

MAY 4-5, 2022

Balloon ascensions 29 July 1907.

Lat. N: 13° 3'
Long. W: 35° 51'

	500	1000	1500	2000	2500	3000	4000
25.1	495	500	500	500	500	500	10.00
	19.7	17.1	13.2	10.9	12.8	10.0	4.2
	- 5.4	- 2.6	- 3.9	- 2.3	+ 1.9	- 2.8	- 6.8
-0.73039	-0.41497	-0.59106	-0.36173	0.27875	-0.44716	-0.76349	
-0.68890							
	1.234		1.592		10.965		
9.95651	0.27829	0.10220	0.33153	0.41451	0.24610	0.2308	
0.9047	1.8980	1.2653	2.1455	-2.5972	1.7624	1.7016	
0.49578	0.81756	0.64147	0.87080	0.95378	0.78537	0.7701	
298.1	292.7	290.1	286.2	283.9	285.8	283.0	277.
17436	2.46642	2.46255	2.45667	2.45317	2.45606	2.45179	2.442
	-0.00794	-0.00387	-0.00588	-0.00350	-0.00289	-0.00427	-0.09
	-7.89982	-7.58771	-7.76938	-7.54407	7.46090	-7.63043	-7.95
	-8.39560	-8.40527	-8.41085	-8.41487	-8.41468	-8.41580	-8.72
	-0.2487	-0.2543	-0.2575	-0.2599	-0.2598	-0.2605	-0.5
00684	4.98197	4.95654	4.93079	4.90480	4.87882	4.85277	4.79
1612.	9.5934	9.0478	8.5268	8.0316	7.5652	7.1248	6.3
8195	9.85708	9.83165	9.80590	9.77991	9.75393	9.72788	9.6
62.0	719.6	678.7	639.6	602.4	567.4	534.4	4
	719.0	678.0	639.0	602.0	567.0	533.0	4

1. Bigelow, Frank H. **Balloon Ascensions. Cordoba - Argentina 1911 - 1913. Europe and United States.** 1906-1911.

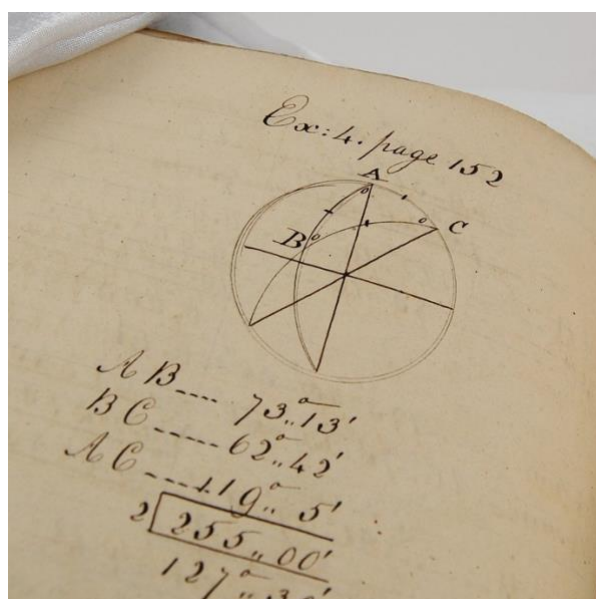
Folio (352 x 215 mm), single leaves oversewn in sections onto sawn-in cords. 196 page manuscript in black and red ink and pencil, rectos only. Leaves numbered in blue crayon. Contemporary quarter black skiver, black pebble-grain cloth, titles to spine gilt, marbled endpapers, graph paper leaves. Spine professionally relined and reattached to text block by Bainbridge Conservation, binding rubbed and worn, particularly along the spine, endpapers and blanks tanned, contents a little toned, a few contemporary ink blotches. Very good condition.

A substantial, 196-page manuscript of measurements obtained during meteorological balloon flights in South America, Europe, Africa, and the United States between 1906 and 1911 (the title gives a date range of 1911-1913, but there do not seem to be any entries after 1911).

The compiler of this manuscript, meteorologist, and astronomer Frank H. Bigelow (1851-1924), grew up in Concord, Massachusetts and was educated at the Episcopal Theological School in nearby Cambridge. During the 1870s and 80s he served two stints as assistant astronomer at the Argentine National Observatory at Cordoba, where many of these measurements were made, and he also worked as a professor of mathematics at Racine College, as assistant in the National Almanac Office in Washington D. C., and as a professor of meteorology at the National Weather Bureau.

Neatly written on graph paper, each entry in this manuscript is laid out as a grid with the columns headed by elevations. The rows are labelled with a variety of mathematical formula that often relate to each other as they descend the page, " $T_1 - T_0$ " followed by " $\log T_1 - T_0$ ", or " T " followed by " $\log T$ " then " $\text{Log } T_1 - T_0$ " and " $\text{Log} (\text{Log } T_1 - T_0)$ ". There are also rows where work is presumably checked ("check") and various rows are added together ("summ"). Unfortunately, we cannot locate a guide to the symbols used here, making it difficult to determine exactly what Bigelow was studying. Prose notes occasionally appear, however, and seem to indicate that his measurements were connected with heat and possibly solar activity. "Since z increases upwards the $(-)$ sign indicates loss of heat energy from level to level outwards... The evidence is strongly against the theory that absorption is proportional to the density or path length..." "The assumed $(E_1 - E_0)$ solar near surface seems to require special modification because the p values are impossible..."

As well as meteorology, Bigelow studied the solar corona, aurora, and terrestrial magnetism, and it may have been in pursuit of these subjects that the present ascensions were made. It is also unclear whether Bigelow or a colleague actually went up in the balloons, or whether they were uncrewed weather balloons, which had first been used in the late 1890s by the French meteorologist Léon Teisserenc de Bort. We suspect the former, as results are given for multiple elevations during each flight. Unusually, within the manuscript the flights are bound entirely out of date order, and it's unclear whether this was an accident or a way to highlight or connect certain results. This manuscript would benefit from attention by an informed cataloguer or scholar, in connection with similar materials. 00462 **£750**



2. **Bonnycastle, John. A student manuscript of mathematical problems from *A Treatise on Plane and Spherical Trigonometry* as well as Andrew MacKay's *The Theory and Practice of Finding the Longitude at Sea or Land*.**

170 page manuscript. Contemporary half speckled sheep, marbled sides. Several contemporary sheets of manuscript with mathematical notations loosely inserted. Corners repaired, a little wear and some discolouration to boards, endpapers tanned, contents with the occasional light spot but overall quite clean. Very good condition.

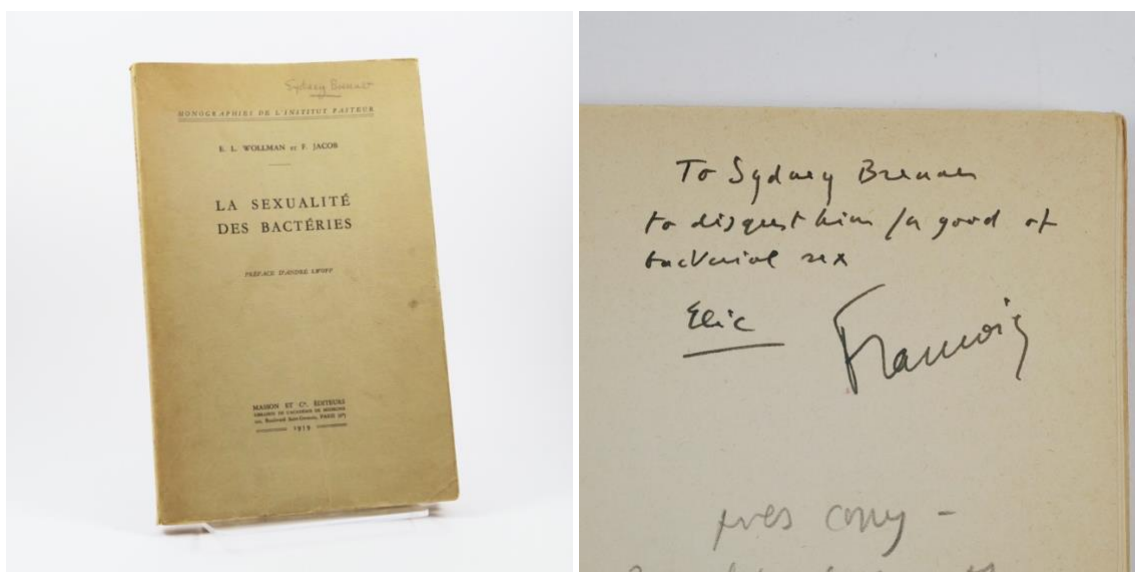
An elegant, substantial early-19th century manuscript containing practical mathematical and astronomical problems likely produced by a student of navigation. The majority of the text is from John Bonnycastle's *A Treatise on Plane and Spherical Trigonometry*, originally published in 1806.

Bonnycastle was a respected mathematics teacher who tutored the children of the aristocracy and taught at the Royal Military Academy in Woolwich. A man of "considerable classical and general literary culture", he was a great friend of Fuseli and also of Leigh Hunt, who included Bonnycastle in his book *Lord Byron and Some of His Contemporaries*.

"Bonnycastle was a prolific and successful writer of textbooks. Of his chief works, *The Scholar's Guide to Arithmetic* first appeared in 1780 and ran to an eighteenth edition in 1851. His *Introduction to Astronomy* (1786), intended as a popular introduction to astronomy rather than as an elementary treatise, was one of the best-selling books on the subject for many years. Besides elementary mathematical books, Bonnycastle was in early life a frequent contributor to the *London Magazine*. He also wrote the introduction to a translation (by T. O. Churchill) of Bossut's *Histoire des mathématiques* (1803) and a 'chronological table of the most eminent mathematicians from the earliest times' for the end of the book" (ODNB).

