



“A HUNGER OF THE MIND”

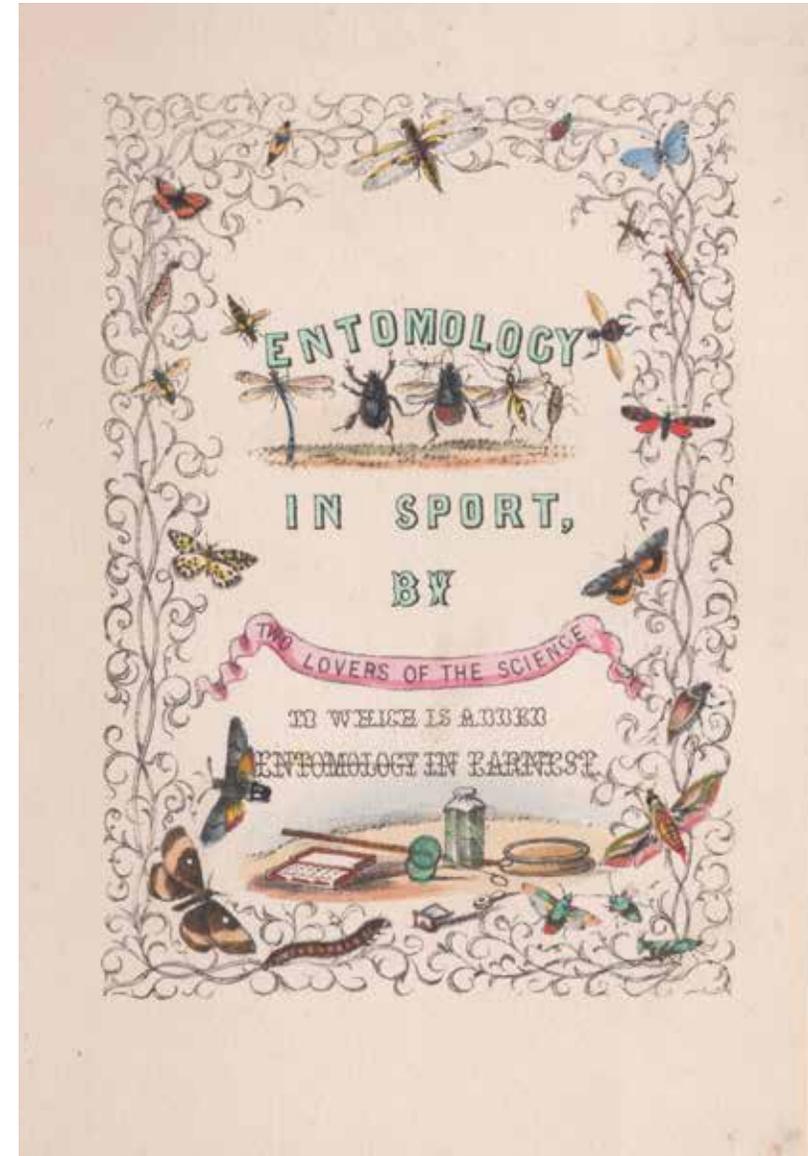
Four Centuries of
Women and Science

ALEMBIC RARE BOOKS
DEBORAH COLTHAM RARE BOOKS

“We have a hunger of the mind
which asks for knowledge of all
around us, and the more we gain,
the more is our desire;
the more we see, the more we
are capable of seeing.”

Maria Mitchell

Cover:
Item 8, BASSI, Laura. Mezzotint Portrait.
Opposite:
Item 94, WARD, Mrs Mary and Lady Jane.
Entomology in Sport, and, Entomology in Earnest



ALEMBIC RARE BOOKS

113c Mount View Road
London
N4 4JH
United Kingdom

+ 44 (0) 7503 785296
info@alembicrarebooks.com
alembicrarebooks.com

DEBORAH COLTHAM RARE BOOKS

PO Box 523
Sevenoaks
Kent
TN13 9PN

+ 44 (0) 1732 887252
deborah@coltham.co.uk
www.dcrb.co.uk

All books are sent on approval
and may be returned for any
reason within ten days of receipt.

Any items returned must be
insured for the invoiced value.
All books remain the property
of the seller until payment has
been received in full.

EC customers who are registered
for VAT should quote their VAT
number when ordering.

“A HUNGER OF THE MIND”

*Four Centuries of
Women and Science*



ALEMBIC RARE BOOKS
DEBORAH COLTHAM RARE BOOKS

- 01| **AGNESI, Maria Gaetana.** Oval Engraved portrait. Bust slightly to right. Maria Longhi dis. Ernesta Bisi inc. MA. Gaetana Agnesi (engraved in upper case below). n.d. but ca. 1812. Image size 120 x 97mm, sheet size 305 x 227mm; with small blindstamp initials below the image; some minor foxing, mounted ready for framing. **£175**

This catalogue comprises 100 items by and about women in every branch of the sciences across four centuries. The big names are here, of course, but many of the entries illuminate women who don't fit the dominant narrative of science as an enterprise driven by men and only a handful of exceptional women. They include the working scientists who may not have been household names but spent decades contributing to their fields and guiding new generations of researchers. Long-serving educators and university administrators. Translators and popularisers. Entrepreneurs and homemakers. Journalists and essayists who dipped into scientific topics as part of wider-ranging careers. Women who embraced the freedom offered by new technologies, and those who resisted systems of oppression, war, and environmental destruction. Women who were born into scientific privilege and those who broke social, racial, legal and economic barriers in the service of knowledge. All hungered, all saw and fought to see more.

An appealing copper engraved portrait by two female artists of the noted Italian mathematician Maria Gaetana Agnesi (1718-1799), executed by the engraver Ernesta Bisi, after a drawing by Maria Longhi. Agnesi is best remembered for her work of 1748 *Instituzioni analitiche ad uso della gioventù* which provided a clear and concise discussion of algebra and analysis and emphasized the mathematical concepts new to her day. The work was widely acclaimed and in 1750 she accepted the chair of mathematics and natural philosophy at the University of Bologna as an honorary position. 'Maria Agnesi's greatest importance to the history of science is symbolic. She made no discoveries, yet her reputation for brilliance convinced many of her contemporaries of the capacity of women for abstract mathematical thinking' (Ogilvie).



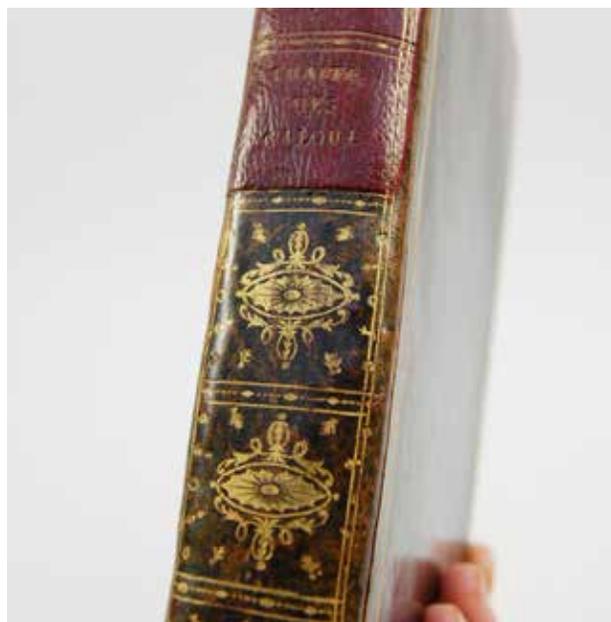
Ernesta Legnani Bisi (1788-1859) was an Italian painter and engraver. Born in Milan she became a student of the Brera Academy, where she studied under the direction of Guiseppe Longhi, and whom she married in 1811. She was recognized as a brilliant student. She devoted herself mainly to portraits, and this depiction of Agnesi appeared in Longhi's *Vita e ritratti di illustri Italiani* (Vol I. p. 46). It appears to have then been used in the 1815 biography of Agnesi. Maria Longhi was the sister-in-law of Guiseppe.

Alic, p. 136-139; Grolier, *Extraordinary Women*, pp. 72-76; Ogilvie, I, pp. 14-16; Proffitt, p. 5; not in Burgess, *Portraits of doctors & scientists in the Wellcome Institute*, London 1973.

- 02| AGNESI, Maria Gaetana.** *Traité élémentaire de calcul différentiel et de calcul intégral*. Traduits de l'italien de Mademoiselle Agnesi; avec des additions. A Paris, Chez Claude-Antoine Jombert, Fils aîné, Libraire, rue Dauphine, près le Pont-Neuf. M.DCC. LXXV. 1775. Octavo, pp. [iv], 500; with appealing woodcut head-and tail pieces, together with six folding engraved plates, numbered I-IV, and I-II; some occasional light foxing and soiling, but otherwise clean and crisp; in contemporary full mottled polished sheep, with ruled triple gilt border, spine attractively tooled in gilt with red morocco label, all edges marbled with marbled endpapers, head of spine nicked with slight loss, joints lightly rubbed, rear cover a little scratched, corners slightly bumped, otherwise a very good copy. **£1,500**

An attractive copy of the first French edition of this important work by Maria Gaetana Agnesi (1718-1799), 'the first woman in the Western world who can accurately be called a mathematician' (DSB).

'Agnesi's advanced textbook of algebra, geometry, calculus, and elementary differential equations appeared in 1748 ... to produce the book, a printing press was installed in the Agnesi house so that she could supervise the typesetting, a challenge because of the mathematical symbols and complex equations ... The book was dedicated to Empress Maria Theresa, whose reforms had recently aided the opening of Italian culture to Enlightenment ideas ... Shortly after the book appeared, she was offered - but she declined - a formal position in mathematics at



the University of Bologna. She also received a congratulatory letter from Laura Bassi, the science lecturer in Bologna ... The text is one of the earliest by anyone to provide a comprehensive introduction to algebra, geometry, differential calculus, integral calculus and differential equations' (Grolier).

'A copy of Agnesi's *Instituzioni Analitiche* reached the French Academy of Sciences, which issued in 1749 a very favorable report on the second volume, praising it as the best and most complete presentation of calculus and recommending it be translated. The translator, Pierre Thomas Antelmy, a professor of mathematics and an astronomer in a military school in Paris, is not identified in the book' (Grolier, item 70).

The fact that it was considered worthy of translation is a testament to its contemporary importance, with an English translation by John Colson produced sometime before 1759, and published in 1801.

Alic, p. 136-139; Grolier, *Extraordinary Women*, pp. 72-76; Ogilvie, I, pp. 14-16; Proffitt, p. 5; for a full biography see Massimo Mazzotti's *The world of Maria Gaetana Agnesi, mathematician of God*, 2012.

MICROFOSSILS IN GEOLOGY

- 03| APPLIN, Esther Richards, Alva E. ELLISOR & Hedwig T. KNIKER.** *Subsurface Stratigraphy of the Coastal Plain of Texas and Louisiana*, reprinted for private circulation from Bulletin of the American Association of Petroleum Geologists, Vol. 9, No. 1, January-February 1925. [Tulsa, OK]: American Association of Petroleum Geologists, 1925. Offprint. Octavo, pp. 44. 1 plate, 1 illustration within the text. Original tan wrappers printed in black. Wrappers lightly rubbed and toned with some small chipped areas at the edges of the lower wrapper. Text clean and fresh. Very good condition. **£150**

Offprint of the paper proving that microfossils could be used to date the layers of the Earth's crust, a key insight of modern geology. An attractive copy in nice condition.

Author Esther Richards Applin (1895-1972) was a petroleum geologist at the Rio Bravo Oil Company. 'In a paper presented at a Geological Society meeting in 1921 by her supervisor at Rio Bravo, Applin suggested that microfossils could be used to date strata. She was ridiculed by more experienced geologists for her audacity ... To verify her claim, Applin worked with Alva Ellisor and Hedwig Kniker to find ways to separate the fossils from the matrix of the cuttings. In 1925, the three coauthored a paper that detailed the sequences and oil-bearing zones in the Gulf Coast using microfossils' (Ogilvie). (GEOLOGY)

Ogilvie I, p. 46; Proffitt pp. 17-18.

- 04| **ARBBER, Agnes.** *Herbals. Their Origin and Evolution.* A Chapter in the History of Botany 1470-1670. Cambridge: at the University Press, 1912. Tall quarto, pp. [iiii]-xviii, [1]-253, frontispiece and 21 plates, illustrations throughout the text. Original light green cloth, titles and decorative floral design to spine and upper board in dark green, top edge gilt. Bookplate of Allan Heywood Bright. Spine slightly rolled, cloth a little rubbed at the extremities and faded unevenly, endpapers tanned. A very good copy. **£250**

First edition, first impression of this classic study of early modern herbals, attractively designed and copiously illustrated with engravings from the original texts. From the library of Liberal politician Allen Heywood Bright, with his bookplate and with an autograph letter from the author tipped-in on the front free endpaper.

Botanist and historian of science Agnes Arber (1879-1960) began her career as a research assistant in the laboratory of Ethel Sargent, from whom she learned the new style of botany which 'introduced an experimental approach to plant study, including plant morphology and physiology, rather than relying on the former systematic approach' (Ogilvie).

In 1903 Arber published her first paper and became a lecturer at UCL. She relinquished this position when she married a fellow botanist in 1909 but, rather than giving up her career, established a home laboratory and continued publishing. 'Her major work, *Monocotyledons: A Morphological Study* (1925) was followed by a study of grasses and cereals (*The Graminae*) ... Arber was made a fellow of the Linnaean Society in 1908. She also began research in the history of herbals, publishing in 1912 her study of Renaissance and early modern herbals (later enlarged and republished), which became the classic in that field' (*ibid*). She also wrote about Goethe's botany and Nehemiah Grew, and later in life published two volumes on the philosophy of science. The letter tipped-in to this volume is address to Bright and discusses some suggestions he had regarding the book (full transcription available upon request). Though Bright spent most of his career as a politician in the Liverpool area, in later life he took up the study of Middle English books and published *New Light on Piers Plowman* in 1928. Some short manuscript notes on loosely inserted slips may be in his hand.

Ogilvie I, p. 48; see also Burek and Higgs, *The Role of Women in the History of Geology*, 2007, p. 54; and Creese I, p. 45 and p. 62n228 for more on her work with Sargent.

- 05| **ARBBER, Agnes.** *The Manifold and the One.* London: John Murray, 1967. Octavo, pp. [vi], xiii, 146. Original blue cloth, titles to spine gilt. With the dust jacket. Small pencilled note on the jacket spine panel, '29 Nov'. Minor bump to the tail of the spine, slight fading at the head. An excellent, fresh copy in the price-clipped jacket that is just a little rubbed and toned with a chip from the head of the spine panel. **£125**

First edition, first impression of this beautifully designed philosophical volume by the botanist and historian of science Agnes Arber (1879-1960).

AN IMPORTANT VOLUME OF PRESSED NEW ZEALAND FERNS

- 06| **ARMSTRONG, C. C. [Mary Ann].** *New Zealand Ferns.* Dunedin, NZ, [late 1870s or 1880s]. Tall quarto (370 x 280mm). Original green cloth, upper board blocked in gilt and black. The contents comprise approximately 56 fern specimens mounted on the rectos of 16 card leaves with scientific names in manuscript, the leaves bound in on linen stubs. Maker's ticket to the front pastedown. Some wear, small bumps, spots and marks to the binding, contents toned. 4 of the specimens are loose or have a small piece that has come loose, but are still retained, one specimen is lacking a frond. Very good condition. **£2,500**

A rare, sixteen-page album of artistically arrayed and scientifically labeled New Zealand ferns by the award-winning botanical artist and entrepreneur Mary Ann Armstrong, known commercially as 'Mrs. C. C. Armstrong' (1838-1910). This is a nice example of Armstrong's work, which is notable for its elegant presentation, including the use of symmetry and sweeping arcs, and the placement of moss to 'ground' the specimens. Each page is an artwork unto itself, usually featuring between three and six large fronds accompanied by carefully chosen smaller samples, all given scientific labels in a large and neat hand. The ferns in this volume are generally in excellent condition, clearly professionally prepared and maintaining their fine details and sense of vitality.

Historian Molly Duggins, of the National Art School, Sydney, has done important work on Armstrong, providing a deep understanding of her work within the context of the Victorian fern trade and the wider economic and cultural landscape of colonialism. She explains that the 19th-century fern craze provided 'a form of popular rational amusement that was intimately linked to scientific progress and colonisation' and that 'held special significance for the colonies where the plethora of local species became a symbol of proto-nationalistic pride' (Duggins, "Mary Ann Armstrong", Design & Art Australia Online, 2011).

In New Zealand and Australia ferns were a major commercial industry encompassing both living plants and artistically arranged pressed specimens. 'Few women, however, engaged in the New Zealand fern industry as a significant and sustained business venture. The fern work produced by Mary Ann Armstrong is distinctive in this regard' (Duggins, "The world's fernery: New Zealand, fern albums, and nineteenth-century fern fever", *New Zealand's Empire*, p. 108).



Armstrong was born in Birmingham and emigrated to Australia in 1853, marrying Charles Clark Armstrong five years later. In the early 1860s the couple moved to Dunedin, but Charles's business fared poorly and it may be that Mary, who was developing a serious interest in ferns, began selling pressed specimens to supplement the family's income.

Though Armstrong's work stemmed from the 19th-century culture of domestic botanical art, Duggins argues that it is, 'distinct from this feminine tradition in that it was displayed alongside the work of men at a series of international and intercolonial exhibitions from 1879-89 ... Moreover, her work was unabashedly commercial: unlike the domestic arts which were largely created and displayed within the home, Mary Ann marketed and sold her fern compositions to the general public. As an entrepreneur, she relied upon the reputation she established through her commendable exhibition record'. And 'rather than wholly succumbing to decoration, a majority of Mary Ann's compositions retained a strong scientific element that was firmly grounded in the systematic notation of each specimen. The classificatory fluctuation of her entries from horticulture to fancy goods at international exhibitions reflects this duality, indicating that her compositions straddled the divide between art and science' (Duggins, "Mary Ann Armstrong").

Armstrong's albums are rare in commerce, appearing at auction only three times in recent decades: Dominic Winter in 2011 and 2008, and Christies in 2008. Institutionally, they are mainly represented in Australasian institutions: the National Library of New Zealand, the Universities of Wellington and Waikato, the National Library of Australia, and the State Libraries of New South Wales and Victoria. Examples are also held at Harvard, the University of Georgia, and UCLA.

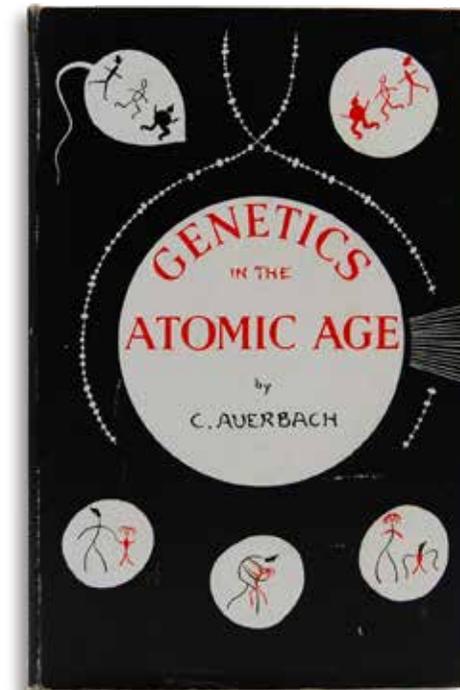
071 **AUERBACH, Charlotte.** *Genetics in the Atomic Age.* Illustrations by I. G. Auerbach. Edinburgh & London: Oliver and Boyd, 1956. Octavo, pp. [iv], vii, 106, illustrations in red and black throughout. Original red boards, titles to spine gilt. With the dust jacket. Just a few light spots to the top edge of the text block. An excellent copy in the lightly rubbed jacket. **£100**

First edition, first impression. A lovely copy of this popular work on radiation-induced genetic mutations by one of the leading scientists in the field, whose 'work is cited in almost every genetics textbook' (Ogilvie).

The present volume begins with an explanation of human genetics, then describes mutations encountered in the normal evolutionary process as well as those induced artificially. In the final section, Auerbach discusses the effects of radiation on the genetic material, the mutations that it can cause, and how increased exposure to radioactive materials may affect the course of human evolution.

Charlotte Auerbach (1899-1994) earned her undergraduate degree in biology, chemistry, and physics in Germany in 1924, and studied biology under Otto Mangold at the Kaiser Wilhelm Institute, until Mangold's growing Nazi sympathies caused her to leave. In 1933 Auerbach was removed from her post because of her Jewish heritage, so she moved to Scotland and earned a

PhD at the Institute of Genetics at the University of Edinburgh, where she was encouraged by genetics pioneer H. J. Müller. 'She is most noted for her classic study on the chemical production of mutation in the fly (*Drosophila*), the first animal in which such mutation was demonstrated' (*ibid*). She did important work comparing mutations caused by different chemicals and x-rays, and 'her later research included a study of the relationship of gene mutations to changes in nucleotide sequences, following the new understanding of molecular biology' (*ibid*). Auerbach was made a Fellow of the Royal Society of Edinburgh and the Royal Society in 1957, and in 1972 was awarded the Royal Society's Darwin Prize. 'In her personal life, Auerbach was a strong opponent of atomic bomb research and the widespread use of medical and industrial radiation. She opposed apartheid in South Africa, refusing to lecture there unless all racial groups were admitted' (*ibid*).



