; Poggendorff I, 855; Roller-G. I., 447; Wenner, *History of Physics.* p. 214; Wheeler Gift 867. See: Cherrie R. Scott, *Enigma of Carl Friedrich Gauss: a storytelling journey into the mind of history's greatest... mathematician*, (2025); Margaret B. W. Tent, *The prince of mathematics: Carl Friedrich Gauss*, (2012).





18. **GRAHAM, Thomas** (1805-1869). "On the Motion of Gases. [Parts I & II]." Extracted from: Philosophical Transactions, 1846-1849. 4to. (290 x 230 mm). 573-631; 349-391 pp. 2 plates, tables. Modern orange paste-paper boards, printed paper spine label. Bookplate of Andras Gedeon. Fine. \$200

Thomas Graham (1805-1869) was a Scottish chemist, fellow of the Royal Society, and successor of Edward Turner as professor of chemistry at the University College, London (later the University of London). He was also the founder and first president of the London Chemical Society. He is best known for studies on the diffusion of gases and his discovery of dialysis. [DSB].

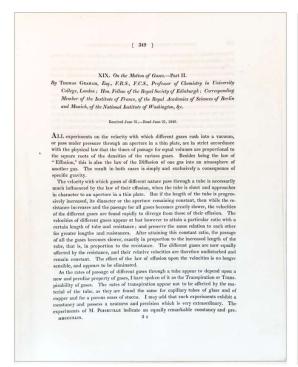
"With the death of John Dalton in 1844, Graham was left as the acknowledged dean of English chemists, the successor of Joseph Black, Joseph Priestley, Henry Cavendish, William Wollaston, Humphry Davy, and John Dalton." [DSB].

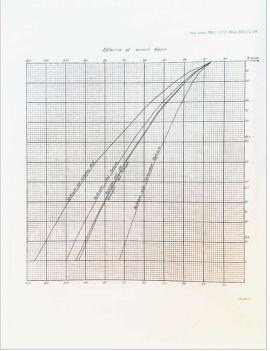
"The spontaneous intermixture of different gases, and their passage under pressure through apertures in thin plates and by tubes, form a class of phenomena of which the laws have been only partially established by experiment. The separation of two gases by a porous screen, such as a plate of dry stucco, will prevent for a short time any sensible intermixture arising from

slight inequalities of pressure, but such a barrier is readily overcome by the diffusive power of the gases, which is fully equal to their whole elastic force. Hence a cylindrical glass jar with a stucco top, filled with any gas and standing over water, affords the means of demonstrating the un-equal diffusive velocities of air and the gas, by the final contraction or expansion of the gaseous contents of the jar, after the escape of the gas is completed. Compared with the volume of air which has entered, the volume of gas which has passed simul-taneously outwards is found to be in the inverse proportion of the square root of the specific gravity of the gas. The diffusive velocities therefore of different gases are inversely as the square root of their densities; or the times of diffusion of equal volumes directly as the square root of the densities of the gases. Such is also the theoretical law of the passage of gases into a vacuum, according to the well-known theorem that the molecules of a gas rush into a vacuum with the velocity they would acquire by falling from the summit of an atmosphere of the gas of the same density throughout; while the height of such an atmosphere, composed of different gases, is inversely as their specific gravities. This is a particular case of the general law of the movement of fluids, well-established by observation for liquids, and extended by analogy to gases. The experiments which have ah eddy been made upon air and other gases, by M. P. S. Girard and by Mr. Faraday, are sufficient to show that the discharge of light is more rapid than that of heavy gases; and are interesting as first approximations, although incomplete and lending a very impel feet support to the theoretical law. Indeed some results obtained by these experimenters and others, appear wholly inconsistent with that law, such as Mr. Faraday's curious observations of the change of the relative rates of hydrogen and olefiant gases in passing through a capillary tube under different pressures; and my own observation, that carbonic acid gas is forced by pressure through a porous mass of stucco as quickly or more so than air is, although more than a half heavier; and that other gases pass in times which have no obvious relation to their diffusive velocities." – Royal Society (abstract).

"In 1846 and 1849 Graham published two memoirs "On the Motion of Gases" (Graham, 1846, 1849) reporting a phenomenon which he named effusion of gases into a vacuum through a thin plate, "leaving no doubt of the truth of the general law, that different gases pass through minute apertures into a vacuum in times which are as the square roots of their respective specific gravities, or with velocities which are inversely as the square roots of their specific gravities," and

that "the effusion-time of air of different temperatures is proportional to the square root of its density at each temperature."



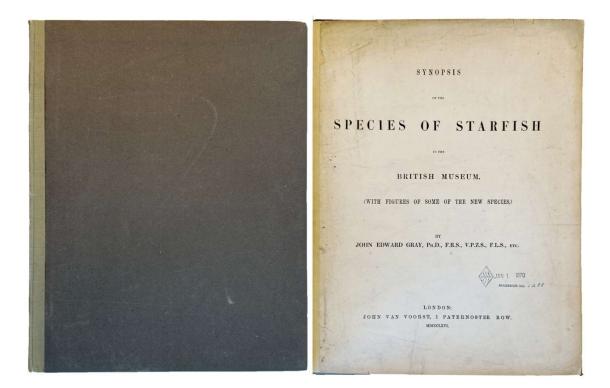


"The experimental procedure was as follows: Ajar standing on the plate of an air pump was kept continuously under vacuum while a measured quantity of gas was introduced into the jar through a minuscule gap in a thin metallic plate. The admission of 0.983 liters of dry air into the jar, within about 1,000 seconds, showed that the times of passage of the same volume of air did not vary by more than two or three seconds, in successive experiments. Experiments with different gases showed that the relative times of passage or of effusion were approximately identical with the square roots of the specific gravities. The rate of effusion of a mixed gas corresponded in most cases with the calculated mean of the constituents, but the rates of effusion of the light gases, methane and hydrogen, were disproportionately retarded by the admixture with them, even to a small extent, of the heavier gases oxygen and nitrogen (Graham, 1846, 1849)." – Educación Química, Elsevier. Vol. 24. Issue S2. 2013.

About this work: "Graham also measured the effusion of gases through a small hole in a metal plate, and the transpiration of gases through capillary tubes

(related to viscosity). In the first case the velocities of flow were inversely proportional to the square-roots of the densities; in the second case the results were peculiar: the rates of transpiration became constant with a certain length of tube and were not simply related to the densities." [Partington].

§ DSB, V, pp. 492-494; Partington, p. 269.

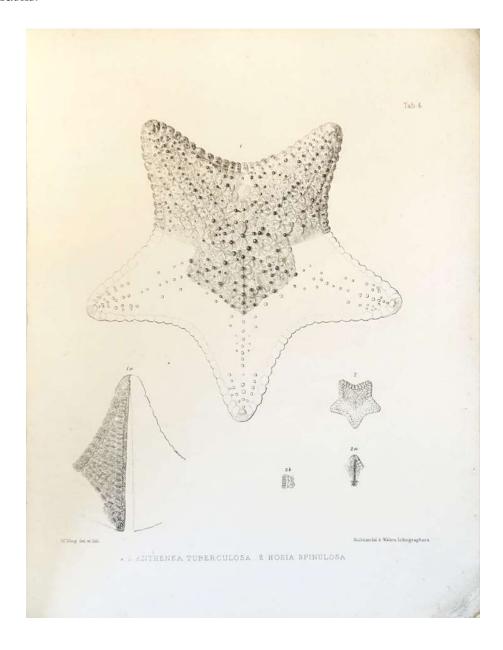


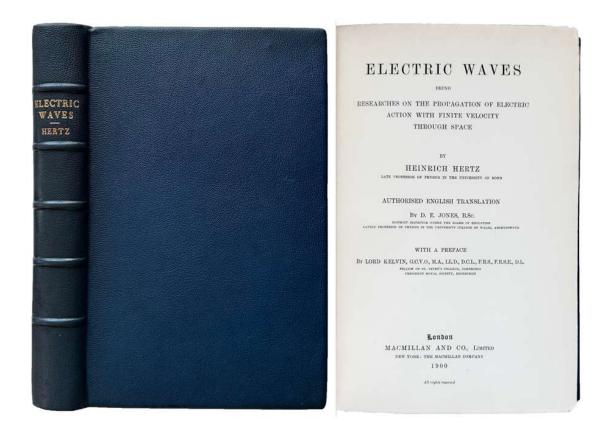
19. **GRAY, John Edward** (1800-1875). Synopsis of the Species of Starfish in the British Museum. (With figures of some of the new species.). London: John Van Voorst, 1866. ¶ 4to. iv, 17, [1] pp. 16 lithographic plates. Rubber-stamp on title, some darkening of extremities, "introduction" leaf mounted on tab. Recent quarter plain cloth, boards. Very good.

\$ 50

Gray writes in his introduction that the plates for this work were actually prepared circa 1840-47, "containing figures of all the genera and of most of the species of this class." His reason for the delay in producing the work was that Professor Agassiz had wished for his assistance in forming part of his *Monograph of Radiated Animals*.

John Edward Gray, FRS, was a British zoologist. During his 50 years employed at the British Museum, Gray wrote nearly 500 papers, including many descriptions of species new to science. These had been presented to the museum by collectors from around the world, and included all branches of zoology, although Gray usually left the descriptions of new birds to his younger brother and colleague George. Gray was also active in malacology, the study of mollusks.





Hertz' Theories of Electromagnetic Wave Propagation

20. **HERTZ, Heinrich Rudolf** (1857-1894). *Electric Waves being researches on the propagation of electric action with finite velocity through space. Authorized English translation by D. E. Jones with a preface by Lord Kelvin.* London: Macmillan & Co., 1900. ¶ 8vo . xv, 278 pp. 40 figs., numerous formulae & charts, index. Modern full navy morocco, raised bands, gilt-stamped spine title, t.e.g. Fine.

\$850

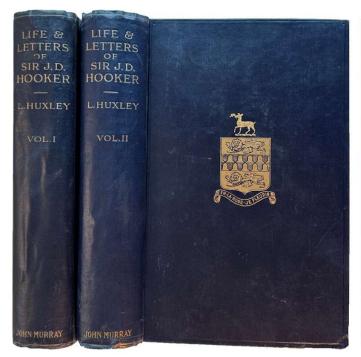
SECOND EDITION IN ENGLISH of *Untersuchungen über die Ausbreitung der elektrischen Kraft.* "Hertz was the first to demonstrate experimentally that electromagnetic waves radiate in space at the speed of light, just as Maxwell had predicted in his *Treatise on Electricity and Magnetism.* Hertz determined that electromagnetic waves were longer than light waves and showed that they were in complete correspondence with the waves of light and heat in the transverse nature of their vibration and their susceptibility to reflection, refraction, and polarization." [Hook & Norman]

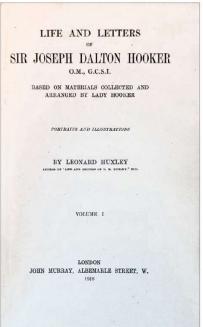
"Experimental proof by Hertz of the Faraday-Maxwell hypothesis that electrical waves and be projected through space was begun in 1887, eight years after Maxwell's death. The two main requirements were (a) a method of producing the waves, supposing that they existed, and (b) a method of detecting them once they were produced. Hertz found the first problem easy to solve. He used the oscillatory discharge of a condenser. Detection was much more difficult, because there then existed no means of detecting currents alternating at the high speed of these waves. Hertz in fact used an effect as old as the discovery of electricity itself-the electric spark. By inducing the waves to produce an electric spark at a distance, with no apparent connexion between the oscillator and the spark gap, and by moving the sparking apparatus so that the length of the spark varied, he proved beyond question the passage of electric waves through space." [PMM]

"Hertz demonstrated what Maxwell had predicted, that electromagnetic waves radiated in space with the speed of light. Hertz determined these waves to be of greater length than light and that they could be reflected, refracted and polarized. This discovery and its demonstration led directly to radio communication, television and radar." – Dibner 71.

⇔ BM Readex Vol. 12, p. 71; Dibner 71; DSB Vol. VI, pp. 340-50; Hook & Norman, Origins of cyberspace, 158; Printing and the mind of man, 377 (German 1st ed.).

See: William Berkson, Fields of Force: the development of a world view from Faraday to Einstein, Routledge, 2014, (Chapter 8); Jed Z. Buchwald, The Creation of Scientific Effects, Heinrich Hertz and Electric Waves. University of Chicago Press. 1994.

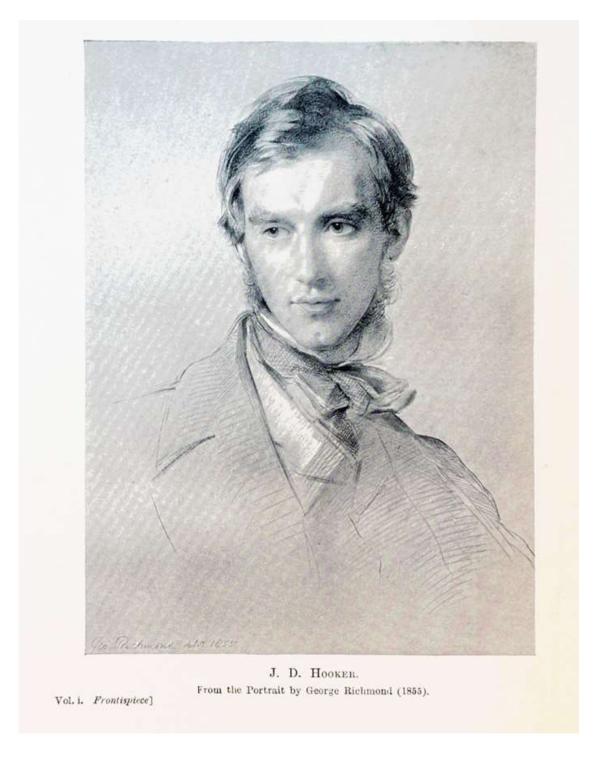




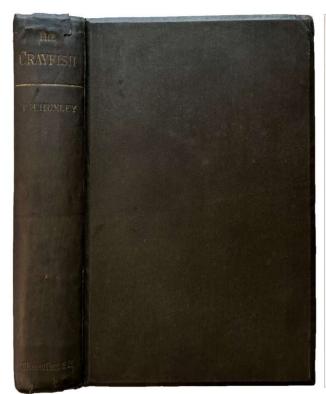
21. [HOOKER, Sir Joseph Dalton (1817-1911)] HUXLEY, Leonard (1860-1933). Life and Letters and Sir Joseph Dalton Hooker. Based on Materials Collected and Arranged by Lady Hooker. London: John Murray, 1918. ¶ Two volumes. 8vo. x, [2], 546; vi, 569 pp. Frontis. Blue cloth, gilt-stamped cover ornaments, gilt-stamped spine titles; recased, new endpapers. Near fine. [S9148]

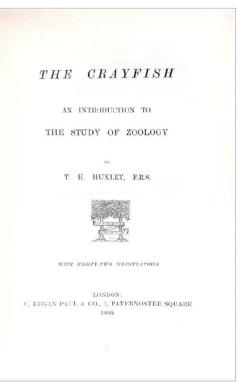
\$ 100

First edition, second printing (August 1918). This two-volume is the first full-length biography of Hooker, written and edited by Leonard Huxley with the assistance of Hooker's widow, Lady Hyacinth Hooker. Hooker (1817-1911), British botanist, was arguably the most important botanical figure of the nineteenth century. A traveler and plant-collector, he was one of Charles Darwin's closest friends and eventually succeeding his father to became director of Britain's Royal Botanic Gardens, Kew, in 1865. Hooker was chief botanist (1839-1843) teaming with Dr. David Lyall, of the Antarctic voyage, on the discovery ships HMS Erebus and HMS Terror (the consort to Erebus; the Terror was commanded by Crozier), under the command of Sir James Clark Ross, visiting Madeira and the Cape of South Africa. During the voyage he also served as assistant surgeon on the Erebus. In 1848-51 he journeyed at Nepal and India collecting many specimens preserved at Kew Gardens.



See: W. B. Turrill, Joseph Dalton Hooker. Botanist, Explorer and Administrator, (London, 1963).





Probably the best biological treatise ever written.' – Prof. G. B. Howes One of 250 Large Paper copies

22. **HUXLEY, Thomas Henry** (1825-1895). *The Crayfish. An introduction to the study of zoology.* London: C. Kegan Paul & Co., 1880. ¶ 8vo. xiv, 371 pp. Frontis., 81 figs., index. Original olive cloth, beveled boards, gilt-stamped spine title; neatly restored spine. Very good. This issue is quite rare.

\$1,000

LIMITED EDITION of 250 numbered Large Paper copies (signed by publisher: "Bradbury Agnew W" - Whitefriars).

"Crayfish were the 'hidden hand' which drew [Huxley] from Spirula. He veered off, lured by a new promise and would never finish the tentacled mollusks . . . The Crayfish might not sound like a stimulating book. But it was destined for the International Scientific Series. The ISS now stretched from physics to psychology and beyond. It outdid the evangelical presses in pumping out rationalist books for Everyman. A huge force for deterministic and social

evolution, it mixed modernity and notoriety to sell titles through umpteen editions. . . He started The Crayfish after the Summer holidays in 1878, giving his own text an alluring evolutionary gloss. He intended it as the beginning of his own series. He would take readers from the 'insignificant' and common-orgarden into the profound depths." [Desmond].

"The Crayfish, his famous volume in the International Scientific Series, has been called by Professor Howes, the assistant and successor of Huxley at the Royal College of Science, 'PROBABLY THE BEST BIOLOGICAL TREATISE EVER WRITTEN." [Prof. G. B. Howes in Mitchell, *Thomas Henry Huxley; a sketch of his life and work.*]

** THIS LARGE PAPER EDITION, CONSISTING
OF TWO HUNDRED AND FIFTY COPIES, ALL OF
WHICH ARE NUMBERED, WAS PRINTED ON
NOVEMBER 29, 1879.
THIS COPY IS No. 8

Madbury Agreed to

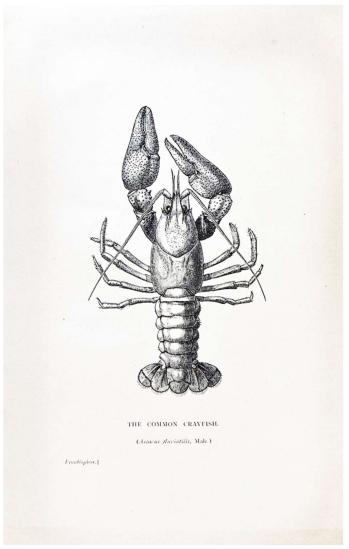
NOTES: Of reproduction in crayfishes, Huxley offers the following: "... the male seizes the female with his pincers, throws her on her back, and deposits the spermatic matter ... the seminal matter is poured out, and runs slowly along the groove of the anterior appendage to its destination, where it hardens and assumes a vermicular aspect. The filaments of which it is composed are of a tough case or sheath filled with seminal matter. The spoon-shaped extremity of the second abdominal appendage, working backwards and forwards in the grove ... After an interval ... The female, resting on her back, bends the end of the abdomen forward the eggs are passed into the chamber ... and are plunged into a viscous greyish mucus with which it is filled." - pp. 350-351.