This manuscript, titled "Bonnycastle's Trigonometry", contains the practical portions of the text, including rules for solving different types of trigonometric problems ("cases") and practice problems. The practice problems have been completed in full, including large, precise geometrical diagrams made with ruler and compass. Page numbers are given and the problems are dated, the first section having been completed on September 24th, 1813 with additions every few days until the final dated entry on March 31, 1814. The final, undated portion, about a quarter of the manuscript, comprises "Miscellaneous Astronomical Problems" from Andrew Mackay's *The Theory and Practice of Finding the Longitude at Sea or Land* (first published in 1793, the second edition in 1801), an important work for which its author "received the thanks of the boards of longitude of England and France" (ODNB).

This manuscript's focus on mathematical rules and practice problems (at the expense of the more theoretical, text-heavy portions), together with the fact that it was updated regularly between September and March, indicates that it was produced by an advanced student working through the book as part of a regular course of study. The script is elegant, clear, and controlled throughout, and pencilled guide rules indicate that the student took great pains to ensure the manuscript was attractive and readable, suggesting that it was evaluated as part of coursework rather than used as a notebook for producing rough calculations (indeed, some rough calculations are included on sheets of scrap paper loosely inserted). Mathematics of this type, focused on spherical trigonometry, astronomy, and navigational problems, would have been of interest primarily to mariners, and it seems reasonable to conclude that the student was attending a naval or military institution, or was perhaps under private tutelage with a naval career in mind. A beautiful example of a student's efforts at practical mathematics for navigation at a time when Britain was the major power on the seas. 00102 **£1,500**



THE MEETING OF TWO NOBEL LAUREATES JUST PRIOR TO THEIR TRAILBLAZING JOINT PROJECT

3. **(Brenner, Sydney) Wollman, E. L. & F. Jacob. *La Sexualité des Bactéries*. Paris: Masson et Cie, Libraires de l'Académie de Médecine, 1959.**

Octavo. Original grey wrappers printed in black. 3 double-sided plates from photographs. Wrappers rubbed, a little creased, and partially tanned with a few small spots and marks. Slight crease affecting the margins of the first half of the contents. A very good copy.

First edition, first impression of this uncommon and important monograph on bacterial genetics. An exceptional presentation copy signed by author François Jacob, with whom Brenner would partner only a year later to perform one of the most elegant experiments in the history of biochemistry, proving the role of messenger RNA in the decoding DNA. Cheekily inscribed by Jacob's co-author, Elie Wollman (1917-2008), "To Sydney Brenner, to disgust him / a good of bacterial sex" (possibly missing the word "dose" or similar before "bacterial sex"). And with Brenner's ownership signature in pencil on the upper cover.

Wollman and Jacob were bacteriologists at the Pasteur Institute who, by investigating bacterial reproduction, made ground-breaking discoveries in genetics. They published one of the first examples of a gene regulatory mechanism; discovered plasmids (portions of genetic material independent of the chromosomal DNA); and created the first model of gene mapping in a living organism" (Dantzer, "Elie Wollman 1917-2008: A Biographical Memoir, National Academy of Science, 2008). The present volume covers the breadth of contemporary knowledge of bacterial reproduction, including conjugation and the resulting genetic recombination. Jacob was later awarded the Nobel Prize for work on the regulation of enzyme levels in cells, and Wollman received several awards, including the French Legion of Honour.

Recipient Sydney Brenner (1927-2019) was a leader in the field of genetics almost from the moment he received his doctorate at Oxford in 1954. He joined Francis Crick's Cambridge laboratory in 1956, and they performed innovative research on how DNA is decoded by cells. Brenner proposed that the nucleotides which comprise DNA (adenine, guanine, thiamine and cytosine) are read by the cell in groups of three called codons, with each codon representing an amino acid (for example, three adenines in a row is the codon for the amino acid lysine). A gene is therefore a string of codons that directs the production of a specific protein molecule from

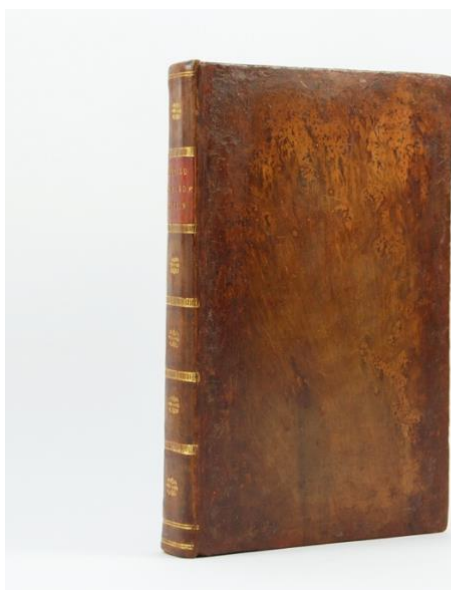
individual amino acids. He would later win the Nobel Prize for his work establishing the nematode *C. elegans* as a key model organism for genetics, neurobiology and developmental biology research.

Brenner met Jacob and Wollman at a symposium on microbial genetics in Copenhagen in 1959, and it was almost certainly on this occasion, or shortly afterwards, that this copy was presented. Jacob hoped to discuss new evidence for the existence of an intermediary molecule responsible for transporting information from DNA in the nucleus to the site of protein production in cellular structures called ribosomes, located outside the nucleus. It was known that ribosomes contained an analogue to DNA, ribosomal nucleic acid (RNA), but it was not clear whether there were intermediaries between DNA and RNA.

Though nothing concrete came of the Copenhagen symposium, the following spring Jacob again brought up the subject during a meeting with Brenner, Crick, and other biochemists at Cambridge. As Jacob later recalled, when he pointed out recent experimental results suggesting that, unlike normal RNA, the messenger molecule was unstable, “Francis and Sydney leaped to their feet. Began to gesticulate. To argue at top speed in great agitation. A red-faced Francis. A Sydney with bristling eyebrows. The two talked at once, all but shouting. Each trying to anticipate the other. To explain to the other what had suddenly come to mind” (Jacob, *The Statue Within*, p. 312). What Brenner and Crick had suddenly remembered was another experiment showing that when a certain virus attacked bacterial cells it blocked the creation of new ribosomes, and the only RNA then manufactured by the cell was both unstable and had the same base composition as DNA, strongly suggesting that it was the messenger molecule.

That afternoon Brenner and Jacob also learned that they had both been invited to spend the month of June as visiting scholars at Caltech, the perfect opportunity to collaborate and prove that there was an intermediary in the DNA decoding process and that it was the previously discovered unstable RNA. Most importantly, the colleague who had invited Jacob, Mat Meselson, had just developed a new method for marking bacterial macromolecules with heavy isotopes. Brenner and Jacob developed a plan “to distinguish whether, after phage (virus) infection, new RNA went to new ribosomes, or whether there were no new ribosomes, just the pre-existing ones ‘for hire’ – Brenner’s phrase at the time – to the new message when it came along” (Judson, *The Eighth Day of Creation*, p. 423).

With only four weeks to complete the experiment, Brenner and Jacob worked at speed and overcome numerous setbacks. But the final result was “spectacular. Eyes glued to the Geiger counter, our throats tight, we tracked each successive figure as it came to take its place in exactly the order we had been expecting. And as the last sample was counted, a double shout of joy shook the basement at Caltech. Followed immediately by a wild double jig. This was merely one experiment, performed in extremis... But we now knew that we had won. That our conception explained the transfers of information in the synthesis of proteins... Scarcely was the experiment over than we gave a seminar at Caltech to demonstrate the existence of X and its role as magnetic tape. No one believed us. The next day we left, each to his own home. The bet had paid off. In the nick of time” (Jacob, p. 317). 00604 **£4,750**



4. **Cavallo, Tiberius. The Theory and Practice of Aerostation. [Bound together with] Description, and Use, of the Telescopical Mother-of-Pearl Micrometer.** London: printed for the author and sold by C. Dilly, P. Elmsly, and J. Stockdale, 1785. And London: printed for the author and sold by C. Dilly, 1793.

Octavo (208 x 130 mm). Contemporary tree calf handsomely rebacked to style, spine gilt in compartments, red morocco label. 8 page index and author's ad. The Micrometer being 41 pages with two leaves of preliminaries. 2 engraved folding plates, extra-illustrated with 3 plates from an unknown edition of Faujas de Saint-Fond's book on the Montgolfier brothers, Description des Expériences de la Machine Aérostatique. Armorial bookplate. Professionally rebacked and with the corners and edges of the boards restored, occasional light spotting to the edges of the textblock and the contents, a little toning and offsetting of the plates, mostly affecting the plates introduced from the Saint-Fond, but generally clean and fresh. A very good copy.

First edition of the first English-language scientific treatise on ballooning. This copy includes Cavallo's uncommon 1793 treatise on the mother-of-pearl micrometer that he invented, and is extra-illustrated with three plates from an unknown edition of Saint-Fond's book on the Montgolfier brothers, *Description des Expériences de la Machine Aérostatique* (first published 1783-84).

In his early twenties Tiberius Cavallo (1749-1809) moved from Italy to London, where "he moved easily in cultivated circles and developed an interest in electrical experiments, in particular on atmospheric electricity. His experimental skill and inventiveness brought him quickly to the notice of some of the leading natural philosophers of the day. He designed an ingenious electrometer for detecting and measuring the smallest quantity of electricity in the atmosphere, and in 1777 he published *A Complete Treatise on Electricity in Theory and Practice with Original Experiments...* The work was a compendium of contemporary understanding of electricity, and in it Cavallo emphasized the importance of experiments for the advancement of natural knowledge and identified possible directions for further investigation, both practical and theoretical. The *Treatise* was well received, and it earned him a high reputation within the Royal Society of London, of which he was elected a fellow on 9 December 1779" (ODNB).