Ogilvie, I. p. 59; Proffitt pp. 18-19; Yount, p. 11.

- 08| **BASSI, Laura.** Mezzotint Portrait. Half length facing front, looking out through a window, Bassi holding a book in her right hand, with library visible in background, armillary sphere partially hidden by a curtain, with one book resting on sill, with blank sheet below but without the geometrical figures. With six lines of text on plinth below. 'I. Jac. Haid. excut Aug. Vind', (Johann Jacob Haid, 1704-1767) after Litters (??) 'Litter's pinxit'. [n.d. but ca. 1745]. Image 310 x 192mm (to plate mark); sheet size 375 x 221mm; margins lightly foxed; mounted ready for framing. **£400**

A variant state of this fine mezzotint portrait of the eighteenth century 'femme de science' and important Italian Enlightenment figure Laura Maria Catarina Bassi (1711-1778). A child prodigy, Bassi was 'educated in mathematics, philosophy, anatomy, natural history and languages by Dr Gaetano Tacconi, a professor at the college of medicine. At the age of 21, she engaged in a public debate with five philosophers. Bassi went on to receive her doctorate in philosophy from the University of Bologna in 1733 and the Senate granted her a pension to continue her studies. She eventually became a professor, publishing many papers on Cartesian and Newtonian physics. Two of her Latin dissertations on mechanics and hydraulics were published in the *Commentaries* of the Bologna Institute and many of her physics lectures are extant in manuscript form. By the end of her life she was famous throughout Europe as one of the most able of eighteenth-century women scientists' (Alic).



The present image was produced for one of the most striking and important eighteenth century portrait collections of European scholars, Johann Jakob Bruckner's *Pinacotheca Scriptorum Nostra Aetate Literis Illustrium* (published in both Latin and German with vernacular title of *Bilder-sal heutiges Tages lebender*). This scarce work was issued in four fascicles in Augsburg by Johann Jakob Haid between 1741-55, and celebrated contemporary figures learned in science, literature, philosophy, and theology. Far more than a bio-bibliography, the 100 exquisitely produced mezzotints by one of Germany's leading print publishers, after his own and other artists' drawings, provided faithful portraits of leading figures, set in varied frames. Bassi's inclusion, together with that of Emilie du Châtelet in the same fourth volume, clearly reflects their importance and peer recognition. Only one other female scholar was included by Bruckner - that of the poet Madelena Sibylla Riegeria (in part five).

Other leading scientists selected by Bruckner included Johann Bernouill, Maupertuis, Haller, Gesner, Trew, Van Swieten, Hebenstreit, Formey and Albinus.

Later portraits include an eighteenth century oil on canvas of Bassi later in life, painted by Carlo Vandì. The Wellcome library hold a nineteenth century lithograph by A. di Lorenzo (Burgess 194.1) seemingly depicting Bassi early in her career. A fine medallion was struck to commemorate her university degree in 1732 with the verso of the medal depicting Bassi as 'Minerva', the Roman goddess of wisdom, the arts and professionals. We have been unable to identify the artist Litters - it may possibly be the Venetian family of artists the Litterini, Agostino, Bartolomeo and Caterina who flourished during the seventeenth and eighteenth centuries.

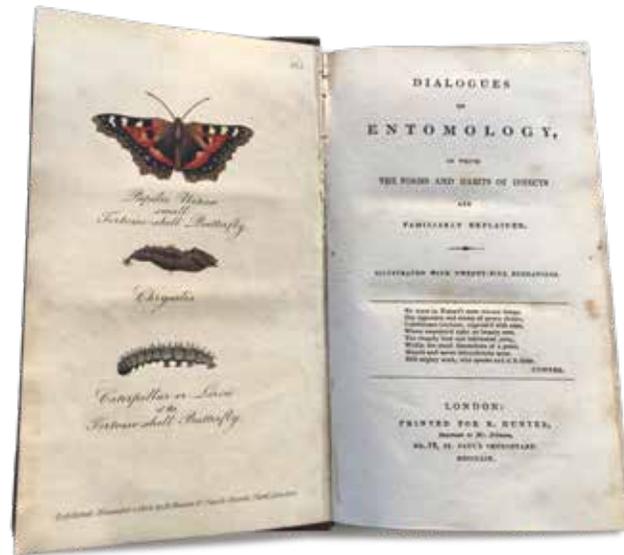
Alic, p. 136; Drugulin, *Allgemeiner Portrait-Katalog*, 1048; Proffitt p. 30; Watts, pp. 71-2; not in Burgess, *Portraits of doctors & scientists in the Wellcome Institute*, London 1973; see OCLC: 8296899 for copies of the *Pinacotheca* at Chicago, Harvard and Oxford; a digital image available at Tartu University.

- 09| **[BEAUFORT, Louisa.]** *Dialogues on Entomology*, in which the forms and habits of insects are familiarly explained. Illustrated with twenty-five engravings. London: Printed for R. Hunter, Successor to Mr. Johnson, no. 72, St. Paul's Churchyard. 1819. *Duodecimo*, pp. xii, 408, [2] blank; with 25 hand coloured engraved plates (including frontispiece, all but one retaining original tissue guards, a couple with outer margins slightly shaved affecting plate number); some occasional light spotting and soiling, the one plate without tissue guard lightly foxed; 19th century quarter calf over marbled boards, spine ruled in gilt, with black morocco lettering label, head of upper joint repaired, joints and extremities lightly rubbed and bumped with minor wear; with contemporary signature at head of frontispiece recto 'C Lumb(?)' and book plate of Paul Sokoloff on front pastedown; an appealing copy. **£525**

Uncommon first edition of this appealing work presented in the form of a dialogue between a mother and her daughter Lucy, more commonly attributed to Jane Marcet, but in fact believed to be the work of Louisa Beaufort. The work is dedicated to 'Miss Edgeworth, from whose writings the youth of the present age have derived equal entertainment and advantage', and to whom Louise was related through marriage.

The daughter of the Church of Ireland clergyman, cartographer and founding member of the Royal Irish Academy the Reverend Daniel Augustus Beaufort (1739-1821), Louisa, together with both her sister and brother, shared their father's interest in following scientific pursuits. Francis enjoyed a successful career as a hydrographer for the admiralty, and Harriet wrote a popular book on botany.

'The two unmarried sisters, Louisa and Harriet, kept house for their parents and other family members. One inspiration behind Harriet's publishing her popular volume was to help the family with its financial difficulties. In 1818, her father gave up his clerical position and



became increasingly burdened by debt. Both her book on botany and her sister's book on entomology were published by Rowland Hunter, Maria Edgeworth's publisher. Edgeworth also helped to arrange annuities for Harriet, Louisa, and their mother after Daniel Beaufort died' (Ogilvie, entry for Harriet).

The present work is illustrated with 25 engravings, attractively hand-coloured in the present copy. Of interest, her sister's work on botany was not illustrated, Harriet believing that the children should study from nature itself and not from pictorial representations. According to Ogilvie she was criticized for this omission. This may perhaps explain Louisa's decision to include engravings, but also perhaps to publish anonymously.

Freeman 974 (no author attribution given); see Ogilvie, I. p. 99.

ARCHIVE OF A FEMALE JET PROPULSION LABORATORY MISSION SPECIALIST

- 10| **BEIGHT, Mary Catherine Grady.** NASA Jet Propulsion Laboratory Archive Compiled by a Female Control Room Mission Specialist. Comprising mission updates, photographs, employee newsletters, and souvenirs documenting JPL projects between 1965 and 1984, including Apollo, Mariner, Pioneer 10 & 11, Viking, Voyager, Skylab, SEASAT, and Galileo. Pasadena, CA & Washington D. C.: National Aeronautics and Space Administration, 1965-1985. *Archive composed of 135 printed photos with printed explanatory text (between 20.3 x 25.4 cm and 21.6 x 28 cm); 13 silver gelatine and colour photographs on glossy photo stock, most with explanatory text on the versos (between 10 x 15.25 cm and 21.6 x 28 cm); 37 printed pamphlets, newsletters, bulletins & etc.,*

most in quarto; 14 printed letters to staff from JPL directors Bruce Murray, Ray Heacock, and Lew Allen, with printed signatures; 1 photocopied ALS from Bruce Murray; PlanetFest '81 aluminum souvenir plaque (12.7 x 22.8 cm); and 5 original JPL mailing envelopes. The bulk of the archive newly housed in individual mylar sleeves in two blue ring binders with printed silver titles to the upper covers; three certificates and the mailing envelopes separately housed in archival sleeves. Occasional minor creasing and paper clip marks, but overall this is a very well-preserved archive in superb condition. **£2500**

An incredible archive documenting the work of NASA's Jet Propulsion Laboratory between 1965 and 1984, the golden age of uncrewed space exploration, compiled by female control room mission specialist Mary Catherine Grady Beight (1917-2012). The heart of the archive are the 148 photographs taken during the Apollo, Mariner, Pioneer, Viking, Voyager, and Galileo missions, some of which were only released in-house, rather than as public relations packets. There are also congratulatory printed letters to staff from JPL directors, staff newsletters, certificates of achievement, and a small number of souvenirs.

NASA's Jet propulsion Laboratory was founded in the 1930s as a Caltech student club for amateur rocketry. During the Second World War it was sponsored by the US Army and became a fully-fledged research centre. Within three months of Sputnik's launch in October 1957, JPL had built the United States' first satellite, Explorer 1, and in 1958 the organisation was transferred to the new National Aeronautics and Space Administration, while remaining under the management of Caltech. 'The Laboratory began to turn its attention from the rockets themselves to the payloads they would carry. Developing these payloads - scientific spacecraft - would become the new focus and place JPL at the center of the Space Race with the Soviet Union... Thus commenced a long series of "first ever" accomplishments by JPL that helped define history's first five decades of space exploration' (JPL website "History & Archives").

Women were key employees of JPL from the very beginning of its life as a government research centre. The first was Barbara Canright, hired in 1939 as a mathematical computer to work on the first federal grant project, the development of a rocket plane. More female computers, and eventually engineers and mission specialists, quickly followed (see Holt, *Rise of the Rocket Girls*, 2016). The compiler of this archive, Mary Catherine Beight, was born in 1917 and attended the LA Business College. Though it is unclear what her previous career was, she joined JPL at age 47 in 1964, and worked as a control room mission specialist for the Deep Space Network before retiring in the mid-1980s. Founded in 1958, the DSN is a world-wide array of communications facilities that support NASA's interplanetary missions by monitoring and communicating with uncrewed spacecraft. Beight's role on this team meant her involvement with almost every major mission undertaken during her two decades with JPL.

The archive begins with Apollo missions 5, 8, 10, 11, 14, 15, and 17. Apollo 8 was the first manned mission to orbit the Moon, and included here are photographs of its launch; the Western hemisphere as seen from the capsule on December 21st; and the full Moon and images of the lunar surface, including the far side. Apollo 10, the 'dress rehearsal' for the Moon landing, is represented with a photo of the Lunar Module in its practice descent orbit,



and the Apollo 11 vehicle is depicted on the launch pad in the early morning. Four photos depict lift-off of Apollo 14 and equipment and activity on the Lunar surface during Apollo 14, 15, and 17. Additionally, there are photographs of some of the astronauts and the mission patches, and published booklets and fact sheets.

The next missions represented are Mariner VI and VII, the first dual mission to Mars, in which the two probes studied the surface and atmosphere. Beight has kept a printed booklet of photos, daily status bulletins, and two silver gelatine prints showing the surface of the planet, with dittoed text on the backs. Beight was probably involved with Mariner VI and VII, and it's clear that she was directly involved with Mariner VIII in 1971, as she has received two photocopied letters from mission manager Dan Schneiderman, one congratulating the team on a "highly successful Mars Orbit Insertion and Orbit Trim Maneuver" (positioning the satellite in the correct orbit), the second explaining that after the end of a global dust storm the satellite is beginning its mapping and "during the remainder of our mission, lithos of the most noteworthy pictures will be forwarded to you on a periodic basis". These are presumably the 27 photographic prints depicting the surface of the planet included here. There are also a silver gelatine print of the control room with dittoed text on the back, two colour photos of the launch without text, daily status updates, a DSN newsletter discussing the Mars antenna, and some booklets and colour illustrations produced for the public.

In 1972 the first probe to Jupiter, Pioneer 10, was launched, and the archive contains a colour photo titled "Historic photograph taken from NASA's Pioneer 10 spacecraft, showing the red Spot and Cloud Structure of Jupiter, plus the shadow of its Moon Io", taken on December 1st, 1973. Two photos depict Jupiter as seen from Pioneer 11, including a close-up of the Red Spot. All three of these images seem to have been produced for internal consumption, particularly the final two, which feature technical data in the print.

Viking I and II, launched in 1975, were the first probes to land on Mars. This is another program that Beight worked on. She has received three certificates of achievement, a congratulatory printed letter from manager Henry W. Norris, "In spite of the challenges, you



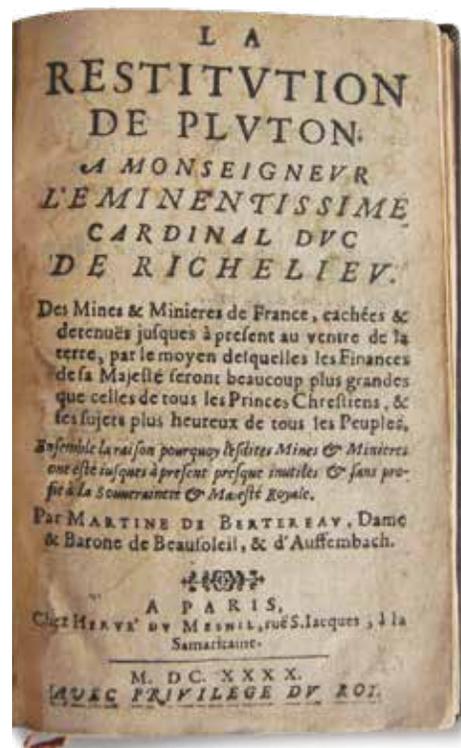
have performed in an exemplary manner and two beautiful Viking Orbiters are on their way to Mars, flying with very few concerns", as well as a letter from the heads of the Mission Control and Computer Center, in which they extend their appreciation for "your efforts in making the Data Systems Division 91 contributions to the Viking Project such a success". Included with these letters are 17 colour and black and white photographic prints of the Martian surface, including the "first panoramic view by Viking 1 from the surface of Mars", dated July 20, 1976. Together with two status bulletins, a photocopied Christmas message from Bruce Murray, a commemorative statement by the Viking scientists, mission stickers, and a published booklet. Most interestingly, there is a small black and white Polaroid snapshot of the control room, probably taken with a personal camera.

The Voyager I and II probes were launched in 1977 to explore the outer solar system, in particular Jupiter, Saturn, Uranus and Neptune, and then continue into interstellar space. Beight received two congratulatory letters for her participation with Voyager, and her archive includes 61 colour and black and white prints from photographs of this mission, including the Titan rockets and a probe capsule before launch, one of the probes in the laboratory before encapsulation, the Golden record, and a copy of the signature plates. There are many beautiful colour images taken by the probes, including Jupiter, its Great Red Spot, ring, and planets, and Saturn and its rings and planets. There are also four published booklets on Voyager.

Finally there is material, including photographs, connected with the Infrared Astronomical Satellite, the first space telescope to perform a survey of the entire night sky at infrared wavelengths; SEASAT, the first satellite designed to monitor the Earth's oceans, the Deep Space Network itself (a colour photograph depicting all four antennas), several copies of "Laboratory" and other JPL staff newsletters, a metal plaque commemorating PlanetFest '81, and five original JPL internal envelopes, many with Beight's name.

Holt, *Rise of the Rocket Girls*, 2016.

- 11] **BERTEREAU, Martine de, Baronne de Beausoleil.** *La Restitution de Pluton à Monseigneur l'Eminentissime Cardinal Duc de Richelieu. Des Mines & Minieres de France, cachées & detenuës jusques à present au ventre de la terre, par le moyen desquelles les Finances de sa Majesté seront beaucoup plus grandes que celles de tous les Princes Chrestiens, & ses sujets plus heureux de tous les Peuples. Ensemble la raison pourquoy les dites Mines & Minieres ont esté iusques à presque inutiles & sans profit à la Souuerainteté & Maiesté Royale.* A Paris, Chez Herve' du Mesnil, ruë S. Jacques, à la Samaritaine. M.DC. XXXX [1640.] Octavo, pp. [xiv], [ii] blank with engraved armorial coat of arms on verso, 171, [4], *Privilege du Roi (dated April 20th, 1640), [1] blank; pp. 103-9 inserted folding astrological charts; title-page somewhat browned with dampstain along gutter and which is evident throughout, though varying in prominence, with some further occasional dampstaining to upper margins, a few headlines shaved close but without significant loss; with a small number of contemporary annotations in brown ink on the margins of a couple of leaves; in nineteenth century mottled calf, with triple fillet gilt border, spine with raised bands, attractively tooled in gilt with red morocco label.* **£6,800**



First edition of this rare and little known early work by Martine Bertereau, Baroness of Beausoleil (fl. 1600-1630), considered to be the first female geologist.

Little is known about the early life of the Baroness de Beausoleil. Born in around 1590, Martine de Bertereau came from a noble family, though her exact place of birth is uncertain. She clearly received a sound humanist education however, and in 1601 married Jean du Châtelet, Baron de Beausoleil and Auffembach. Du Châtelet was a Belgian metallurgist, alchemist, prospector, and inspector of mines of the German empire, and for some fifteen years they travelled together across both northern and southern Europe visiting mines, even venturing as far as South America. His alchemical experiments engaged upon during a prospecting trip to Brittany in 1628

prompted his arrest on charges of sorcery. He was released after a short term in prison, but his apparatus was destroyed. Between 1630 and 1634 they were commissioned by the superintendent of mines to survey the French provinces in search of new mineral veins. A failure to be reimbursed for some expenses incurred may perhaps have prompted Martine to pen her first work in 1632, *Veritable declaration de la decouverte des mines et minières par le moyen desquelles sa majesté et sujets se peuvent passer des pays estrangers*. This was followed in 1640 by the present work, further discussing their joint work. Written in the form of an appeal to Cardinal Richelieu to open and operate the French mines, it contains discussions of their travels, provides a long list of mines visited, and notes the minerals found.

'She presented two memoirs to the French court to inform the king how he could make himself and his country more independent of other countries by using the mineral resource of France. She never received a response to these reports, and apparently the couple's persistence annoyed Cardinal Richelieu to the extent that he had the pair imprisoned in the Bastille, where du Châtelet died in 1645 ... After her husband's death, Martine and her daughter Anne were imprisoned at the Château de Vincennes. According to Mozans, the Baroness's memoirs discuss various types of mines, the assaying and smelting of ores, and the general principles of metallurgy. She also provides a description of the qualifications of a mining engineer - a person who was knowledgeable in chemistry, mineralogy, mechanics, and hydraulics. She assured her readers that she devoted thirty years of study to these branches of knowledge' (Ogilvie). Martine is credited with having discovered some 150 ore deposits and water deposits through a variety of hazel and metal divining rod, although this, together with her shared interest in alchemy, eventually led to accusations of witchcraft and imprisonment, and she too died in captivity.

Whilst clearly of significance to those interested in mineralogy and metallurgy, it is interesting to note how much importance Bertereau places upon the need for a good understanding of astrology - one of the vital skills required by a mining engineer she believes. Seven woodcut charts are included, and the stars, she believes, are directly connected with and govern the developing metals in the earth. Touching upon her alchemical views, she expresses her belief in the universal spirit of life, responsible for the growth and reproduction of all things, including precious metals. From these metals, she notes, the ancient philosophers prepared their Grand elixir which could treat incurable illnesses, and purge metals of their imperfections. In her discussions about the importance of seeking new mineral reserves both at home and abroad, she touches upon the explorations of Christopher Columbus.

Though condemned in her lifetime she was undoubtedly a serious woman of science, and her conclusions were deemed important enough to be reprinted over 100 years later, in the second volume of Barba's *Metallurgie, ou, l'Art de tirer et de purifier les Métaux*, Paris, 1751, 2, 56-151.