Further, crayfish are known to be cannibalistic: "in fact, are guilty of cannibalism in its worst form; and a French observer pathetically remarks, that,

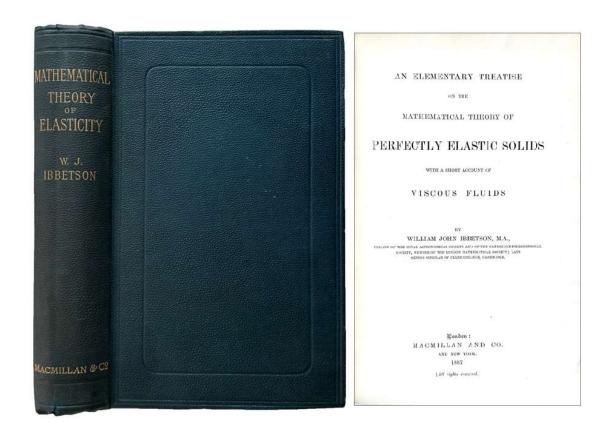
under certain circumstances, the males "méconnaissent les plus saints devoirs" and, not content with mutilating or killing their spouses, after the fashion of animals of higher moral pretensions, they descend to the lowest depths of utilitarian turpitude, and finish by eating them." - p.10.

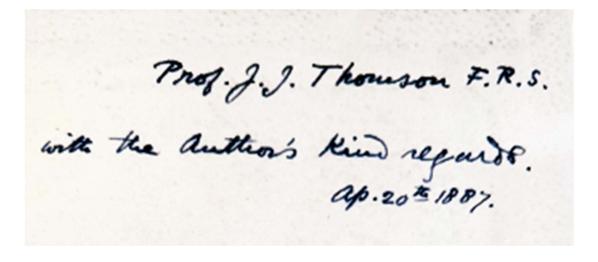
Location: Stephen Jay Gould collection, Stanford University (this edition 1/250 copies).

§ Desmond, Huxley, From devil's disciple to evolutions' high priest, pp. 496-97.



[22] Huxley





[23] IBBETSON's inscription to J.J. Thompson

23. **IBBETSON, William John** (d. on or before 1910). *An Elementary Treatise on the Mathematical Theory of Perfectly Elastic Solids with a short account of Viscous Fluids*. London & New York: Macmillan, 1887. ¶ 8vo. xiii, [3], 515 pp. Index. Original dark green blind and gilt-stamped cloth. INSCRIBED BY THE AUTHOR to "Prof. J.J. Thomson, F.R.S., with the Author's kind regards, Ap. 20th, 1887." PROVENANCE: Harold I. Levine (1922-2017), Stanford University Dept. of Mathematics (without any ownership marks, but purchased from him). [LV1834]

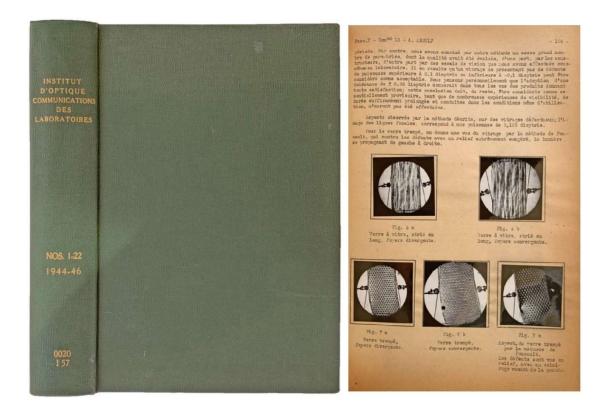
\$ 200

"In the present Volume I have attempted to present to the English student a continuous and fairly complete analysis of the Mathematical Theory of Elasticity, as it stands at present, together with a brief account of the physical basis on which the theory rests, and of the considerations which limit its practical application to natural materials."

"It would, of course, have been impossible to exhaust so wide a subject within the limits of an elementary text-book, and my endeavour has rather been, after giving a very full and clear account of the properties of Strain and Stress, considered separately and in their relations to one another, to indicate to the student as many as possible of the various modes of further advance, in order that he may be able to read without difficulty any of the more specialised memoirs, both theoretical and practical, that constitute the already enormous literature of Elasticity." – Preface.

Ibbetson, B.A., F.R.A.S., was associated with Clare College where he was a Senior Scholar. He worked at the Cavendish Laboratory in 1885, placing him in contact with J.J. Thomson. See: *A History of the Cavendish Laboratory 1871-1910*, London, 1910.

PROVENANCE: [1] Sir Joseph John Thomson (1856-1940) was an English physicist who received the Nobel Prize in Physics in 1906. [2] Harold I. Levine (1922-2017), Stanford University Dept. of Mathematics].



24. Institut d'Optique Théorique et Appliquée (Orsay, Essonne).

[Communications des laboratoires de l'Institut d'optique]. Paris: Institut d'Optique Communications des Laboratoires, 1944-46. ¶ 4to. 218, 1; 141 ff. [complete]. Figures, 5 mounted photographs; paper substantially browned in part. Green gilt-stamped buckram. Embossed stamped of the Mount Wilson Observatory. Very good. EXTREMELY RARE. [S13762]

\$ 125

Early French periodical on the theories of optics and physics, especially as applied to photography, in this case the Wilson astronomical observatory was intensely interested in the application of photography to astronomical photography, especially of the Sun. These papers, here complete, are seldom seen anywhere.

Institut d'Optique Communications des Laboratoire, opened in 1917, is still active today, and has the mission to educate, research and innovate and disseminate the sciences and technologies of light and optics.

Contains more than 34 papers [communications, chapters] on photometry, optical instrument studies, thermoelectric batteries, optical engineering, physics, infrared light measurement, etc., all issues current for the period at the end of WWII.

CONTENTS (partial shown here): 1. Charles Fabry (1867-1945), Introduction.

- 2. Albert Arnulf (1898-1984), Photométrie des instruments et lumière parasite.
- 3. Albert Arnulf (1898-1984); Maurice Francon (1913-1996), Etude photométrique de quelques instruments influence d'un traitement diminuant le facteur de réflexion des surfaces.
- 4. Maurice Francon (1913-1996), Diagramme de diffusion d'un instrument.
- 5. Albert Arnulf (1898-1984), La clarté des instruments visuels influence des variations du diamètre pupillaire et de l'effet Stiles-Crawford.
- 6. André Bayle, Piles thermoélectriques symétriques.
- 7. André Bayle, Dispositif nouveau pour la mesure des facteurs de réflexion diffuse dans le visible et l'infrarouge.
- 8. Penciolelli, Georges. Constructions -- Raphiques Concernant des Problèmes de Dioptrique Elémentaire.
- 9. André Marechal (1916-2007), Les Aberrations géométriques et la limite de Lord Rayleigh.
- 10. André Marechal (1916-2007), Principe d'un intégrateur mécanique pour l'étude de la répartition de la lumière dans les images optiques.
- 11. Pierre Fleury (1894-1976), Le Repérage des Couleurs: état actuel du problème.
- 12. Pierre Fleury, Les éléments du vocabulaire colorimétrique moderne.

- 13. Albert Arnulf (1898-1984), Méthode pour l'étude des défauts optiques des vitrages. [This paper illustrated with 5 small photographic mounted plates]
- 14. Albert Arnulf (1898-1984), Principes d'un contrôle rationnel des qualités optiques des vitrage.
- 15. André Marechal (1916-2007), La mesure directe du facteur d'absorption des verres d'optique.
- 16. Jean Terrien (1907-1992), Transmission des monochromateurs étude théorique.
- 17. Jean Terrien, De choix des largeurs de fentes dans un monochromateur double.
- 18. Jean Terrien, Etude expérimentale d'un monochromateur double méthodes et résultats.
- 19. Maurice Françon (1913-1996), Vision dans un instrument entache d'aberration sphérique.
- 20. Maurice Françon (1913-1996), Rôle de la pupille dans la vision instrumentale. (Parts I & II).
- 21. Maurice Françon (1913-1996), Structure de l'image d'un point lumineux au Foyer de l'œil suppose parfait lorsque celui-ci est place derrière un instrument entache d'aberration sphérique.
- 22. Maurice Françon (1913-1996), Troisième partie. Application . . .
- 23. Maurice Françon (1913-1996), Cas de l'œil suppose optiquement parfait et dont les défauts proviennent uniquement de la structure discontinue de la rétine.
- 24. Mme. C. Weinstein; Albert Arnulf (1898-1984), Contribution à l'étude des seuils de perception de l'ail.
- 25. Melle. Françoise Flamant, Etude de lumières ne détruisant pas la vision de nuit.
- 26. Melle. Françoise Flamant, Contribution a l'étude du phénomène Stiles-Crawford.
- 27. F. Blottiau, Etude Critique de la notion de brillance visuelle.

- 28. F. Blottiau, Conséquences du phénomène de Purkinje.
- 29. F. Blottiau, Tentatives pour définir la brillance visuelle en tenant compte du phénomène de Purkinje.
- 30. F. Blottiau, Les variations de la fonction de visibilité relative dans les méthodes pas plages juxtaposées.
- 31. F. Blottiau, Tentative d'explication des faits observés.
- 32. F. Blottiau, La visibilité des plages lumineuses.
- 33. F. Blottiau, Les variations de la fonction de visibilité relative dans la méthode de papillotement.
- 34. F. Blottiau, *La Photométrie des éclairages colores*. [END]. NOTES: Robert Gaston Andre Marechal was director general of the French Institut d'Optique.

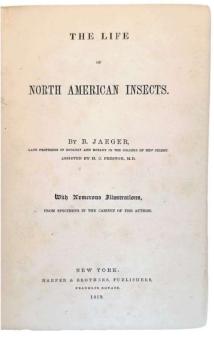
Albert Arnulf & Maurice Françon both famous for their effective pedagogy in the field of optics, their talents as experimenters and their didactic works. The Arnulf- Françon Prize, recognizing teaching in optics, is named for them both. Arnulf, a French engineer and physicist, received the Prix Jules Janssen, the highest award of the *Societe astronomique de France*, the French astronomical society.

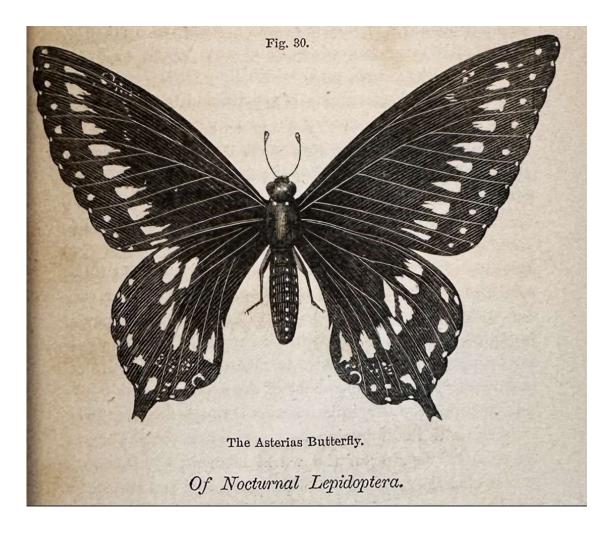
With World War I the Institute of Optics was started in 1917. Charles Fabry was involved at that time. Here it shows how this volume was part of the Mount Wilson Observatory collection, via George Ellery Hale: "Shortly after the United States entered the war, Fabry was chosen to command the French Scientific Mission to the United States, tasked with traveling across the Atlantic to exchange information, intelligence, and technical and scientific advances useful to the war effort. A first group of members of this mission left Bordeaux on May 19, 1917, and consisted of Charles Fabry, Armand de Gramont, Henri Abraham accompanied by a young telegraphist, Paternot, the secretary of the expedition Dupouey, as well as Sir Ernest Rutherford and Commander Cyprian Bridge, dispatched by the British army to join the French. The members of the mission were notably welcomed on site by members of

the National Research Council, including George Ellery Hale and Robert Millikan. Joined a few weeks later by Victor Grignard and Giorgio Abbetti, the members of the mission studied many questions with their American counterparts, notably concerning defense against submarines. On July 13, 1917, some of them visited Thomas Edison 's laboratory in West Orange, New Jersey." From 1919 until his death, Charles Fabry was the first general director of the Institute of Theoretical and Applied Optics.

REOSC (acronym for Recherche et Etude en Optique et Sciences Connexes [=Research and Study in Optics and Related Sciences]) was founded in 1937 by a group of scientists from the Paris Optics Institute [l'Institut d'Optique de Paris], including Henri Chretien and Charles Fabry (d.1945). The REOSC company found its real development with Andre Bayle in 1960, which was joined by Georges Penciolelli of the Institut d'Optique-CNRS. In 1978, REOSC was bought by the Societe de Fabrication d'Instruments de Mesure (SFIM) through Georges Penciolelli, founded in 1947 by Marcel Ramolfo and Francois Hussenot, to whom we owe the invention of black boxes. It only became a real subsidiary in 1992 when it merged with EVAP Service (thin film production) and MTO (mirror aluminide). In 1996, SFIM's optronics division merged with Matra's. After SAGEM acquired SFIM in 1999, REOSC joined the business unit of Sagem's Optronics division as an establishment.



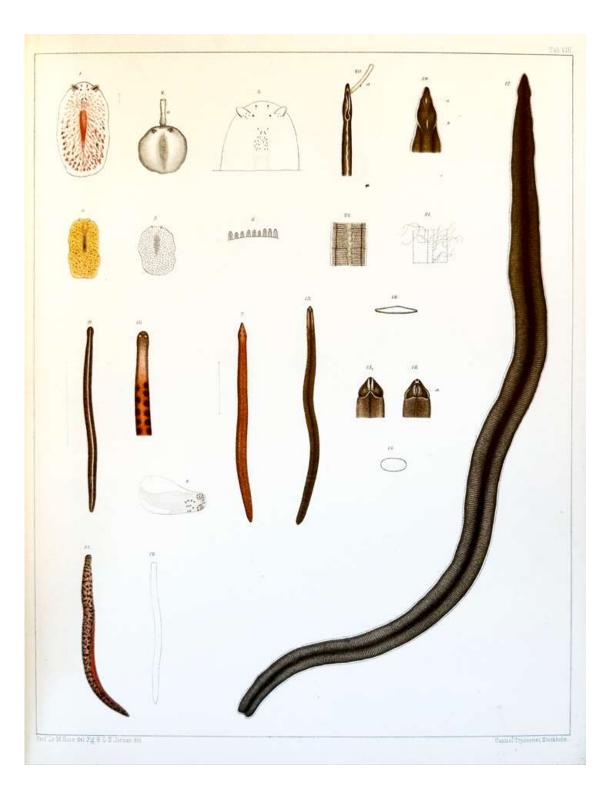




25. **JAEGER, Benedict** (ca.1789-1869). *The Life of North American Insects*. New York: Harper, 1859. ¶ 195 x 125 mm. Small 8vo. 319 pp. 69 figs.; a couple of signatures sprung loose. Original brown blind- and gilt-stamped cloth; rebacked preserving original spine, corners showing, call number partially removed from spine, 3 ex-library bookplates (Hal H. Newcomb Library, kept at the Southwest Museum (1924); Henry T. Child, M.D., Philadelphia; University of Southern California, Allan Hancock Foundation). AS IS.

\$ 12

Professor Benedict Jaeger was an early American entomologist living in New Jersey. He was hired by the College of New Jersey, now Princeton University, and given the task of putting together their zoological museum. He resigned in 1840 [or 1843?] upon accepting another post elsewhere.



[26] JENSEN

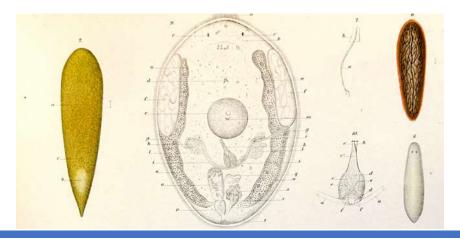


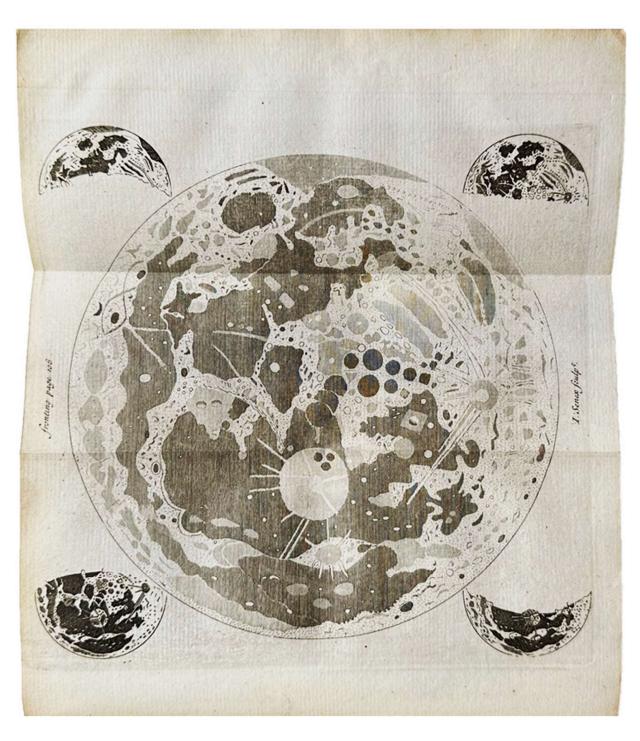


26. **JENSEN, Olaf S**. *Turbellaria ad litora Norvegiae Occidentalia. Turbellarier ved norges vestkyst af Olaf S*. *Jensen, conservator ved Bergens Museum*. Bergen: J. W. Eides, 1878. ¶ 4to. [8], 97, [1] pp. 8 partly colored plates. Original quarter cloth-backed printed boards. Rubber-stamp of the Allan Hancock Foundation. Very good copy. Rare.

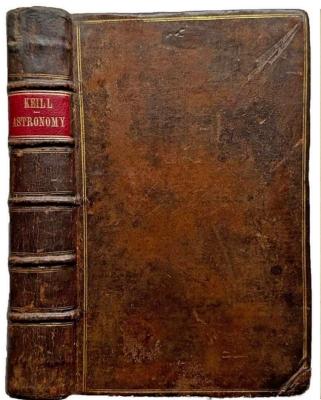
\$ 20

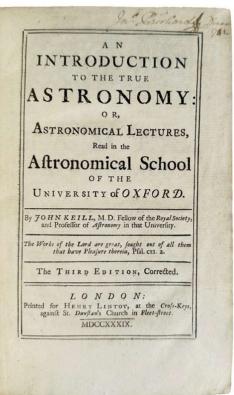
Turbellaria on the west coast of Norway. The Turbellaria are one of the traditional sub-divisions of the phylum Platyhelminthes (flatworms), and include all the sub-groups that are not exclusively parasitic.





[27] KEILL





27. **KEILL, John** (1671-1721). *An Introduction to the true Astronomy: or, Astronomical Lectures read in the Astronomical School of the University of Oxford.* London: Printed for Henry Linton, 1739. ¶ 8vo. xiv, [4], 396, [12] pp. 26 [of 27] numbered + 2 unnumbered engraved plates of the MOON (following p. 108, engraved by John Senex (1678-1740)), index, ads; lacks plate XVIII, pages 325-378 heavily stained. Original full calf, spine bands, gilt-tooling to accent the bands, new red morocco spine label, modern red morocco gilt-stamped spine label; minor kozo repair to spine head, lower corners dented, with related wear, otherwise very good. Ownership signature of Henry C. King, his initials also applied; early ownership signature of Jn. Prechard [or like: Preschard!?] Din---, 1752 [or 1782]. As is [good+]. [S14120]

\$ 100

Third edition. "Keill was one of the very important disciples gathered around Newton who transmitted his principles of philosophy to the scientific and intellectual community". – *DSB* VII, p.275.