Cavallo was a talented experimentalist and inventor; he undertook serious investigations into topics such as the medical uses of electricity and the physical properties of air and other gases. He invented and improved on a large number of instruments, and also acted as an international agent for London instrument makers. Serving as the Bakerian Lecturer of the Royal Society

between 1782 and 1792, he was a skilled science communicator whose books and lectures were well-received by the public as well as his peers.

The History and Practice of Aerostation contains a detailed history of ballooning and aerostatic experiments, including early unmanned flights and the work of the Montgolfier brothers, Pilatre de Rozier, and a large number of other amateur and professional experimenters. The second half of the volume covers the theory of ballooning with sections on the nature of air, the construction of balloons, the mechanisms for sending them aloft and bringing them back to earth, scientific experiments and observations that can be made during a voyage, and a short essay on the uses to which the new invention may be put in the future. "It can hardly be expected that, in the present state of the subject, all, or even a few, of the uses, to which the aerostatic machines may be applied, should be precisely known, since the decisive proof of experience has not yet been sufficiently shewn" (p. 320).

The second text bound into this volume describes one of Cavallo's inventions, a "simple and valuable" micrometer, for making small measurements while using a microscope or telescope. "The Mother-of-pearl micrometer is a very simple, and at the same time, a very accurate instrument of the kind. It consists of a small semitransparent scale or slip of Mother-of-pearl, about the 20th part of an inch broad, and of the thickness of common writing paper, divided into a number of equal parts by parallel lines, every fifth and tenth of which is a little longer than the rest" (pp. 3-4). 00211 £1,800



5. [Fioravanti, Leonardo] Falloppio, Gabriele (attributed). **Secreti Diversi & Miraculosi. Racolti dal Falopia, & Approbati da altri Medici di Gran Fama. Novamente Ristampati, et à Commun Beneficio di Ciascuno, Distinti in Tre Libri...** Venice: Alessandro Gardane [for Giacomo Leoncini], 1578.

Small octavo (145 x 90 mm). Early-18th century vellum, paper covered spine with manuscript library label, blind fillets, red speckled edges. Publisher Giacomo Leoncini's woodcut device to title page and the verso of the final leaf, 5 woodcut initials. Some contemporary or near-contemporary pen marks and short notes in the margins, many partially trimmed, more significant 12-line manuscript note to the recto of the final leaf, and pen trials, a partially illegible name, and a child's doodles to the verso of the same leaf. Vellum peeling a little from a corner of the upper board, some marks and spots to the vellum, minor area of insect damage to pastedowns and early and late leaves only slightly affecting the text, ink stain to K2 and adjacent leaves. Very good condition.

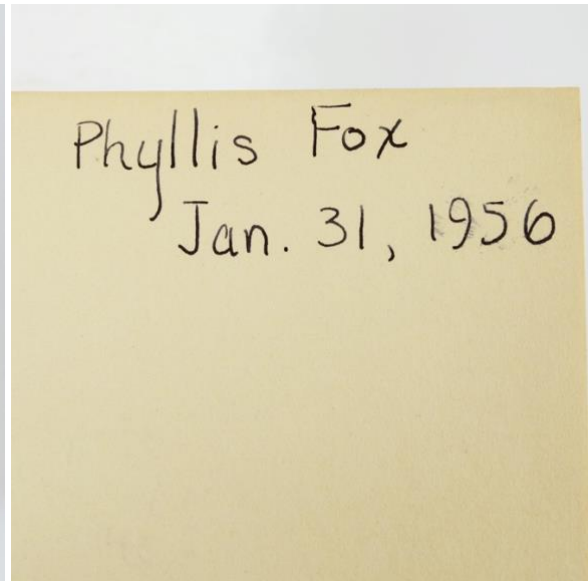
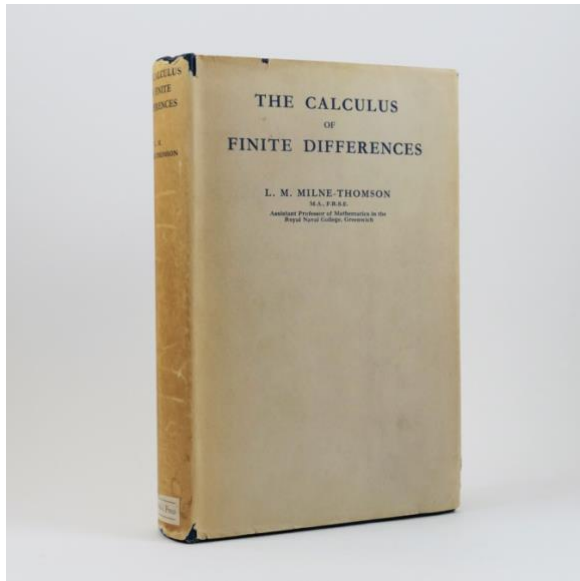
A rare early edition, likely the fifth in the original Italian, of a significant book of secrets first published in 1563 and attributed to the anatomist Gabriele Falloppio (1523-1562), though probably written by the iconoclastic physician Leonardo Fioravanti (1517- c. 1588). The first five editions were all printed in Venice, with the book given its lasting form by the editor of the 1565 second edition, Borgaruccio Borgarucci. Copies of the first five editions are well-represented institutionally but rare on the market, and only two other copies have appeared at auction in recent decades.

Books of secrets, compilations of natural and technical knowledge, were a popular medieval and early modern genre with roots stretching back to the Hellenistic period. As William Eamon, one of the foremost scholars of the subject, writes in *Science in the Secrets of Nature*, “Underlying these works was the assumption that nature was a repository of occult forces that might be manipulated, not by the magus’s cunning, but merely by the use of correct techniques. The utilitarian character of the books of secrets gave concrete substance to this claim. Unlike the recondite treatises on the philosophical foundations of magic, which barely touched base with the real world, the books of secrets were grounded upon a down-to-earth, experimental outlook: they did not affirm underlying principles but taught ‘how to’... What they revealed were recipes, formulas, and ‘experiments’ associated with one of the crafts or with medicine: for example, instructions for making quenching waters to harden iron and steel, recipes for mixing dyes and pigments, ‘empirical’ remedies, cooking recipes, and practical alchemical formulas such as a jeweler or tinsmith might use... By the eighteenth century such ‘secrets’ were techniques and nothing more. In the sixteenth century, however, the term was still densely packed with its ancient and medieval connotations: the association with esoteric wisdom, the domain of occult or forbidden knowledge, the artisan’s cunning... and the political power that attended knowledge of secrets” (Eamon, *Science and the Secrets of Nature*, pp. 4-5).

This particular volume explores a wide range of secrets, the first chapter covering medicine, the second wines and spirits, and the third alchemical and metallurgical recipes, including producing gold and silver from lead; working with precious metals, iron, and copper; and making cosmetics (“red for women’s faces”). It also includes more unusual recipes such as how to carve letters into marble without iron and how to make an inextinguishable candle.

Books of secrets were often spuriously attributed to famous doctors, philosophers, and occult figures as a marketing strategy. When *Secreti Diversi et Miraculosi* was first published in 1563 its Venetian printer Marco di Maria explained that the compilation had “fallen into his hands” after the great anatomist’s death, and that the contents were the results of Falloppio’s own successful experiments. However, Eamon cautiously attributes the text to Leonardo Fioravanti. “Indeed, the work praises the Bolognese surgeon so effusively that it reads like an extended advertisement for Fioravanti’s books” (Eamon, pp. 166-167). Fioravanti’s “marvellous” ability to cure syphilis, his treatments for wounds and leprosy, and his most recent books are all promoted. In 1563 Fioravanti was still a young man establishing himself, hence the need for promotion. But he eventually became well-known, an outspoken critic of contemporary medicine and “one of the wonders of the age” whose “skill as a surgeon and unorthodox medical practices made him the focus of a cultlike following” (Eamon p. 168).

USTC 828720, Welcome I, 2161; Thorndike VI, p. 218
00404 **£3,500**



COMPUTER SCIENTIST PHYLLIS FOX'S COPY

6. **(Fox, Phyllis) Milne-Thompson, L. M. *The Calculus of Finite Differences*.**

London: Macmillan and Co., Limited, 1951.

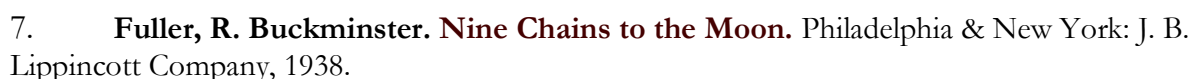
Octavo. Original blue cloth, titles to spine gilt. With the dust jacket. Lower corner of upper board bumped, tips lightly rubbed, contents faintly toned. A very good copy in the price-clipped jacket with tanned spine panel and a few small chips and splits.

Second edition of this classic in applied mathematics, originally published in 1933. With the ownership signature of computer scientist Phyllis Fox and the date January 31, 1956, indicating that Fox purchased this volume while working on the numerical solution of partial differential equations for UNIVAC.

During the late 1940s Phyllis Fox (1923 -) earned undergraduate degrees in mathematics and electrical engineering and worked as an operator for GE's differential analyser. In 1949 she obtained her master's in electrical engineering at MIT, writing for her dissertation a program for the school's unfinished vacuum tube computer the Whirlwind I. Fox then earned her doctorate in mathematics at MIT, supervised by the prominent applied mathematician Chia-Chiao Lin (1916-2013).