Alic, p. 114; BM STC French; 663; Dorbon-Aine *Bibliotheca Esoterica* 298 'very rare'; Eleanor Elder, *Women in Early Geology* [in:] *the Journal of Geological Education* 30, 287-293; Ferchl 40; Sothebys, *Freilich Sale catalogue*, 53, 2001; Klinckowstroem (Divining) 40; Mozans, *Women in Science*, 1991, pp. 238-40; Ogilvie, I, p. 119; Roller-Goodman I, 108, Ward & Carozzi, *Geology Emerging*, 190; not in Hoover, *Bibliotheca de re metallica*; OCLC locates copies at the Smithsonian, the Newberry Library, the Chemical Heritage Foundation, Smith College, Illinois, Oklahoma.

- 12| **BLACKWELL, Elizabeth, Dr.** MEDICINE AND MORALITY [Reprinted from the *Modern Review*, October, 1881.] London: W. Speaight & Sons, Printers, Feters Lane. 1881. *Octavo*, pp. 14, [2] blank; lightly browned, with small nick at head of upper wrapper; small library stamp from the Birmingham Medical Institute at head of p. 3; with blue paper backstrip, corners a little bumped, otherwise a crisp copy. **£200**

An uncommon reprint of this interesting paper first published in the *Modern Review*, by the noted British/U.S. physician Elizabeth Blackwell (1821-1910), renowned as the first woman to receive an American medical degree from Geneva College, in 1849. Touching upon a number of topics of concern, including student education, the behaviour and ethics of medical professionals, and the morality of vaccination, this short essay provides a fascinating insight into her own education.

'I hope it may not appear out of place, in conclusion ... to offer sincere and grateful testimony to the generous aid which I have always met with in the Profession during a long and arduous pursuit of medical knowledge. From the year 1845, when a distinguished physician accepted me as his private pupil, and place his library and best advice freely at my disposal, such generous support has never been wanting. The college class of more than 120 young men who invited my attendance, nobly redeemed the pledge of friendly aid they forwarded to me. The class of 1850-1 at St. Bartholomew's Hospital, with who I sat in the lecture-room, and whom I joined in the clinical visits of the hospital, displayed the same true manliness. Time would fail me to relate all the acts of generous kindness received by myself ... Less favourable experiences could, of course, be furnished; but the facts I have now stated are facts, generous and encouraging, and only a part of those I would gladly record' (p. 13).

Born in Bristol, England in 1821, Blackwell moved with her family to the United States in 1832. The daughter of a Dissenter by religion and an advocate for social reform, all nine children were well educated, a number of her siblings also going on to lead distinguished careers. After earning her degree, she practised medicine in New York, and in 1857 she and her colleagues founded the New York Infirmary for Women and Children. In 1869 she returned to England where she remained until her death in 1910 at Hastings. Blackwell gradually withdrew from medical practice in the 1870s and devoted her energies to moral reform and women's rights. 'To Elizabeth Blackwell, medicine was not an end in itself, but a tool for fighting social injustice. By making medicine a more acceptable profession for women, emphasizing the importance of personal hygiene, crusading for moral reform, and attempting to combat Victorian inequities, Blackwell assumed an important place in social history and in the history of science' (Ogilvie).

Ogilvie, I. p. 136; OCLC locates copies at UCLA and Geneva only; Profitt pp. 43-44.

- 13| **BLAU, Marietta.** Mitteilungen des Institutes für Radiumforschung Nr. 208. Über die photographische Wirkung von H-Strahlen II (Mit 5 Textfiguren). [Offprint from] Sitzungsberichten der Akademie der Wissenschaften in Wien Mathem.-naturw. Klasse, Abteilung IIa, 136. Band, 7. Heft, 1927. Gedruckt mit Unterstützung aus dem Jerome und Margaret Stouffer-Fonds. Wien, Hölder-Pichler-Tempsky, A.G. Wien und Leipzig, Kommissionsverleger der Akademie der Wissenschaften in Wien. Druck der Österreichischen Staatsdruckerei. 1927. *Octavo*, pp. 469-480; with five text illustrations and half-tones; paper a little soiled and browned; in the original orange printed wrappers, slightly soiled, fore-edge nicked and a little furled and frayed. **£200**

Offprint of this, the second of two important papers by the Austrian/US physicist Marietta Blau (1894-1970), published during her time as an unpaid researcher at the Institute of Radium Research, Vienna (1923-1938), and outlining her pioneering work on the development of the photographic method of detecting and observing nuclear particles and reactions. This was a method which was to play a prominent role in nuclear physics in the following decades. Considered extraordinarily gifted by Albert Einstein, Blau was nominated three times for the Nobel prize in physics, twice by Erwin Schrödinger. 'Blau began to explore the possibility of finding protons and smashed atoms using photographic emulsions. Finally, in 1925, she succeeded in detecting the fragments of atoms hit by alpha particles, [*Über die photographische Wirkung natürlicher H-Strahlen*] including the thinner, harder-to-find tracks of protons. These experiments were followed in 1926 and 1927 by a series of experiments in which Blau bombarded aluminium with alpha particles in order to measure the nuclear fragments that would emerge. Unfortunately, with a weak radioactive source (the only kind available to her), she had to settle for the very lowest energy particles. It was clear that if she was going to make fast protons visible (as opposed to the much more heavily ionizing nuclear fragments or slow-moving protons), she would have to improve both the emulsion and the development process that would bring out the narrow tracks' (Galison).

Blau received her Ph.D. in 1919 with a thesis on ray physics and the absorption of gamma rays. 'Blau's sex and her Jewish background impeded her professional advancement in Austria ... When the Nazis annexed Austria in 1938, Blau, who was out of the country at the time, did not return. She worked briefly in Oslo at the invitation of her friend Ellen Gleditsch, then relocated to Mexico City. In 1944 Blau moved to New York, where she worked on radioactivity and took out several patents. She then did research at Columbia University and at Brookhaven National Laboratory. Afterward she took a position at the University of Miami. Due to the brevity of her employment in the United States, Blau's retirement income was very low. In order to economize on expenses, she returned to Austria for an eye operation. Poor health caused in part by radiation exposure prevented her from returning to the United States, and she died impoverished in Vienna' (Ogilvie).

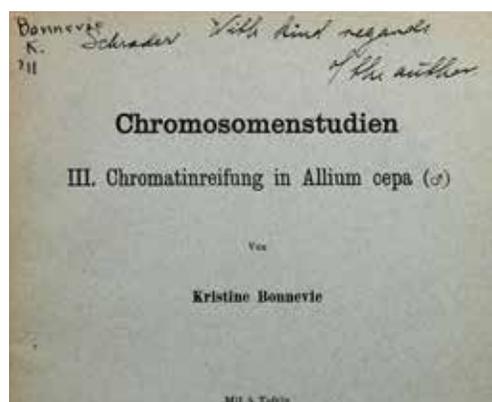
Galison, *Image and Logic: A Material Culture of Microphysics*, p. 150; Grolier, *Extraordinary Women* pp. 57-60; Ogilvie I, p. 143; Rayner-Carter, pp. 196-204; see Strohmaier and Rosner, *Marietta Blau, Stars of Disintegration: Biography of a Pioneer of Particle Physics*, 2006.

- 14| **BONNEVIE, Kristine.** Chromosomenstudien III. Chromatinreifung in *Allium cepa*. Mit 4 Tafeln. [Offprint from] *The Archiv for Zellforschung* volume 6, number 2. Leipzig: Wilhelm Engelmann, 1911. *Offprint. Octavo, pp. 191-253, 4 plates of which 1 is folding and the others are double-page. Original grey wrappers printed in black. Ownership signature "Ric" and short note on the upper wrapper. Wrappers a little toned at the extremities, lightly rubbed, lower corner bumped, contents faintly toned. A very good copy.* **£250**

Offprint. Presentation copy inscribed by the author on the upper wrapper, 'Schrader, with kind regards of the author'.

Cell biologist Kristine Bonnevie (1872-1949) was Norway's first female professor and the first female member of the Norwegian Academy of Sciences. She studied with chromosome researcher Theodor Boveri in Germany, and was awarded a PhD in 1906 for her study of sex cells. 'The problem of chromosome halving in the sex cells was not well understood at the time, and her work challenged the classic work of the Norwegian cytologists Alette and Kristian Emil Schreiner. In response to criticism by the Schreiners about her chromosomal work, Bonnevie went to Columbia University where she worked on sex chromosomes in the sea snake, under E. B. Wilson, verifying her earlier work ... In 1908, she extended her work to non-dividing chromosomes in related organisms. She continued work on mitosis even after she gave up other work in cytology' (Ogilvie). On Bonnevie's return to Norway she became a professor of zoology at the University of Oslo (then Christiania) and did significant work on genetic diseases. 'By 1949, almost every Norwegian cytologist had been trained by her' (*ibid*). Bonnevie received a number of awards for her social and political activism, including being made St. Olaf Knight, First Class, for organising deliveries of food to the Norwegian resistance during the Second World War.

The subject of this paper is chromatin in the common onion, chromatin being the material that packages the usually-loose DNA into dense chromosomes for cell division. The recipient is



uncertain, but may have been the prominent chromosome researcher Franz Schrader (1891-1962) or his wife, Sally, also a cytologist (1895-1984). Franz Schrader was a generation younger than Bonnevie, but it's possible that this offprint was sent to him some time after publication, perhaps in correspondence between the two scientists. Schrader was certainly aware of Bonnevie's work, and in 1935 cited her in the first paragraph of his paper "Notes on the Mitotic Behaviour of Long Chromosomes" in the journal *Cytologia*.

Creese, I. pp 9-13; Ogilvie, I. p. 157.

- 15| **BOOLE, Mary Everest.** *The Mathematical Psychology of Gatty and Boole.* Translated from the Language of the Higher Calculus and into that of Elementary Geometry. London: Swan Sonnenschein & Co. Ltd., 1897. *Octavo, pp. [vi]-ix, [i], [1]-116. Original brown cloth, titles to spine gilt, black coated endpapers. Lightly rubbed at the extremities, spine a little rolled and darkened with some minor wear at the ends, contents slightly toned. A very good copy.* **£175**

First edition, first printing.

Mary Everest Boole (1832-1916) was the daughter of a rector who encouraged her interest in mathematics. At eighteen the logician George Boole became her tutor, and she wrote later that it was his book on logic which made her fall in love with him. In 1855 they were married, and George encouraged Mary 'to attend his lectures and improve her knowledge of mathematics. He read his book on differential equations to her, altering it until the language was completely clear to her' (Ogilvie). Following George's death, Mary became a matron at Queens College and developed an interest in mathematical education. 'Her collected works, published after her death in 1931, reprinted interesting articles on mathematical education that include the idea that a child should construct a mathematical table before he or she uses it, and emphasize the need for logical thinking' (*ibid*). The present volume is 'a detailed analysis of the philosophical writings of the French writer P. Gatty (whom George Boole had admired), comparing them with her husband's mathematical concepts which she tried (not entirely successfully) to explain using simple geometric concepts. This book also tried to investigate what she termed "mathematical psychology", the importance of logical thinking, and the nature of genius' (*ibid*).

Ogilvie I. p. 158.

THE LEADING GEOLOGIST OF THE ROCKY MOUNTAINS

- 16| **BOOS, Margaret Fuller, & George C. Maynard Boos.** *Tectonics of Eastern Flank and Foothills of Front Range, Colorado.* [Offprint from] *The Bulletin of the American Association of Petroleum Geologists*, volume 41, number 12. Denver, CO: The American Association of Petroleum Geologists, December, 1957. *Duodecimo, pp. 2603-2676, [2], stapled self-wraps. Small arrow in ink pointing to the authors' names. A few of the outer leaves split at the head and tail of the spine, but still firmly bound. Excellent condition.* **£250**

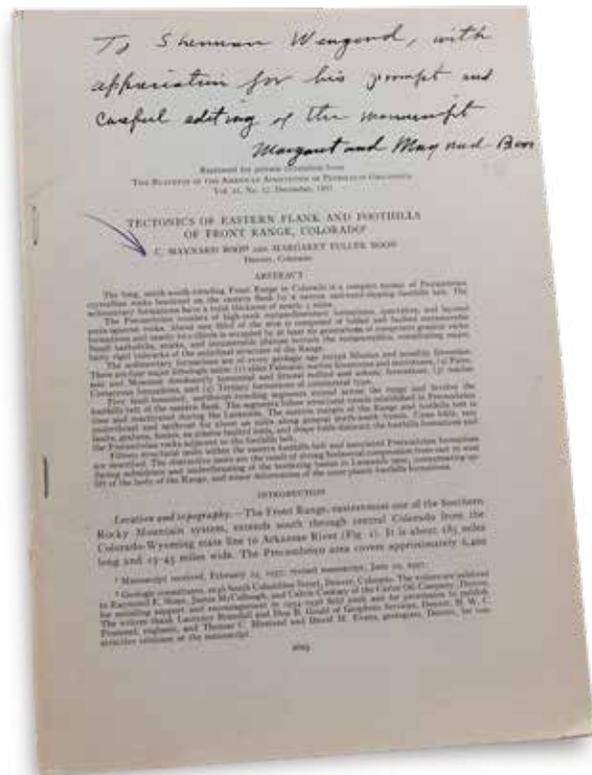
Offprint inscribed by Margaret Boos on the title, 'To Sherman Wengerd, with appreciation for his prompt and careful editing of the manuscript, Margaret and Maynard Boos'.

Geologist Margaret Boos (1892-1978), known as Peggy to her friends, was one of the 20th century's leading experts on the geology of the Rocky Mountains, principally the structure

and stratigraphy of the Front Range. She carried out important work on minerals and petroleum reserves in the region and taught at universities across the American West, including establishing and serving as head of the Department of Geology at the University of Denver. She met her husband, C. Maynard Boos, while both were graduate students at the University of Chicago and he became 'an ideal field partner', helping her expand on her own work (Jacobson). Boos became one of the first female members of the American Geological Association and in 1975 the US Board of Geographic Names designated a previously unclimbed mountain in Alaska 'Peggy's Peak' in her honour. 'Boos was very interested in supporting women students studying geology at Northwestern University; following her death, the Margaret Fuller Boos Scholarship was established as a permanent endowed fund for women graduate students at Northwestern' (Ogilvie). The present paper is on the subject for which Boos and her husband are best known, the geology of the Front Range of the Colorado Rockies, and is listed as a key work by Ogilvie.

The recipient of this inscribed offprint, Sherman Wengerd (1915-1995) was a distinguished petroleum geologist at the University of New Mexico.

Jacobson, Margaret Fuller Boos: *Colorado Pegmatite Geologist*, Matrix vol. 5, summer 1998. p. 74; Ogilvie I. p. 159.



RARE EPHEMERA OF AN EARLY FEMALE AVIATOR

- 171 **BOWMAN, Martie.** Calendar for 1936 depicting pilot Martie Bowman in her WACO INF biplane. [Olympia, WA], 1935. Silver gelatin composite photograph (250 x 200 mm) with small tear-off monthly calendar for 1936. Inscribed 'Merry Christmas, The Bowmans'. A few minor nicks and spots at the edges. Excellent, unused condition. **£650**

A remarkable piece of early aviation ephemera, this calendar was produced as a Christmas greeting by the early female aviator Marguerite (Martie) Bowman (1901-1985) and her husband Leslie, also a pilot. It depicts Bowman flying in her WACO INF biplane, registration number NC625Y, in formation with two others, and includes two portraits of Bowman and one of her husband.

The Bowmans established an aviation business together and, during the 1920s, 30s and 40s, Bowman ferried planes from factories and regularly participated in air races. She competed in the 1930 Women's Dixie Air Derby from Washington D. C. to Chicago and won both the Women's International Air Derby of 1934 and the two-day women's championship Shell Trophy Cup at Long Beach, California. In her biography of fellow pilot Phoebe Omlie, Janann Sherman recounts that during the Dixie Derby Bowman selflessly assisted Omlie by waking up each hour during the night to apply medicated drops to her injured eyes.

The Bowman's papers are held at the Smithsonian Air and Space Museum, and as of 2001 two of Martie Bowman's planes were still registered as flight-worthy with the FAA.

Sherman, *Walking on Air*, p. 65.

- 181 [BORROMEIO, Clelia Grillo]. DEREHAM, Thomas, *translator*. Saggio delle Transazioni Filosofiche della Società Regia, compendiate da Giovanni Lowthorp; tradotte dall'Inglese nell' Idioma Toscano. A sua eccellenza La Signora Contessa Donna Clelia Grilla-Boromea. In Napoli, Presso il Moscheni, e Compagni. 1729. [together with]: Saggio delle Transazione filosofiche della Società Regia compendiate da Beniamino Mottoes dall' anno 1700. al 1720 [- dall' anno 1720 fino a tutto l'anno 1730]. Tradotte dall' idioma Inglese dal Cavaliere Tommaso Dereham, Baronetto della Gran Bretagna, e Membro della Società suddetta. Tomo secondo [-tomo quinto]. In Napoli, per il Moscheni, e Compagni. 1729 - 1734. *Five volumes, bound in two 4to; I. pp. [xiii], 240, with two folding plates; II. pp. [x], viii, 166, with seven folding letterpress tables (Tabs II and IV repaired at some point, with loss of a column of text), and with 12 engraved plates on 11 sheets bound at the end (intended to be bound at the end of part III); III. pp. [viii], 197, [1], with folding map of California at p. 183; IV. pp. [xvi], 347, [4] explanatory leaves for the plates, with five woodcut illustrations (one full-page), and fifteen folding engraved plates (I-XV); V. pp. [vi], 309, [3], with numerous woodcut illustrations and nine folding engraved plates (nos XVI-XXIV); marginal tear with loss (not touching text) at foreedge of Vol I, p. 46, small marginal tear at p. 70 fore-edge, ink stain at gutter of pp. 80-89 with small ink burn hole at p. 87, a couple of small paper flaws with loss of a letter in Vol. IV, p. 29, worming affecting upper margins of final three leaves of Vol I, and also affecting plate XXV though no loss of text; all five volumes with some occasional foxing, marginal browning and dust-soiling, with some sporadic staining in places, with a few neat marginal tears, but never touching text, otherwise clean and fresh; in 19th century marbled boards, with black morocco labels lettered in gilt, and two paper accession labels numbered '91' and '92' at tail of spines, head of spines both with small vertical tears, joints and extremities lightly rubbed and bumped, with minor surface wear.* **£1,800**

The rare Italian translation of selected parts of *The Philosophical Transactions abridged*, by Thomas Dereham, and dedicated to the erudite female natural philosopher and patron of the sciences, Clelia Grill Borromeo (1684-1777), who together with her contemporary Laura Bassi in Bologna, did much to promote and disseminate Newtonian ideas and theories through Italy.

Grillo Borromeo published no works during her lifetime, and a significant amount of manuscript material is believed to have been destroyed during WWII. Knowledge of her work and reputation comes predominantly from contemporary testimonials by scientists such as Antonio Vallisneri (1661-1730), Tommaso Ceva (1648-1737), Luigi Grandi (1671-1742 and who named the cloelian curve after her), and Charles de Montesquieu (1689-1755), who all spoke of her important role in

the spread of natural sciences and mathematics in Italy during the first half of the eighteenth century. Born into an aristocratic and well-connected Genoese family, Clelia came into contact with numerous naturalists and intellectuals from an early age. She soon became renowned for her proficiency at languages (fluent in at least five including Arabic), and of her interest in the natural sciences and mathematics. Her marriage into the noble family of Borromeo-Arese, one of the wealthiest in Italy, provided her with further resources and influence, and from as early as 1718 she had established a salon at the Palazzo Borromeo which attracted many foreign and Italian scientists, having not only a notable library, but a well-stocked physics and natural history cabinet and an astronomical observatory. In 1722 she founded the *Accademia Cloelia Vigilantium*, dedicated to the liberal arts, mathematics and experimental and natural sciences, and which she hoped would rival not only the newly invigorated Bologna Academy of Science, but all other leading academies in Europe and thus place Milan on the intellectual map. 'Her academy, more than any other scientific project of the 1720s, embodied the idea of the learned noblewoman as patron of science who could intelligently direct conversations of male philosophers for the greater good of society' (Findlen, *Founding a Scientific Academy*). Vallisneri became the first President, and in addition to his scientific work ultimately did much to champion the role of academic women,

moderating in the following year the important debate at the *Accademia de Ricovrati* on whether women should be educated in the arts and sciences. Both he and Grillo Borromeo were subsequently instrumental in helping the career of a young Maria Agnesi. Grillo Borromeo was also involved with the French periodical *Bibliothèque Italique*, which as with the present translation was a further attempt to help promote and sponsor the exchange of information and spread of empirical science.