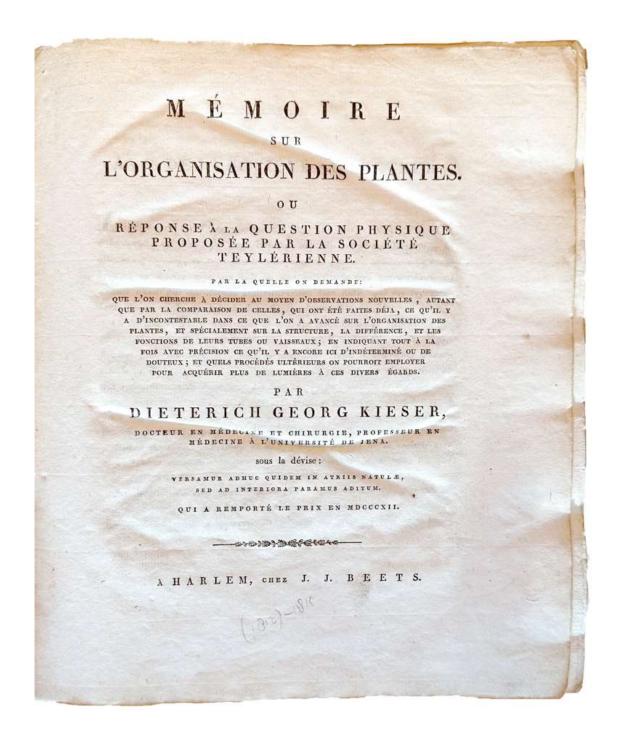


28. **KIESER, Dieterich Georg** (1779-1862). Mémoire sur l'Organisation des Plantes ou Réponse a la Question Physique Proposée par la Société Teylerienne.

Haarlem: J.J. Beets, 1814. ¶ Series: Verhandelingen, Uitgegeeven door Teyler's Tweede Genootschap. Achtiende stuk. Bevattende een Antwoord op de Vraag betreffende het werktuiglijk zamenstel der planten. 4to. xxi, 345 pp. Series title, 22 engraved plates. Original boards, original printed spine label; spine worn, joints splitting. Original binding untouched. Bookplate. RARE. [LV1836]

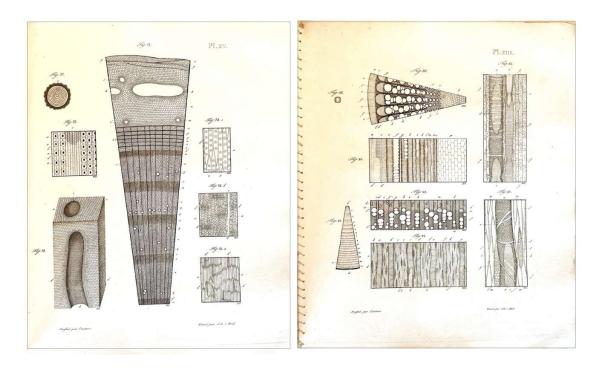
\$ 850

PIONEER OF CELLULAR BOTANY. This is the author's prize-winning essay for the Teylerian Society in Haarlem in 1812. The work is both a review of earlier botanical literature, but it also puts forth an early form of cell theory. "... Dietrich Georg Kieser (who published after the award of the Gottingen prize), is of interest for three reasons: first, because although he was a German and a professor at Jena, the definitive statement of his position, the *Memoire sur l'Organisation des Plantes* was written in French; second, because he wrote a widely read textbook, in German, in 1815, the *Elemente der Phytotomie*, and third, because he is mentioned by Dumortier, the discoverer of binary fission, as one of the principal proponents of the view that cells arise from subcellular granules. The *Memoire sur l'Organisation des Plantes* was submitted as a prize essay for a competition organized by the Teylerian Society on the subject of plant fine structure, and especially on the tubes and vessels to be found in plants.



Kieser's essay won the prize and became very well known. It begins with a detailed review of the work of [Robert Hook, Marcello Malpighi, Nehemiah Grew (1641-1712), Leeuwenhoek, Henri-Louis Du Hamel du Monceau, Sir John Hill, Martin Van Marum, Mustel, Johann Hedwig, Jean Senebier, Christian Sprengel, Ludolph Christian Treviranus, Heinrich Friedrich Link (1767-1850),

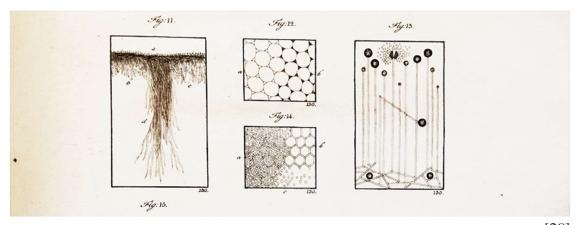
Karl Asmund Rudolphi (1771-1832) (the "father of helminthology") and Mirbell, and it is, in this respect, one of the most useful of nineteenth century compendiums of botanical history. As for Kieser's own ideas on the organization of plants, he takes the view that 'Les plantes sont composees en grande partie de cellules, qui forment un tissue cellulaire.' (Plants are composed in large part [that is, not entirely] of cells, which form a cellular tissue.') He believed that these cells arose from an infinity of tiny, transparent globules to be found in the sap. These globules were through to enlarge, cohere and, as a result of external pressures, assume their final shape. . . . He regarded the cells of lower plants, which retailed their ellipsoidal shape, as the most primitive forms. In higher plants, however, the cells were forced by reciprocal pressures into a shape that he now defined more specifically as a dodecahedral rhombus. There pressures were said to obey strict mathematical laws, but how the forces were exerted and what mathematical laws they obeyed are not stated [referring to his later work, Elemente der Phytotomie]..." Henry Harris, The Birth of the Cell, 2000, page 45.



Stevens cites Kieser's work as a model of the post-Linnean treatises that sought to organize and categorize major fields of the natural sciences. "The various shades of meaning it encompassed prefigure many of the questions — evolutionary, genetic, developmental, mechanistic, functional, anatomical, and

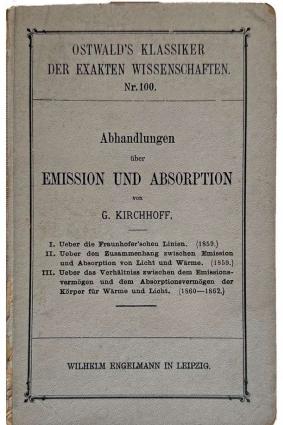
physiological – that would be addressed in biology later in the nineteenth century." Kierser links Lamarck and Treviranus to using terms that organize biology, as with Kieser, but they also do not address "organization" specifically.

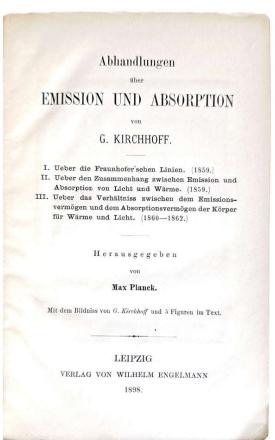
Dieterich Georg KIESER (also Dietrich Georg von Kieser, 1779-1862), born in Harburg, Germany, studied medicine at the Universities of Wurzburg and Gottingen, receiving his doctorate in 1801. He was appointed director of a Jena mental hospital in 1816. The following year he began teaching psychiatry at the university and opened a private sanatorium. For most of his career he was a professor at the University of Jena, where from 1824 to 1862. Kieser was also a learned scholar of natural sciences. While working as a professor at the University of Jena, Kieser operated a private ophthalmology clinic from 1831 to 1847, and from 1847 until 1858 he was director of the Grand Ducal Mental Hospital. He was an advocate of balneology, and beginning in 1813 was a physician at the therapeutic spas at Heilbad Berka. With Adam von Eschenmayer (1768-1852) he published the 12-volume Archiv fur den thierischen Magnetismus (Archive for Animal Magnetism), for which he contributed numerous articles. He found positive or negative charges everywhere, dichotomies rules the cosmos. "Organs within one and the same body were believed to magnetize each other." [Wallace-Gach]. He died in Jena.



[29]

§ See: Peter Francis Stevens, The Development of Biological Systematics: Antoine-Laurent de Jussieu, Nature, and the Natural System, Columbia University Press, 1994 - page 198. Edwin R. Wallace, John Gach, History of Psychiatry and Medical Psychology: With an Epilogue on Psychiatry and the Mind-body Relation, Springer-Verlag, 2008, pages 342-43.



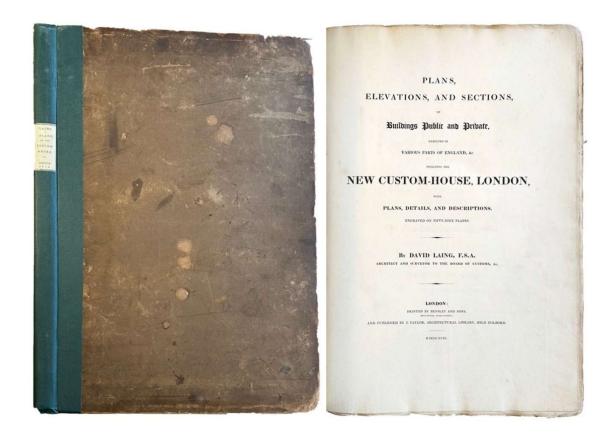


29. **KIRCHHOFF, Gustav** (1824-1887). *Abhandlungen über Emission und Absorption*. Leipzig: Wilhelm Engelmann, 1898. ¶ Series: *Ostwald's Klassiker des Exakten Wissenscaften*, nr. 100. Small 8vo. 41, [1] pp. Frontispiece portrait (corner dented), 5 figs. Original gray printed cloth; spine chipped. Generally very good.

\$ 12

Edited by Max Planck. Contains 3 classic papers of the author:

I. Ueber die Fraunhof'schen linien. [Berlin. Akad. Monatsber., october 1859]; II. Ueber den zusammenhang zwischen emission und absorption von licht und wärme. [Berlin. Akad. Monatsber., december, 1859]; III. Ueber das verhältniss zwischen dem emissions-vermögen und dem absorptionsvermögen der körper für wärme und licht (1860-1862) [Untersuchungen über das sonnenspektrum und die skeptren der chemischen elemente. 2. ausg. Berlin, 1862].



Large-format Architectural Plans for the London Custom House

30. LAING, David (1774-1856). Plans, Elevations, and Sections, of Buildings Public and Private, executed in various parts of England, &c including the New Custom-House, London, with plans, details, and descriptions. Engraved on fifty-nine plates. London: Bensley & Sons, 1818. ¶ Imperial folio (560 x 380 mm) [10], xvi, [1, 1 blank], 44 pp. Subscriber's list, 2 etchings, 57 engraved plates (12 double-page), complete; occasional light foxing. Quarter green cloth over drab boards, modern printed spine label; rebacked. Bookplate and signature of George Aitchison, book-label of A. Russell, Pollock, Greenhill. Fine. RARE. [S14039]

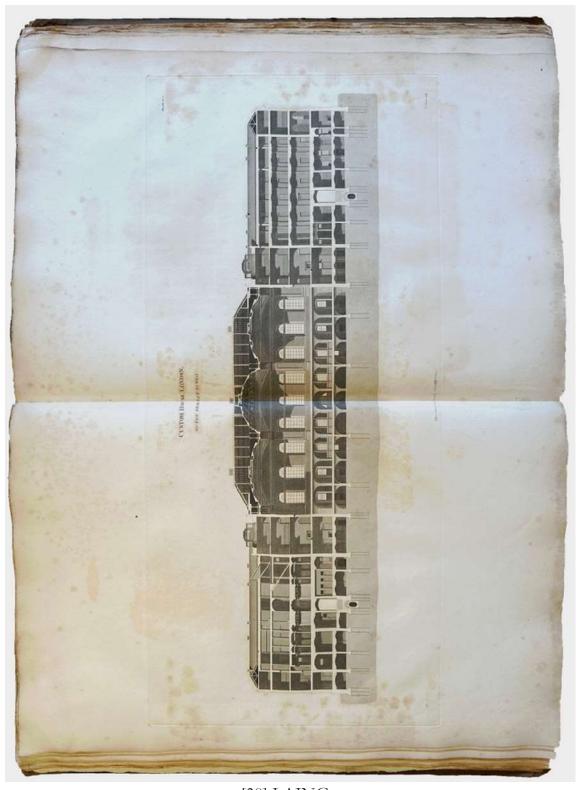
\$ 1,350

FIRST EDITION. This magnificent architectural folio primarily documents the structure of the New Custom House in Lower Thames Street, begun in 1813. Leading the list of subscribers is King George III, and the work is

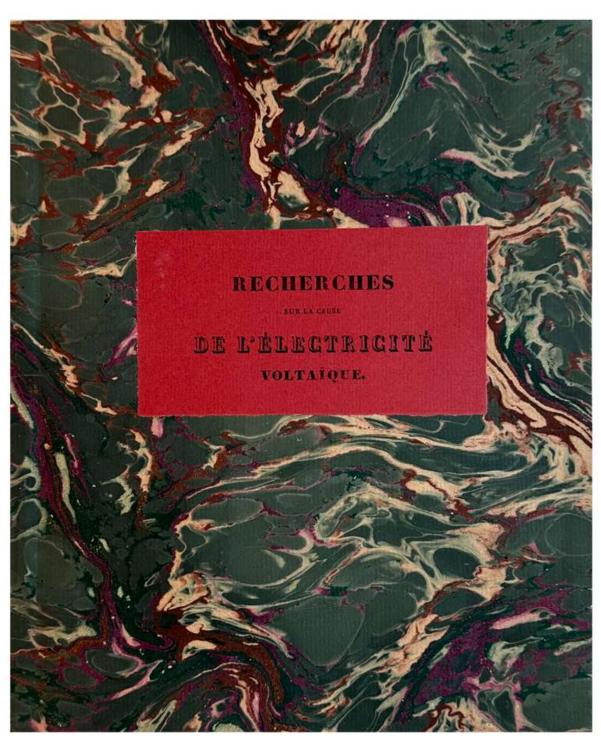
dedicated to the Prince of Wales (eventually George IV) who undoubtedly had provided royal patronage for this deluxe volume. The text describes the site preparation, including test bores of the soil, to a depth of 30 feet. Initially, the investigation indicated that the site was suitable to support the massive weight of the proposed building. However, when the actual trenching began, it was discovered that the underlying soil was of a quite variable nature and density, having been the result of centuries of variation in the width of the adjacent Thames River. It was decided to insert beech pilings, at three-foot intervals, to support the river front of the building. The pilings eventually decayed, [contributing] to the collapse of that side of the building. The cost overruns in completing the foundation were considerable, and unfortunately insufficient, leading to the eventual collapse, necessitating its rebuilding. The remainder of the book documents the work performed on St. Dunstan's Church, public buildings and a few grand villas of the wealthy.

David Laing is principally known as the architect of the New Custom House in London, which was completed in 1817 and collapsed in 1825. Assisted by a young William Tite, he also rebuilt the church of St Dunstan-in-the-East between 1817 and 1821. In 1818 Laing published this book of plans and drawings which included details of the problems he had encountered in laying the foundations of the New Custom House. The subsidence of those foundations was later to cause the collapse of the building, which had to be rebuilt, under the direction of Sir Robert Smirke. After the collapse of the New Custom House Laing was suspended from his post as Architect & Surveyor of the Board of Customs, and his practice was ruined.

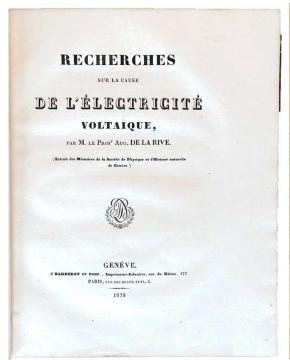
PROVENANCE: George Aitchison (1792–1861) and George Aitchison, Jr. (1825-1910) were both prominent English architects. An expert in interior design, the son's finest work is the house he designed for Frederic, Baron Leighton of Stretton, at Holland Park Road, Kensington, which includes the Arab Hall (added 1877–9, built to display the collection of glazed tiles Leighton had acquired during his visits to the East) and the artist's studio. Aitchison (junior) enjoyed a considerable reputation, being Professor of Architecture at the Royal Academy (1887–1905) and President of the Royal Institute of British Architects (1896–9). DNB Vol. XI, pp. 400-1.

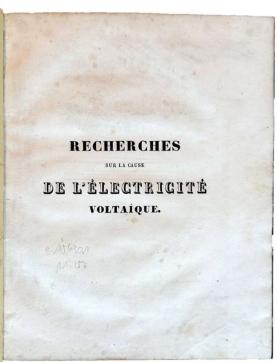


[30] LAING



[31] LA RIVE



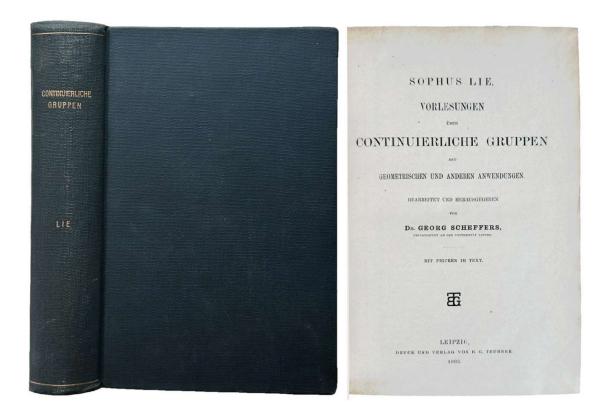


31. **LA RIVE, Arthur-Auguste de** (1801-1873). "Recherches sur la Cause de l'Electricite Voltaique." Offprint from: Mémoires de la Société de Physique et d'Histoire Naturelle de Genève, 4, Part 3, 1828. Geneve: J. Barbezat, 1828. 4to. 50 pp. Later marbled wrappers. FINE. [S7766]

\$ 175

FIRST EDITION. La Rive's major work and an influential factor in the development of electrical theory. "It was as a critic of Volta's contact theory that of the pile, which attributed the production of electricity in the pile to an electromotive force arising from the contact of heterogeneous substances, that La Rive made his European reputation." *DSB* VIII, p. 36. He was a friend of Arago, Ampere and Faraday, and became the dominant force in the Academie de Geneve.

 $\$ Poggendorff II, p. 657; DSB VIII.