As Fox explained to an interviewer from the Society for Industrial and Applied Mathematics in 2005, between 1954 and 1958 she worked at the Courant Institute, an Atomic Energy Commission-funded department of the City University of New York. "[Richard] Courant ran it, but Courant, Kurt O. Friedrichs, Levy, all these famous, really, applied mathematicians were there, and I got a job. As what, I don't know. But I wasn't really a fluid dynamicist. They had bought a computer, a Univac. Now, none of these applied mathematicians really wanted to bother with the machine, but a physicist named Bob Richtmyer who came out of AEC and Los Alamos was there. He was interested in doing computations on the Univac... At that time, the main problem thing they were looking for was controlled thermonuclear. Now this isn't the bomb. The controlled fusion, of course, is the source of all power, if you can make it work. Fine. Theoretically it was clean, and an infinite source of power, once you got it going. And the Russians were probably working on it, so it was very secret. But of course, the technique would apply also to Teller and his bomb. I wasn't in the abstract analysis part of the research, but I helped with the computer probably, and some of the analysis of the equations involved, because I had that experience from MIT."

The author of the present volume, Louis Melville Milne-Thomson (1891-1974), was a professor at the Royal Naval College at Greenwich who made significant contributions to applied mathematics, including the Milne-Thomson circle theorem and the Milne-Thomson method for finding a holomorphic function. He was particularly concerned with “making mathematics accessible to the beginner or non-specialist” and in 1933 “published the first of several textbooks. *The Calculus of Finite Differences* was based on his own experience of making tables and, in its preface, he states that one motivation for writing it was the lack of other texts suitable for his students” (ODNB). 00704 **£750**



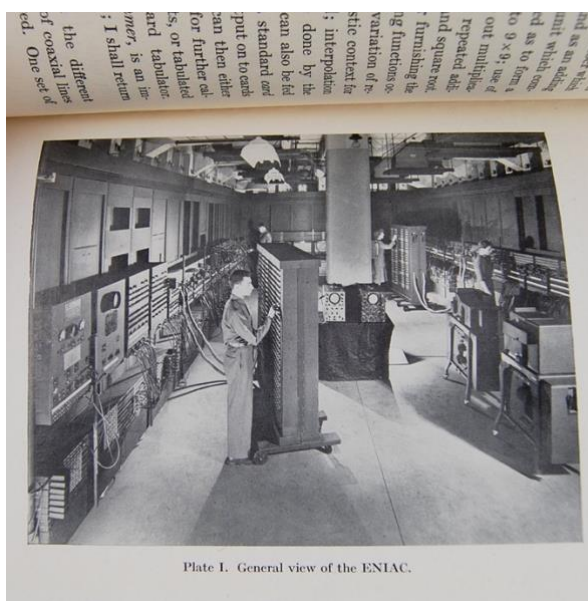
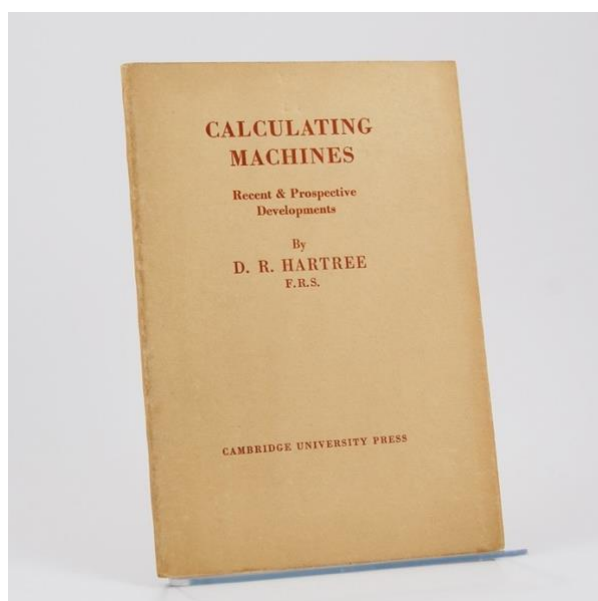
First edition, first printing of the author's first book. Presentation copy with a warm and lengthy inscription from the author to fellow architect Robert George Cerny (1908-1985), dated November 22, 1959. Fuller begins, "To Bob Cerny, with whom it has been my privilege and pleasure to work on the emergent...". Unfortunately, the combination of Fuller's messy handwriting and unique vocabulary and syntax make it difficult to grasp the full meaning of the inscription, and it's unclear how the two knew each other.

Nine Chains to the Moon is a collection of forty-four essays on various topics in the history of science and technology, many of them exploring progressive design and the concept Fuller called “ephemeralization”, or doing more with less, which he believed would create higher living standards despite population growth. The title, a metaphor for co-operation, refers to the notion that if all the humans on Earth stood on each other’s shoulders, they could reach the Moon. The

book has been described by one fan as “an outlandish collection of essays in feverish celebration of the technical and design possibilities of the twentieth century” (Taylor, nous.org, accessed August 4, 2020). Fuller’s elaborate writing style (also in evidence in the inscription in this volume) put off most critics, with the Kirkus reviewer left “puzzled, confused and doubting” by the “vast areas where I cannot follow him, where mathematical and physical abstractions leave me floundering, where meaning is lost -- for me -- in a thicket of verbiage”.

The recipient of this copy, Bob Cerny, was a modernist architect based in Minneapolis and St. Paul, who had graduated from the University of Minnesota School of Architecture in 1932. “The school’s architectural program, like others across the country, had fallen under the sway of Modernist ideas in the 1930s. The austere Bauhaus strain of Modernism rather than Wright’s more dynamic style prevailed, and once graduates established practices in Minnesota after the war, they filled the state with all manner of Modernist buildings. These homegrown architects—among them Carl Graffunder, Robert Cerny, Jack Liebenberg, and the firm (now HGA) founded by Richard Hammel, Curt Green, and Bruce Abrahamson—rarely achieved national recognition. Even so, their work, usually quite restrained, was of consistently high quality” (Millett, “Minnesota Design”, *Metropolis*, March 1, 2018). Among Cerny’s most prominent designs was the 1950s Gateway Center in Minneapolis, one of the largest mid-century “urban renewal” projects.

00511 £750



8. Hartree, D. R. **Calculating Machines: Recent & Prospective Developments.**

Cambridge: Cambridge University Press, 1947.

Octavo. Original cream wrappers printed in brown. 2 plates from photographs, equations and charts within the text. Near-contemporary ownership inscription to the title. Wrappers a little toned, a couple of tiny dents to the upper wrapper. A fresh and attractive copy in excellent condition.

First edition, first impression and a lovely copy of “the first booklet on electronic computers separately published by a conventional publisher, and also one of the earliest discussions of how these machines could be used in scientific calculations” (Hook & Norman, *Origins of Cyberspace* 649).

In addition to his significant contributions to ballistics and quantum theory, British mathematician Douglas Hartree (1897-1958) was also a leader in efforts to automate scientific

calculations. He was “involved in the development of the digital electronic computer, which emerged from wartime attempts to automate calculation further... In 1946 Hartree's advice was sought in the application of the United States army's ENIAC (electronic numerical integrator and computer) to the production of ballistic tables” (ODNB).

This booklet was based on his experience with ENIAC, and describes in detail the machine's operation, its memory capacity, how problems are encoded for it to process, and what types of mathematical questions it is currently addressing. It also offers hints of future applications, such as research in fluid dynamics, statistics, number theory, and economics, where the burden of manual calculation was previously too great to allow in-depth analysis. 00166 **£500**



9. **Hibbert, Samuel. History of the Extinct Volcanos of the Basin of Neuwied, on the Lower Rhine. With Maps, Views, and Other Illustrations.** Edinburgh & London: W. and D. Lang; Treuttel and Wurtz ad Richter, 1832.

Octavo. Original brown silk morieé, printed paper label to spine. 2 hand-coloured maps, one being the double page folding frontispiece, 6 lithographed plates of which 3 are double page, 18 illustrations within the text. Table and directions to the binder at rear. Publisher's advert on the front pastedown, covered by a late-19th century Munden family bookplate. Splits at the head of the spine, some small worn spots at the extremities, joints cracked, some light offsetting affecting the maps, a few of the plates darkened, light spotting to the edges of the text block. Edges untrimmed. Very good condition.

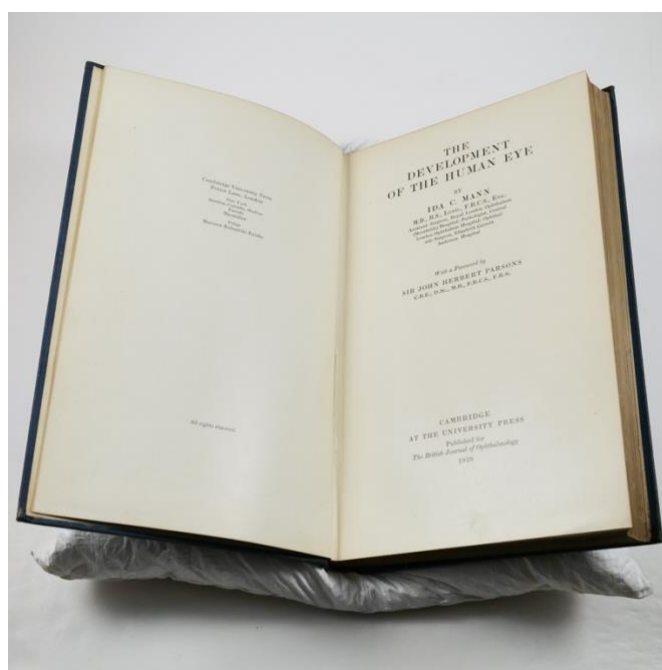
First and only edition of this rare work on the effect of volcanic activity on the development of the Rhine Valley, in the original cloth. WorldCat locates only three copies, at Berlin, Göttingen, and the University of Manchester. Only one other copy has appeared at auction in the last decade, a copy in library cloth at Dominic Winter in 2013.

Author Samuel Hibbert Ware (1782-1848) was an antiquarian and geologist who spent most of his life in Edinburgh, where he was a member of numerous learned societies and was friendly with notables such as Sir Walter Scott.