Thomas Dereham (ca. 1678-1739) was a resident in Italy and became actively involved in the scientific and intellectual community. He sought to promote a greater knowledge of British intellectual life in Italy, as well as spreading Italian science to Britain. A member of the Royal Society from 1720, Dereham wrote a series of letters to the secretary James Jurin in 1722 about the state of Italian science, and Newton, in his capacity as President,

subsequently authorised Jurin to accept Dereham's offer to act as a conduit of information between the two nations. It was therefore in this capacity that Dereham came into correspondence with Grillo Borromeo, becoming particularly interested in her newly formed Academy. An abridged compilation of the *Philosophical Transactions* had first been published in 1705 by John Lowthorp (in 3 vols.), with subsequent revisions and extensions being published by Benjamin Motte (1721, 2 vols.), H. Jones (1731), John Eames (1734), and John Martyn (1747-56). As a whole the abridgement comprises eleven volumes (with a general index of the first seven volumes published in 1736). A translation was therefore an obvious project for Dereham to undertake, with the first volume being published in 1729 and dedicated to Grillo Borromeo. Dereham translates only selected portions, and also includes a number of letters between himself and various Italian scientific

figures. Vallisneri in a letter to Dereham described the project as being ‘most useful and worthy of eternal praise’ as so few Italians could read the original articles. Findlen suggests that he may also have encouraged Dereham to dedicate the project to his patron, as a way of further drawing attention to her merits and promoting the Academy.

This scarce translation, therefore, can be seen as being not only instrumental in promoting Newtonian ideas in Italy, but indirectly as a promotion of the argument that science could be a legitimate pursuit for exceptional women. Already an eager audience for philosophical discussion, thanks to Borromeo their role as patrons and consumers of natural philosophy became increasingly accepted by contemporaries, and the visibility of other female patrons such as Queen Christina of Sweden, and Christina of Lorraine ‘set the background for the increased participation of socially prominent and intellectually gifted women in natural philosophy’ (Findlen, *Science as a Career in Enlightenment Italy, the Strategies of Laura Bassi*, p. 443).

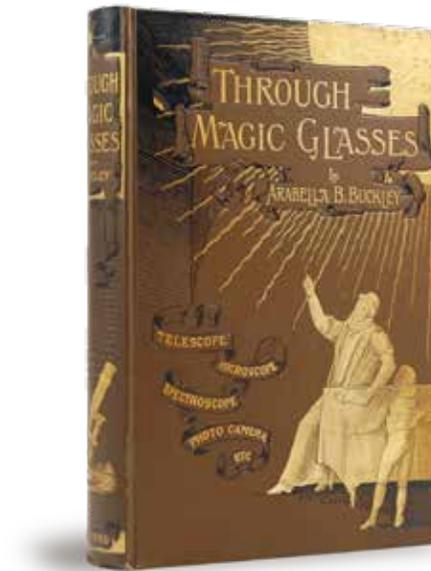
Not in Blake, Waller or Wellcome; Scudder, *Catalogue of scientific serials of all countries*, 1960a and see 434h; see Neville, II p. 403 for a discussion on the English editions; for a detailed and discussion of the Clelian Academy see Findlen, *Founding a Scientific Academy, Gender, Patronage and Knowledge in early Eighteenth-Century Milan*, [in] *Republics of Letters, A Journal for the Study of Knowledge, Politics and the Arts*, 1, no 1 (May 2009) p. 13; see also Findlen, *The Contest for Knowledge*, pp. 118-119; for a general history see Cavazza, *The Institute of Science of Bologna and the Royal Society in the Eighteenth Century*, in *Notes and the Records of the Royal Society of London*, vol 56,1 (2002), pp. 3-25.

- 19| **BUCKLEY, Arabella B.** *Through Magic Glasses and other Lectures. A Sequel to The Fairy Land of Science. With Numerous Illustrations.* London: Edward Stanford, 1890. *Octavo, 16 page publisher's ads at rear, frontispiece and 3 plates of which 2 are in colour, engravings throughout the text. Original brown cloth, titles and illustrations to spine and upper board blocked in gilt and black, smaller illustration to lower board in blind, yellow endpapers, all edges gilt. Only some tiny rubbed areas to the cloth. An exceptional copy.* **£150**

First edition of Arabella Buckley's sequel to her popular children's book *The Fairyland of Science*. A superb, fresh copy, the best we have seen.

Arabella Buckley (1840-1929) was secretary to the zoologist Sir Charles Lyell and an authoritative popularizer of science. She was ‘personally familiar with the leading scientists and scientific theories of her day, lectured on natural science from 1876 until 1888, was editor of Mary Somerville's *Connexion of the Physical Sciences* (1877) and Heinrich Leutemann's *Animals from Life* (1887), and produced a set of botanical tables for the use of junior students (1876) ... Buckley was deeply aware of the nature of science writing and realized that science, though based in fact or experiment, was transmitted as a literary construction’ (ODNB).

‘*The Fairy-Land of Science* and its sequel, *Through Magic Glasses* (1890), demonstrate her skill at telling the stories of science. In *Fairy-Land* Buckley generated interest in her scientific subjects by borrowing the language of fairy stories and wizardry to reinforce her ultimate belief that the wonders of science not only paralleled but surpassed the wonders of fairyland. In its



sequel, *Through Magic Glasses*, she focused more closely on what childlike eyes can see, calling on the help of the telescope, stereoscope, photographic camera, and microscope, and a fictional guide, a magician into whose chamber the reader immediately enters and through whose eyes the world is viewed.’ (ODNB).

Alic p. 115; Ogilvie I. p. 202.

- 20| **BUCKTON, Catherine.** *Town and Window Gardening. Including the structure, habits, and uses of plants. A course of sixteen lectures given out of school hours to pupil-teachers and children attending the Leeds Board Schools.* London: Longmans, Green, and Co., 1879. *Octavo, pp. xx, 180; with steel engraved frontispiece, and numerous text illustrations; corner of p. 91 nicked with minor loss, and corners of index a little creased and dust-soiled, with further light browning throughout and some occasional minor spotting and soiling; in the original green publisher's cloth, ruled and lettered in blind and gilt, though gilt having faded on covers, neatly recased, covers slightly scuffed and creased, extremities a little bumped; an appealing copy; with presentation book-plate on front paste down from the School Board for London and their presentation stamp on title-page.* **£200**

Uncommon first edition of this appealing later Victorian introduction to urban gardening, one of a number of instructional works intended for the specific use of working class women and children and written by the leading Yorkshire social reformer and philanthropist Catherine M. Buckton (1827-1904). Though with the aim of encouraging the gardeners of the future, Buckton does not confine herself to a discussion of British garden plants, but introduces her reader to the wider botanical world, a testament to the Victorian fascination with exotic plants, and concluding with a chapter devoted to the Royal Gardens at Kew, and indeed uses their classification system as a basis for her work. She notes too, her indebtedness to the works of several leading authorities, including Darwin's *Climbing Plants and Fertilisation of Orchids*.



'This little book owes its existence to my having offered prizes for window-garden-boxes about three years ago to children from the Leeds Board Schools, who attended my lectures on the 'Laws of Health'. The two years' experience, in awarding these prizes, showed me that window gardens are very difficult gardens, and that it is impossible for children or men to become good gardeners unless they understand the structure, nature, and growth of plants ... My hope is that the rising generation will be

brought up with a love and respect for plants, so that no gentleman having beautiful gardens and grounds may object to allow their being visited by those who have no gardens, and who spend their lives in the midst of the smoke and dirt of a large town' (p. vii). Of further appeal, the present copy has been awarded as a prize for 'punctual regular attendance' by the School Board for London, to 'John Wedd' at the end of July 1885.

A founder member of the Ladies' Council of the Yorkshire Board of Education, and the only 'lady member of the Leeds School Board', Catherine Buckton was a Unitarian and the wife of a local wool merchant and manufacturer. She delivered lecture courses for her fellow townswomen and 'working sisters' on a variety of health and sanitary topics over several years, including warning against the dangers of alcoholism, and advocating the benefits of vaccination. In 1875 some of these were published as *Health in the House. Twenty Five lectures on elementary physiology*, and which was to prove immensely popular, going through several editions and subsequently being printed in Toronto.

Crawford, *The Women's Suffrage Movement in Britain and Ireland: A Regional Survey*, p. 57.

- 21| **BULLAR, Anne.** *Every-day Wonders of Bodily Life.* Essential to be known for health and comfort. Third edition, seventh thousand. London: Jarrold and Sons, 12, Paternoster Row. 1862. *Duodecimo, pp. vi, [3] - 90, [2] advertisements; with 42 small text engravings; title-page a little browned and spotted, with further light foxing and marginal browning throughout; without the initial front free endpaper; in the original red blindstamped publisher's cloth, with gilt vignette on upper cover and spine lettered in gilt, head and tail of spine nicked and worn with minor loss, spine sunned, covers darkened with light dampstain on rear cover; a little dog-eared but still with some charm.* **£125**

Uncommon third edition of this appealing work for children by Anne Bullar (1813-1856). According to COPAC, the date of the first edition appears uncertain, with other variant editions cited giving either an undated Jarrold imprint, or that of the Ladies Sanitary

Association (part of their Popular Tracts on Health), and both of which are divided into three distinct parts or volumes: 1. Breathing, blood, digestion, food, and nerves; 2. Bones, the muscles, and skin; and 3. The teeth, the eye, the ear, feeling, tasting, smelling. The copy at the London School of Economics gives a pagination for this variant (and which they date to ca. 1860), and it seems that it was available to purchase in the individual parts, or bound as one volume. Although the present 'third edition' is divided into chapters rather than three sections, the text nevertheless follows this basic thematic structure.

We believe, however, that the first edition was in fact published in 1850 under the variant title *Every-day wonders; or, facts in physiology which all should know*, and which was a number of works written anonymously by Bullar and published by John van Voorst. A publisher's advertisement for Voorst found in Paley's 1858 second edition of *A Manual of Gothic Mouldings*, ascribes this to be her from her pen, together with *Domestic Scenes in Greenland and Iceland* (1844), *England before the Norman Conquest* (1851), and *Sunday Book for the Young* (1855) - none of which are ascribed to her by COPAC. The preface to the present work is identical to that of the 1850 work.

OCLC locates one copy of this continuously paginated variant at Duke, with other variants found at Cambridge, Glasgow, the British Library, King's College and the Wellcome.

BRINGING SOME CULTURE TO THE PHYSICISTS

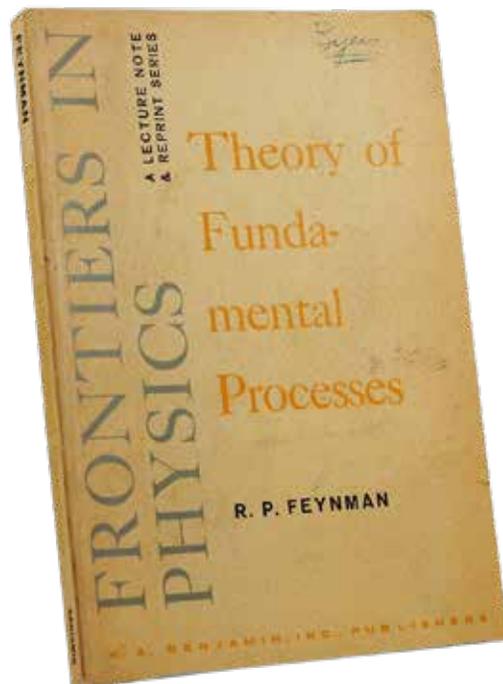
- 22| **[BYERS, Nina] FEYNMAN, Richard.** *The Theory of Fundamental Processes.* A Lecture Note Volume. Notes Corrected by H. T. Yura. New York: W. A. Benjamin, Inc., 1961. *Octavo, viii, 172. Original cream wrappers printed in blue, black, and orange. Ownership signature of UCLA physicist Nina Byers to the upper wrapper, UCLA store price sticker to the lower wrapper. Some additional notes by Byers in pencil on the upper wrapper and check marks by chapters in the contents list. A little creasing, rubbing, and toning to the wrappers, some light ink stains on the lower cover. A very good copy.* **£475**

First edition, first printing. From the library of physicist Nina Byers (1930-2014), who made important contributions to particle physics and superconductivity and had a humorous personal connection with Feynman, earning her a mention in *Surely You're Joking Mr. Feynman*.

Byers received her bachelors in physics at Berkeley and then studied under Murray Gell-Mann and Gregor Wenzl at Chicago, completing her thesis on pi-mesic atoms in 1956. In 1961 she joined the faculty at UCLA where she worked on particle physics as 'the first and the only female in the Physics department for 20 years' (*Los Angeles Times* obituary). Byers remained at UCLA for the rest of her career, later splitting her time between LA and the UK after she was appointed the first female physics lecturer at Oxford. During the 1970s and 80s Byers and her students were engaged in 'forefront research' on areas such as gauge theories of the electroweak interactions, quarkonium, and bound state systems (UCLA Physics & Astronomy department obituary).

At the same time, she was deeply involved with the American Physical Society and the American Association for the Advancement of Science. 'Nina served as President of the APS Forum on History of Physics, a position earned through her dedication to promoting the understanding of two weighty subjects: the role of women in physics, and the examination of physicists' role in the development and deployment of nuclear weapons' (*ibid*). One of Byer's most significant projects in this regard was the web archive *Contributions of 20th Century Women to Physics*, which includes detailed information on 83 female physicists. She also edited the volume *Out of the Shadows: Contributions of Twentieth-Century Women to Physics* (2006), and was a committed campaigner against nuclear weapons.

In a lifetime of accomplishments, perhaps the most unusual aspect of her legacy is her appearance in Feynman's memoir *Surely You're Joking Mr. Feynman*. Byers was running a series of physics colloquia at UCLA and wanted to include speakers on other aspects of culture. Looking for an expert on Mayan mathematics, she was hitting dead ends until another professor recommended Feynman, who had done some work on the Dresden Codex. As Feynman recalled it, 'She nearly died! She's trying to bring some culture to the physicists, and the only way to do it is to get a physicist!' The two became friends and remained close for the rest of Feynman's life.



The present text, *The Theory of Fundamental Processes*, was one of Feynman's first published books, appearing in 1961 along with *Quantum Electrodynamics*. Both became influential within the physics community and contributed to Feynman's growing celebrity. As a particle physicist, Byers would have been particularly interested in this book, a key work at the cutting edge of her field. A price sticker on the lower cover indicates that she purchased it at the UCLA student shop, and the ink stains, pencilled notes on the cover and in the contents list, and other signs of use confirm that that she probably consulted it as a reference work. A wonderful association copy.

- 23| **[BYERS, Nina] Wali, Kameshwar C. Chandra.** *A Biography of S. Chandrasekhar.* Chicago & London: The University of Chicago Press, 1991. *Octavo. Original red cloth, titles to spine gilt. With the dust jacket. Minor bumps to lower corners. An excellent copy in the jacket with just a little fading of the spine panel and very minor creasing at the lower corners.* **£150**

First edition, first printing. Inscribed by the author to Nina Byers on the front free endpaper, "Happy New Year! To dear Nina, With love & deep appreciation for all the encouragement, Kamesh, Dec 1991".

This volume is the authoritative biography of Subramanyan Chandrasekhar, the Nobel Prize-winning astrophysicist who did important work on the structure and evolution of stars, black holes, and gravity waves. His most well-known contribution is the Chandrasekhar limit, which describes the minimum mass that must be exceeded for a star to collapse into a neutron star or black hole at the end of its life cycle. Carl Sagan studied under Chandrasekhar and wrote that the physicist taught him "what true mathematical elegance is".

Author Kameshwar C. Wali is an eminent high-energy physicist at Syracuse University who has also done important work promoting the history of physics. He is one of the founding members of the American Physical Society's Forum on the History of Physics, of which the book's recipient, Nina Byers, was the president. A beautiful copy and a wonderful association, warmly linking two scientists who have done much to promote the history of physics.

PIONEERING WOMEN EXPLORERS IN THE GOBI DESERT

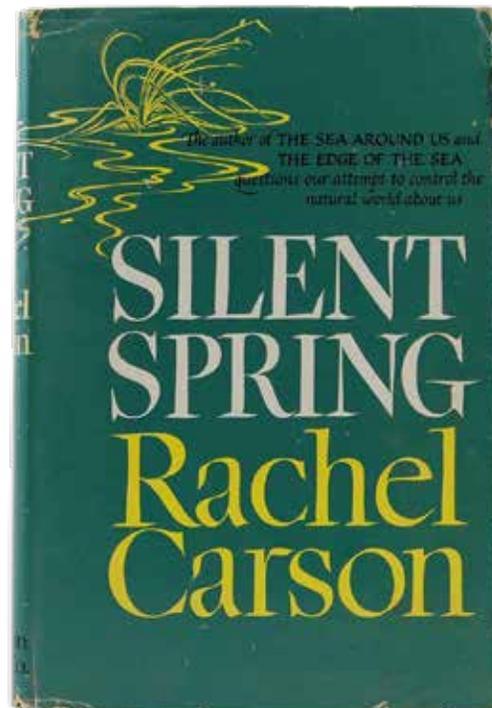
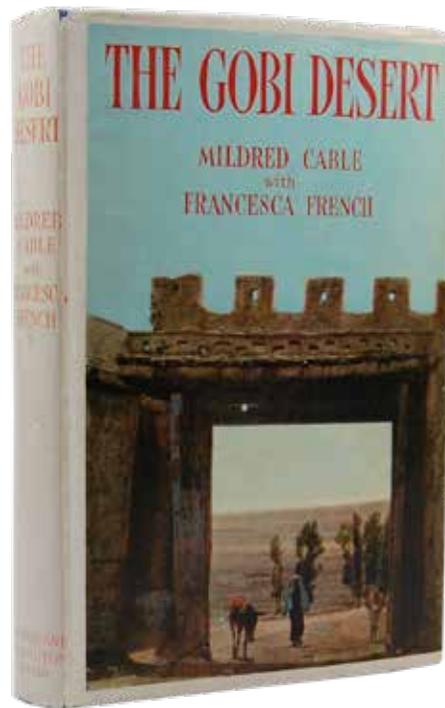
- 24| **CABLE, Mildred & Francesca FRENCH.** *The Gobi Desert.* London: Hodder and Stoughton, 1942. *Octavo, pp. [4]-303, [1], colour frontispiece and 2 plates, 48 black and white plates, 1 map within the text, folding map at rear. Original blue cloth, titles to spine gilt. With the dust jacket. Ownership signature to the front free endpaper. Spine rolled, very lightly rubbed at the extremities, but overall the cloth and contents very fresh. An excellent copy in the bright jacket that is lightly rubbed at the extremities and on the lower panel, with a few nicks.* **£250**

First edition, first printing of this important work on the cultures and landscape of the Gobi desert by explorer and missionary Mildred Cable. A beautiful copy.

Cable journeyed to China in 1901, working and travelling with the missionary sisters Evangeline and Francesca French. 'Cable was committed to the idea of an indigenous church, and sought to involve Chinese Christians in all areas of their mission. She believed that their work in Huozhou could be self-sustaining and that her skills might be more usefully exploited in areas still relatively untouched by the protestant missionary movement. It was with this intention that she gained

permission to initiate a mission in north-west China. The Trio left Shanxi in June 1923 ... After establishing a base and native church at Jiuquan they devoted the next thirteen years to travelling, by mule cart, across the trade routes of the Gobi Desert, “gossiping the Gospel”, as Cable described their method of proselytizing; leaving biblical tracts in hostelrys, visiting country fairs, and disseminating their Christian message on a personal level by befriending local people’ (ODNB).

‘It is for the Trio’s work in this part of central Asia that they were to become widely known in missionary circles and also to the British public. While their numerous journeys across the Gobi Desert were motivated by their evangelical calling, the hardships and frequent dangers endured made them pioneer women travellers and explorers of this region, and they were the first British women to visit the city of Urumchi. Their work was frequently obstructed by growing political disturbance, and Cable’s medical skills ... proved a valuable passport to their own survival. She was recognized as a leading authority on the Gobi Desert, and her most famous book, of eponymous title, was published in 1942. It was in recognition of that expertise that she was awarded the Lawrence memorial medal by the Royal Central Asian Society in 1942, and, with the French sisters, the Livingstone memorial medal of the Royal Scottish Geographical Society in 1943’ (*ibid*).



- 25| **CARSON, Rachel.** *Silent Spring*. Boston & Cambridge: Houghton Mifflin Company; The Riverside Press, 1962. Octavo, pp . [xvii], [1]-368, illustrations throughout the text. Original green cloth, titles to spine and upper board gilt, yellow top-stain, green and grey patterned endpapers. With the dust jacket. Only the lightest rubbing at the extremities. An excellent copy in the jacket that is just a little rubbed at the edges with fading of the spine panel, a few minor nicks and short splits, and a short closed tear to the fold of the upper flap. **£350**

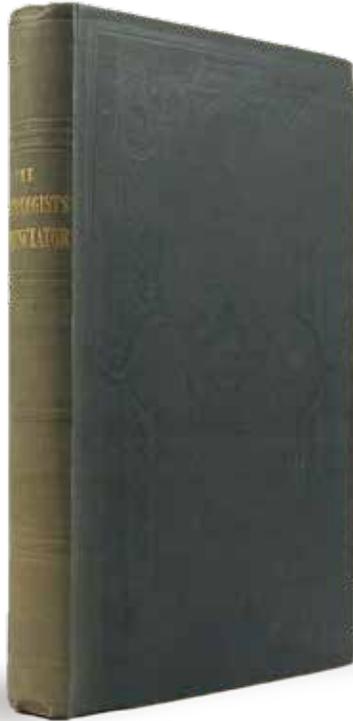
First edition, first printing of Carson’s ecological classic, the book that inaugurated the modern environmental movement.