32. LIE, Sophus (1842-1899); SCHEFFERS, Georg (1866-1945). Vorlesungen uber Continuierliche Gruppen mit Geometrischen und Andern Anwendungen. Leipzig: B. G. Teubner, 1893. ¶ 8vo. (230 x 152 mm) xii, [4], 810 pp. Figs., index. Light toning throughout, marginal pencil annotations in German. Bound in dark green cloth, gilt-stamped spine title. Ownership signature of Joseph Miller Thomas, November 26, 1930. Rare. [S8964]

\$ 90

FIRST EDITION. Lectures on Continuous Groups with Geometric and Other Applications. "Die aufgabe des unterzeichneten bestand in der hauptsache in der anordnung und bearbeitung des reichen stoffes, wobei ihm zu einem grossen teil knappgehaltene manuscripte von Lie sowie eigene nachschriften zur verfügung standen. In stärkerem masse hat er das kapitel über complexe zahlen beeinflusst." [The undersigned's task was mainly to arrange and process the rich material, with a large portion of Lie's manuscripts and his own manuscripts at his disposal. He influenced the chapter on complex numbers to a greater extent]. -- Editor's pref.

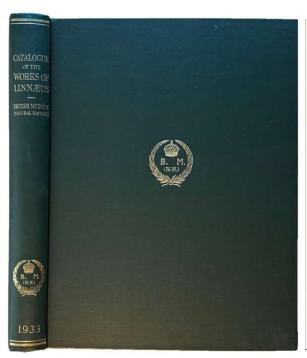
CONTENTS: Die allgemeine projective gruppe der ebene und einige ihrer untergruppen.--Theorie der projectiven gruppen in der ebene.--Die gruppen der ebene.--Die grundlegenden satze der gruppentheorie.--Lineare homogene gruppen und complexe zahlen.--Einige anwendungen der gruppentheorie.

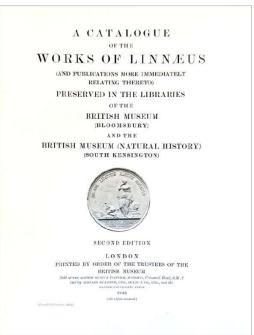
Marius Sophus Lie (1842-1899), Norwegian mathematician, noted for his contributions to the theories of differential equations and continuous transformation groups. *DSB*, Vol. XII, p. 150; University of St. Andrews, Scotland.

The editor, Georg Scheffers studied at Leipzig from 1884 to 1888 obtaining his doctorate in 1890. From 1896 he lectured at Darmstadt becoming a full professor there in 1900. In 1907 he was appointed to Charlottenburg where he held the chair of mathematics until he retired in 1935. Scheffers was a student of Sophus Lie, who was at Leipzig from 1886 until 1896 and he greatly influenced Scheffers' work. Lie suggested the topic for his doctoral thesis on plane contact transformations and also the topic for his *Habilitationsschrift* on complex number systems. Scheffers' most important work, also inspired by Lie, was a paper in 1903 on Abel's theorem. Later in life Scheffers wrote many popular mathematics textbooks and edited Lie's works. His favorite topic was differential geometry and here he discovered many properties of particular curves and surfaces. [University of St. Andrews].

ovember 26, 1930. Joseph Miller Thomas

PROVENANCE: Joseph Miller Thomas (1898-1979) was an American mathematician, known for the Thomas decomposition of algebraic and differential systems. Thomas received his Ph.D., supervised by Frederick Wahn Beal, from the University of Pennsylvania with thesis Congruences of Circles, Studied with reference to the Surface of Centers. He was a mathematics professor at Duke University for many years.



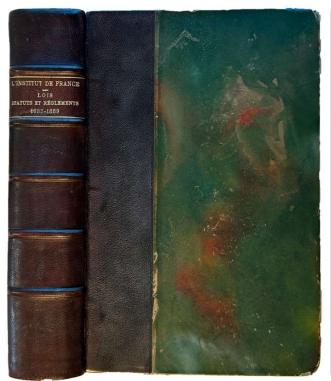


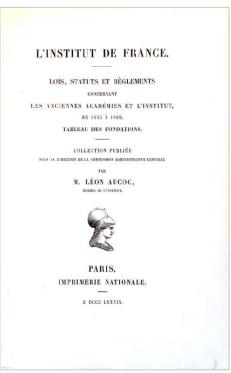
33. [LINNÉ, Carl von (1707-1778)] British Museum. Department of Printed Books. A catalogue of the works of Linnæus (and publications more immediately relating thereto): preserved in the libraries of the British Museum (Bloomsbury) and the British Museum (Natural History) (South Kensington). Second edition. London: Printed by order of the Trustees of the British museum, 1933. ¶ 4to. xi, [1], 246, 68 pp. VII plates. Original full dark green gilt-stamped cloth. Fine.



[WITH]: An index to the authors (other than Linnaus) mentioned in the catalogue of the works of Linnaus; preserved in the libraries of the British Museum. London: Printed by order of the Trustees of the British museum, 1936. ¶ 4to. 59, [1] pp. Original full dark green printed wrappers. Fine.

2 volumes: \$ 35





34. L'Institut de France; AUCOC, Leon (1828-1910). L'Institut de France. Lois, statuts et règlements concernant les anciennes académies et l'Institut, de 1635 a 1889, tableau des fondations. Paris: Imprimerie Nationale, 1889. ¶ 8vo. ccviii, 451 p. Original printed wrappers bound in later quarter morocco, raised bands, gilt title, decorative paper over boards, t.e.g.; corners bumped, extremities rubbed. Bookplates of Stephen d'Irsay and Roger Hahn. [RH1366]

\$ 125

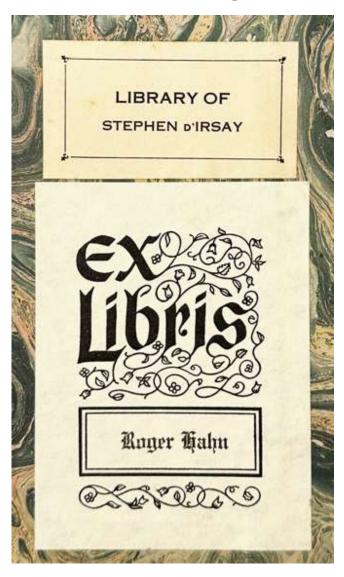
The Institute of France laws, statutes and regulations concerning the former Academies and the Institute from 1635 to 1889, Paris. The author, Jean-Léon Aucoc, was a French lawyer and senior civil servant.

PROVENANCE [2]: [1] Stephen d'Irsay (1894-1934), born in Budapest, and long exiled from his own country, d'Irsay earned his medical degree from the Royal Hungarian University. He worked on electrocardiography and studied under Einthoven and Kraus, also turning his attention to heart disease. At only 40 years of age, he died at the American Hospital in Paris, suffering from kidney disease and blindness. [2] Roger Hahn (1932-2011). "Roger Hahn was a distinguished member of the first cohort of historians of science trained in the

programs established in the United States after World War II. As an undergraduate in physics and history at Harvard (AB, 1953), he had an opportunity of hearing T.S. Kuhn and I.B. Cohen. After obtaining a master's

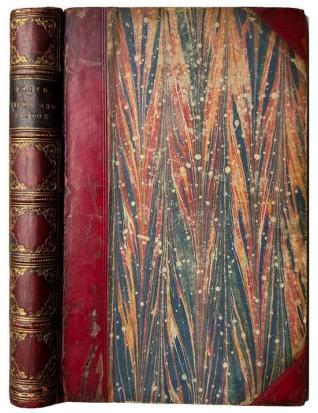
degree in teaching at Harvard (1954), he went to Paris on a Fulbright to prepare himself more pertinently in the seminars of Alexandre Koyré and René Taton. From Koyré he took an interest in philosophical questions; from Taton, an interest in the dissemination of science."

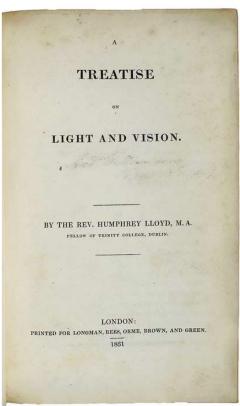
"Roger died on May 30, 2011, en route to Paris, where he was to hold an early celebration of his 80th birthday. During a stopover in New York, he contracted a respiratory disease that overwhelmed an immune system weakened by years of battling cancer. In his baggage was a large manuscript, finished apart from a few minor details, containing Laplace's known correspondence and the significant records about him that Roger had uncovered



during almost fifty years of resourceful searching." [University of California, Berkeley]. I had purchased Hahn's library just one month earlier.

§ See: *ISIS*, vol. 24, no. 2, February 1936. My added note: I bought Roger' Hahn's office library circa May 1, 2011. Since then I have slowly brought his books to the market.





35. **LLOYD, Rev. Humphrey** (1800-1881). *A Treatise on Light and Vision*. London: Longman, Rees, Orme Brown and Green, 1831. ¶ 8vo. xx, xii, 402 pp. Original gilt-stamped half red calf, marbled boards, raised bands, black leather spine label; extremities heavily rubbed. Good+. Scarce. [S14122]

\$ 100

First edition. "A most valuable though scarce work. The chapter on spherical aberration and the general description of instruments have been derived mainly from this treatise. – Pref., Heath in Geometrical Optics' The author first proved by experiment the correctness of Sir William Rowan Hamilton's prediction-arrived at mathematically-of the conical refraction of light [1832]. He also discovered a class of interference known as Lloyd's Single-Mirror Fringes." – from a note mounted in the book.

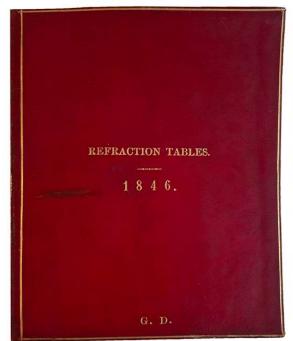
"In his final paper of 1832 Hamilton applied his results to Fresnel's theory of the double refraction of light in biaxal crystals and deduced theoretically that for certain directions of the incident ray the light would be refracted as a cone of rays, a totally unexpected result. He asked his friend Humphrey Lloyd, the son of Bartholomew and the then Professor of Natural Philosophy, to test the result experimentally, and the phenomenon of conical refraction was observed for the first time in December, 1832. This was the first of four famous predictions of physical phenomena by theoretical calculation, the other three being the discovery of Neptune by Adams and Leverrier in 1845 by analysing the perturbations of Uranus, the theoretical prediction of wireless waves by Maxwell in 1864, afterwards verified experimentally by Hertz, and Einstein's deduction of the bending of light rays by the sun from his theory of relativity, later observed during the solar eclipse of 1919." – McConnell.

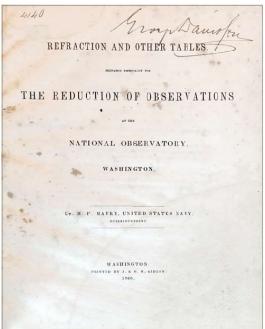
Humphrey Lloyd was "an Irish physicist and academic who served as the 30th Provost of Trinity College Dublin from 1867 to 1881. He was Erasmus Smith's Professor of Natural and Experimental Philosophy at Trinity College Dublin from 1831 to 1843. Lloyd is known for experimentally verifying conical refraction, a theoretical prediction made by William Rowan Hamilton about the way light is bent when travelling through a biaxial crystal. He was a Fellow of the Royal Society, and President of both the British Association and the Royal Irish Academy."

PROVENANCE: [1] Reverend Richard Townsend (1821-1884), Trinity College, Dublin (a colleague of the author?), mathematician, "Following graduation Richard's whole career was spent as an academic at Trinity: initially as First Senior Moderator in mathematics and physics; Junior Fellow May 1845; Tutor October 1847; Professor of Natural Philosophy June 1870; Examiner in Mathematics and Mathematical Physics and Senior Fellow in 1883." [DNB]; [2] Henry C. King, (1915-2005) 1951.



See: A.J. McConnell, 'The Dublin Mathematical School in the first half of the nineteenth century'. *Proceedings of the Royal Irish Academy. Section A: Mathematical and Physical Sciences*, Vol. 50 (1944/1945), pp. 75-88.



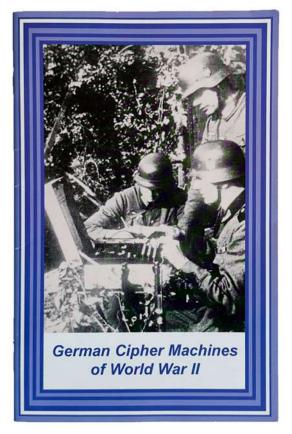


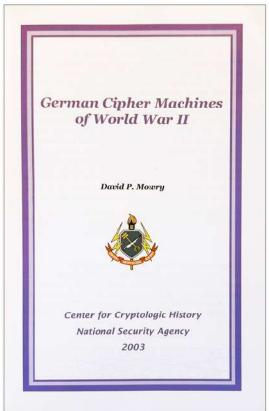
36. MAURY, Matthew Fontaine (1806-1873). Refraction and Other Tables. Prepared especially for the Reduction of Observations at the National Observatory, Washington. Washington: Printed by J. & G.S. Gideon, 1846. ¶ 4to. ix, [1], 24 pp. Original full crimson red gilt-stamped calf, a rich treatment for this item, possibly for presentation, or unique to G.D. Ownership signature (on title) of George Dau-----[?], his initials on the binding cover. Heavily spotted, some stains. RARE.

\$ 45

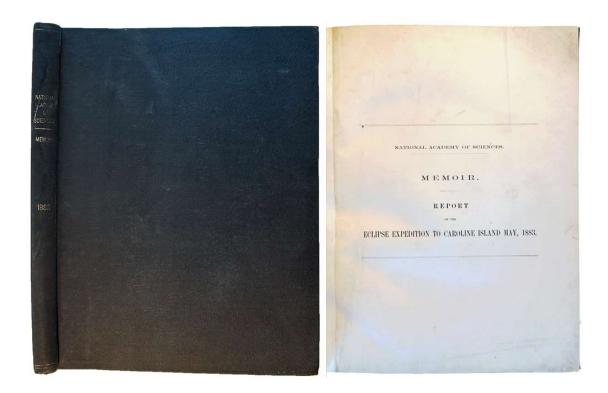
Maury, nicknamed "Pathfinder of the Seas", is considered the founder of modern oceanography, became Superintendent of the Depot of Charts and Instruments, later renamed the United States Naval Observatory, in 1844.

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37. **MOWRY, David P.** *German Cipher Machines of World War II*. Washington, DC: Center for Cryptologic History, National Security Agency, 2003. ¶ 21cm. [2], 31, [1] pp. Illus., errata. Printed wrappers. Very good. \$ 7.95



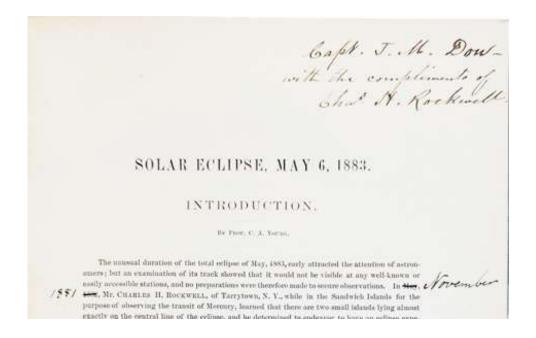
38. **[Solar eclipse] National Academy of Sciences, Washington**. *Memoir. Report of the Eclipse Expedition to Caroline Island May, 1883*. Washington, DC: National Academy of Sciences, 1883. ¶ 4to. 146 pp. 22 figs. Early full black cloth, gilt-stamped spine label. The first part is inscribed to Capt. J.M. Dow – with the compliments of Chas. H. Rockwell.

On May 6, 1883, a dramatic total eclipse plunged the Sun into darkness for nearly six minutes. Several expeditions of prominent astronomers from the United States, Great Britain, France, and Italy convened on Caroline Island, a remote coral atoll in the middle of the Pacific Ocean, to observe and document the event. An expedition of American astronomers traveled from Peru to Caroline Island aboard the *USS Hartford* to observe the total solar eclipse.

"The eclipse expedition was fully reported in the Memoirs of the National Academy of Science, v. 2, 1883. Not only does this report provide detailed information relating to the scientific work undertaken on the Island, but it also includes a very readable account of the journey, the history and description of the Island as well as its botany and zoology. More recently, an account by Joseph Ashbrook was published in Sky & Telescope. The lighthearted account by Upton and Ray Woods made pretense of being learned, but through the fun of

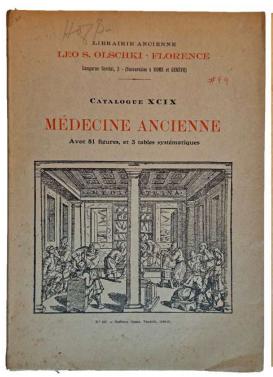
\$ 25

it all one gets a glimpse of the characters of the people involved, and of events that help fill out the more formal reports of the venture . . ." – Lastovica.



PROVENANCE: Charles H. Rockwell, Tarrytown, New York, is named in the text. John Melmoth Dow (1827-1892) was a ship captain, shipmaster, shipping agent and naturalist. Born in New York City in 1827, he joined the Panama Railroad Company. He made his first voyage to the Central American coast in 1851, and remained involved with Central and South American coastal trade as a ship captain until 1876. He was appointed commander of the steamer Constitution in 1853, and opened the Central American service of the Panama Railroad Company as commander of the steamer Colombus. He later became a shipping agent for the Pacific Mail Steamship Company. During his years as a shipping agent, Dow was captured and held hostage by revolutionist Pedro Prestán [1852-1885] in 1885. He was arbitrator in the dispute between the Compagnie Universelle du Canal Interocéanique and the American Contracting and Dredging Company in their attempt to build the French Canal in Panama. Dow died in New York City in 1892. – Cornell University (who holds Dow's papers).

§ See: Lastovica, E., "The Lighter Side of the Solar Eclipse Expedition to the Caroline Islands, 1883." *Monthly Notes of the Astron. Soc. Southern Africa*, Vol. 49, p. 7, 1990.



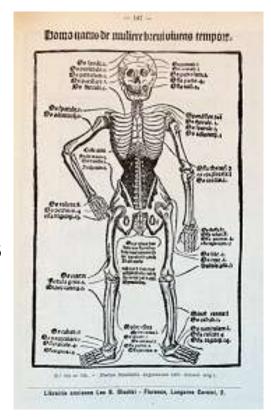


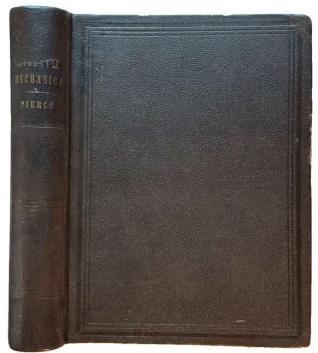
Catalogue #99

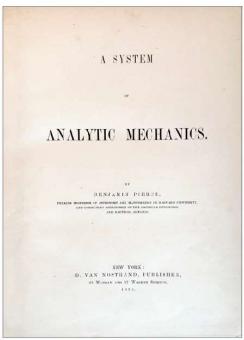
39. **OLSCHKI, Leo S.** (Florence, bookseller). *Catalogue XCIX Médecine Ancienne. Avec 81 figures, et 3 tables systématiques.* Florence : Leo S. Olschki Librairie Ancienne, [ca.1924-28]. ¶ Sq. 8vo. 400 pp. 81 figures, index. Paper uniformly browned. Original printed red & black wrappers. Some minor wear, generally very good. Scarce.

\$ 45

Bookseller catalogue, with 1809 items offered for sale, heavily populated with early printed medical texts, the Italian and French imprints being most well represented. A remarkable assemblage of medical rarities.