“In 1817 Hibbert visited Shetland, where he discovered ‘chromate of iron’ and undertook a geological survey of the country. For this discovery the Society of Arts awarded him in 1820 the

Iris gold medal. In Shetland he also discovered what he described as ‘native hydrate of magnesia’. In 1822 he published his *Description of the Shetland Islands*, in which he described the local geology and antiquities... In 1824, at the request of the Manchester Literary and Philosophical Society, Hibbert delivered at Manchester a course of lectures on geology, and in 1827 a further course for the Manchester Royal Institution... He and his family also spent two or three years abroad, chiefly visiting the volcanic districts of France, Italy, and northern Germany, and he published *A History of the Extinct Volcanoes of the Basin of Neuwied on the Lower Rhine* (1832) on his return to Edinburgh” (ODNB).

A History of the Extinct Volcanos was well received in the scientific community. A near contemporary, Edward Hull, described it as a work of “remarkable merit, if we consider the time at which it was written. For not only does it give a clear and detailed account of the volcanic phenomena of the Eifel and the Lower Rhine, but it anticipates the principles upon which modern writers account for the formation of river valleys and other physical features; and in working out the physical history of the Rhine Valley below Mainz, and its connection with the extinct volcanos which are found on both banks of that river, he has taken very much the same line of reasoning which was some years afterwards adopted by Sir A. Ramsay when dealing with the same subject. It does not appear that the latter writer was aware of Dr. Hibbert’s treatise” (Hull, *Volcanos Past and Present*, p. 7). 00426 **£950**



10. **Mann, Ida C. The Development of the Human Eye. With a Foreword by Sir John Herbert Parsons.** Cambridge: at the University Press, 1928.

Octavo. Original blue cloth, titles to spine gilt. 2 plates, numerous diagrams and illustrations from photos within the text. Spine rolled and a little faded, cloth rubbed at the extremities, upper corner bumped, lower hinge cracked, contents faintly toned. Very good condition.

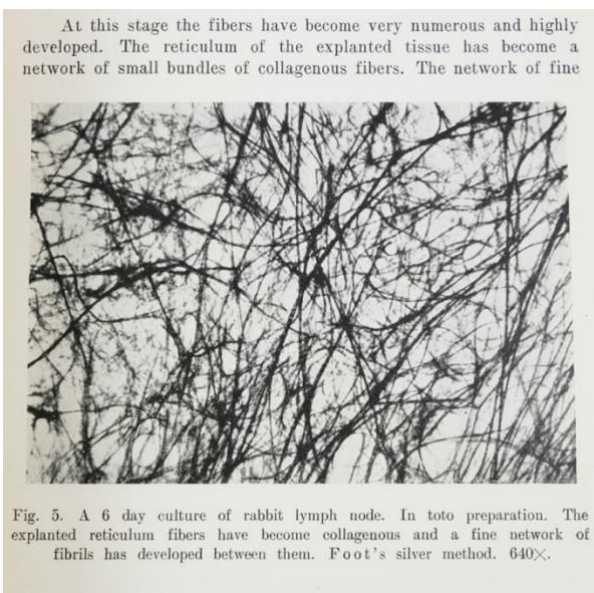
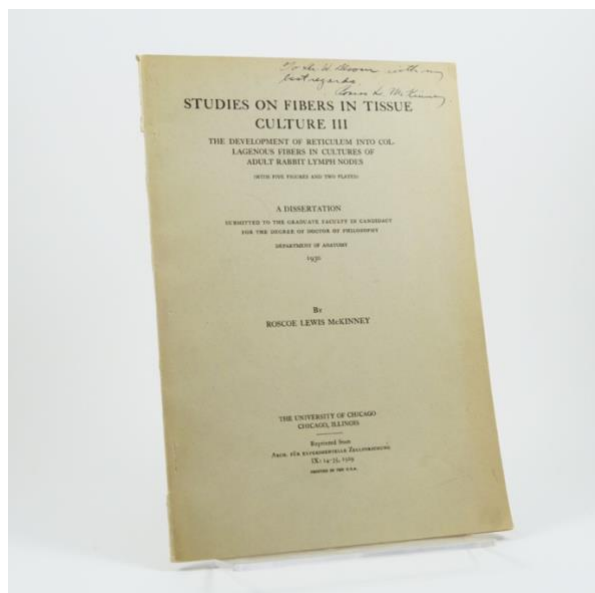
The rare first edition of this ground-breaking work on the embryology of the human eye. No copies are noted in auction records since 1980.

Dame Ida C. Mann (married name Gye, 1893-1983) entered the London School of Medicine for Women in 1914, and also undertook training at the Royal Free and St Mary's hospitals. During

the period at St Mary's she assisted Professor J. E. S. Frazer in embryological research; her developmental studies were presented as a dissertation for the DSc (London, 1924), and formed the basis of her notable first textbook, *The Development of the Human Eye* (1928), still in print forty years later” (ODNB).

“After qualifying Mann decided to specialize in ophthalmology, and took her first post under Leslie Paton at St Mary's, becoming FRCS in 1924. She also held several teaching appointments while she progressed up the ladder towards consultant ophthalmologist status, reaching the highest point in 1927 with appointment as senior surgeon on the staff of Moorfields Eye Hospital, London, the first woman ever to do so. At the same time she established a Harley Street practice and consolidated herself as a leading clinical ophthalmologist in London, but still carried on her developmental studies and teaching (including the diploma course in Oxford). In this period up to the Second World War she learned and promoted the then new technique of slit-lamp microscopy of the eye, applying it both to patients and to animals in the London Zoo. She was also instrumental in bringing to London in 1938 Josef Dallos, the Hungarian pioneer of glass contact lenses, just ahead of the Nazi take-over of Hungary, and with him she established the first contact lens centre in the United Kingdom... At the instigation of Sir Hugh Cairns Mann moved to Oxford in 1941 to undertake the clinical training of medical students diverted from London, and there she was appointed to Margaret Ogilvy's readership in ophthalmology, as well as a personal chair, the first woman ever to hold the title of professor in the University of Oxford, and a professorial fellowship in St Hugh's College... In this period she was the first to use penicillin to treat ocular infection.” (ODNB).

Mann emigrated to Australia in 1949 and continued her career, travelling throughout Australasia and the Pacific to study eye diseases. “In recognition of Mann's many contributions to research, teaching, and clinical practice, she was appointed CBE (1950) and DBE (1980), as well as receiving honorary degrees, prizes, and medals from many countries (ODNB). 00717 **£650**



DISSERTATION OF THE FIRST BLACK AMERICAN PHD IN ANATOMY, INSCRIBED TO HIS DOCTORAL ADVISOR

11. **McKinney, Roscoe Lewis. Studies on Fibers in Tissue Culture III.** The Development of Reticulum into Collagenous Fibers in Cultures of Adult Rabbit Lymph Nodes (with Five Figures and Two Plates). A Dissertation Submitted to the Graduate Faculty in Candidacy for the Degree of Doctor of Philosophy, Department of Anatomy, 1930. Reprinted from Arch. für Experimentelle Zellforschung IX: 14-35. Chiacgo, IL: The University of Chicago, 1929.

25 page pamphlet. Original grey wrappers printed in black. Together with another offprint of the paper as published in English in a German journal in the same year. 4 colour plates, 5 illustrations from microphotographs within the text. Closed tears to the wrappers at the head and tail of spine, light toning and dulling at the edges of the wrappers, a few light marks, contents faintly toned. Very good condition. The German offprint in good condition, the wrappers separated and chipped.

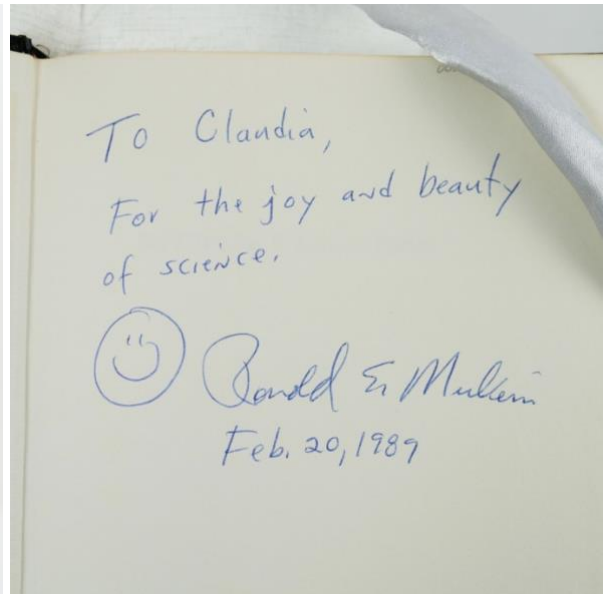
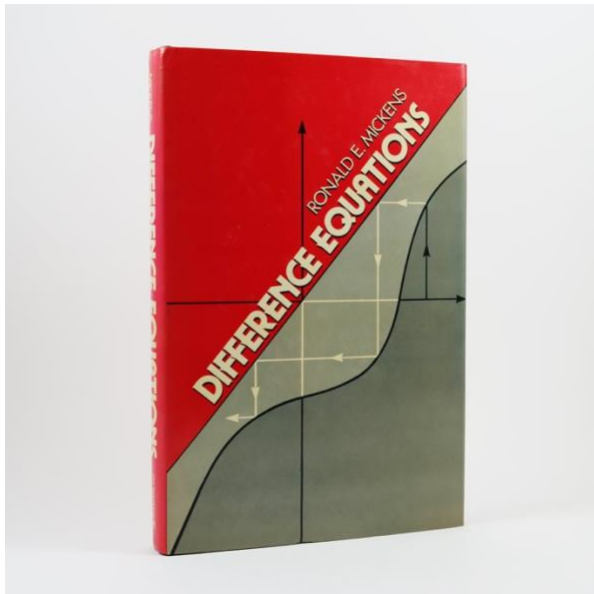
The rare offprint of the dissertation of the first Black American to earn a doctorate in anatomy, a presentation copy inscribed by the author to his doctoral advisor on the upper wrapper, "To Dr. W. Bloom with my best regards, Roscoe L. McKinney". WorldCat locates only three institutional copies: at Duke University, the University of Chicago, and the Bibliothèque Nationale. Together with another offprint of the same, from *Abdruck aus Archiv für Experimentelle Zellforschung besonders Gewebezüchtung*, with McKinney's pencilled signature to the upper wrapper.