‘The domination of the human species over all others increasingly disturbed Carson. This type of shortsighted thinking, she asserted, would mean the destruction of life as we knew it. To convince people of the necessity of changing our way of dealing with the natural world, she produced one of the most poignant and influential books of all time – the book that, in essence, began the environmental movement. *Silent Spring*, published in 1962, expressly addressed the problem of insecticides and herbicides, especially DDT. Beautifully written, it engaged its sympathetic readers and infuriated its opponents, in particular members of the pesticide industry. Industry scientists accused Carson of launching an unscientific polemic. Her story, however, was so powerful that the public’s awareness of the problem ballooned and the environmental movement moved from an esoteric discipline to a burgeoning popular movement’ (Ogilvie).

Ogilvie I. p. 233; Proffitt pp. 81-82.

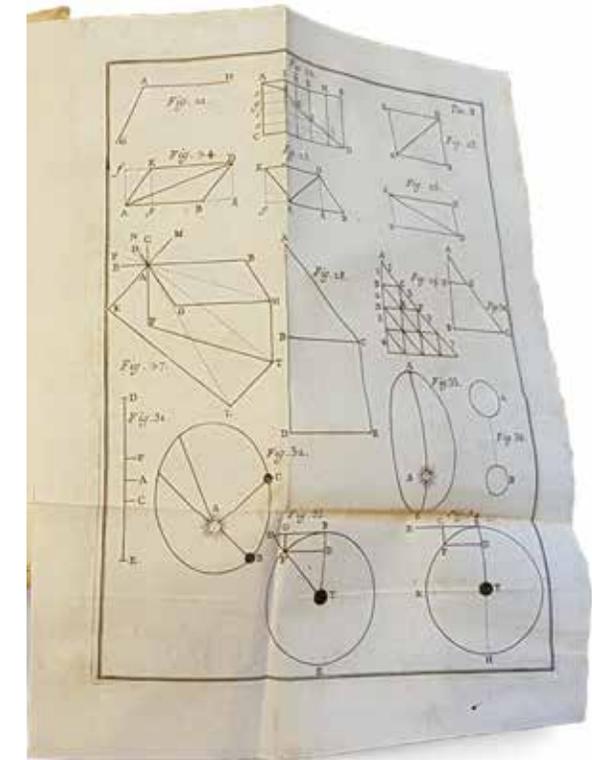
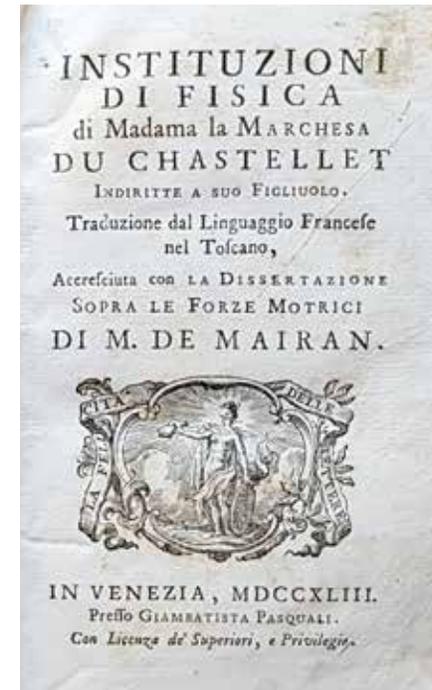
- 26| **CATLOW, Agnes.** *The Conchologist’s Nomenclator*. A Catalogue of all the Recent Species of Shells, included under the Subkingdom ‘Mollusca,’ with their Authorities, Synonymes, and References to Works where Figured or Described. London: Reeve Brothers, 1845. Octavo, pp. viii, 326, [2] blank, 12 publisher’s advertisements; with chart frontispiece. Original green cloth blocked in blind, titles to spine gilt, yellow coated endpapers, Westleys & Clark binder’s ticket to rear pastedown. Ownership ink stamp to the verso of the frontispiece. Frontispiece slightly pulled away from the binding at the top edge, but holding firm. Spine a little faded, upper corner lightly bumped, occasional faint spots to the contents, which are unopened. A very good copy. **£250**

First edition and a lovely, unopened copy in the original publisher’s cloth.



Little is known of the life and education of Maria Agnes Catlow (1807?-1889), but she wrote a number of successful works on 'field, garden, and greenhouse botany between 1847 and 1857' as well microscopy and conchology (Ogilvie). Interestingly, in the introduction to her 1851 book *Drops of Water: Their Marvellous and Beautiful Inhabitants Displayed by the Microscope*, she remarks that women could take advantage of their position as scientific outsiders to write in an accessible and engaging way for children and non-scientists: 'My experience and observations may be more genial to the beginner, than the scientific treatises of more able authors'.

Ogilvie, I. p. 237.



271 [CHÂTELET, Gabriele Emilie de Breteuil, Marquise du.] *Instituzioni di Fisica di Madama la Marchesa du Chastellet. Indiritte a suo figliuolo. Traduzione dal Linguaggio Francese nel Toscano, aceresciuta con la Dissertazione sopra le forze motrici di M. De Mairan. In Venezia. Presso Giambatista Pasquali ... 1743. Octavo, pp. viii, 510; with woodcut printers device on title-page, seven folding engraved plates; lightly foxed and browned throughout, some occasional light damp staining; in later vellum, expertly rebacked and restored, preserving some of the original spine, extremities lightly worn. £1,500*

Rare first Italian edition of the Marquise du Châtelet's first book *Institutions de Physique* (1740), and a significant essay in Newtonian physics, though attempting to defend the notion of 'forces vives' in Leibniz's philosophy. Mme du Chatelet became interested in Newtonian philosophy through her relationship with Voltaire and through Francesco Algarotti, who was preparing a popularisation of Newtonian philosophy while a guest at the Châtelet's estate.

She later collaborated with Voltaire on his *Elemens de la philosophie de Neuton*, and after the publication of her own work devoted her time to the translation and annotation of the *Principia* itself.

From about 1737 she 'was writing a book of Newtonian inspiration on the principles of physics and mechanics, designed for the instruction of her son. However, her conversion to Leibniz's doctrine of 'forces vives' in 1738, under the influence of Johann Bernoulli and Maupertuis, obliged her to interrupt her work in order to give more prominence in it to the Leibnizian epistemology ... She completed her work, which she published anonymously at the end of 1740 ... The chapter of this book dealing with the problem of 'forces vives' vigorously defends Leibniz's point of view and severely criticizes a memoir by Dortous de Mairan (1728) that condemned this principle' (DSB). This was the beginning of the famous 'vis viva' controversy.

A German edition was also published in 1743, and Grolier, *Extraordinary Women* note that both translations are rare. 'Another "extraordinary woman," Laura Bassi in Bologna, is reported to have used Du Châtelet's book in her classes' (Grolier).

Alic, ff. 139; *Bibliotheca mechanica*, pp. 96-7 (1740 first edition); Gjertson, *The Newton Handbook*, p. 104; Grolier, *Extraordinary Women*, item 10, p. 35; Proffitt, p. 88; Wilson I, p. 240; see Babson 28 for her translation of the *Principia*; for an interesting discussion of 'Newtonian Women' including du Chatélet, see Feingold, *The Newtonian Moment* ff. 118; OCLC locates copies of this Italian edition at the Burndy Library, the Huntington, Colorado College, Chicago, the British Library, the BnF and Augsburg only.

- 28| CURIE, Irène and Frédéric JOLIOT.** Un nouveau type de radioactivité. [Académie des Sciences, Séance du Lundi 15 Janvier 1934, Tome 198 Nr 3] [in:] Comptes Rendus de l'Académie des Sciences de Paris, Tome 198, [Janvier-Juin 1934. Paris, Gauthier-Villars, Imprimeur-Libraire ... 1934. Large 4to, pp. 254-256; entire volume pp. 2419, [2]; somewhat browned throughout due to paper quality; with small blindstamp on front free endpaper 'Carnegie Institution, Washington, Mount Wilson Observatory'; a large and heavy volume, bound in contemporary half morocco over marbled boards, spine in compartments with raised bands, ruled and lettered in gilt, head and tail of spine chipped and worn, inner hinges weak but holding, rear joint split with spine loose, extremities rubbed and worn. **£875**

First printing of this seminal paper in which artificial radioactivity was announced for the first time. The husband and wife team of Irène Curie and Frédéric Joliot were awarded the Nobel Prize in Chemistry 1935 'in recognition of their synthesis of new radioactive elements'.

'Irène Joliot-Curie, the daughter of Marie and Pierre Curie, began working in the same field as her parents. Frédéric Joliot, whom she married in 1926, also worked at the Curies' Radium Institute in Paris. The pair carried out their most important experiments in 1934. It dealt with bombarding an extremely thin layer of aluminium with alpha particles. The layer of

aluminium was placed in front of the window of a cloud chamber so that the radiation that occurred when it was bombarded could be studied. However, it was when the bombardment was turned off that an unexpected discovery was made. the aluminium continued to emit radiation. The Joliot-Curies eventually concluded that during the bombardment the aluminium atoms had been transformed into a radioactive isotope of phosphorus. This was the first radioactive atomic nucleus created by artificial means ... the discovery was a further confirmation that atoms were not stable, indivisible units scientists had once believed. It was also one of the first steps toward the harnessing of atomic energy, and the creation of the atomic bomb. Both of the Joliot-Curies continued their research with a focus on uranium fission, the splitting of uranium nuclei' (Larsson).

Grolier, *Extraordinary Women*, pp. 53-56, and item 43; Larsson, *Cultures of Creativity: The Centennial Exhibition of the Nobel Prize*, p. 131 see Kragh, *Quantum Generations*, p. 187; see Rayner-Carter, pp. 97-123; Yount, pp. 144-146.

- 29| CURIE, Irène and Frédéric JOLIOT.** Artificial production of a new kind of radio-element [in:] Nature. A weekly Journal of Science. Volume CXXXIII, January, 1934, to June, 1934. London: Macmillan and Co., Limited, New York: The Macmillan Company. 1934. Large 4to, pp. 201-202; entire volume pp. lxvi, [1], 996, iii-vi; with bookplate of 'Dr Lee's Laboratory, Christ Church' on front pastedown, with two further labels on front free endpaper; contemporary half calf over blue cloth, spine in compartments with raised bands, ruled in gilt with two black morocco labels, some light scuffing and nicking to calf at head of upper cover, extremities lightly rubbed and worn. **£550**

First edition in English of this seminal paper. Irène Curie and Frédéric Joliot had observed for the first time the phenomenon which, under the name of induced or artificial radioactivity, had been sought since the discovery of the natural radioactivity of uranium by Becquerel in 1896. They first reported their discovery on 15 January in a note in the *Comptes Rendus* and informed their International colleagues abroad in this short note in *Nature*, offered here. The result was immediately accepted and later that year Rutherford described their findings as the first proof of artificial production of a radioactive element. In 1935 the Nobel Prize for Chemistry was awarded jointly to Curie and Joliot 'in recognition of their synthesis of new radioactive elements'. Their method of creating new radioactive substances exhibiting positron-decay should be regarded, Joliot pointed out in his Nobel lecture, as only the beginning of a new epoch extending the wealth of new elements.

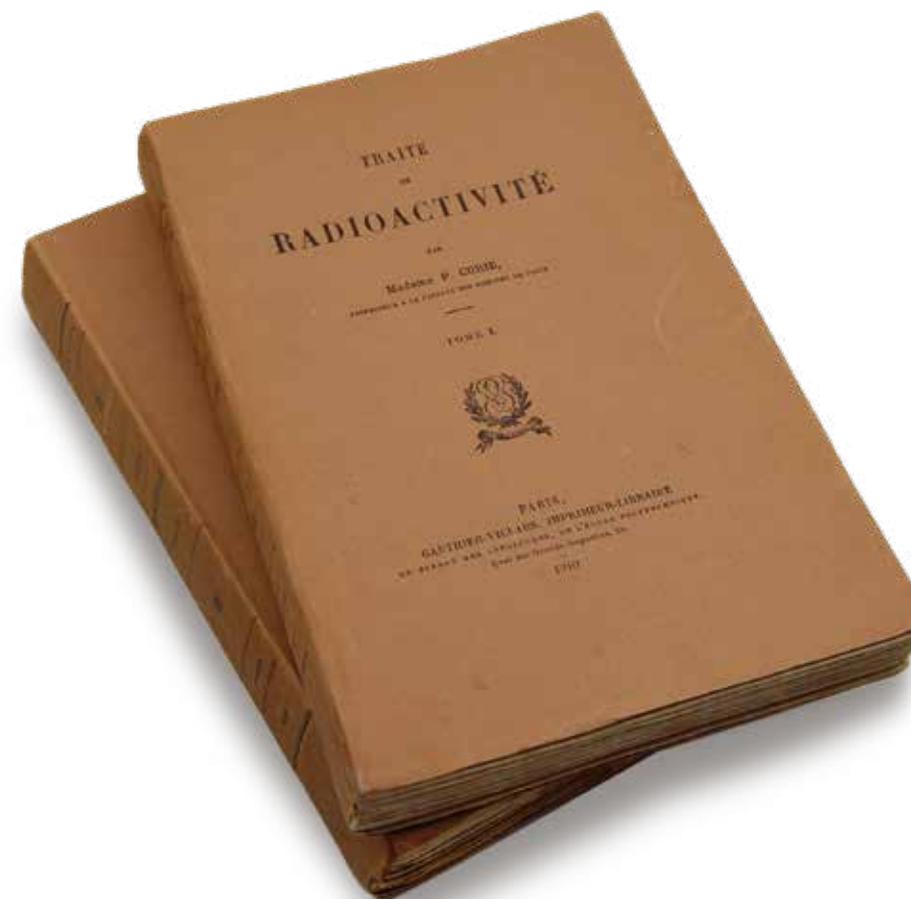
Grolier, *Extraordinary Women*, pp. 53-56, and item 43; see Kragh, *Quantum Generations*, p. 187; see Rayner-Carter, pp. 97-123.

- 30| **CURIE, Marie.** *Traite de Radioactivité ... Tome I [- Tome II]*. Paris, Gauthier-Villars, Imprimeur-Libraire ... 1910. Two large volumes, octavo; pp. xiii, [i], 426, with heliogravure frontispiece portrait of Pierre Curie and plates 1 and 2, together with numerous text illustrations; [iv], 548 and plates 3-7 and numerous text illustrations and diagrams (six of the plates photographic); generally clean and bright with some occasional minor soiling and marginal browning, pp. 87-90 of Vol I, and with short tear to outer margin of p. 413 due to partial opening, with gutter cracked at p. 416, lower corner of p. 10 of Vol II nicked with loss, and final verso somewhat browned; some occasional minor marginal nicks due to rough opening; with two publisher's advertisements loosely inserted, the one in Vol II causing some offsetting at p. 56; uncut in the original tan wrappers printed in black (second state of wrappers with advertisements on rear wrapper of Vol I referring to works dated 1912, 1919, 1914, and 1916), inner hinges of Vol I cracked and with lower joint neatly repaired, with small loss to head and tails of both spines; overall a very good copy of this fragile work; preserved in a clamshell box. **£1,600**

First edition bound in the original printed orange wrappers (second state). 'One of the most important books of science written in the twentieth century, this is Madame Curie's principal writing on her discoveries in radioactivity' (Nobelprize.org).

'Mme Curie's treatise on radioactivity (1910) admitted, without reservations the theory of transformations.' (DSB). In 1911 she was awarded her second Nobel prize 'for services to the advancement of chemistry by the discovery of the elements radium and polonium'. She is the only person to win two Nobel science prizes. Curie's dramatic discovery of Radium, announced in her thesis of 1903, is usually cited as her great work (see for example PMM, Horblit and Dibner), although it was in 1898 that she and Pierre Curie discovered their first new element, Polonium. 'The word "radioactivity" was suggested by Marie Skłodowska Curie, the Polish chemist and physicist. At Becquerel's suggestion Madame Curie and her husband, Pierre, French physicist and chemist, began to work on the properties of uranium and thorium. They found pitchblende to be four times as radioactive as uranium. Further investigation showed another element, radium, to be a million times as radioactive as uranium. After the early death of her husband, Marie Curie continued research in radioactivity. In 1910, she isolated radium in a pure state. Her classic *Traité de radioactivité* (1910) is an account of her work through collected papers' (Sparrow, *Milestones*).

'In 1891, she went to Paris to continue her studies at the Sorbonne where she obtained Licentiateships in Physics and the Mathematical Sciences. She met Pierre Curie, Professor in the School of Physics, in 1894 and in the following year they were married. She succeeded her husband as Head of the Physics Laboratory at the Sorbonne, gained her Doctor of Science degree in 1903, and following the tragic death of Pierre Curie in 1906, she took his place as Professor of General Physics in the Faculty of Sciences, the first time a woman had held this



position. She was also appointed Director of the Curie Laboratory in the Radium Institute of the University of Paris, founded in 1914. Her early researches, together with her husband, were often performed under difficult conditions, laboratory arrangements were poor and both had to undertake much teaching to earn a livelihood. The discovery of radioactivity by Henri Becquerel in 1896 inspired the Curies in their brilliant researches and analyses which led to the isolation of polonium, named after the country of Marie's birth, and radium. Mme. Curie developed methods for the separation of radium from radioactive residues in sufficient quantities to allow for its characterization and the careful study of its properties, therapeutic properties in particular'. [Nobelprize.org]

Barchas 457; Grolier, *Extraordinary Women*, pp. 46-52, and item 34; Honeyman 2:789. Sparrow, *Milestones of Science*, 41; for a detailed discussion of her life and work see Rayner-Carter, *A Devotion to their Science* ff. 31; Ogilvie, I, pp. 311-316; Proffitt, p. 121.

- 31| CURIE, Marie.** *La Radiologie de la Guerre.* Avec 11 figures et 16 planches hors texte. Paris, Librairie Félix Alcan, 108, Boulevard Saint-Germain, 108. Tous droits de reproduction, d'adaptation et de traduction réservés pour tous pays. 1921. Octavo, pp. [iv], 143, [1]; with 16 half-tone plates and numerous text illustrations; printed on poor quality and as a result somewhat fragile and delicate, though expertly repaired notably along the gutters of the first few leaves, and with several marginal repairs using Japanese paper; opening slightly restricted and caution required however, and edges still somewhat fragile; in the original tan printed wrappers, expertly repaired and restored with Japanese paper, covers rather soiled; ex-libris from the Franklin Institute Library with their bookplate on inside upper wrappers, remains of label on final leaf, and ticket pocket on inside rear cover; housed within custom-made cloth bound clamshell case, with remains of paper label on spine and retaining cloth ties. **£1200**

First edition, though a rather fragile copy, of this important work giving a summary of her pioneering efforts during World War I, and providing an informative account of the scientific advances of radiology during the war. It is much rarer than her technical publications. Curie devoted much of her time during the four years of the war to equipping automobiles in her own laboratory with x-ray apparatus, these cars becoming known in the war zone as 'little Curies'. 'Marie had established a fleet of donated vehicles outfitted with dynamo-powered x-ray units. One car carried Marie, Irène, and a military staff consisted of a doctor, an assistant, and a driver. The apparatus itself was fairly straightforward, but the task was daunting. In many cases the men were very badly wounded ... by the time the first radiology unit had set off towards the front on 1st November 1914, 310,000 French soldiers had already died and 300,000 were wounded. For a young person of seventeen who had lived within a protected circle of friends and relatives, the scenes of

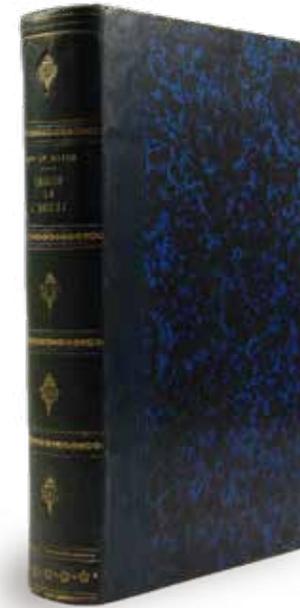


horror and misery were a great shock. A short nursing course given by Les Dames des France left Irène ill prepared for what she would see and experience. The tragedies she witnessed marked her with a lifetime horror or war' (Rayner-Carter). The war effort was to prove physically and financial demanding for Marie as well, though she continued to work tirelessly and 1919 saw her installation at the Radium Institute.