With the Author's Name Misspelled Twice: "Pierce"

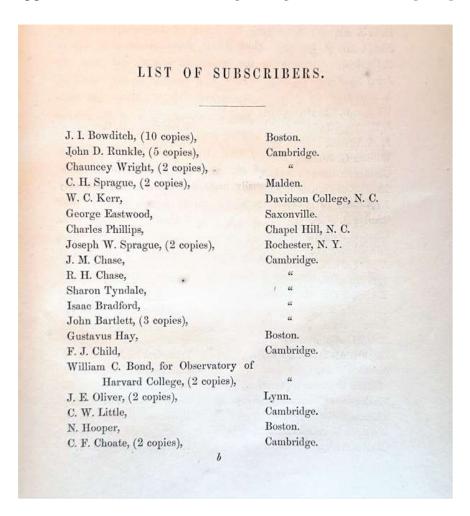
40. **PEIRCE, Benjamin** (1809-1880). A System of Analytic Mechanics. New York: D. van Nostrand, 1855. Printer: Allen and Farnham, Printers, Cambridge. ¶ (20 x 25.8 cm). 4to. xxxix, [1], 496 pp. Subscribers list (showing 200 copies subscribed for). Folding engraved plate, errata, index; short marginal tear to front blank professionally repaired. Original brown blind-stamped cloth, gilt spine, rebacked with dark brown morocco, original cloth spine mounted; gilt spine lettering partially lacking, original endleaves preserved with the rear e.p. reinforced along margins. Very good.

\$ 750

FIRST EDITION, EARLY ISSUE (probably a second issue) with the date on the title-page; additionally, Peirce's name is miss-spelled on both the title-page and the spine. Dedicated to Nathaniel Bowditch, this work is a masterpiece of 19th century American mathematics.

"In A System of Analytic Mechanics (1855) Peirce again set forth the principles and methods of the science as a branch of mathematical theory, a subject he developed from the idea of the 'potential.' The book has been described as the most important mathematical treatise that had been produced in the United

States up to that time. Peirce's treatment of mechanics has also been said, by Victor Lenzen, to be 'on the highest level of any work in the field in English until the appearance of Whittaker's *Analytical Dynamics*' in 1904." [DSB].

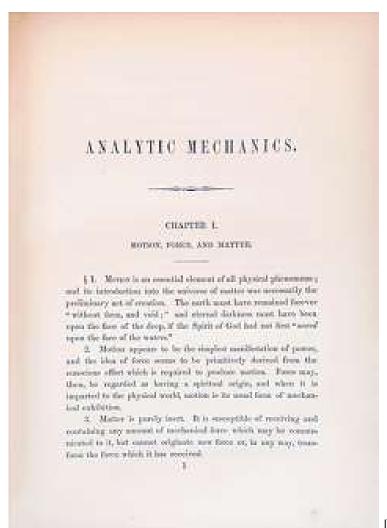


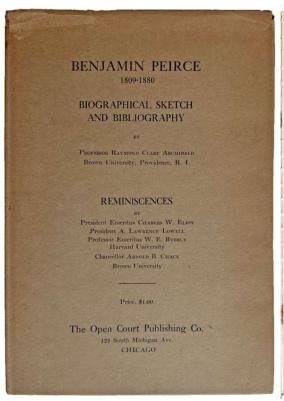
Peirce "was a disciple of Laplace. Peirce's teacher when he was a schoolboy in Salem, Nathaniel Bowditch, was the author of the standard English translation of Laplace's *Traité de méchanique celeste*; Peirce helped to check the proof sheets while he was a student at Harvard College.... Peirce thought that 'no grander conception of the physical universe has ever been presented to philosophical discussion' than the nebular hypothesis" – Menand, p. 2.

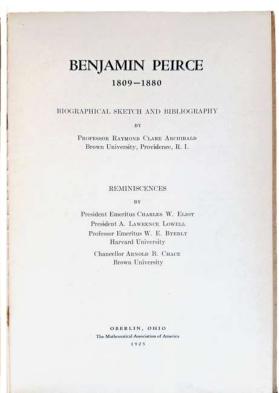
There are two publishers who issued this work in 1855: Boston: Little, Brown, and New York: D. van Nostrand (as above). Of the NY issue, the Verne Roberts' copy (see below) does not have the date of issue on the title, but the pagination and content are the same. Both issues are made up of sheets printed

by Allen and Farnham, Printers, Cambridge. The Boston Little, Brown issue also is seen with an alternative added title, *Physical and Celestial Mechanics Developed in four systems of Analytic Mechanics, Celestial Mechanics, Potential Physics, and Analytic Morphology*, 1855. Additionally, it is important to note that the Little, Brown copies have a larger version of the original sheets, measuring 21 x 27.4 cm. I suspect the Van Nostrand issue is trimmed down from the original sheets. The Peirce Editions Project, headed by Nathan R. Houser, is at the time of this description, looking into the history of the relationship of these various issues. According to Houser, Van Nostrand also made later issues of the book in 1865 and 1872. All are scarce on the market.

⇔ DSB Vol. X, p. 480; Roberts, Bibliotheca Mechanica, p. 248 (2nd issue). Not in Norman.

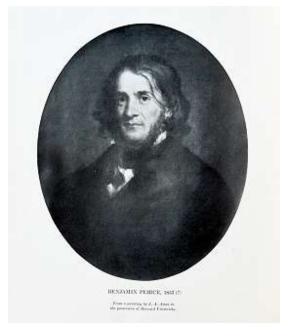


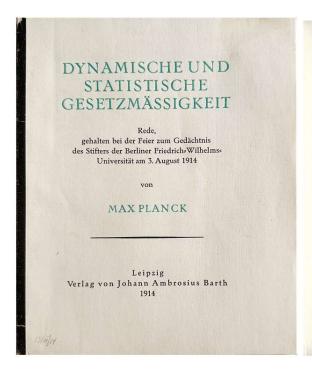




41. [PEIRCE, Benjamin (1809-1880)] Raymond Clare ARCHIBALD (1875-1955). Benjamin Peirce 1809-1880, biographical sketch and bibliography.

Reminiscences by President Emeritus
Charles W. Eliot, President A. Lawrence
Lowell, Prof. Emeritus W. E. Byerly,
Harvard University, [and] Chancellor
Arnold B. Chace, Brown University.
Chicago: Open Court; Oberlin, Ohio:
The Mathematical Association of
America, 1925. ¶ Open Court pub.
bound copies and added 4 portraits
and additional notes. 8vo. iv, 30, [2]
pp. Illus. Original gray boards, brown
printed dust-jacket; modest wear or
tearing to extremities, but a very
good copy. \$20





HOCHANSEHNLICHE VERSAMMLUNG! VEREHRTE KOLLEGEN! LIEBE KOMMILITONEN!

ach altsehrwürdigem Brauch begeht heute die Friedrich-Wilhelmss-Universität, in freudigem Bekenntnis untilgbarer Dankesschuld, die Geburtssfeier ihres erhabenen Stifters, dessen Namen sie mit Stolz den ihren nennt, und entnimmt zugleich der besonderen Lage dieses Gedenktages die Anregung zu sinnender Rückschau auf das zur Neige gehende Semester. In einer Zeit der bittersten Not gegründet, durch ein Jahrhundert rastloser Arbeit zu hoher Blütte entfaltet, darf sie gegenwärtig mit Recht sich der genommenen Entwicklung freuen und fühlt sich gerade heute wieder besonders eng verbunden mit der Persönlichkeit ihres ersten Königlichen Herrn, der unter den Fürsten seiner Zeit emporragte durch die Makels losigkeit des Charakters, durch die Gewissenhaftigkeit und Treue, die er in allen Lagen seines schicksalsreichen Lebens zur Richtschnur des Handelns zu nehmen bes müht war.

müht war.

Gewissenhaftigkeit und Treue, das sind auch die Wahrzeichen, unter denen unsere Universität groß geworden ist, während daegeen andere gleichzeitig gegründete, äußerlich noch glänzendere Schöpfungen menschlichen Genies, die eines solchen Merkmals ent-

3

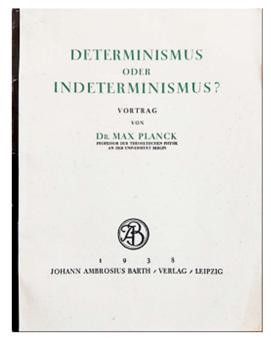
42. **PLANCK, Max** (1858-1947). *Dynamische und statistische gesetzmassigkeit*. Leipzig: Johan Ambrosius Barth, 1914. Thin 8vo. 31 pp. [and:] *Determinismus oder indeterminismus?* Leipzig: Johann Ambrosius Barth, 1938. ¶ 2 papers housed in drop-back box. Thin 8vo. 32 pp. Printed

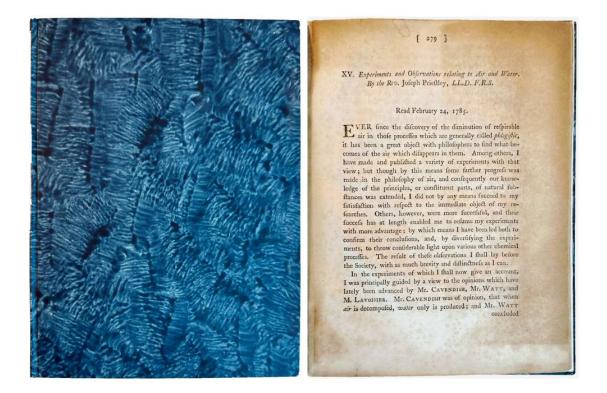
wrappers; a few corners slightly damaged. Housed together in a clamshell box. Bookplate of Andras Gedeon. Very good. [S10007]

\$ 155

FIRST SEPARATE EDITIONS of Planck's lectures, *Dynamische*... [Dynamic and Statistical Laws] being the third major publication of Planck. "Report in the memory of the founder..." Here Planck puts forth the theses about the microcosm and macrocosm, which strongly influenced Erwin Schrödinger, among others.

§ *DSB* Vol. XI, p. 7-17; Poggendorff V, pp. 982-3.





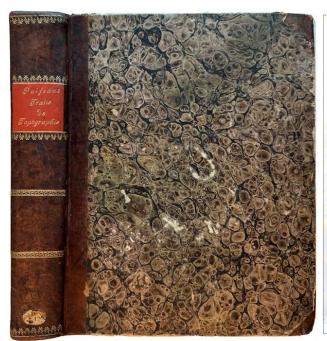
43. **PRIESTLEY, Joseph** (1733-1804). *Experiments and Observations relating to Air and Water.* Extract: *Philosophical Transactions of the Royal Society of London*, Vol. 75, pp. 279-309, 1785. [London: the Royal Society of London, 1785]. ¶ Small 4to. (235 x 175 mm) pp. 279-309. Considerable browning. Modern boards, printed spine label. Bookplate of Andras Gedeon. Binding fine.

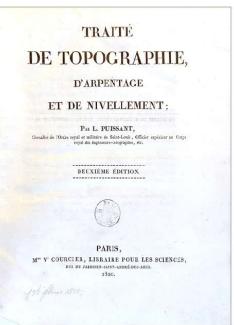
\$ 100

FIRST EDITION. In 1772, Priestley's work on *Observations on Different Kinds of Air*, and pneumatic researches included the isolation and identification of nitric oxide and anhydrous hydrochloric acid gases, and the beginnings of photosynthesis.

"Priestley's experiments were carried on at such a prolific rate, that following the paper of 1772, it was decided that he should publish his accounts of them in book form. . . These works were supplemented by an occasional paper in the *Philosophical Transactions* (including the *Account of Further Observations of Air*, in which he announced his discovery of 'dephlogisticated air', later to be defined as oxygen)." [DSB].

The above paper carries on further research into 'dephlogisticated air'. The phlogiston theory holds that all flammable materials contain phlogiston, a substance without color, odor, taste, or mass that is liberated in burning. Once burned, the "dephlogisticated" substance was held to be in its "true" form, the calx. "Phlogisticated" substances are those that contain phlogiston and are "dephlogisticated" when burned. *DSB* Vol. XI, p. 144.





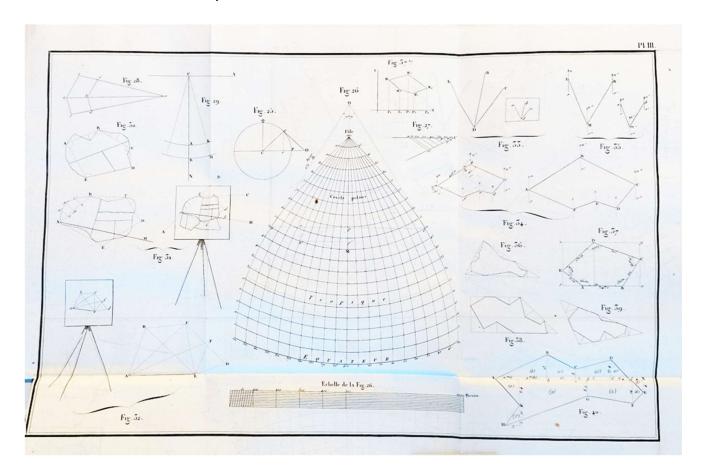
44. **PUISSANT, L. [Louis]** (1769-1843). *Traite de Topographie, d'Arpentage et de Nivellement*. Paris: Mme. Ve. Courcier, 1820. ¶ Second edition. 4to. (252 x 197 mm) xxvi, [2], 412, [42] pp. 9 engraved plates, 42 pages of tables. Original quarter brown calf over marbled boards, gilt-stamped spine bands, gilt-stamped red calf spine label; light wear to covers, corners bumped. Minor pencil signature and ink stamp on title-page. Very good. [S9056]

\$ 250

Second, enlarged edition. This very crisp, fine copy of Puissant's work contains all the original folding engraved plates as well as extensive metric tables and scales.

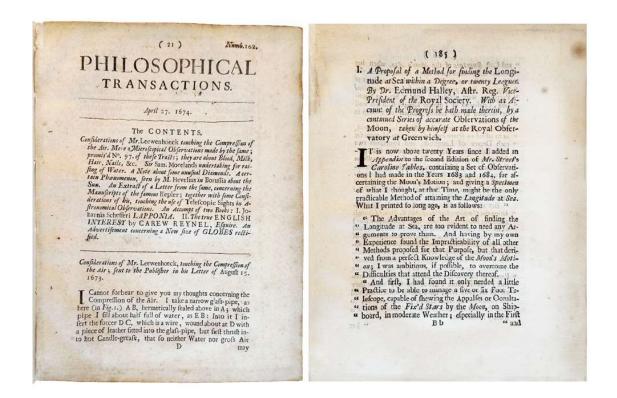
The land maps are used to resolve territorial disputes, they offer precise measurements for international peace treaties, a scale for establishing proper

tax, to regulate divisions between families when there are disputes. In civil works, the projects for road building, canals, etc., depend on these measurements. In war they serve as sure guides to the troops who must defend or attack as necessary.



A French mathematician and geographer, best remembered for his invention of a new map projection, Puissant was a colonel with the French Army in Pyrenees-Orient and Spain beginning in 1792, and subsequently in 1795 professor of mathematics at several schools in France. In 1802 and 1804, Puissant was engaged by the Italian government to survey and chart the island of Elba. His works include several treatises on geometry and mathematics.

§ BM Readex Vol. 20, p. 1081 (1st ed.); Brunet IV, 962; Graesse V, 506; Poggendorff II, 542.



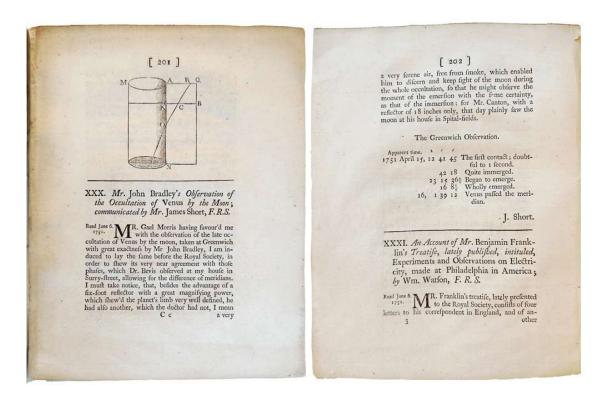
45. [Royal Society]. [8 papers from Philosophical Transactions, including important works by Antoni van Leeuwenhoek, Edmund Halley, Charles Bell, Thomas Henry Huxley, et al.]. London: Royal Society, 1647-1849. ¶ Eight Separate Extracts. 8vo. and 4to. Separately sewn into modern plain paper wrappers. Each extract has an ownership bookplate of Haskell F. Norman tipped in. Housed in folding paperboard box, hinges cloth-backed, printed paper side label. Fine. [SS10003]

\$ 500

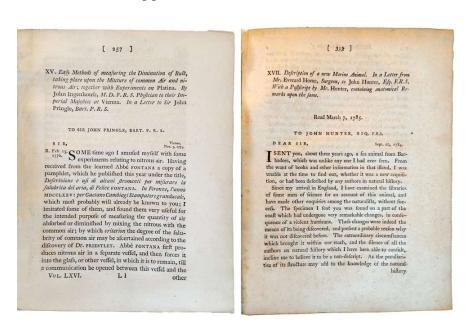
The inventor of this grouping: [1] LEEUWENHOEK, Antoni van (1632-1723). "Considerations touching the Compression of Air." pp. 21-25, 1674. –

[2] HALLEY, Edmund (1656?-1743). "A Proposal of a Method for Finding the Longitude at Sea within a Degree, or Twenty Leagues." pp. 185-196, [1732?]. –

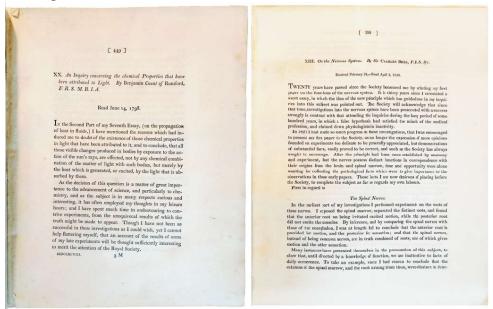
[3] BRADLEY, John. "Mr. John Bradley's Observation of the Occultation of Venus by the Moon; communicated by Mr. James Short, F.R.S." [with: WATSON, William (1715-1787). "An Account of Mr. Benjamin Franklin's Treatise, lately published, intituled, Experiments and Observations on Electricity, made at Philadelphia in America."]. pp. 201-212, 1753. —



[4] INGEN-HOUSZ, Jan (1730-1799). "Easy Method of measuring the Diminution of Bulk, taking Place upon the Mixture of Common Air and Nitrous Air; together with Experiments on Platina..." pp. 257-268, 1776. —

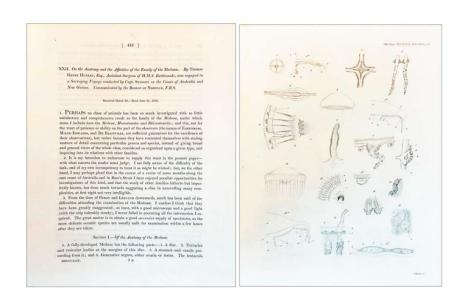


[5] HOME, Everard (1756-1832). "Description of a New Marine Animal. In a Letter. . . to John Hunter." pp. 333-346, 1785. Folding engraved plate, small text vignette on p. 345. The animal is unidentified, but from Barbados. —



[6] THOMPSON, Sir Benjamin, Count of Rumford (1753-1814). "An Inquiry concerning the Chemical Properties that have been attributed to Light." Pp. 449-468, 1798. –

[7] BELL, Sir Charles (1774-1842). "On the Nervous System." pp. 245-254, 1840. Engraved plate. —

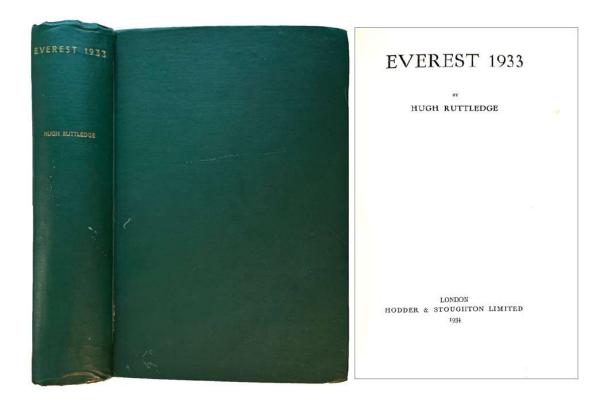


[8] HUXLEY, Thomas Henry (1825-1895). "On the Anatomy and the Affinities of the Family of the Medusae." pp. 413-434, 1849. 3 engraved plates.