Roscoe L. McKinney (1900-1978) earned his bachelor's degree from Bates College in 1921 and then worked as a biology professor, first at Morehouse and then at Howard University, where his department head was the famed zoologist Ernest Everett Just.

McKinney's doctoral work was done at the University of Chicago where, with the support of the Rockefeller Foundation, "he became involved in tissue culture studies under the late Alexander Maximow and later under professor William Bloom. Illustrations and citations of work contained in his PhD thesis there were later included in several succeeding editions of the *Textbook of Histology* by Maximow and Bloom" (obituary in the *Journal of the National Medical Association*, volume 71, number 5, May 1979).

After completing his doctorate, McKinney founded the Howard University anatomy department and was its chairman between 1930 and 1947, concurrently serving as vice-dean of the College of Medicine. During the 1950s and 60s he spent significant time overseas, first as a Fulbright fellow at the Royal College of Medicine in Baghdad, then as an instructor at the Osmania Medical College of Hyderabad. He worked as a consultant in anatomy at the University of Saigon during the height of the Vietnam War, between 1969 and 1971.

The recipient of this offprint, McKinney's advisor William Bloom (1899-1972), was a prominent histologist, "well-known for his research on cells of connective tissue and their interrelationships; the ionizing radiation on cells and tissues; and the development of clinical hematology. He developed apparatus for pinpointing small parts of cells, including chromosomes, with beams of ionizing or ultra-violet radiations... He was also part of the Manhattan Project, where he studied the effects of radiation on cells" (finding aid for the William Bloom Papers, University of Chicago Library, 2009). 00557 **£1,250**



“THE SATISFACTION OF DEALING WITH A CHALLENGING PROBLEM”

12. **Mickens, Ronald E. *Difference Equations*.** New York: Van Nostrand Reinhold Company, 1987.

Octavo. Original black boards, titles to spine in silver. With the dust jacket. Equations and graphs throughout the text. Small bump to the edge of the upper board also affecting the jacket. Faint partial toning of the pastedowns. An excellent copy in the jacket that is just a little rubbed and faded along the spine panel.

First edition, first printing. An attractive copy inscribed by the author on the front free endpaper, “To Claudia, for the joy and beauty of science [smiley face] Ronald E. Mickens, Feb. 20, 1989”. Rare signed and with the stylish jacket in such nice condition.

Ronald E. Mickens (1943 -) “is a physicist who has advanced the general understanding of the role that pure mathematics can play in science. He is perhaps best known for his work on difference equations – a type of equation that is now considered fundamental to the development of chaos theory” (Krapp, *Notable Black American Scientists*, p. 229).

In an interview with the American Physical Society Mickens has described how, “Even at two or three years of age, I was curious about the ‘workings’ of the universe and of the human mind”. His maternal grandfather introduced him to the scientific outlook, and his childhood in a farming community provided opportunities to see science in action: “There was an implicit scientific understanding involved in all these processes, [picked up] just from working the farm”. Mickens went on to earn his bachelor’s in physics at Fisk University and his PhD at Vanderbilt in 1968, then studied particle physics as a postdoctoral researcher at MIT.

Mickens has had an extensive teaching career at institutions including Fisk, Clark Atlanta University, Howard University, MIT, and Vanderbilt. He has been the recipient of numerous grants and awards allowing him to study a wide range of topics, including “nonlinear equations, numerical analysis, mathematical biology, and the history and sociology of science” (Krapp), on which he has published more than 170 papers and five books.

Mickens’s most recent research projects have focused on mathematical models for epidemiology and vibrations and oscillations in materials science. As he told the APS, “There’s really no area of

physics that doesn't have real world applications... Even if it seems like the applications for something aren't too significant, you still have the satisfaction of dealing with a challenging problem and making progress with it".

Mickens "is also deeply involved in documenting African American contributions to science and technology. He has already written a biography of Edward Bouchet, the first African American to earn a Ph.D. in any subject—it happened to be physics. He continues to research and write a biographical work on Elmer Imes, the second African American to earn a Ph.D. in physics" (APS interview). He has served as historian of the National Society of Black Physicists and was one of the founders of the National Conference of Black Physics Students. 00565 **£450**



THE DISCOVERY OF ARGON

13. **Rayleigh, Lord & William Ramsay. Argon, a New Constituent of the Atmosphere.** Washington D.C.: The Smithsonian Institution, 1896.

Large octavo. Original green cloth, titles to upper board gilt, yellow coated endpapers. Corners and tail of spine bumped slightly affecting leaves, else a very fresh copy in excellent condition.

First separate edition, first printing of the first publication on the discovery of argon, which led to Nobel Prizes for its co-discoverers.

"Few discoveries have been as dramatic as the discovery of argon in the atmosphere by Lord Rayleigh and William Ramsay, professor of chemistry at University College, London. The discovery of argon involved a bitter public dispute concerning the legitimacy of a chemical element whose most important characteristic was its inertness, and which forced the chemists to reassess the very notion of a chemical element."

Rayleigh had begun work to determine the densities of atmospheric gases in 1882. In 1892 he uncovered a strange discrepancy between the atomic weight of atmospheric nitrogen and nitrogen derived from ammonia. Further experiments led him to the conclusion that the extra weight represented an unknown constituent of the atmosphere, and in 1894 Rayleigh and

Ramsay joined forces in an attempt to isolate it. "Letters were written to the *Times* criticizing Rayleigh's and Ramsay's work, especially their unwillingness to make public the details of their investigations. Rayleigh and Ramsay kept the details private until they were absolutely certain about the new element because they wished to receive (which they did) the Smithsonian Hodgkins prize for discoveries associated with the atmosphere. The final announcement was made at a meeting of the Royal Society at University College, London, on 31 January 1895, less than a week after Lord Kelvin in his presidential address to the Royal Society had referred to the discovery of the new constituent as the greatest scientific event of the year. Lord Kelvin chaired the meeting to which the councils of both the Chemical and the Physical Society were invited. There were 800 people present when Ramsay read the paper. Rayleigh's comment at the end was quite characteristic: 'I am not without experience of experimental difficulties, but certainly I have never encountered them in anything like so severe and aggravating a form as in this investigation' (Rucker, 337)" (ODNB). 0093 £650



14. Rydberg, J. R. Recherches sur la Constitution des Spectra d'Émission des Éléments Chimiques. Kongl. SV. Vet. Akademiens Handlingar Band 23. No. II.

Stockholm: Kongl. Boktryckeriet. P. A. Norstedt & Söner, 1890.

Tall quarto (300 × 230 mm). Recent burgundy quarter 18morocco, marbled boards, titles to spine gilt. Title page just a little toned. Excellent condition.

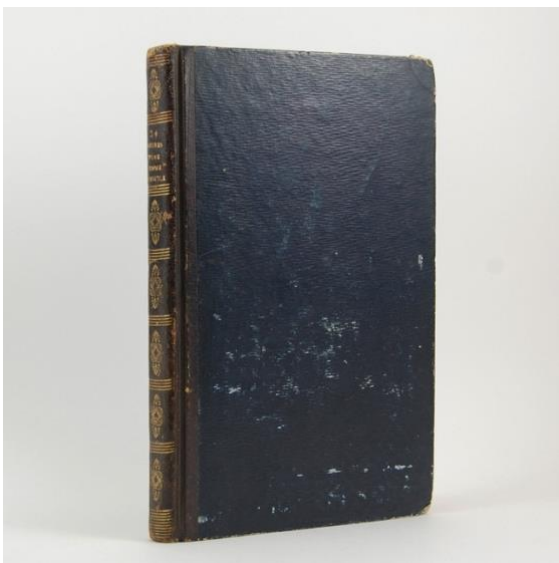
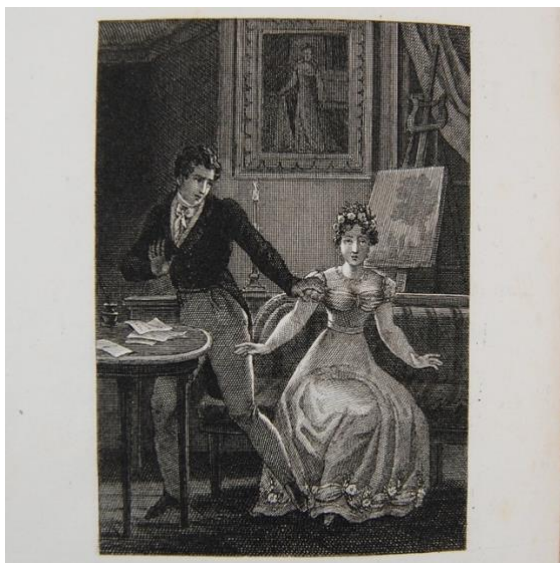
First edition of this significant work in which Rydberg lays out the empirical formulae governing the frequencies of spectral lines, a precursor to Bohr's development of the quantum theory. A handsomely bound copy in excellent condition.

Johannes Rydberg (1854-1919) was a Swedish physicist at Lund University who studied atomic masses and electromagnetic radiation; inspired by Mendeleev's periodic table, he was convinced that the electromagnetic spectra emitted by atoms could provide insight into atomic structure and theory.