Grolier, *Extraordinary Women*, pp. 46-52, and item 35; for a detailed discussion of her work see Rayner-Carter, *A Devotion to their Science*, p. 106; see also <http://nobelprize.org> for a detailed biography; OCLC locates copies at Columbia, the New York Academy of Medicine, Yale, Smithsonian, Harvard, Duke, Texas, Pittsburgh, Alabama, Arizona, Caltech and Cambridge.

- 32| (DARWIN.) ROYER, Clémence.** *Origine de l'Homme et des Societes.* Paris, Guillaumin et Cie ... [et] Victor Masson et Fils. MDCCCLXX [1870]. Octavo, pp. xxiv, [ii], [3]-591; occasional light foxing and soiling; with numerous marginal annotations and markings throughout in a contemporary hand, in both pencil and red crayon; contemporary signature on title-page (somewhat illegible); bound in blue morocco backed marbled boards, spine tooled and lettered in gilt, spine a little darkened, some minor wear to extremities; a good copy. **£700**

First edition by the noted French female scientific writer, philosopher and Republican, and which is one of the earliest introductions of Darwinism into France. Written before his *Descent of Man*, the work focuses on the evolution of society and attack's Rousseau's view of natural man. Clearly a thought provoking work, of interest, the present copy has been extensively marked and annotated by the original owner, with markings and notes in both pencil and red crayon throughout.



Clémence Royer (1830-1902) was born in Nantes. She became interested in science and philosophy during time spent in Lausanne, and in 1859 began to lecture on science to women. 'In these remarkable lectures, she emphasized the need of women to embrace science as a source of knowledge and transform it by making it their own ... Royer, lecturing on Lamarck, read Darwin's *Origin of Species* and immediately recognized its importance as an evolutionary theory that incorporated modern economic theories, notably those of Malthus' (Ogilvie). She resolved to publish a translation, and in 1862 produced the first French edition accompanied by long explanatory notes and a lengthy preface. Although Darwin, who described Royer as 'one of the cleverest and oddest women in Europe' (Freeman) had authorized the translation, he objected to some of her notes and so made some significant changes for the second French edition in 1866. In the preface of her third edition, she made the mistake of criticising Darwin's hereditarian theory, and it was rejected by Darwin who obtained a new alternative French translation.

The present work includes a detailed and extensive bibliography, Royer clearly familiar with the work of many of the leading anthropologists and protagonists in the evolutionary debate including Erasmus Darwin, Geoffroy Saint-Hilaire, Richard Owen, Huxley, Wallace, Hooker, Camper, Retzius and Prichard.

In 1870, the year of the present publication, Royer was elected to the influential all-male Société d'Anthropologie, headed by Paul Broca.

Ogilvie, II, p. 1129; see Freeman p. 84; OCLC: 3146561; Proffitt pp. 498-500.

- 33| DAVIS, Katherine Bement.** *Factors in the Sex Life of Twenty-Two Hundred Women.* Publication of the Bureau of Social Hygiene. New York & London: Harper & Brothers, 1929. Octavo, pp. [vi]-xx, [ii], 430. Original red cloth, titles to spine and upper board gilt. Bookplate of Anne & F. G. Renier, and small initials 'AR' in black ink on the rear blank. Foyles ticket to the front free endpaper. Spine and edges of boards dulled, gilt darkened, particularly on the spine, light rubbing at the extremities, endpapers partially tanned, contents lightly toned, some spotting to the edges of the text block. **£45**

Fifth printing of this early sociological study of women's sex lives which 'included a section on lesbianism—a radical inclusion for that time' (Ogilvie).

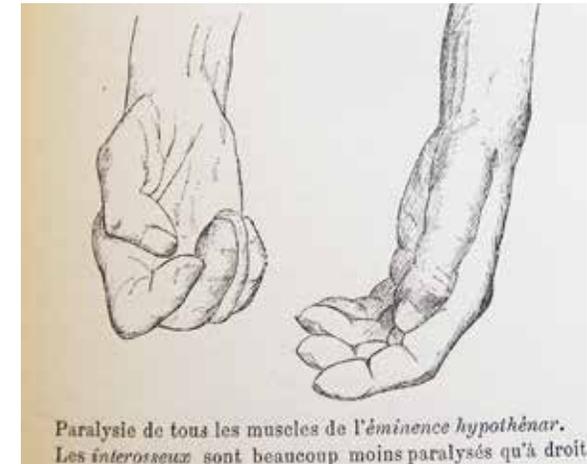
Katherine Bement Davis (1860-1935) studied food chemistry and the new sanitary science (combining public health, chemistry, nutrition, home economics, and sociology) at Vassar, and was the first woman awarded a doctorate by Columbia University, in political economy. She spent much of her career as superintendent of the new Bedford Hills Reformatory for Women, where she became an outspoken supporter of penal reform. Davis 'embraced an environmental concept of criminal responsibility, arguing that the women who broke the law were themselves victims of destructive social and economic forces' and 'expanded the "teaching" aspect of rehabilitation to include trades far beyond the domestic skills taught in traditional women's institutions' (*ibid*). Davis was awarded a significant grant from the Rockefeller Foundation to establish a research center for studying female offending. She was appointed the first woman commissioner of correction for New York City and was the first woman to hold a cabinet-level office in the city.

Ogilvie, I. p. 331.

AN AMERICAN IN PARIS - THESIS BY THE FIRST FEMALE INTERN TO WORK IN PARISIAN HOSPITAL

- 34| DEJERINE-KLUMPKE, Augusta Maria.** *Des polynévrites en général et des paralysies et atrophies saturnines en particulier. Étude clinique et anatomo-pathologique. Avec figures dans le texte.* Paris, Ancienne Librairie Germer Baillièrre et Cie Félix Alcan, Éditeur. 108, Boulevard Saint-Germain, 108. 1889. 4to, pp. [iii] - 295, [1] blank; with one folding lithograph, partially coloured, and a small number of text engravings; lightly browned throughout, with some occasional light creasing at gutter; uncut, and partially unopened in modern limp red cloth with printed paper label on spine, remains of front cover of original printed wrapper preserved and mounted on blue paper and bound in. **£385**

Important doctoral thesis by the first woman intern to work in a Paris hospital. During her studies Klumpke 'elucidated and described the condition resulting from neurological injury to the complex of nerves controlling arm movements, the brachial plexus: this condition, characterized by paralysis of the inner-arm and forearm as well as the ulnar side of the hand, is still called Klumpke or Lower Radicular Syndrome ... In her inaugural dissertation which she defended in 1889 Klumpke discussed further studies of paralysis of the inferior brachial plexus. Her series of investigations of this condition brought her the Prix Godard of the Académie de Médecine' (Creese).



'Born Augusta Klumpke (1859-1927) in San Francisco, one of three remarkable sisters, Augusta moved with her mother, sisters, and brother to Germany and then to Lausanne when she was eleven. She received her baccalaureate in Lausanne and then decided with encouragement from her mother to go to Paris to study medicine ... Her sister Dorothea ... also went to Paris to study astronomy and work at the Paris observatory' (Ogilvie). Her move to Paris was inspired by Madeleine Brès, who in 1875 had become the first woman in France to be created a doctor of medicine. 'Despite the resistance of the dean of the faculty, Alfred Vulpian (1826-1887), Augusta was able to enter the study. In 1882 she won entrance to an externship, a hospital position without residence at the hospital. During her second and third year Augusta was connected to Vulpian's clinic. It was only due to intervention by the minister of education, the physiologist Paul Bert (1830-1886), that Augusta in 1887 became the first woman in France to be appointed interne des hôpitaux. She received her doctor's degree in 1889 with the thesis *Des polynévrites en général et des paralysies et atrophies saturnines en particulier*. One of those who had noticed Klumpke's outstanding abilities while still a student, was the neuroanatomist Jules Dejerine, who wrote of her: "Elle a toutes les qualités possibles". The pair married and together worked on a number of publications, notably the two volume *Anatomie des centres nerveux* (1895 & 1901), until his death in 1917. She published a number of studies under her own name during World War I and became a pioneer in the treatment and rehabilitation of the large number of soldiers afflicted by wounds of the nervous system and especially of the spinal cord.

Creese, I. pp. 61-63; Ogilvie, I. p. 338.

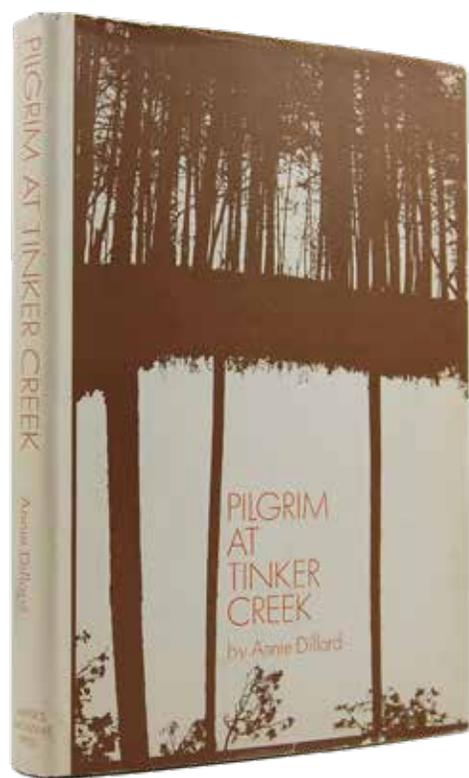
- 35| **DILLARD, Annie.** *Pilgrim at Tinker Creek*. New York: Harper's Magazine Press in association with Harper & Row, 1974. Octavo, pp. [xiv], 271, [3]. Original brown cloth, titles to spine gilt, red and black pictorial endpapers, Harper's logo to the upper board in blind. With the dust jacket. An excellent copy in the jacket that is just a little rubbed, dulled and creased at the extremities with a few faint spots and minute closed tears. **£250**

First edition, first printing of this landmark work of nature writing.

Pilgrim at Tinker Creek was only Dillard's second book, published in the same year as her first volume of poetry. Though often mistaken for a collection of individual essays, it is rather 'a long nonfictional account of her experience embedding, Thoreau-style, for a year of close observation of the titular waterway in Virginia. "Pilgrim" won the Pulitzer Prize and unleashed upon the world Dillard's radical style: prose right on the border of poetry, dense with dazzling effects – strong metaphors, heavy rhythms, bold verbs, sudden parables,

outlandish facts harvested from the darkest corners of the library' ("Annie Dillard's Impossible Pages", *The New York Times*, March 2nd, 2016).

'*Pilgrim at Tinker Creek* appeared at a time of emerging environmental awareness, and its chronicle of a natural world near cities and suburbs affirmed a connection the country was just starting to sense in a new way. Dillard also gained attention because she was writing about nature in a genre long dominated by men. Her arrival on the literary scene coincided with the burgeoning women's movement, giving another dimension to the book's success' (National Endowment for the Humanities medal citation, 2014).



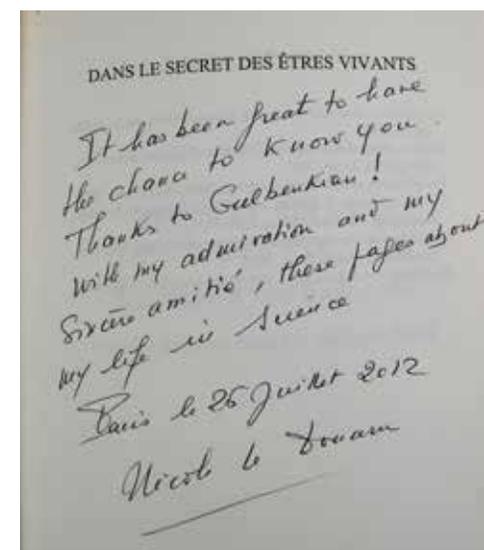
- 36| **DOUARIN, Nicole le.** *Dans le Secret des Êtres Vivants. Itinéraire d'une Biologiste*. Préface de Mona Ozouf et Michelle Perrot. Paris: Robert Laffont, 2012. Perfect bound, tall octavo, pp. [12]-487, [5]. Original white wrappers printed in blue and black. With the publisher's wraparound band. Minor bump to head of spine. An excellent, fresh copy. **£250**

First edition, first impression, paperback issue. Presentation copy inscribed by the author to Nobel Prize-winning biologist Sydney Brenner on the half title, 'It has been great to have the chance to know you. Thanks to Gulbenkian! With my admiration and my sincère amitié, these pages about my life in science. Paris, le 26 Juillet 2012, Nicole le Douarin'. Gulbenkian probably refers to the Calouste Gulbenkian Foundation, a philanthropic organisation which may have held a conference at which Douarin and Brenner met. An excellent association connecting two of the greats of recent biological science.

A world leader in developmental biology, Nicole le Douarin (1930 -) has designed important techniques for studying differentiation in embryos, most importantly the creation of chimeras in which cells from two different species can be individually tracked as they develop into organ systems. Crucially, she used this technique to elucidate the early development of the nervous and immune systems. Douarin has received numerous accolades for her work. 'In 1989 she was elected as a member of the US National Academy of Science and in 1990 as a

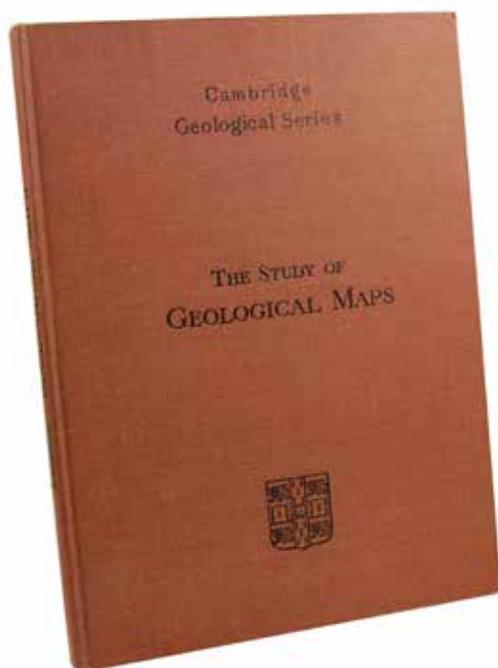
fellow of the Royal Society. She also received the Louis-Jeantet Prize for Medicine in 1990 and in 1991 she became an officer of the Légion d'Honneur. In 1993 she received the Louisa Gross Horwitz Prize from Columbia University. She is an honorary fellow of the Academy of Medical Sciences (2002) and was the first recipient of the Pearl Meister Greengard Prize for women in science and biology (2004)' (*The Embryo Project Encyclopedia*).

The recipient of this volume, Sydney Brenner (1927 -), has been a leader in the field of genetics almost from the moment he received his doctorate at Oxford in 1954. He joined Francis Crick's laboratory in 1956, and they performed groundbreaking research on how DNA is decoded by cells. He was awarded a Nobel Prize for establishing a new laboratory organism for the study of genetics, the nematode *C. elegans*.



- 37| **ELLES, Gertrude L.** *The Study of Geological Maps*. Cambridge: at the University Press, 1921. Quarto, pp. [vi], 74, 7 plates, folding map at rear, numerous maps and diagrams within the text. Original red cloth, titles and university crest to spine and upper board in black. Library blindstamp of Maine State Geologist J. C. Twinem to the title and page 25. Lower corner bumped, lightly rubbed at the tips, light spotting to the title, half title, and edges of the text block. Very good condition. **£150**

First edition, first impression of this introductory work on geological maps by one of Britain's first professional female geologists. A very attractive copy. With the blindstamp of Maine State Geologist J. C. Twinem.

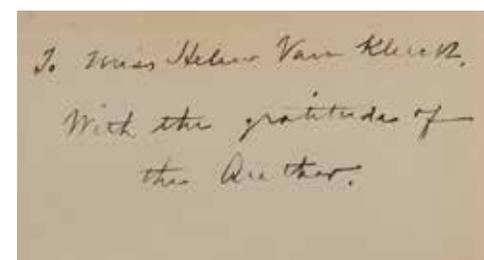


Gertrude Elles (1872-1960) was a star student of Newnham College, Cambridge during the 1890s, eventually becoming their lecturer in geology, the first woman reader at the university (in 1936), and after her retirement the first woman to hold the position of Reader Emeritus at Cambridge. 'Under the supervision of Professor Lapworth of Birmingham University, Elles studied graptolites [Cambrian-period fossils similar to present-day corals] and their use in the stratigraphy of the Ordovician and Silurian rocks of the Welsh Borderland and Wales. By the time she was thirty years old, she had begun the publication with E. M. R. Wood of the monumental *Monograph of British Graptolites*. This monograph formed the basis of the work on British graptolites for years to come ... Although she is best known for her studies of graptolites, she also worked on metamorphism and the structure of the Precambrian rocks of the Scottish Highlands' (Ogilvie). In 1919 Elles was one of the first group of women elected to the Geological Society of London, and also the first female recipient of the organisation's Murchison Medal.

Ogilvie, I. p. 418.

- 38| **FURNESS, Caroline E.** *Vassar Semi-Centennial Series. An Introduction to the Study of Variable Stars*. With Illustrations. Boston & New York, Cambridge: Houghton Mifflin Company & The Riverside Press, 1915. Octavo, pp. [ii], [ix]-xx, [1]-327, [3], frontispiece and 13 plates from photographs. Original blue cloth, titles to spine and upper board gilt, top edge gilt. A little rubbing to extremities, some small spots to the lower board. A very good copy. **£500**

First edition, first impression of the first authoritative textbook on the subject of variable stars. Association copy inscribed by the author on the front free endpaper, 'To Miss Helen Van Kleeck, with the gratitude of the Author'. The recipient worked closely with Furness on the book and is profusely thanked in the preface: 'The author's greatest debt, however, is to Miss Helen Van



Kleeck, who at several times in the past has assisted in preparing the publications at Vassar College for the press ... Miss Van Kleeck also prepared the drawings for the illustrations...' The Van Kleecks were one of Poughkeepsie's most prominent families, closely aligned with the Vassars through both business and marriage. It is unclear what Helen's formal role at the university was, but the Vassar archive confirms that she

was likely a staff member. In addition to her work with Furness she is recorded as having assisted a former librarian of the university, and also worked on a large alumnae directory project.

Author Caroline Furness (1869-1936) served for twenty years as an astronomy professor at Vassar and was also the director of the school's observatory. As the child of a teacher her scientific education had begun early, and after entering Vassar in 1891 she became determined to remain unmarried and work as a professional scientist, writing to her sister that, 'I shall devote myself entirely to Mathematics and Science, and when I develop into a second Mary Somerville or Maria Mitchell, then you will be proud of me' (*Vassar Encyclopedia*).

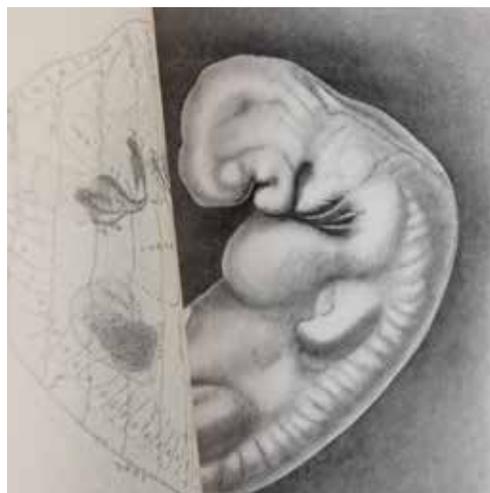
Furness's enjoyment of astronomy, and her career opportunities, were strengthened by her strong friendship with her teacher Mary Whitney, who was then doing important research on double and variable stars using photography. After a short stint as a public school teacher, Furness returned to Vassar as Whitney's assistant, and also completed graduate work at Columbia. She became an instructor in astronomy in 1903, and formally succeeded Whitney as observatory director in 1915. Throughout her career, Furness was concerned with women's education and opportunities. She was a member of the American Astronomical Society, the Royal Astronomical Society of London, and numerous other institutions.

Vassar president Henry Nobel MacCracken identified Furness's course on variable stars as 'the first of its kind offered in any American college'. *Introduction to the Study of Variable Stars* became a standard in the field and was 'included among the 100 best books written by American women during the preceding century at the 1933 Century of Progress world's fair at Chicago' (*Vassar Encyclopedia*).

- 39| GAGE, Susanna Phelps.** A Three Weeks' Human Embryo, with Especial Reference to the Brain and the Nephric System. [Offprint from The American Journal of Anatomy, volume IV, no. 4, pages 409-443, Sept. 15, 1905]. [Washington D.C.]: The American Journal of Anatomy, 1905. Octavo. Original blue-grey wrappers printed in black. 5 plates at the back, one with a printed tissue overlay. A little rubbing and some mild creases at the extremities, head of spine bumped, contents very fresh. An excellent copy. **£350**

Offprint. Presentation copy inscribed by Gage on the upper cover, 'Compliments of the Author', and with the typed ownership signature of fellow scientist Mary A. Bowers.