46. **RUTTLEDGE, Hugh** (1884-1961). *Everest 1933*. London: Hodder & Stoughton, 1934. ¶ Tall 8vo. xv, [1], 390 pp. 59 illustrations, 4 maps (including the large folding map at rear), 3 diagrams, index; occasional foxing. Original dark green gilt-stamped cloth. Very good.

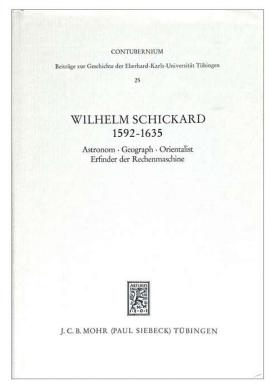
\$ 20

First edition. Ruttledge, English civil servant and mountaineer, was the leader of two expeditions to Mount Everest in 1933 and 1936. "In 1933 permission was granted to the British by the authorities in Tibet for a further attempt on the mountain. The Mount Everest Committee's task of finding a leader for this, the fourth British expedition, was made difficult by the incapacity of Charles Granville Bruce (the leader of previous British expeditions to the mountain), and the unwillingness of Major Geoffrey Bruce and Brigadier E. F. Norton to assume the role. As Ruttledge wrote, 'it was necessary to find someone with experience of Himalayan peoples as well as with mountaineering knowledge, and eventually the lot fell upon me'." "In 1934 Ruttledge was awarded a Royal Geographical Society Founder's Medal; his citation read 'For his journeys in the Himalayas and his leadership of the Mount Everest Expedition, 1933.' Although the Mount Everest committee set up an inquiry into the reasons for the failure of the expedition, Ruttledge was not blamed, almost all members of the expedition expressing their admiration and fondness for him."





[47] Ruttledge on Mt. Everest





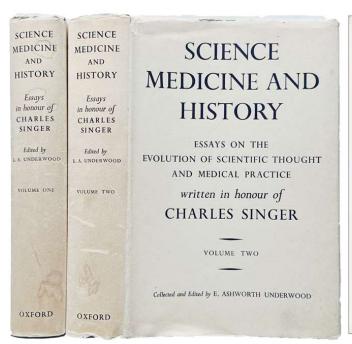
47. **[SCHICKARD, Wilhelm** (1592-1635)**] SECK, Friedrich** (1936-). *Wilhelm Schickard 1592-1635. Astronom, geograph, orientalist, erfinder der rechenmaschine.* Tübingen: J.C.B. Mohr, 1978. ¶ 8vo. 422 pp. Color frontis., 4 folding charts (in rear pocket), text figs., bibliog., index. Teal cloth, gilt-stamped cover and spine titles, dust jacket; some spotting along the outer edges. ISBN: 3169397729 Very good.

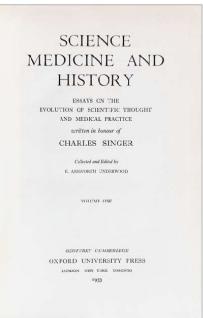
\$ 35

Schickard, a professor at Tuebingen at the beginning of the seventeenth century, was arguably the inventor of the language "crash course" and of the modern calculator with four mathematical functions. He has been called "the father of the computer age". – See: Jürgen Schmidhuber, *Wilhelm Schickard*.

Wilhelm Schickard was a German professor of Hebrew and astronomy who became famous in the second part of the 20th century after Franz Hammer, a biographer (along with Max Caspar) of Johannes Kepler, claimed that the drawings of a calculating clock, predating the public release of Pascal's calculator by twenty years, had been discovered in two unknown letters written by Schickard to Johannes Kepler in 1623 and 1624. Hammer asserted that

because these letters had been lost for three hundred years, Blaise Pascal had been called and celebrated as the inventor of the mechanical calculator in error during all this time. [Wikip.].





48. [SINGER, Charles Joseph (1876-1960)] Science, Medicine and History. Essays on the evolution of scientific thought and medical practice written in honour of Charles Singer. Collected and edited by E. Ashworth Underwood. Oxford: Oxford University Press, 1953. ¶ 2 volumes. Royal 8vo. xxxii, 563, [1]; viii, 646 pp. 106 illustrations (plates distributed evenly between the two volumes, being numbered I-L; LI-CVI), additional figs., Singer's bibliography, index. Navy cloth, gilt-stamped spines, dust-jackets; though a couple of tears are present, this is a well-preserved jacket, vol. II spine showing bump, short strip of cellophane tape applied to ffep (vol. II), pages 87-98 rather crudely creased (also vol. II). Bookplate of Bern Dibner, the Burndy Library. Generally very good.

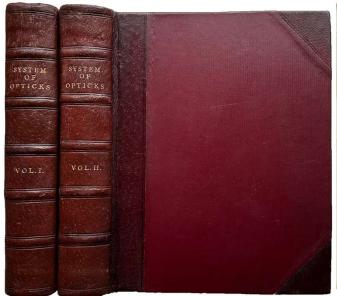
\$ 175

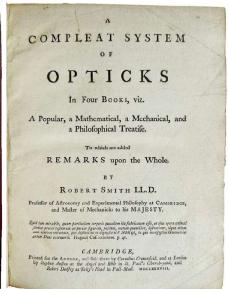
"This extensive work was designed to enable scholars in many countries to pay tribute to Professor Singer. Its ninety essays cover a wide range of the whole field of the history of science and medicine, and many embody important original research. The essays are arranged mainly by broad chronological periods. The scientific field covered ranges over archaeological sub- jects, early Chinese science and studies of the Greek philosophers, by way of the literary wanderings of the famous rhinoceros of Albrecht Dürer, Vesalian studies, and the history of distillation and combustion, to the little-known Academy of the Investigators at Naples, and to the beginnings of the teaching of 'modern' physiology. Among essays devoted to medical subjects are important contributions on the Egyptian method of treating fractures, on the origin of hospitals, on early MSS. which were destroyed at Chartres during the war, on the *Society of Chymical Physitians* [sic: Physicians], on *Natural Nosology*, and on the history of some of the modern specialties. In addition, over twenty essays are critical studies of the work and in-fluence of individual physicians and scientists. All the essays are in English except five (four in French and one in Italian)." – Jacket.

Among the 95 contributors are: Agnes Arber, Donald Campbell, Arturo Castiglioni, Francis Joseph Cole, Sir Vincent Zachary Cope, Stephenson Lyle Cummins, Herbert Dingle, Kenneth Franklin, Hohn Farquar Fulton, Major Greenwood, Ralph Hermann Major, M. F. Ashley Montagu, Joseph Needham, Max Neuburger, Charles O'Malley, Walter Pagel, J. R. Partington, George A. L. Sarton, J. B. de C. M. Saunders, Sir Charles Scott Sherrington, Henry E. Sigerist, Owsei Temkin, Lynn Thorndike, et al.

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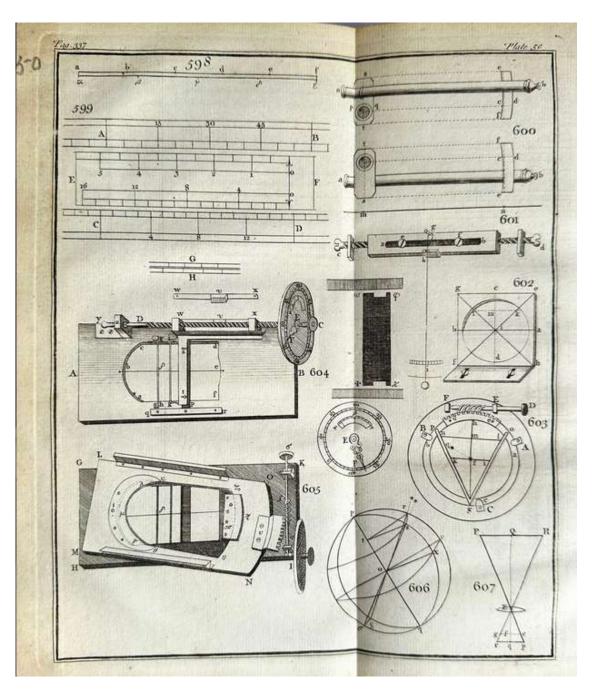


49. SMITH, Robert (1689-1768). A Compleat System of Opticks in four books, viz. A Popular, a Mathematical, a Mechanical, and a Philosophical Treatise. To which are added remarks upon the whole. By Robert Smith LL. D. Professor of Astronomy and Experimental Philosophy at Cambridge, and Master of Mechanicks to his Majesty. Cambridge: Printed for the Author, . . . by Cornelius Crownfield, etc., 1738. ¶ 2 volumes (containing 4 books). 4to. [6], vi, [8], 280; [2], 281-455, [1], 171, [17] pp. 83 folding engraved plates (numbered 1-63; 1-20), errata; note: PLATE VI is an early manuscript replacement – neatly executed – of the original plate, some margins perforated (see for example pages 17-42 and further), the upper margin is closely trimmed throughout. Contents: I: Lead title, Dedication, Preface, List of Subscribers; II: added title, The Author's Remarks upon the Whole Work (113 pp.), Dr. Jurin's Essay upon Distinct and Indistinct Vision (171 pp.), index, advertisements, Book-binder instructions. Later (nineteenth or early twentieth century) half maroon calf, maroon cloth sides, bands tooled with black outlines, gilt-spine titles; vol. I spine head neatly mended. Ownership signatures of Charles S. Bird, [Trinity College 1820?]. Very good (noting pl. VI). [S14136]

\$ 1,250

First edition. Robert Smith's *A COMPLEAT SYSTEM OF OPTICKS* (1738) "was the most prominent eighteenth-century text-book account of Newton's optics. By rearranging the findings and conclusions of Opticks, it made them

accessible to a wider public and at the same time refashioned Newton's optics into a renewed science of optics. In this process, the optical parts of Principia were integrated, thus blending the experimental inferences and mechanistic hypotheses that Newton had carefully separated. The Compleat System was not isolated in its refashioning of Newton's optics." – Dijksterhuis.



"Largely based on Newton. Greatly stimulated the construction of optical apparatus and is the most helpful historical treatise on light of its time" – Babson 1614.

The work is divided into four books: I. A Popular Treatise (of light, glasses, the eye, vision, sight, refraction, reflection, inflection, emission of light, transparency, & colors in bodies). II. A Mathematical Treatise (various applications relating to rays, how to determine distance, magnitude, situation, etc., on the refracting or reflecting telescope, properties of focus, concerning the rainbow, the corona and parhelia, how to determine apparent shapes, of microscopes). III. A Mechanical Treatise (methods of grinding and polishing glasses for telescopes, methods of casting, grinding and polishing metals for telescopes, how to center an object-glass, meridian telescope and its uses, telescopic instruments for finding time, measuring small angles with a telescope, Newton's reflecting telescope, Hadley's description of his reflecting instrument, optical machines, a binocular telescope, explanations of magic lanterns, etc. IV. A Philosophical Treatise (Using the telescope to study the Sun, Mercury, Venus, Moon, Mars, Jupiter, Saturn, the Fix'd stars, etc.

Robert Smith, graduated from Trinity College, he became Plumian (named for

Thomas Plume (1630-1704)) chair and professor of astronomy and experimental philosophy at Cambridge University (1716-1760). He was elected a Fellow of the Royal Society (1718).

Henry C. King

PROVENANCE: [1] Rev. Charles S. Bird, M.A., Fellow of Trinity College [1820?]; [2] Henry C. King (1915-2005), but no markings. In the 1950s King was Senior Lecturer in Ophthalmic Optics at Northampton College of Advanced Technology,

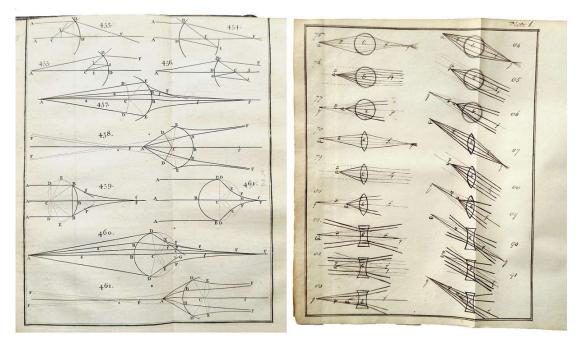


(now City, University of London). In 1956, he became the first Scientific

Director of the London Planetarium. Ten years later, he became Director of the McLaughlin Planetarium, Toronto. He was President of the British Astronomical Association from 1958-60. He is famous for his expertise in the history of astronomy and of the telescope. He was the author of numerous books and papers in the history of astronomy, these include: *The History of the Telescope* (1955), *The World of the Moon* (1966, 1967). He co-authored, with John R. Millburn, *Wheelwright of the Heavens: The Life and Work of James Ferguson, FRS*, (1988), *Geared to the Stars: the evolution of planetariums, orreries, and astronomical clocks* (1978). See: King, David A, "Henry C. King (1915 - 2005)", *Journal for the History of Astronomy*, Vol. 38, Part 4, No. 133, p. 526 - 527 (2007).

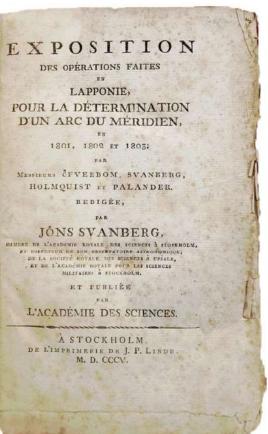
§ Babson 1614; Becker 345; *British Optical Association Catalogue* p. 194; *DSB* XII p. 477; Houzeau & Lancaster 3323; Maslen & Lancaster 2593; Poggendorff II, 945; Sotheran, *Bibliotheca Chemico-Mathematica* 4459.

See: Kevin Thompson, "Early Books in Optics and Optical Design," *Optics & Photonics News*, 16(10), 28-33 (2005); Fokko Jan Dijksterhuis, "Reading up on the Opticks. Refashioning Newton's Theories of Light and Colors in Eighteenth-Century Textbooks." *Perspectives on science*, 2008; J. Barrow-Green, "A corrective to the spirit", *Annals of Science*, 56 (1999), pp. 271-316.



[50] Smith – right image is the manuscript facsimile of plate VI



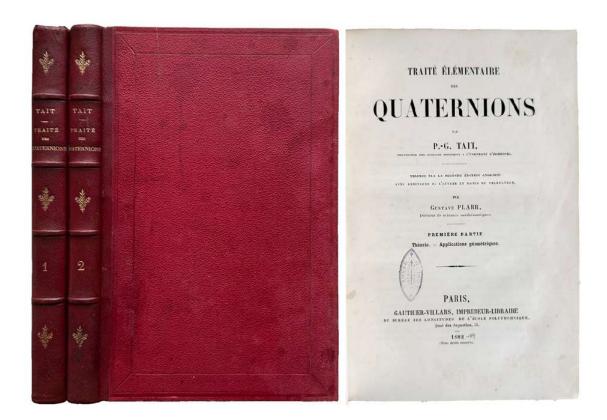


50. **SVANBERG, Jons [SWANBERG]** (1771-1851). Exposition des Operations Faites en Lapponie, pour la determination d'un arc du meridien, en 1801, 1802 et 1803, par Messieurs Ofverbom, Svanberg, Holmquist et Palander. [Stockholm]: S J.P. Lindh, 1805. ¶ 8vo. [2, iv], xiii-xvi, [v]-xii, xxxi, [1], 196 pp. 3 folding engraved plates, errata; lightly foxed. Modern dustyrose paste-paper over boards. The first section is misfoliated, but complete, spotting or browning. Untrimmed. SS13440

\$ 125

First Edition, arranged in four parts, appendix. The 1801-3 scientific results of measuring the arc of meridian in Lapland, Finland. The expedition was undertaken with the direction of Daniel Melanderhjelm (1726-1810), secretary to the Swedish Academy of Sciences, for the purpose of verifying or correcting previous measurements by Pierre Louis Maupertuis (1698-1759), taken in 1736. The text refers to J.-B.-J. Delambre, Methodes Analytiques pour la determination d'un arc du meridien, 1799, Pierre Bouguer, Charles Marie de La Condamine, Nevil Maskelyne, Holmquist, Palander, Mechan, Daniel

Melanderhjelm (1726-1810), Franz de Paula Triesnecker (1745-1817), Aristotle, Huygens and Isaac Newton (p. 11). "The re-measurement of a degree in Lapland, as a correction of the previous French operations [by Maupertuis], was carried on during the years 1801, 1802, and 1803, by Messrs. Ofverboom, Svanberg ["Swanberg"], Holmquist [Holinquist [sic]] and Palander, Swedish mathematicians: and from the account of their operations, published by M. Sw[v]anberg, the length of a meridional degree, north latitude 66° 20' 10" (the centre of the arc) is 69° 2698 English miles. From a comparison of this result with those from the measurements taken in Peru, the East Indies, and France, M. Swanberg deduces a mean of 1/323° 065 for the ellipticity, and 3963° 26 miles for the equatorial radius of the earth." -- Peter Barlow, A New Mathematical and Philosophical Dictionary: Comprising an Explanation . . .



51. TAIT, Peter Guthrie (1831-1901); Gustave PLARR (1819-1892).

Traite Elementaire des Quaternions . . . Traduit sur la Seconde Edition Anglaise avec Additions de l'Auteur et Notes de Traducteur par Gustave Plarr. Paris:

Gauthier-Villars, 1882, 1884. ¶ Two volumes. 8vo. xxvi, 306; x, 312 pp.