"Notwithstanding the imperfect spectroscopic tables then at his disposal, Rydberg discovered most of the important properties of series spectra, including the relation between corresponding

series in the spectra of related elements, and foreshadowed discoveries which were made later, when experimental work has sufficiently advanced. Some of the features noted by Rydberg were observed about the same time by Kayser and Runge, but his work had the special merit of connecting different series in the spectrum of the same element into one system, which could be represented by a set of simple formulae having but few adjustable constants. He especially insisted that the hydrogen constant, now generally called the 'Rydberg constant,' should appear in all series and, apart from slight variations from element to element suggested by the theoretical work of Bohr, nearly all subsequent attempts to improve the representation series have involved this supposition, and have had Rydberg's formula as a basis." (*Nature* obituary, January 24, 1920). Rydberg's work was justified and expanded upon by Neils Bohr's development of the quantum model of atomic structure in 1913, and Bohr was able to use his own theory to derive Rydberg's results, providing confirmation of both.

This uncommon publication represents the culmination of Rydberg's work. It "mapped out Rydberg's total approach with remarkable clarity... While Rydberg observed and measured some spectral lines on his own, he was not particularly noted as an experimental physicist and did not publish any of his experimental investigations or spectroscopic measurements. Most of the data he needed were already available in the voluminous literature. While T. R. Thalen and Bernhard Hasselberg, Rydberg's major Swedish contemporaries in spectral studies, concentrated upon accurate measurements of the spectra of the elements, Rydberg's major spectral contributions were to theory and mathematical form, and those to form were the ones of enduring value" (*Dictionary of Scientific Biography*, vol. 12, p. 42). 00213 **£1,000**



AN EARLY FEMINIST NOVEL

15. Salm, Constance de. **Vingt-Quatre Heures d'une Femme Sensible, ou Une Grande Leçon.**

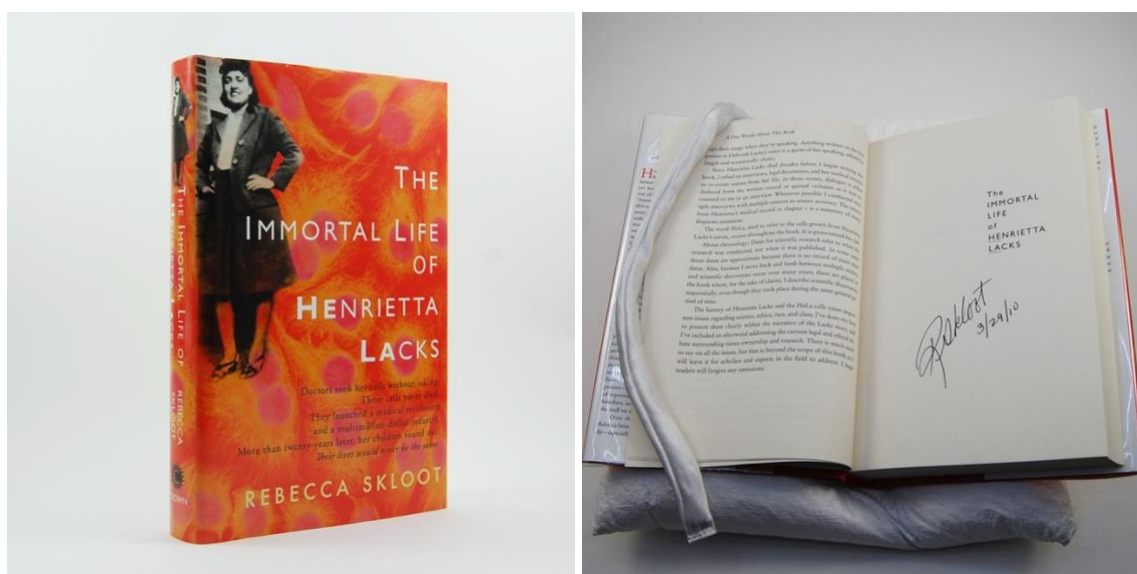
Paris: Arthus Bertrand, 1824.

Octavo. Contemporary quarter black skiver, blue boards, spine gilt in compartments. Engraved frontispiece. 1 leaf of publisher's ads at rear. Spine rolled, binding rubbed, spotting and toning of contents, primarily in the margins. A very good copy.

First edition, first impression of this early feminist novel.

Author Constance de Salm (1767-1845) was a highly regarded French writer and moral philosopher, and an important member of a circle of leading intellectuals and scientists. Though forgotten for much of the 19th and 20th centuries, she is now the subject of renewed academic interest, providing a window onto the lives and intellectual networks of women in Revolutionary and Napoleonic France. De Salm spent most of her life promoting the equality of women, and her most important work, the poem “Épître aux femmes” (1797), was a direct attack on the language and social structures that uphold patriarchy, as well as an exhortation to women to liberate themselves. During her career “she used a variety of genres to address issues of importance to women, such as equal access to educational opportunities and to family courts, recognition of intellectual achievement, the infantilization of women and the denigration of their abilities, the cost to women's health of reproduction, and adequately remunerated work for poor, widowed, and single women. In many ways she can be usefully compared to Mary Wollstonecraft” (Hine, *Constance de Salm*, p. 4).

The present text, *Twenty-Four Hours in the Life of a Sensitive Woman*, is an epistolary novel exploring the mindset of a woman whose lover may have abandoned her for another. It was praised by her friend, the author Stendhal and is now rare in the first edition. We can locate only one institutional copy, at the British Library. 00158 £950



THE HUMAN COST OF ONE OF THE 20TH CENTURY'S MOST IMPORTANT MEDICAL ADVANCES

16. Skloot, Rebecca. **The Immortal Life of Henrietta Lacks.**

New York: Crown Publishers, 2010.

Octavo. Original red boards, titles to spine gilt. With the dust jacket. Illustrated title and chapter titles, 8 pages of illustrations from photographs. A fine copy in the jacket.

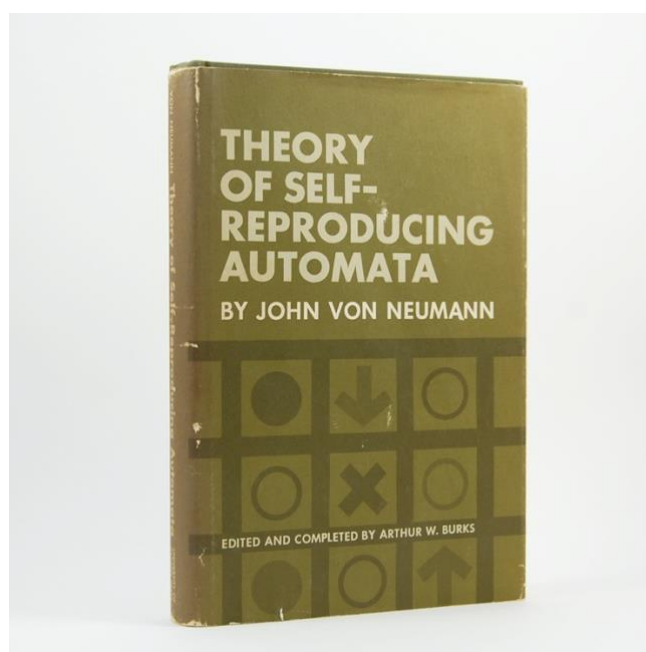
First edition, first printing. A superb copy, signed and dated “3/29/10” by the author on the half title.

In 1951 Henrietta Lacks, a 31-year-old Black American woman, died of ovarian cancer at Johns Hopkins. Unbeknownst to herself or her family, doctors used her biopsy to culture a line of cells

that revolutionised medicine. Previously, no human cell culture had survived for more than a few days in the laboratory, seriously limiting their usefulness to research. Lacks's cultures, however, survived for weeks, then months, and eventually decades, becoming essentially immortal. Dubbed "HeLa", they are now mass produced and have been used to study almost every major medical question of the last seventy years. HeLa cells have been key to the development of vaccines, including the Salk polio vaccine; to identifying HIV and other emerging diseases; to our understanding of cell biology, genetics, and ageing; and in the development of medications for a range of illnesses.

But this scientific success has a darker side. There are serious concerns about how Lacks's race affected her medical care and the treatment of her family by the scientific community. Neither Lacks nor any of her relatives provided informed consent for her cells to be retained and studied, much less for them to become a multi-million dollar industry over which they have no control. And her descendants fear the privacy implications of their genome being made public.