Susanna Phelps Gage (1857-1915) was a prominent American embryologist and comparative anatomist who did fundamental work on the development of the human brain and nervous system. Gage studied at Cornell, where she was the first woman to take a laboratory physics course, and she earned her PhD there in 1880. Though her career was sometimes overshadowed by that of her husband, the embryologist Simon Henry Gage, she published a number of



important papers and was widely respected, earning election to the American Academy for the Advancement of Science, the American Anatomical Association (the publishers of the present paper), and the American Microscopical Society, among others. This paper, on the human embryo, is one of her most significant contributions to the literature, and the five detailed anatomical plates were probably done by Gage herself, who also illustrated works for her husband and the anatomist Burt G. Wilder. This copy is particularly interesting in that the owner, Mary A. Bowers, was also a female scientist and the instructor of zoology at Wellesley College. A nice presentation offering a glimpse of professional connections between female scientists.

Ogilvie, I. p. 480.

- 40| GERMAIN, Sophie.** Examen des principes qui peuvent conduire à la connaissance des lois de l'équilibre et du mouvement des solides élastiques. [in:] Annales de Chimie et de Physique. Tome Trente-Huitième. A Paris, Chez Crochard, Libraire, cloître Saint-Benoît, no. 16 près la rue des Mathurins.

1828. Octavo, pp. 123-31; entire volume pp. 448, with one folding engraved plate; light marginal browning and occasional spotting throughout; ex-libris from the British Museum/ Natural History Museum with their stamp and withdrawal stamp on verso of volume title-page and folding plate; later 19th century blue half calf over red pebble-grained cloth, spine ruled and lettered in gilt, remains of small paper label at head of spine, joints and extremities rubbed and lightly worn. **£800**

First printing of Sophie Germain's last paper on the theory of elasticity, and the culmination of over fifteen years of significant work.

'In 1808, when the German physicist Ernst Chladni came to Paris and demonstrated modes of vibrating plates with patterns in sand, Germain turned her attention to these "Chladni figures." In 1811, the French Academy of Sciences offered a prize for a mathematical theory to describe the vibration characteristics of elastic surfaces. Germain submitted a paper using her pen name but did not win a prize until the third and final competition, in 1816. This time she signed her revised paper with her own name. Now 40 years old, she was the first woman to be awarded a prize by the Academy of Sciences' (Grolier). Two further important works followed on elastic surfaces, before this her final contribution to the subject. More philosophical than technical, it 'discusses the inadequacies of current theories of elasticity based on molecular forces and is also critical of efforts to reduce physics to mathematics and to find causality embedded in mathematics ... Although her mathematics, as she admitted, was faulty, her results did predict some Chladni figures correctly. Her continuing publications on the problem are best viewed as a part of the scientific process of problem solving that requires fresh ideas and new developments in theory and concept. Today, the need to solve problems about elastic vibrations arises in such diverse fields as structural engineering and electronic device manufacturing. The contributions of Sophie Germain form a part of the very beginning of modern analytical methods for such problems' (*ibid*).

One of France's most renowned mathematicians, Marie-Sophie Germain (1776-1831) lived through the tumult of the Revolution, finding refuge in her father's library, where she was inspired by Montucla's *Histoire des Mathématiques*, to follow a career in mathematics. Her parents, initially disapproving of her ambitions considering it to be unbecoming for a young woman at that time, were eventually won over by her determination and obsession. Though unable to attend the École polytechnique, she succeeded in obtaining lecture notes from a course taught by Joseph Louis Lagrange. Sending in observations under the guise of a male pseudonym, "Le Blanc", Lagrange was so impressed by this gifted student that a meeting was arranged, and was amazed to find that his correspondent was a 20 year old woman. She was introduced to his circle of mathematicians, and was to become a frequent correspondent with Adrien-Marie Legendre and Karl Friedrich Gauss. In addition to her work on elasticity, Germain is remembered for her work on number theory, as well as a number of philosophical treatises.

Alic, pp. 148-158; Creese, I. pp. 76-79; Grolier, *Extraordinary Women*, pp. 76-81; Merzbach, *History of Mathematics*, p. 503; Proffitt pp. 197-198.

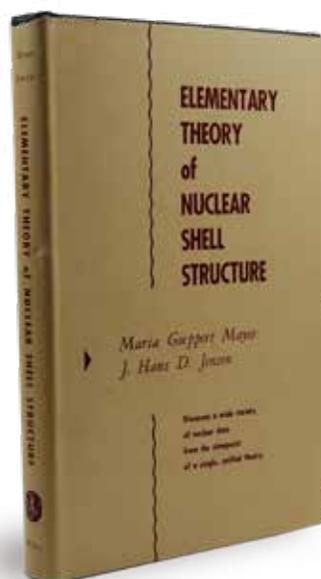
- 41| **GOEPPERT-MAYER, Maria and J. Hans D. JENSON.** *Elementary Theory of Nuclear Shell Structure.* New York, John Wiley & Sons, Inc. London, Chapman & Hall, Ltd. 1955. *Octavo, pp. xiv, 269, [5] blank; clean and crisp; in the original blue publisher's cloth, spine lettered in gilt, cloth lightly sunned and rubbed along upper margins, with the original printed cream dust-jacket lettered in red, slight loss at head of spine, tail of spine nicked, with some fraying and nicking to upper margins, jacket covers a little soiled.* **£150**

First edition of this classic text on nuclear shell structure and which explained the stability of specific atomic nuclei. 'The authors of this monograph shared the 1963 Nobel Prize in Physics for the nuclear shell model of atomic nuclei. In addition to theoretical work, the book includes a large body of experimental data interpreted with the aid of the shell model. As the second author admitted in a letter, Mayer wrote most of the book' (Grolier). Mayer was only the second woman, after Marie Curie, to receive the Nobel Prize in Physics. Her co-author J. Hans D Jenson was a Professor of Physics at the University of Heidelberg.

'The nuclear shell model was a key discovery for the development of nuclear physics. It explained facts, such as the abundance of specific isotopes of elements that were beyond the predictive capability of the liquid drop model of nuclei, which treated the particles - protons and neutrons - of atomic nuclei as one ensemble and had been adequate for a basic explanation of fundamental nuclear processes such as fission' (Grolier).

Maria Gertrud Käte Goeppert (1906-1972) grew up in Göttingen, where her father had an academic appointment. 'For a woman at that time, it is noteworthy that she gained entry to Göttingen University; her original plan had been to study mathematics, but she quickly

switched to physics. Her talent was quickly recognized and she became associated with some of Göttingen's most famous research physicists. Her doctoral thesis of 1930 presented a theory of a phenomenon only observed later. In 1927 the Goeppert household was upset by the death of Maria's father, and her mother took in students as lodgers. One of those students was an American, Joseph Mayer, and in 1930 Maria and Joseph were married and moved to the United States. An academic appointment for her in Germany would have been very difficult to obtain, but as she discovered, an academic position in the United States was not much easier to obtain, as nepotism rules were common. As well ... no academic institution in the United States had yet shown an interest in her speciality, the



application of quantum mechanics to problems in physics and chemistry' (*ibid*). 'Though Goeppert-Mayer had an outstanding background in quantum mechanics and was to become a Nobel laureate in physics, upon her arrival in the United States ... she was treated not as a brilliant academic, but as "an academic wife, whose husband has a fairly secure position"' (Rayner-Carter).

Grolier, *Extraordinary Women*, pp. 65-68; Proffitt pp. 208-211; Rayner-Carter p. 233; Yount, pp. 196-198.

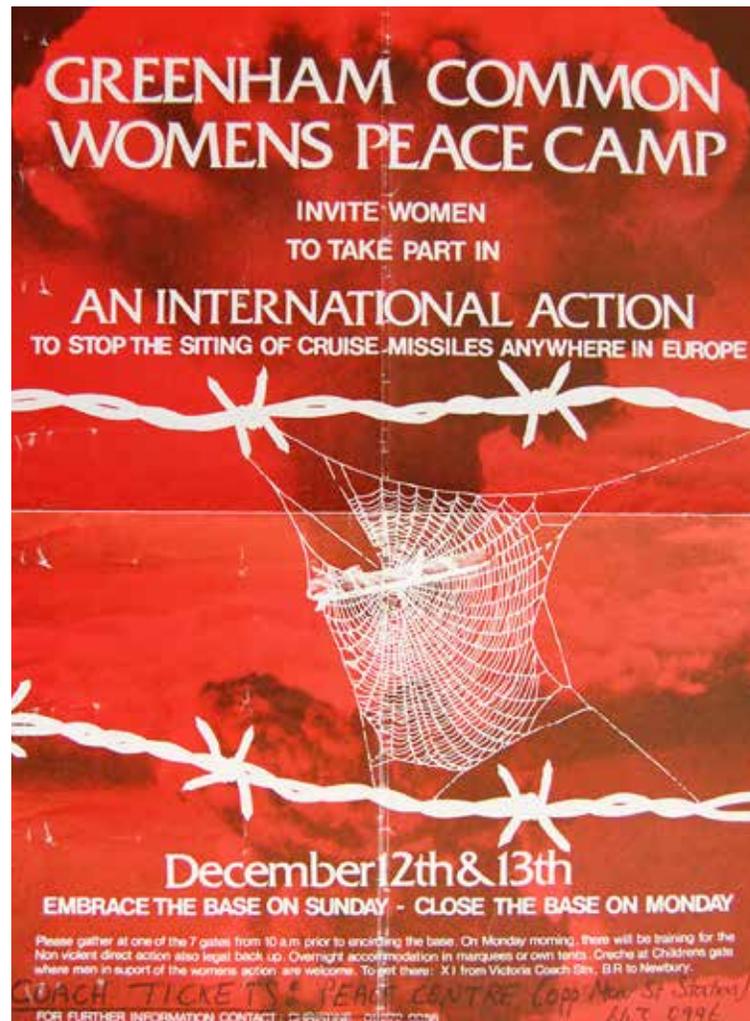
'WITCHY, UNARMED WOMEN DANCING ON A MISSILE SILO'

- 42| **GREENHAM COMMON WOMEN'S PEACE CAMP.** [Embrace the Base] *Greenham Common Women's Peace Camp Invite Women to Take Part in an International Action to Stop the Siting of Cruise Missiles Anywhere in Europe. December 12th & 13th. Embrace the Base on Sunday. Close the Base on Monday.* [England, 1982]. *Poster (420mm x 580mm). White text and graphic of a missile caught in a spider's web superimposed over a grey and red photograph of the mushroom cloud over Nagasaki. Marker pen notes at the bottom of the poster give contact details and instructions for travelling to the camp by bus from Birmingham. Light creases from old folds into four, some slight surface scuffs. Very good condition.* **£1,750**

A rare poster advertising Embrace the Base, one of the key mass actions at the Greenham Common Women's Peace Camp. We have been able to locate only two other copies in institutional collections, at the LSE Women's Library and the Glasgow Women's Library.

The Greenham Common protest was established in September of 1981 by the Welsh group Women for Life on Earth, who were opposed to the deployment of nuclear-tipped Cruise missiles at the site. What was initially planned as a single march became a permanent protest camp in place until the year 2000, one of the most significant and longest lasting protests of the 20th century. In February 1982, for political reasons, the camp was made women only, and the following month they engaged in their first blockade of the base. Embrace the Base was their next major action. Taking place on December 12th & 13th, 1982, it saw 30,000 women from across the UK—drawn by chain letter, word of mouth, and posters such as this one—join hands to surround the nine-mile perimeter fence. This copy of the poster seems to have been used in Birmingham, and includes instructions for obtaining coach tickets at the 'Peace Centre (opp New Street Station)', as well as local activist phone numbers, in marker pen.

As well as being an early and rare example of Greenham Common ephemera, this poster is particularly interesting in that it features a spider web, 'a frequently reoccurring symbol in Greenham women's cultural imaginary' because of its mythological and symbolic associations. 'The metaphor of "building a web" and being connected to each other in a "web-like structure"



populated Greenham women's speech and writing. Alison Young describes Greenham women's reclamation of the spider as revolving primarily around the notion of the spider's web. She writes that the web "shows connections between women or between ideas; it can be begun at any point or at any time; each single strand is weak and fragile, yet when interwoven it is strong, beautiful and efficient" (Feigenbaum, quoting Young, 1990, 38).

The Greenham Common camp had no hierarchy, and its nature was defined by the thousands of individual women who visited when they could or lived permanently onsite for years. The activists engaged in non-violent resistance by disrupting movement in and out of the gates, cutting down portions of the fence, and trespassing on military property, and they endured frequent police raids, arrests, and evictions. A large number of the protesters were middle aged and older; they considered themselves ordinary mothers and working women, and made

a point of the fact that their opposition to nuclear weapons was deeply personal. Their gender was crucial to their message. As Suzanne Moore put it in a remembrance for *The Guardian*, 'a woman's place was not in the home, but at a protest. Women could use their identity as carers and mothers to say, this is about the future safety of our children. We weaponised traditional notions of femininity' (Moore).

'Greenham was powerful. It taught my generation about collective action, about protest as spectacle, a way of life, incredibly hard but sometimes joyous. Still the image of resistance for me is not the famous photograph of a striking miner confronting a policeman at Orgreave, it is the picture of Greenham women dancing in 1982: witchy, unarmed women dancing on a missile silo. This magical, powerful image shows how the peace camp both played on traditional images of the feminine and then subverted them. Greenham created an alternative world of unstoppable women. It changed lives. (Moore, 2017).

Feigenbaum, *Tactics and Technology: Cultural Resistance at the Greenham Women's Peace Camp*. PhD thesis, McGill University, April 2008; Suzanne Moore, "How the Greenham Common Protest Changed Lives, *The Guardian*, March 20th, 2017.

- 43| **GREENHAM COMMON WOMEN'S PEACE CAMP. SURYANINOV, Ruben.** Greenham Common – Peace. Moscow: "Poster", October 1984. Poster (480mm x 670mm). Illustration in blue, black and white depicting two female activists. Light rubbing and a little minor creasing at the extremities. Excellent condition. £750



A stylish and uncommon Soviet agitprop poster celebrating the Greenham Common Women's Peace Camp.

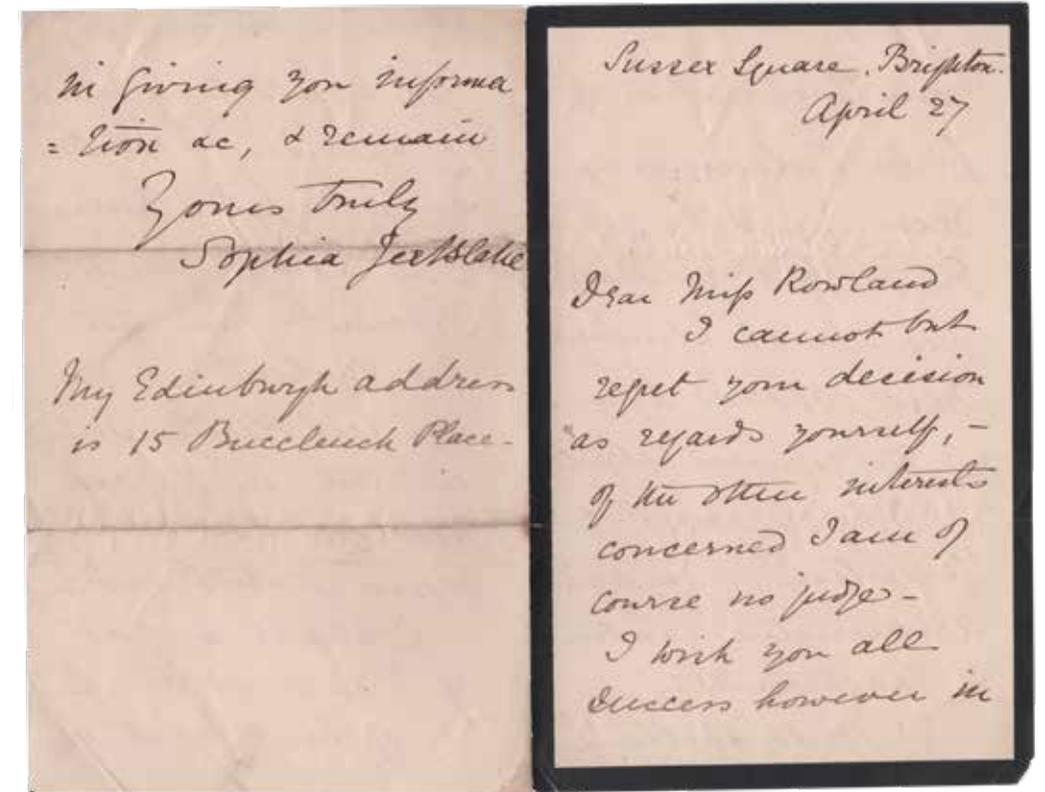
During the early 1980s, in response to Soviet arms stockpiling in Eastern Europe, NATO began siting nuclear-tipped Cruise missiles in Western Europe. In turn, the Soviet Union supported and infiltrated the growing Western anti-nuke movements, and also regularly used peace propaganda at home which positioned the US and NATO as the aggressors. This particular poster, depicting two women whose clasped hands smash the perimeter fence at Greenham Common, is an excellent example of the genre and in superb condition. It was designed by the noted poster artist Ruben Suryaninov, who graduated from the Art Academy of Latvia in 1956 and specialised in public health and social subjects.

- 44 | **HART, Alice.** Extensive archive of over 230 letters to the noted social reformer and hygienist, including over 50 from notable female contemporaries including Elizabeth Garrett Anderson, Octavia Hill, Sophia Jex-Blake, Sophie Willock Bryant and Louise Whitfield Carnegie, together with some 26 letters from those in the medical profession, over 70 from leading architects, politicians, philanthropists, men of industry, merchants, artists, Irish campaigners, some 50 relating to business matters, covering a range to topics relating to her reform activities, her work with the Donegal Industrial Fund, though several offering condolences on the death of her husband, and spanning a period between 1872 and 1923. Collection of over 230 ALS, predominantly octavo, usually penned legibly on headed stationary, sometimes on mourning paper, generally a little dust-soiled and spotted, one or two with small marginal tears or loss of corners, a couple with evidence of having been previously mounted; a fuller list available upon request. **£3,800**

An extensive collection of autograph letters penned to the noted social reformer Alice Marion Hart, *née* Rowland (ca. 1850-1931). Of particular interest, over 50 of the letters have been received from women, provides a fascinating insight into the intellectual circle of female activists, pioneers and reformers of the late 19th century.

Ranging in date from 1872 (before her marriage), up until 1923, and with a significant proportion dating from around 1898/9 (after the death of her husband), the letters touch briefly upon her early studies, her reforming activities, her work with the Donegal Industrial Fund, and with a significant number being sincere and heartfelt letters of condolence upon the death of Ernest Hart in January 1898.

The daughter of a wealthy businessman, Alice was one of eight children, her sister Henrietta Barnett, also becoming a noted social reformer and educationalist. She studied medicine in London and Paris, and this training was to influence much of her later work. In 1872, Alice became the second wife of Ernest A. Hart (1835-1898) the former surgeon turned medical journalist, sanitary reformer and art collector. He is best remembered for his work as editor of the *British Medical Journal*, which transformed it from a comparatively modest, obscure, low-circulation, and impecunious medical weekly, into a large, prosperous, highly respected, and mass-circulation journal. As editor Hart intervened effectively in a number of socio-medical questions including baby farming, public health, military and naval medicine, vivisection, compulsory vaccination, medical education for women, the diet of the working classes, and several aspects of poor-law medicine. Alice shared many of his concerns, and her medical training ensured that she was an able collaborator in much of his work. A visit to Donegal in 1883 to write an official report on health conditions following a series of bad harvests and the Donegal Famine (1879-1883), prompted the pair to set up the Donegal Famine Fund.



Furthermore, Alice created the Donegal Industrial Fund, in order to revive cottage industries such as embroidery and weaving, and this led to her involvement in the Celtic Revival. She instigated a scheme whereby Irish women were encouraged to teach and produce embroidery, including what she called 'Kells embroidery', and she opened a shop in New Cavendish Street, London to sell Donegal products, in particular woven tweeds. At the same time she began experimenting with natural dyes, using plants and pigments from the Donegal region. Kells embroidery won the gold medal at the Inventions Exhibition in London in 1885. She translated Victor Cornil's *Manuel d'histologie pathologique* (*Manual of Pathological Histology*) in 1884, and also published an invalid diet book in 1895, and a travel work on Burma (*see below*).