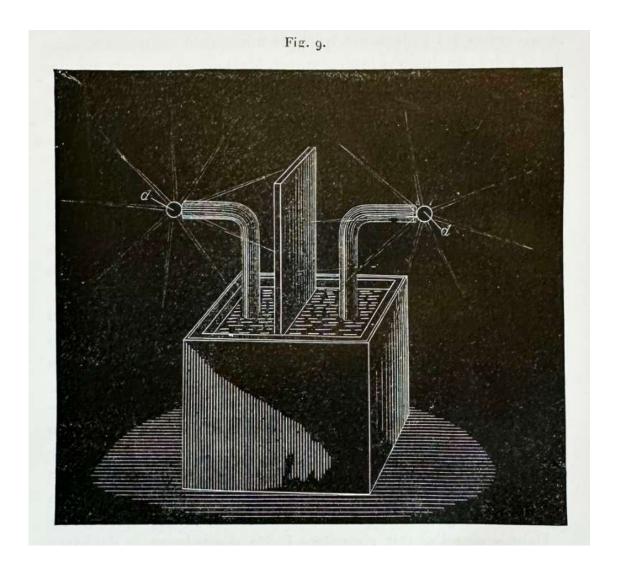
Figs. Quarter maroon calf, gilt spines, raised bands, maroon cloth boards; spine ends rubbed, minor faded stains to covers, small kozo repair to spine head vol. I. Small early rubber stamps (1 on each title) of l'abbé Damase Guinot. Pencil ownership signatures. Very good. [S8418]

First edition in French of this important mathematical work on quaternions. Quaternions were introduced by Irish mathematician William Rowan Hamilton in 1843 and have been used in mechanics to describe three-dimensional space.

"His earliest work dealt mainly with mathematical subjects, and especially with quaternions, of which he was the leading exponent after their originator, William Rowan Hamilton. He was the author of two text-books on them – one an *Elementary Treatise on Quaternions* (1867), written with the advice of Hamilton, though not published till after his death, and the other an *Introduction to Quaternions* (1873), in which he was aided by Philip Kelland (1808–1879). Kelland was one of his teachers and colleagues at the University of Edinburgh." [Wikip.].

"Since 1870, Dr. Plarr's time was almost exclusively devoted to the study of Quaternions. In 1882-84 his – French translation of Prof. Tait's *Treatise* was published by Gauthier-Villars. Several papers by him, on abstruse points connected with the Quaternion method, were communicated to the Royal Society of Edinburgh." [*Nature*, 45, p.419, 03 March 1892].

PROVENANCE: L'abbé Damase Guinot, was a former choir-master at Luçon Cathedral who wrote, *Observations relatives à la bonne exécution du chant grégorien*,1881. [2] The pencil signature is difficult to read, but appears to be J.F. Gaupuis-Montagu [or Montaigne]? Need more information to resolve.

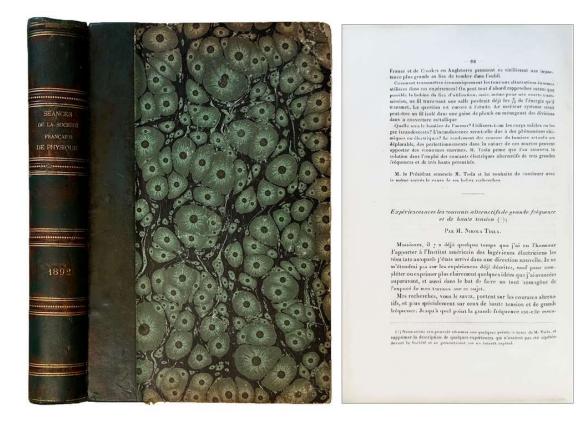


52. **TESLA, Nikola** (1856-1943). "Expériences les Courant Alternatifs de Grande Fréquence et de la Haute Tension". Within: Séance de la Société Française de Physique. Paris: Société Française de Physique, 1892. ¶ 8vo. pp. 62-128. 33 figures (showing Tesla's electric bulbs and schematics for other electrical devices). Whole volume: 4 issues bound together. 466, 63, [1] pp. Contemporary green calf-backed marbled boards, gilt-stamped spine; rubbed. Very good. [S14092]

\$ 650

First printing in French. This work begins (in French) "Gentlemen, some time ago I had the honor of bringing to the American Institute of Electrical Engineers the results I had arrived at in a new direction. I will not dwell on the experiences already described, except to complete or express more clearly some

ideas that I have put forward previously, and also with the aim of making a homogeneous whole of the presentation of my work on this subject.



My research, as you know, concerns alternating currents, and more especially those of high voltage and high frequency. To what extent is high frequency essential?" – Tesla.

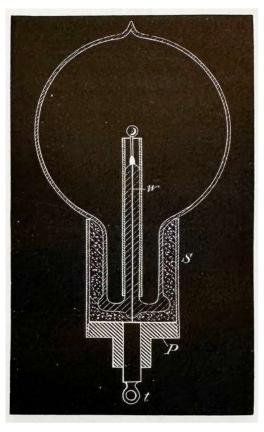
Mr. Jules Joubert (1834-1910) announces on the meeting of February 18, 1892, a lecture by Nikola Tesla: "Mr. President presents to the Members of the two Societies (1) the American engineer Mr. Tesla, who was kind enough to come to France to show us his great experiments on the effects produced by high frequency alternators".

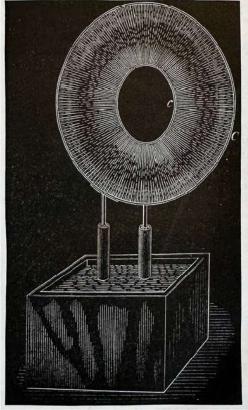
"Mr. Tesla explains very briefly that he has created an alternator giving 10,000 to 20,000 alternations per second. The current from this alternator passes into the primary circuit of a small, perfectly insulated induction coil immersed in the oil. The terminals of the secondary coil then make it possible to collect

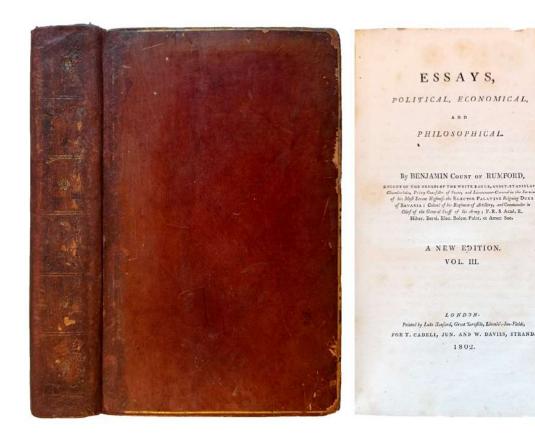
electricity under high voltages, with very rapid alternations. We will designate this coil by the letter A in the description of the experiments". – Joubert.

On February 3, 1892, Nikola Tesla delivered a lecture before the Institution of Electrical Engineers in London concerning his then current work on alternating currents. His talk was titled "Experiments with alternate Currents of High Potential and High Frequency". The talk was published the same year in book form by W. J. Johnson in New York. On February 18, about two weeks later, Tesla appeared before the Societe Francaise de Physique in Paris where he addressed the Society, in French, concerning his work and delivered to them the same paper which he had presented in London. In French, his paper was titled "Expériences les Courant Alternatifs de Grande Fréquence et de la Haute Tension". This paper and his accompanying remarks are found in Seance de la Societe Francaise de Physique (Janvier – Avril 1892) published in Paris that same year, at pages 58 – 62 (remarks) and 62 – 128 (paper).

NOTE: Includes: Pierre and Marie Curie, « Sur la conductibilité des diélectriques solides. » [pp. 261-263].







53. **THOMPSON, Sir Benjamin, Count of Rumford** (1753-1814). *Essays, Political, Economical, and Philosophical. A new edition. Vol. III.* London: Printed by Luke Hanford . . . for T. Cadell, Jun. and W. Davies, 1802. ¶ 8vo. xi, [16], 498, ads [2] pp. 7 engraved plates, numerous woodcuts. Original full gilt-ruled calf; spine heavily restored, extremities worn, hinges neatly mended. Bookplates of James T. Bland, and Anne Willan. Very good. [S11872]

\$ 350

This is an early text on the kitchen and all heating implements relating to equipping the room for usage. Rumford, the noted physicist and inventor, describes his designs for kitchen fire-places, the roaster, dripping-pan, heating an iron oven, construction of boilers, steam cooking, warming rooms, saucepan heaters, portable furnaces, tea-kettles (p.301), kitchen utensils for the poor, "account of a concealed kitchen," chimneys, warm bathing, management of fires, use of steam as a vehicle for transporting heat, etc. Thompson is known also as the inventor of the coffee percolator (1806/1812), published in a later volume.

312 Of Kitchen Fire-places, and Utenfils.

are fastened together by, the former being driven into the latter, with some degree of force, and sticking in it above, where they come into close contact. The lower edge of the cylinder being turned inwards forms a narrow rim, on which the lower end of the stew-pan rests.

Of the construction of Stew-pans of Earthen-ware and Porcelain, to be used with Register Stoves and Portable Kitchen Furnaces.

The following figure shews how, by means of a hoop, or cylinder of sheet-iron, a stew-pan, or sauce-pan, of earthen-ware, or of porcelain, of a suitable form and size, may be sitted to be used with a register kitchen stove, or portable surnace.



This figure is drawn to a scale of fix inches to the inch. The form of the lower part of the stewpan is pointed out by a dotted line. The top and the bottom of the cylinder of sheet-iron are both turned over circular iron wires. The handle of

CHAP. XII.

Of the confiruation of Tea-kettles, proper to be used with Register-Stoves, and portable Kitchen Furnaces.—These utensits may be constructed of tin, and ornamented by japanning and gilding—When they are properly constructed and managed, they may be heated over a small portable surnace in a very short time, and with a surprixingly small quantity of such.—Descriptions of sour of these tea-kettles of different forms and sizes.—Description of several very simple and cheap Stew-pans for portable Furnaces.—Description of a Stew-pan of earthen-ware, on an improved construction.—This will probably turn out to be a most useful utensil for cooking with portable surnaces.

A STea-kettles are so much used in this country, and as they occasion so great a consumption of suel (a large fire being frequently made in a grate, or kitchen-range, morning and evening, for the sole purpose of heating a few pints of water to make tea) the saving of this unnecessary trouble and expence is an object deserving of attention. And in doing this it will be possible to improve very effentially the forms of tea-kettles in several respects, and at the same time to render their external appearance more neat and cleanly. If the forms I shall recommend should not happen to please at first sight, it should be remembered that utility.

PROVENANCE:

[1] James T. Bland; [2] Anne Willan (born 1938) is a recognized authority on French cooking, with more than 35 years of experience as a cooking teacher, cookbook author and food columnist.





She is the founder of the prestigious *Ecole de Cuisine La Varenne*, which operated in Burgundy France from 1991 until 2007.

"As Sir Benjamin Thompson of London, he was famous for his stoves, for his experiments in heat and light, for his mistresses and for his soups. It was he

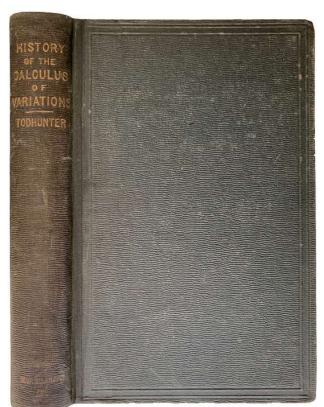
who first discovered the value of wide wheels for carriages, a smoke-shelf in a fireplace chimney, and double-glazing in windows; his measurement of candlepower remains the standard unit, and he organized the poor of Munich and taught them to spin wool. Thompson was a founder of the Royal Institution of Great Britain and, it has been argued, the father of nuclear physics. From a farm boy with a penchant for the grandiose, he became an authentic grandee." – Nicholas Delbanco, "Benjamin Thompson, Count Rumford: His Kitchen and Cuisine," *Repast*, Ann Arbor, MI, vol. XXVI, no. 3, Summer 2010.

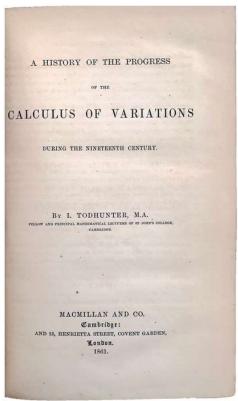


Kitchen fire-place of Baron de Lerchenfeld, Munich, designed by Count Rumford (Thompson)

Colonel Sir Benjamin Thompson, Count Rumford, FRS, "was an Americanborn British military officer, scientist, inventor and nobleman. Born in Woburn, Massachusetts, he supported the Loyalist cause during the American War of Independence, commanding the King's American Dragoons during the conflict. After the war ended in 1783, Thompson moved to London, where he was recognized for his administrative talents and received a knighthood from George III in 1784."

§ See: Martin, T. "The Experimental Researches of Benjamin Thompson, Count Rumford". *Bulletin of the British Society for the History of Science*. 1 (6): 144–158). 1951.





54. **TODHUNTER, Isaac** (1820-1884). A history of the progress of the calculus of variations during the nineteenth century. Cambridge and London: Macmillan, 1861. ¶ 8vo. xii, 532, ads. 28 pp. Folding plate containing 12 geometric diagrams, index. Original green blind-stamped cloth, gilt spine; beautifully rebacked preserving original spine. Nice copy. Scarce. [SS3608]

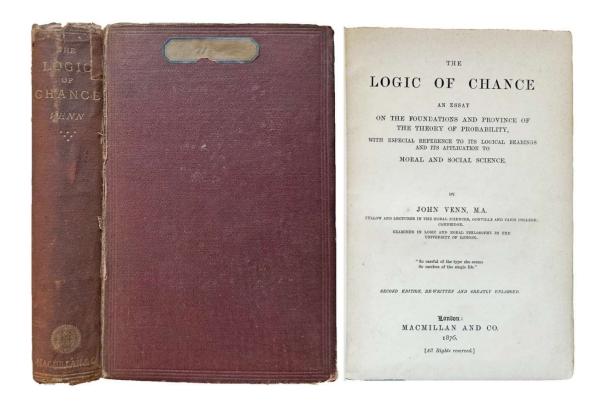
\$ 400

First edition of Todhunter's important historical work including his own research. Todhunter designed his work to follow that of Robert Woodhouse, whose *A Treatise on Isoperimetrical Problems and the Calculus of Variations*, 1810, covered the history up through the end of the eighteenth century.

"Within these years he also labored at some works of a more strictly scientific character. Professor Woodhouse (who was the forerunner of the Analytical Society) had written a history of the calculus of variations, ending with the eighteenth century; this work was much admired for its usefulness by Todhunter and as he felt a decided taste for the history of mathematics he formed and carried out the project of continuing the history of that calculus during the nineteenth century. It was the first of the great historical works which has given Todhunter his high place among, the mathematicians of the nineteenth century. This history was published in 1861; in 1862 he was elected a Fellow of the Royal Society of London. In 1863 he was a candidate for the Sadlerian professorship of Mathematics, to which Cayley was appointed. Todhunter was not a mere mathematical specialist. He was an excellent linguist; besides being a sound Latin and Greek scholar, he was familiar with French, German, Spanish, Italian and also Russian, Hebrew and Sanskrit. He was likewise well versed in philosophy, and for the two years 1863–5 acted as an Examiner for the Moral Science Tripos, of which the chief founders were himself and Whewell." – A. Macfarlane, Lectures on Ten British Mathematicians of the Nineteenth Century, New York: Wiley and London: Chapman and Hall 1916, pp. 134-146. "Todhunter," York University.

Todhunter (1820-1884), English mathematician, was one of the most influential figures in mathematical education of the 19th century. -DNB.

§ Zeitlinger (Sotheran I, p. 249: "Very scarce"). Cajori, History of mathematics, p. 370.



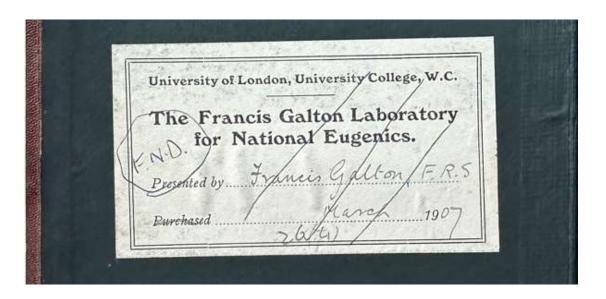
The Francis Galton – F. N. David copy Signed by Galton \mathcal{C} Initialed by F.N. David

VENN, John (1834-1923). The Logic of Chance; an essay on the foundations and province of the theory of probability, with especial reference to its logical bearings and its application to moral and social science. Second edition, re-written and greatly enlarged. London: Macmillan, 1876. ¶ Small 8vo. xxvii, 488 pp. Index. Original full brick reddish-brown blind-stamped cloth with gilt spine title; extremities very worn, upper joint torn, spine ends chipped. Bookplate of The Francis Galton Laboratory for National Eugenics (March 1907); "presented by Francis Galton, F.R.S."; initials "F.N.D." of Florence Nightingale David. This copy with occasional pencil marginalia by F.N. David, page references and additional notes written on rear free endpaper. The handwriting of Francis Galton's signature is clearly in his own hand. Good.

\$ 450

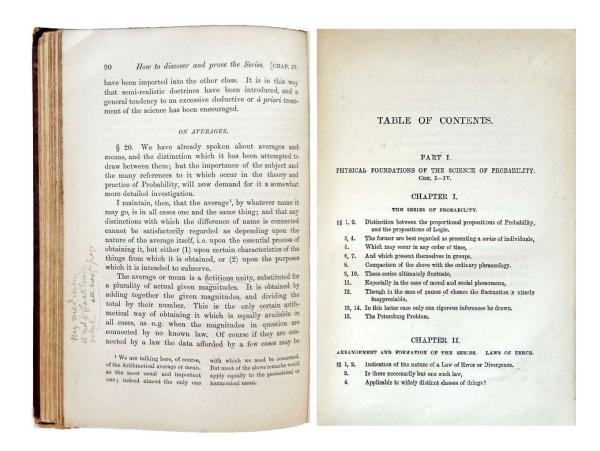
SIGNED by [Sir] Francis Galton FRS FRAI (1822-1911), the noted English polymath and the originator of eugenics during the Victorian era; his ideas later became the basis of behavioral genetics. This volume was part of Galton's personal library at the University of London, University College, Francis

Galton Laboratory for National Eugenics, signed by him in the presentation label, "Francis Galton, F.R.S." in his typical handwriting. Dated March 1907. Added to this are the initials of F.N.D. which are the initials of Florence Nightingale David, who worked at both UC Berkeley and UC Riverside where she was head of statistics.



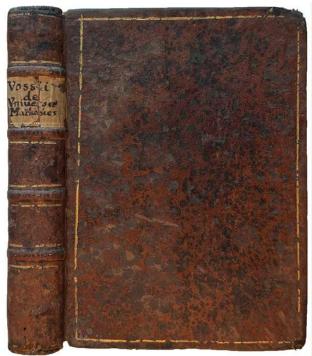
Second edition (first issued in 1866). The text for this edition is much expanded and re-written (1866 was 12mo. xxvii, 370 pp.). The author admired Augustus de Morgan, George Boole, and Mill's *System of Logic*.