The Immortal Life of Henrietta Lacks approaches the HeLa cells from this perspective, and is based on nearly a decade of personal interviews and archival research. Skloot focuses in particular on Lacks's daughter, Deborah, who spent years fighting for access to the full story of her mother's cells and to ensuring that her life and legacy would be honoured. The book also situates Lacks within the wider context of racism in medicine, and how Black women's bodies have frequently been co-opted for the benefit of white doctors and patients. Now considered a key work of popular science writing, it spent 75 weeks on the *New York Times* best seller list and received numerous awards, including the Wellcome Trust Book Prize and the National Academies Best Book of the Year Award. 00369 £350



17. Von Neumann, John. Theory of Self-Reproducing Automata. Edited and Compiled by Arthur W. Banks.

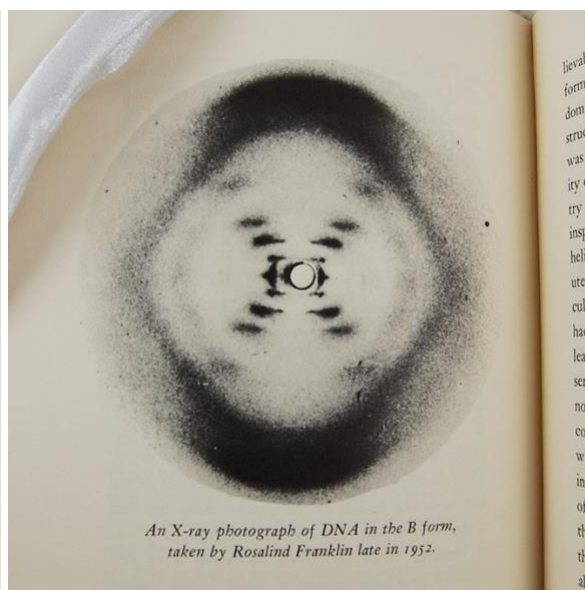
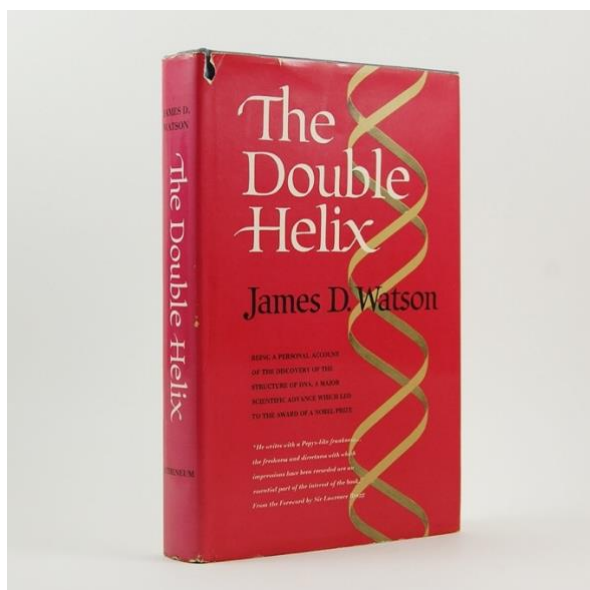
Urbana & London: University of Illinois Press, 1966.

Octavo. Original green cloth, titles to spine and upper board in black. With the dust jacket. Contemporary ownership signature in blue ink to the front free endpaper. An excellent, fresh copy in the lightly rubbed jacket that is tanned, particularly along the spine panel, and has some nicks and short splits at the edges.

First edition of this important work on self-reproduction in machines and life forms, scarce in the dust jacket.

Von Neumann became interested in the abilities of computers to self-reproduce during his work on the Institute for Advanced Studies computer project - noting that, since a Turing machine can make exact copies of any readable sequence, it can copy itself. He hoped to formulate a theory of self-reproduction that would be general enough to explain and predict self-reproduction in both machines and living things. "Viewing the logic of self-replication and self-reproduction through the lens of formal logic and self-referential systems, von Neumann applied the results of Gödel and Turing to the foundations of biology" with his conjectures hitting "the heart of the probability or improbability of the origin of life" (Dyson, *Turing's Cathedral*, pp. 283-285).

Together with Stanislaw Ulam, von Neumann attempted to develop these ideas for publication, but they remained unfinished at his death. "The incomplete manuscript, including a lengthy introduction based on a series of five lectures given by von Neumann at the University of Illinois in 1949, was eventually assembled, with careful editing by Arthur Burks, and published as *Theory of Self-Reproducing Automata* almost ten years after von Neumann's death... Our understanding of self-reproduction in biology, and our development of self-reproducing technology, proceeded almost exactly as the proposed theory described" (Dyson, p. 286). 00233 £1,200



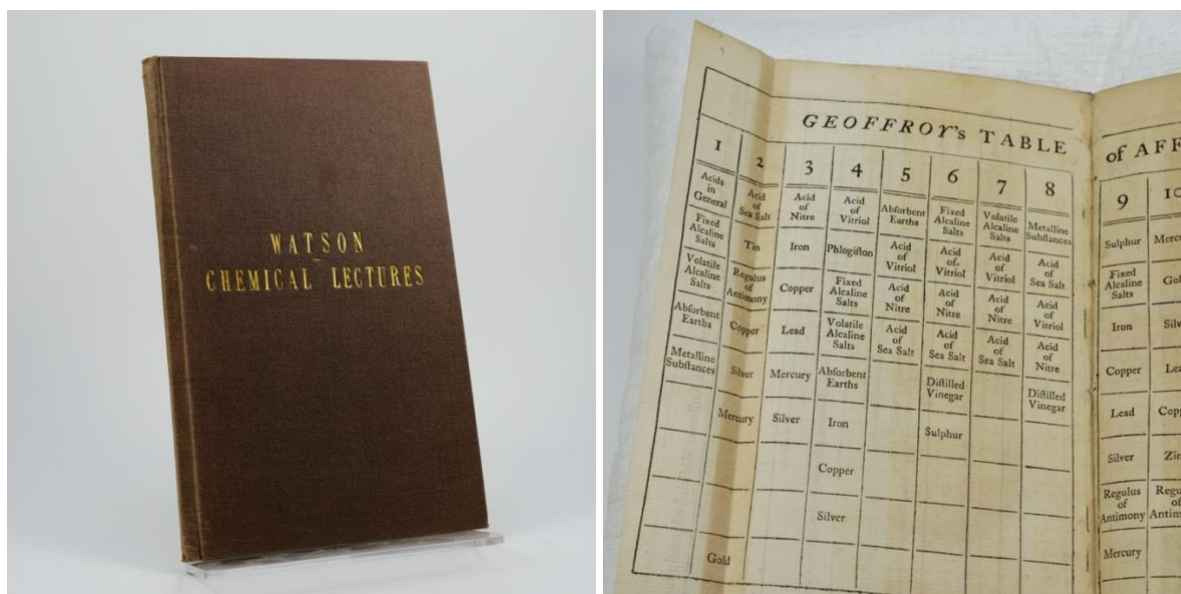
18. Watson, James D. The Double Helix. A Personal Account of the Discovery of the Structure of DNA.

New York: Atheneum, 1968.

Octavo. Original blue boards, titles to spine gilt and to upper board in blind, red endpapers, top edge yellow. With the dust jacket. Contemporary photocopied review loosely inserted. Spine very slightly rolled, some small spots to the top edge of the text block, just a little fading and rubbing at the extremities of the cloth. An excellent copy in the bright, price-clipped dust jacket with a very small chip near the top of the spine panel and a little minor rubbing and some minuscule nicks at the edges.

First edition, first printing and an unusually attractive copy in the bright dust jacket.

The Double Helix is also significant for Watson's unashamed belittling of chemist Rosalind Franklin — whose work formed the basis for the determination of DNA's structure — calling her by the nickname Rosy, which she had never used, and describing her appearance and behaviour in profoundly sexist ways. 00161 **£650**



Cambridge: J. Archdeacon, printer to the University, 1771.

First and only edition of this unusual and uncommon course of chemistry lectures.

info@alembicrarebooks.com

manufacturing processes and a belief that chemistry could help to realize Britain's industrial potential” (ODNB).

Watson was later elected regius professor of divinity, but “lacking the necessary qualification of a doctorate in divinity he rushed to London to obtain one by royal mandate. He admitted to knowing as little about the subject as he had about chemistry” (ODNB). 00534 **£450**



20. **Wyatt, [Matthew Coates]. A Representation of the Meteor seen at Paddington About 12 Minutes before 11 O’Clock, on the Evening of the 11th of February 1850. Mr. Wyatt having retained that splendid object in view from its appearance until it passed away in brilliant 24oruscations, made a drawing of it whilst its impression upon him remained undiminished, and he shortly afterwards Engraved this Plate, in order that a faithfully graphical exhibition of its appearance might be more generally diffused.**

London: Lloyd Bros. & Leggatt, Hayward & Leggatt, May 1, 1850.

Mezzotint (print 280 x 425 mm, sheet 320 x 445 mm). Professionally conserved and cleaned. Mounted, framed and glazed using archival materials. Pencilled note ‘Astronomy’ to the sheet. Some minor creases affecting the image, paper lightly toned. Very good condition.

A dramatic and uncommon mezzotint depicting the spectacular meteor seen in London on February 11th, 1850, by the prominent court artist Matthew Coates Wyatt (1777-1862). One other copy of this print appears in recent auction records, sold at Galerie Bassenge in 2016, and institutional copies are held at the National Maritime Museum at Greenwich, Museum Boijmans in Rotterdam, the Museum of Fine Arts Boston, and the British Museum, which has George Cruikshank’s copy, presented to him by the artist.

“In 1850 a huge meteor appeared over England and was visible in London. It was captured dramatically by Matthew Coates Wyatt over Paddington in a mezzotint that suggests, due to the explosion and sparks of its head, that it was a bolide... Other accounts and representations from various locations were reported in the *Illustrated London News*... as well as in other periodicals. James Glaisher, the assistant to the Astronomer Royal, published an appeal for additional reports in the same issue, and consequently so many accounts were sent in that Glaisher had them published in the *Philosophical Magazine*” (Olson & Pasachoff, *Fire in the Sky: Comets and Meteors, the Decisive Centuries in British Art and Science*, pp. 213-214).

“By good luck, the painter and sculptor Matthew Cotes Wyatt happened to witness the meteor over Paddington; sensing a market, he published this velvety mezzotint of the view two months later... The technique had largely gone out of fashion by 1850, but the rich darks and brilliant lights that it allows were a perfect choice for this dramatic nighttime scene” (Museum of Fine Arts Boston).

Wyatt was the youngest son of the architect James Wyatt and a favourite in the court of George III. “His designs represented a dramatic and full-blooded union of neo-classicism and baroque revival. He was more a theatrical designer than a sculptor in the conventional sense” (ODNB). Wyatt was responsible for a number of significant commissions, including the ceiling of the concert room at Hanover Square; the Nelson monument in the Exchange Flags at Liverpool; Princess Charlotte’s marble cenotaph in St. George’s Chapel at Windsor; the bronze equestrian statue of George III that stands in Pall Mall East; and extensive decorative work at Belvoir Castle, home of the Duke of Rutland. 00397 **£4,750**