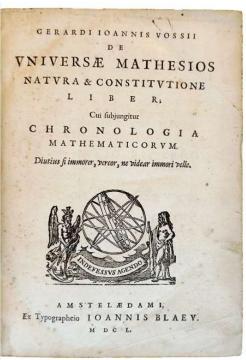
John Venn was born at Hull, Yorkshire on August 4, 1834 and died at Cambridge on April 4, 1923. John Venn's mother, Martha Sykes, came from Swanland near Hull, Yorkshire and died while John Venn was still quite young. John Venn's father was Rev Henry Venn who, at the time of John Venn's birth, was the rector of the parish of Drypool near Hull. John Venn was a British Logician and a philosopher who introduced the Venn diagram in 1881, including set theory, probability, logic, statistic, and computer science. From his family background, John Venn was strictly brought up, and there was no thought that he would follow the tradition of his family into the priesthood. After finishing the Highgate School, Venn entered the Caius College, Cambridge in 1853. He graduated from the Caius College in 1857 and shortly



afterwards he was elected as a fellow of the college. He was ordained as a deacon at Ely in 1858 and became a priest in 1859. In 1862, he returned to Cambridge as a lecturer in moral science. John Venn was most interested in logic and he published three texts on the subject. He wrote *The Logic of Chance* which introduced the frequency interpretation of probability in 1866, Symbolic Logic which introduced the Venn diagram in 1881, and *The Principles of Empirical Logic* in 1889. Venn was elected a fellow of the Royal Society in 1883.

DSB, XIII, pp. 611-612.





VOSSIUS [VOS], Gerhard Johann (1577-1649). De Universae Mathesios Natura & Constitutione liber, Cui subjungitur Chronologia Mathematicorum.

Amsterdam: Joannis Blaeu, 1650. ¶ 4to. [16], 467, [34] pp. Errata; light scattered foxing, lower corner pp. 403-404 torn (without affecting the text), small ink mark on ffep (facing the title page). Full original marbled calf, single-ruled covers stamped in gold, 5 raised bands, holographic paper spine label; spine label chipped, covers heavily pitted. Bookplate of Father Barnabas Hughes. Generally very good. RARE.

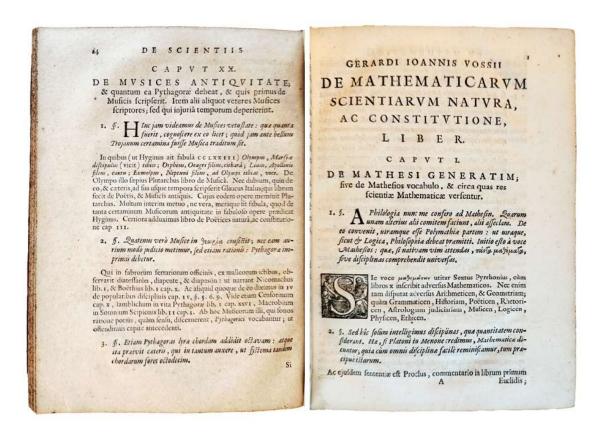
\$ 450

FIRST EDITION of an ancient history of the mathematical sciences, containing a description of mathematical literature and a chronology of mathematicians and their discoveries.

"By far the most important contribution of the 17th century to the history of mathematics in the Netherlands is the *De universae mathesios*... (Book on the nature and constitution of the universe of mathematics) by the humanist and philologist Gerardus Joannes Vossius.... At his death he left an almost complete manuscript which his nephew Franciscus Junius (1624-1678) published in 1650.... Vossius discussed the various disciplines considered to belong to the mathematical sciences" (Dauben & Scriba, p. 48). Junius, a

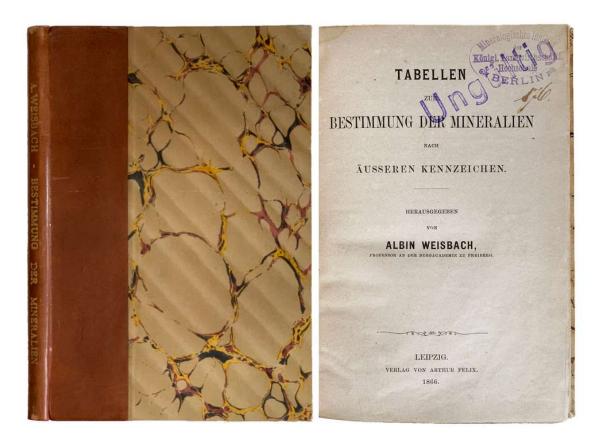
Huguenot scholar and theologian, edited this book and wrote the dedicatory letter that introduces it.

Vossius' collected works were published by Blaeu in 1650 in a volume entitled De quatuor artibus popularibus de philologia et scientiis mathematicis libri tres, which included "De philologia liber" and "De quatuor artibus popularibus, grammatistice, gymnastice, musice et graphe, liber".



"A humanist, classical scholar, and theologian, Vossius was rector of the Latin school in Dordrecht (1600–1614) when he was appointed regent of the theological college in Leiden. In 1619 he was dismissed from his position because of his supposed sympathy for the Remonstrance, a theological movement among Dutch Protestants that disagreed with stricter Calvinism. Three years later he became professor of eloquence and chronology, and later also of Greek, at the University of Leiden. In 1631 he moved to Amsterdam to become professor of ecclesiastical history in the newly founded *Athenaeum Illustre*" (Dauben & Scriba, p. 558).

§ Bierens de Haan 5144; Cantor, Vol. II, 652; Dauben, Joseph W. and Christopher J. Scriba. *Writing the History of Mathematics: Its Historical Development*, New York: Springer, 2002; Poggendorff, Vol. II, 1235.



57. **WEISBACH, Julius Albin** (1833-1901), editor. *Tabellen zur Bestimmung der Mineralien nach ausseren Kennzeichen*. Leipzig: Arthur Felix, 1866. 8vo. viii, 113, [1] pp. Tables, index. Modern quarter brown calf, marbled boards, gilt-spine, marbled end-leaves. Ex library rubber stamps of the Mineralogisches Institut, Berlin. Very good. [S6565]

\$ 125

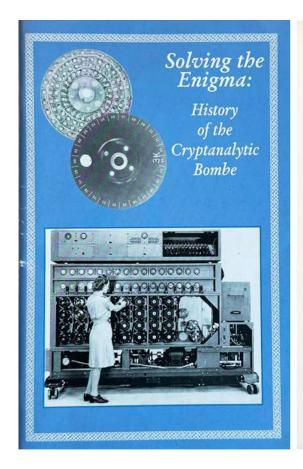
FIRST EDITION. "Rare. This is the first edition of a work that was popular for many years. The text presents a series of tables that are used to determine the name of an unknown mineral by placing a sample through a series of simple tests based upon the external characteristics. Used with in the German education system, it was deemed important enough to be translated into English, which spawned its own sequence of books." – Curtis Schuh. German mineralogist Albin Weisbach (1833-1901), was the son of Julius Ludwig

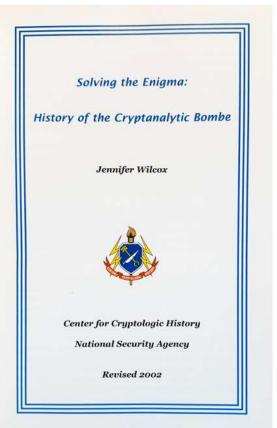
Weisbach (1806-1871), a noted mathematician and engineer, known to teach at the Royal School of Mines in Freiberg. The younger Weisbach followed his father in this discipline and became professor in 1857 and worked for many years as a professor at the Freiberg Mining Academy, later becoming professor of physics. In 1866 he was appointed Professor of Mineralogy. The present work is an interesting and valuable classification of minerals, remained in print until the 7th ed., 1906. The second edition was also issued in 1866; later it was translated into English in 1875.

⇔ BMC (Nat. Hist.), V, p. 2286; Gascoigne, Catalogue of Scientific Periodicals, 1985: no. 8866; Katalog Bergakademie Freiberg, 1879: p. 705 [VI. 989.]; NUC; USGS Library Catalog. ADB: 41, 522; Poggendorff: 3, 1427 & 4, 1615; Sarjeant, Geologists, 1980: 3, 2396; World Who's Who in Science: 1774.

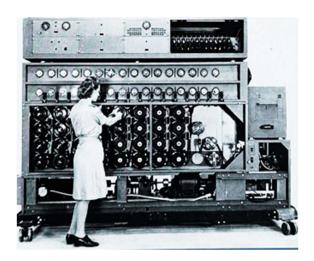
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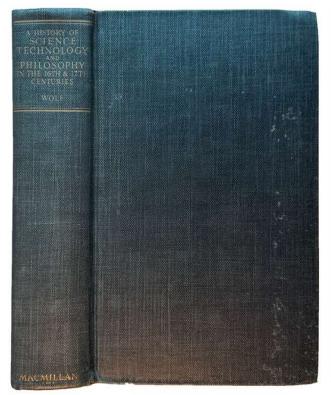
[57] WEISBACH

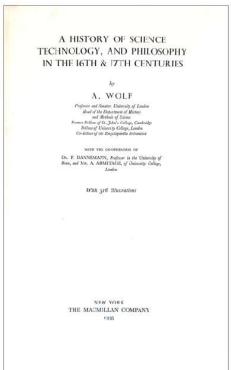




58. **WILCOX, Jennifer**. *Solving the Enigma: History of the Cryptanalytic Bombe*. Washington, DC: Center for Cryptologic History, National Security Agency, 2002. ¶ Revised. 21cm. [2], 55, [1] pp. Illus. Printed wrappers. Very good. \$10



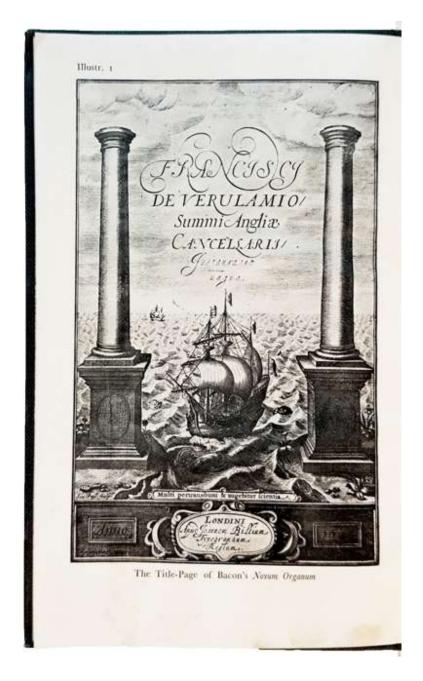




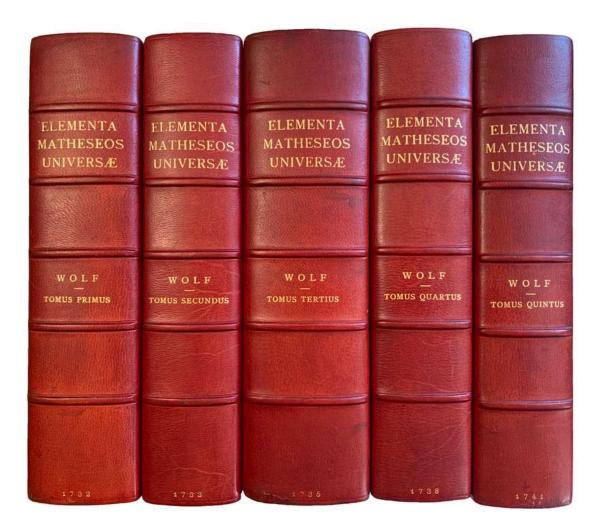
59. **WOLF, A.** (**Abraham**) (1876-1948). *A History of Science, Technology, and Philosophy in the 16th & 17th centuries.* New York: Macmillan, 1935. ¶ 8vo. xxvii, 692 pp. 316 illustrations, index; foxing facing the frontispiece. Original navy-blue gilt-stamped cloth. Very good copy.

\$ 20

First edition. Written by Abraham Wolf with the assistance of University College London astronomer Angus Armitage and University of Bonn professor Friedrich Dannemann, the book was first published in London in 1935 by George Allen and Unwin. A second edition, with minor revisions to the bibliography by Douglas McKie, was published in 1950, following Wolf's death. The book comprises twenty-six chapters, with a particular focus on the physical sciences (including astronomy, physics, chemistry, geology, and meteorology) and mathematics, as well as the positive relationship between modern science and technology. A companion history, titled *A History of Science, Technology, and Philosophy in the 18th Century,* was published in 1938. [Wikip.].



Wolf is credited with introducing the history of science to University College London, where he lectured as Professor of Logic and Scientific Method from 1920 to 1941.



WOLFF, Christian, Freiherr von (1679-1754). Elementa matheseos universae... editio nova, priori multo auctior et correctior. Geneva: Marc-Michel Bousquet, 1732-41. ¶ 5 volumes. 4to. 246x202 mm. xxiv, 526; viii, 396, [2]; vii, [1], 581, [1]; viii, 374, [2]; [8], 501 pp., including errata leaf at end of Volumes 2 and 4. WITH THE FINE COPPER-ENGRAVED PORTRAIT OF WOLFF BY DAUDET AS FRONTISPIECE, AND WITH 164 FOLDING ENGRAVED PLATES; occasional browning, scattered soiling and stains, some early marginalia. Contemporary vellum boards, marbled edges; somewhat soiled, spines darkened. Preserved in the Robert Honeyman-commissioned quarter red morocco slipcases. Stamps of the Cologne Gymnasium on titles; signatures of E. F. August dated 1822-23; bookplates of Robert Honeyman IV. [S13865]

[The August – Honeyman – Gutzwiller copy]. Later edition, published in Geneva, of the 1713 Latin version of Wolff's 1710 *Anfangsgrunde aller mathematischen Wissenschaften*, a textbook used as the basis for teaching mathematics through the end of the 18th century. This massive work encompasses all the aspects of mathematics, arithmetic, geometry, trigonometry, infinitesimal calculus, mechanics, statics, hydrostatics, hydraulics, aerometry, optics, perspective, catoptrics, astronomy, geography, hydrography, chronology, gnomonics, pyrotechnics, civil and military architecture, and perspective. The fifth volume contains a survey of historical mathematical literature, a guide to the teaching of mathematical disciplines, and indexes. This set is entirely complete and is notably from the Honeyman collection, thus a known provenance.





Christian Wolff (less correctly Wolf, also known as Wolfius; ennobled as Christian Freiherr von Wolff in 1745) was a German philosopher. Wolff was the most eminent German philosopher between Leibniz and Kant. His main achievement was a complete oeuvre on almost every scholarly subject of his time, displayed and unfolded according to his demonstrative-deductive, mathematical method, which perhaps represents the peak of Enlightenment rationality in Germany.

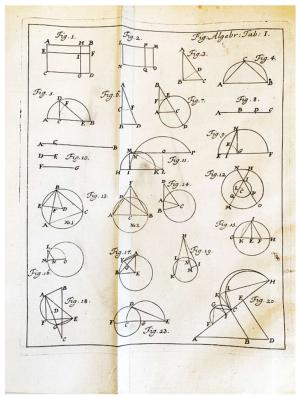




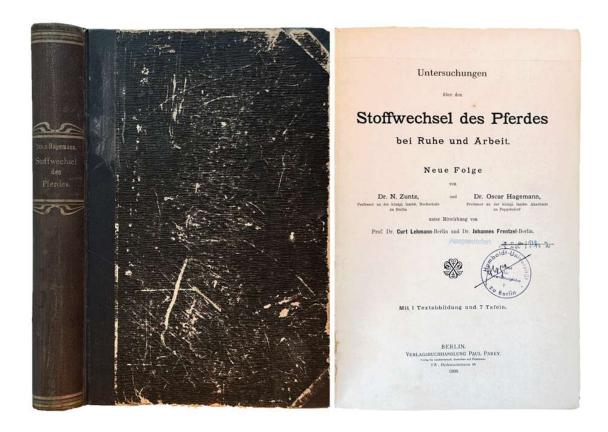
PROVENANCE: Cologne Gymnasium – manuscript signature initials 'E. F. August', dated 1822-23, probable: Ernst Ferdinand August (1795-1870) – Robert B. Honeyman Jr. (Sotheby-London, lot 3135, Honeyman sale, 20 May 1981) – Martin C. Gutzwiller (1925-2014) (Swann, lot 204, Apr 03, 2014 - Sale 2343).



 $\$ DSB XIV, p. 483; Houzeau & Lancaster 9344; Sotheran, II Suppl., no. 857.



[60] WOLFF



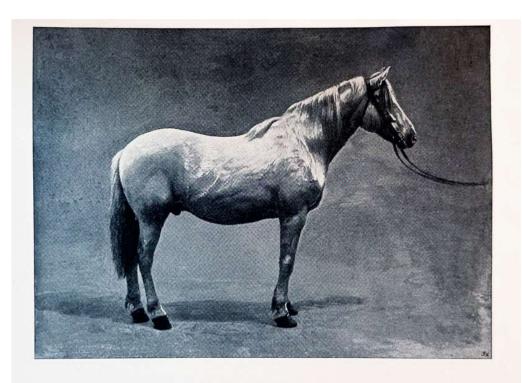
61. **ZUNTZ, Nathan** (1847-1920); **Oscar HAGEMANN** (1862-1926). *Untersuchungen uber den Stoffwechsel des Pferdes bei Ruhe und Arbeit.* Berlin: Paul Parey, 1898. ¶ 8vo. (250 x 166 mm) viii, 438, [2] pp. 7 plates. Original quarter black cloth over marbled boards, gilt-stamped spine title; boards rubbed. Exlib ink stamps on title-page, bookplate of Andras Gedeon. Very good. [S9559]

\$ 75

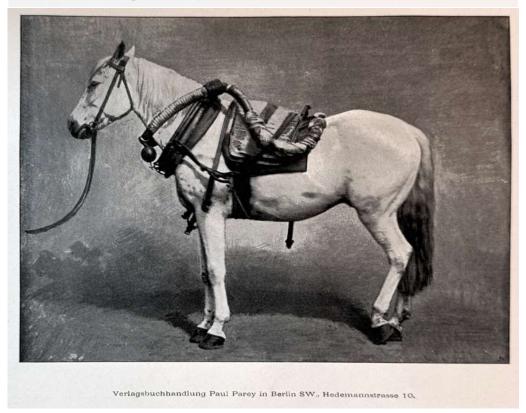
FIRST EDITION. As early as 1889, together with Zuntz, he published a comprehensive work on the metabolism of horses at rest and at work, which represented the state of research at the time. In this physiological study, Zuntz and Hageman determined the cardiac output of horses (under workload and at rest) from the oxygen balance to be 75ml/min/kg.

Nathan Zuntz, German physiologist, born in Bonn, was a pioneer of modern altitude physiology and aviation medicine.

§ Andras Gedeon, Science and technology in medicine, #56.5 (p. 291-2) (Note: this was his copy).



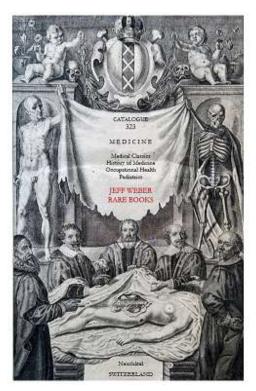
Verlagsbuchhandlung Paul Parey in Berlin SW., Hedemannstrasse 10.



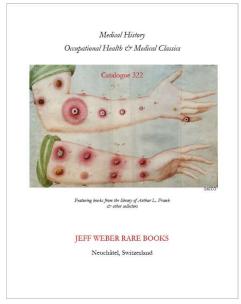
[61] ZUNTZ

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This catalogue continues the number sequence in chemistry (items 42-129)

Pictures (next page): The office entrance and view from above the Plaza





Place Pury before dawn (note the 3 statues of over-sized bulls)

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