The collection includes correspondence from some of the leading female reformers, physicians, philanthropists, and educationalists of the day. The largest group of letters, and the most significant, come from the pen of Octavia Hill (1838-1912), the English social reformer, a moving force behind the development of social housing and one of the three founders of the National Trust. Some 19 ALS (1 on a postcard) are found here, mainly penned in London and ranging in time from 1872-1898, discussing a range of topics relating to their social work, referring to co-workers or supporters, discussing matters of organization, publications (e.g. 1874 about 'those wretched articles. How poisonous such effusions are. How utterly they fail to recognise the poor as men & women, with spirits like our own ... it makes my blood broil ...'), with many also

relating to personal affairs (invitations, etc.). Three further letters from Hill appear to be addressed to Ernest Hart (re. the 'inserting of my paper in the Sanitary Record', 1877), with the final condolence letter penned to 'Yetta' clearly a close friend of the Harts'. Ernest was diagnosed with diabetes in the early 1880s, and his health declined steadily. This led to the amputation of his right foot in 1897, and he died on January 7th 1898. Hart was clearly held in high esteem, and the various letters of condolence all speak well of him, and also express admiration for the care given to him by Alice, and refer to the strain that that had clearly placed upon her.

Other correspondents include two letters from Elizabeth Garrett Anderson (1836-1917), the English physician and suffragist, and first woman in Britain to hold a (French) doctorate in medicine. The letters dated April 25th, 1882, and January 10th, 1898, refer to Hart's translation of Cornil's *Manuel d'histologie pathologique*, and then a letter of condolence. We find also a letter from Sophie Willock Bryant (1850-1922), the Anglo-Irish educator, feminist and political activist, and the first woman in Britain to receive a DSc in England.

Included is an interesting exchange of letters between Hart and Sophia Jex-Blake (1840-1912), the English physician, teacher and feminist, and first practising female doctor in Scotland and one of the 'Edinburgh Seven' campaigning for women's access to university education. The letter from Hart is dated April 26th, and is presumed to be written before 1873 as it is signed 'Alice Rowland'. After much 'anxious' consideration about her future plans, Alice politely declines an invitation to train in Edinburgh, stating that she is 'not at all sure of my physical strength & endurance & should like to test them before taking the first real step in my career. To accomplish this I think I could not do better than study nursing for six months in a London Hospital. The knowledge & experience thus gained would be of real benefit to me afterwards & I feel I should commence the medical student's work with a more certain assurance of not failing ... My determination has not wavered(?) in the least, sooner or later I trust you will see me a student in Edinburgh'. The reply from Jex-Blake is dated the following day, and opens with her regret at Hart's decision, before going on to question her plans '... I doubt whether you would gain much by spending 6 months as a Hospital nurse - the work is essentially different from that of a student, & you can feel little scientific interest in the cases till after you have begun to study medicine ...'.

Of interest to the social historian is the letter from Maria Susan Rye (1829-1903), English social reformer and promoter of emigration (esp. of young women living in Liverpool workhouses)

again at the time you wish to come I wish to go then if it is still open.
A pupil staff six months & pays a fee of five guineas to the Hospital.
I am truly
Yours
Ernest Anderson

Mrs Hart

Dear Alice,
I see there is no hope of my getting off this afternoon, even at the time you so kindly promised to call for me, so I write to save you the trouble of coming - Miss (one or two) are going but they will go early - Will you give my love to Yetta & tell her how sorry I am -
I am
Yours affly friend
Betanina Hill

16 West. Pl. St.
May 22nd/73.

from England to the colonies. Dated July 31st, 1878 and written in Peckham, the letter is written on the headed paper of the 'Emigration Home for destitute little gir[ls]' (there is a small loss at upper right corner): '... I send you a long Blue Book which I think will interest you ... I wish I could see you & have a long talk over my work ... I am being most cruelly & unfairly treated by this present government - & I cannot see an inch before me. Lord Derby will ask I hope in the Lords a couple of questions for me ...'

A full list of recipients is available upon request, but other female names of note include: Louise Whitfield Carnegie (1857-1946), wife of philanthropist Andrew Carnegie; Arabella Madonna Kenealy (1859-1938), physician and author on feminist topics; Olga Nethersole 1867-1951), English actress, theatre producer, wartime nurse and health educator; Frances Russell Reynolds née Plunkett (1835-1908), second wife of neurologist John Russell Reynolds; May Wright Sewall (1844-1920), American social reformer, suffragist and peace activist;

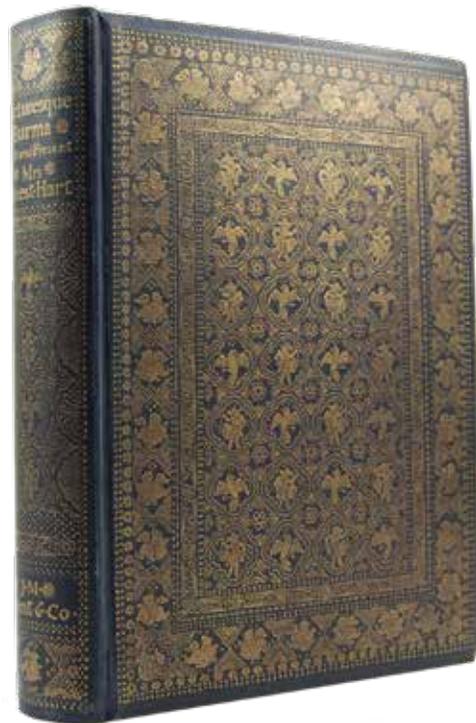
Frances Anne Spencer-Churchill, Duchess of Marlborough (1822-1899), Sir Winston Churchill's grandmother; Catherine Jane Wood (c1841-1930), pioneering nurse, who took part in the formation of the British Nurses' Association and the Invalid Children's Aid Association.

Notable names from her wider circle include: Charles Robert Ashbee (1863-1942), architect, artisan, art theoretician, and poet (on the headed paper of 'The Guild and School of Handicraft'); Arthur Balfour (1848-1930) Conservative politician and Prime Minister who when serving as Chief Secretary for Ireland suppressed agrarian unrest and made a government's contribution of £1,000 to the Donegal Industrial Fund; Laurence Binyon (1869-1943), poet dramatist and art scholar; James Bonar (1852-1941), Scottish political economist; John Buckley Bradbury (1841-1930), Downing Professor of Medicine; Sir Henry Charles Burdett (1847-1920), financier and philanthropist; Sir William White Cooper (1816-1886), the surgeon-oculist; Sidney Coupland (1849-1930), pathologist; Thomas William Cutler (1842-1909), architect, designer, and author; Michael Davitt (1846-1906), Irish republican and agrarian campaigner ('Irish Woollen Manufacturing & Export Co.');

Timothy Michael Healy (1855-1931), Irish nationalist politician, MP, & from 1922 first Governor-General of the Irish Free State; Thomas Cogan Horsfall (1841-1932), philanthropist and town planner, founder of the Manchester Art Museum; Inagaki Manjir (1861-1908), Japanese diplomat and political theorist; Sir Malcolm Alexander Morris (1849-1924) English dermatologist; Henry Joseph Moule (1825-1904), watercolour artist; James Orrock (1829-1913), Scottish illustrator and landscape watercolourist; Isambard Owen (1850-1927), Welsh medic and scholar associated

with St. George's Hospital, London; William John Ritchie Simpson (1855-1931), the Scottish Chair of Hygiene and Public Health and King's College who helped to found the London School of Tropical Medicine; George Murray Smith (1824-1901), publisher & editor of 'The Cornhill Magazine'; Sir Swire Smith (1842-1918), woollen manufacturer, educationalist and Liberal Party politician; Timothy Daniel Sullivan (1827-1914), Irish nationalist journalist, politician and poet; and Thomas Wardle (1831-1909), industrialist, known for his innovations in silk dyeing and printing on silk, and in particular for his collaboration with William Morris.

- 45| **HART, Mrs Ernest, [Alice].** Picturesque Burma Past & Present. London. J. M. Dent & Co. 69 Great Eastern Street, E.C. 1897. *Thick 4to, pp. xiv, 400; with ten photogravures (retaining tissue guards and including frontispiece), 37 full page half-tones, two coloured maps, and numerous half tone images throughout the work; some occasional light foxing and soiling, but generally clean and crisp; partially uncut (fore- and tail-edge), in the original decorative blue cloth, expertly recased and rebacked retaining original spine, with new endpapers, covers and spine elaborately tooled in gilt, top edge gilt, cloth a little dulled, extremities lightly rubbed and bumped; a good copy.* **£400**

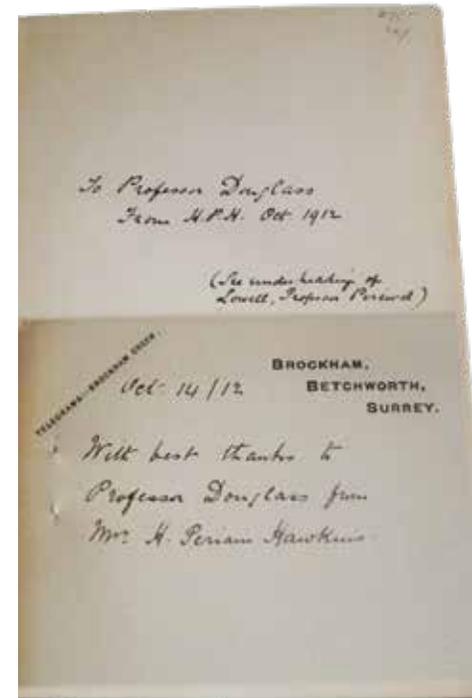


First edition of this extensive and copiously illustrated travelogue. 'When accompanying my husband on a tour through Burma in the spring of 1895, I had no intention whatever of writing a book on the people and country. We paid our visit solely in pursuit of health and enjoyment. I embodied my impressions in some articles published in the Cornhill Magazine, the Queen, the Saturday Review, the Album, and the Hospital, fragments of which papers are intercalated in the text. It was not until some time after my return, that finding how little was known at home of the beautiful country and interesting people of Burma, I undertook the task of writing a book on the subject' (Preface).

It was at about this time that Ernest Hart was diagnosed with diabetes. His health declined rapidly over the next couple of years, and the present work was penned whilst also caring full time for her husband. Illness led to the amputation of his right foot, and he passed away in the following year.

- 46| **HAWKINS, Hester Periam.** A.B.C. Guide to Astronomy. Second Edition. London: Simpkin, Marshall, Hamilton, Kent & Co., Ltd. Bedford: Beds, Times Publishing Co., Ltd. [n.d. but ca. 1912.] *Octavo, pp. [iv], 119, [1]; with frontispiece photograph of the Western Zodiacal Light; lightly browned otherwise clean and crisp; small pencil annotation at tail of Preface by presentation recipient; in contemporary green fine grained cloth, upper cover and spine lettered in white, spine a little sunned and cockled, head and tail of spine a little bumped, covers very slightly scratched, extremities lightly bumped and rubbed; presentation copy from the author with her inscription on front free endpaper to 'Professor Douglass', with further thank you card from author to Douglass loosely inserted* **£150**

Second edition (seemingly published in the same year as the first) of this practical, portable and popular glossary of astronomical terms for young students, the work of the British astronomer Hester Periam Hawkins (1847-1928). Of particular appeal, the present copy is a presentation to Professor A. E. Douglass, who had contributed a photograph to the work, as noted in the Preface.



'In this Second edition, the errors, typographical and otherwise, of the first issue have been corrected and the book has been brought up to date under the supervision of Dr. A. C. D. Crommelin, of Greenwich Observatory, who has kindly read and revised the proofs ... By the courtesy of Professor Douglass a remarkable photograph of the Zodiacal Light has been added. The winged appearance of the stars shining through the glow is due, Dr. Crommelin explains, to the large extent of the sky covered to show the limits of the Light' (Preface). Hawkins gives further credit to his work on p. 57 (also seemingly an addition to this second edition): Douglass had assisted Percival Lowell in his studies of Mars.

Hester was married to the Wesleyan Minister Rev. Joshua Hawkins in 1869, the couple subsequently moving from Oxford to Bedford, where he served as Mayor and was part owner of the local newspaper. Together they had six children, and the couple were much involved in philanthropical and charitable work, working tirelessly to improve and develop the town, focusing in particular upon improvements to housing. After Joshua's

death in 1892 at the age of 46, Hester continued their benevolence work, in addition to penning a number of books, both spiritual and astronomical, including *The Home and Empire Hymn Book* (1885), *The British-Israel A.B.C.* (1920), *The Star Almanac* (1911), *Astronomy for Busy People* (1922) together with the present work, which went through thirteen editions. As a result of her astronomical works, she was awarded the honour of a Fellowship of the Royal Astronomical Society on January 14th, 1921. She was Vice-President of the Bedford Women's Liberal Association, and a life long supporter of the temperance movement.

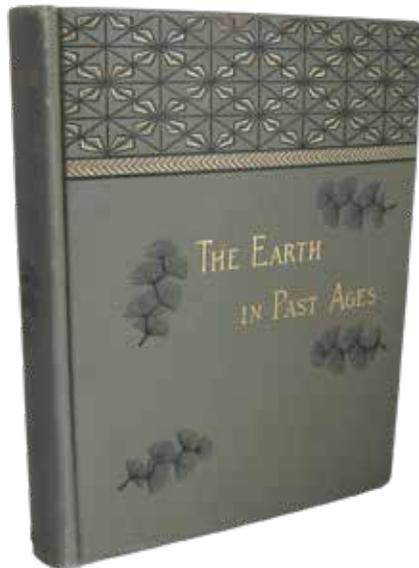
BY A DARWIN CORRESPONDENT

- 47| **HERRICK, Sophie Bledsoe.** *Earth in Past Ages.* New York: Cincinnati: Chicago. American Book Company, Copyright by Harper & Brothers. 1888. Octavo, pp. [ii] initial blank, viii, 241, [1] blank; with numerous text engravings, several full-page; in the original decorative grey publisher's cloth, head and tail of spine a little bumped, small stain on upper cover; an attractive bright copy. **£100**

First edition of this appealing introduction to geology for young children, by the noted science writer, accomplished botanist, editor, and Darwin correspondent Sophie Bledsoe Herrick (1837-1919). A contemporary of Mary Treat (1830-1923), another Darwin correspondent and fellow naturalist, Herrick pursued an early interest in evolutionary theory by studying biology at Johns Hopkins University, and went on to publish a number of scientific articles, notably on carnivorous and insectivorous plants, in both the *Century* and *Scribner's Magazine*. Her other work of note, *The Wonders of Plant Life Under the Microscope* (1883) also proved popular.

'From 1868 to 1872 Sophia Bledsoe Herrick headed a Baltimore girls' school; thereafter she contributed to the *Southern Review*, which her father edited, as writer and associate editor. Always

interested in the natural sciences, she took a biology course at Johns Hopkins in 1876 and became fascinated with the microscope. Soon her articles on cell biology appeared in the *Southern Review*, otherwise often devoted either to defending the South or to dogmatic feuds between her father and other Methodist Episcopal theologians. Herrick also wrote on the religion and history of India and about prominent women, including the novelist George Eliot and the astronomer Caroline Herschel. When her father died in 1877, Herrick replaced him as editor ... Herrick made her most valuable contribution as an author of science books for children. *The Wonders of Plant Life Under the Microscope* (1883), *Chapters on Plant Life* (1885), and *The Earth in Past Ages* (1888) are notable for their forthright, clear style' (ANB).



- 48| **HERSCHEL, Caroline.** *Account of the discovery of a new comet.* By Miss Caroline Herschel. In a letter to Sir Joseph Banks, Bart. K.B. P.R.S. Read November 12, 1795. [IN:] *Philosophical Transactions of the Royal Society of London.* For the year MDCCXCVI. Part I. London, Sold by Peter Elmsly, Printer to the Royal Society. 1796. Large 4to, pp. 131-132; entire journal pp. vi, [ii], 277, [1] errata, 26 'Meteorological Journal'; with seven folding engraved plates; some occasional light browning but generally clean and crisp; uncut and stitched as issued in the original blue wrappers, spine considerably chipped and worn with loss, upper lower corner torn and missing, covers a little soiled; still a good copy in the original binding. **£1200**

One of a number of significant astronomical announcements published in the *Philosophical Transactions* by the noted astronomer Caroline Lucretia Herschel (1750-1848). 'Only when William was away from home did Herschel have the chance to work on her own. It was during these times that she discovered eight comets over the period 1786-1797. After her discovery of the first comet, she became the pet of the astronomical community. Her growing fame had a practical result, for in 1787 she was granted a salary of fifty pounds per year by the king, as official recompense for her work as William's assistant' (Ogilvie).

Herschel left Hanover in the early 1770s to follow her brother William to England, where at the time he was an organist and music teacher in Bath. Initially he assisted with her musical training, but increasingly he devoted himself to her scientific education, whilst at the same time developing his own great interest in astronomy. 'In the ten years following Caroline's arrival, the course of his career changed from musician to King's astronomer and celebrity. In 1773 he attended the lectures of James Ferguson, then on tour in Bath, and read his published work. Caroline was told all about it and he started giving her mathematical tuition when and how he could' (Phillips p. 160). Under her brother's tuition she became an independent astronomer of international reputation in her own right, though her own work frequently played second fiddle to that of her brother, Caroline not only running the household and caring for her brother, but acting as his amanuensis. It was a role that she did not always find easy to fulfil, describing herself once as 'a well-trained puppy-dog', doing simply what her brother commanded. 'I was a mere tool which he had the trouble of sharpening' (Alic). Her best known work is her *Index to Flamsteed's Observations of the Fixed Stars*, published by the Royal Society in 1798. 'In 1828 the Gold Medal of the Royal Astronomical Society was voted to her, and this distinction was crowned with the even greater one of an honorary membership of the Society ... It was somewhat wryly that Caroline, the young girl who wanted nothing more than to be a governess, acknowledged herself in old age as a professional scientist' (Phillips). 'Never has a woman scientist so underestimated her own abilities and denied her own accomplishments; caught, as she was, in the contradiction between her achievements and the prevailing social attitudes that defined women's role in science as that of uncredited assistant ... [she] occupies a unique place in the history of women in science. Her personality, her relationship with her brother William, her attitudes towards science in general - and toward

her own scientific achievements in particular - present a tangle of contradictions. Yet without any systematic education or training she became a great astronomer, and helped to open up astronomy to other women of the nineteenth century' (Alic).

In addition to Caroline's announcement, the present journal includes further significant contributions notably by her brother William Herschel: *On the method of observing the changes that happen to fixed stars* (pp. 166-226); Simon L'Huilier, *Manière élémentaire d'obtenir les Suites par lesquelles s'Expriment [sic] les Quantités Exponentielles et les Fonctions Trigonométriques des Arcs Circulaires*. (pp.142-165) and John Lloyd, *An Account of the late discovery of Native Gold in Ireland ... in a letter to Sir Joseph Banks* (pp. 34-37); Abraham Mills. *A Mineralogical Account of the Native Gold lately discovered in Ireland. IN a letter ... to Sir Joseph Banks* (pp. 38-44, with a double-page engraved 'sketch of the Gold Mine).

Alic pp. 125-133; Ogilvie, I. pp. 587-9 (citing this publication); Phillips, pp. 159-162; Proffitt pp. 255-256; Yount, p. 124.

INDEBTED TO WAKEFIELD

- 49| **[HOARE, Sarah.]** A poem on the pleasures and advantages of botanical pursuits, with notes; and other Poems. By a Friend to Youth, addressed to her pupils. Bristol: Printed by Philip Rose. [ca. 1826.] *Duodecimo*, pp. [ii], xi, [i], 134; some occasional light spotting and soiling, otherwise clean and crisp; with contemporary annotated slip tipped-in; with later ownership label on front paste-down; a very good copy in original pale drab boards. **£800**

First edition of this attractive provincially printed volume by botany teacher and Quaker Sarah Hoare. Hoare's poem first appeared as an addendum to Priscilla Wakefield's *Introduction to Botany* (1818), but is here accompanied by sundry other poems and an introduction. In this, which is addressed to her pupils, Hoare emphasises her indebtedness to Wakefield's work—'it was the first book of the kind I had read on the subject'—and explains that a change in her financial circumstances has necessitated her publication of the present work.

Hoare taught the daughters of Quakers in Ireland for many years before returning to Bristol where she continued the work. For her, 'botany was connected with the ideas of personal and social usefulness' and the work takes on a maternal tone, with the medicinal properties of plants emphasised that they might be of use to those students of hers who have had children of their own. As Samantha George has recognised, Hoare's poem 'posits a trustworthy science reliant on Quakerly practices of proof and honesty'.

Jackson, *Romantic Poetry*, p. 515; Jackson, *Romantic Poetry by Women* p. 160; see Samantham George, *Botany, Sexuality and Women's Writing, 1760-1830*, (Manchester UP, 2007) pp. 6-63; COPAC lists just four copies in the UK, at the British Library, Durham, Society of Friends and St. Andrews, to which OCLCt adds Haverford College, Miami, Stanford, UCLA, and Yale, in the US.

- 50| **HOFFLEIT, Dorrit.** *Misfortunes as Blessings in Disguise. The Story of My Life.* Cambridge, MA: The American Association of Variable Star Observers, 2002. *Tall quarto*, pp. [vii]-xvii, iii, [1]-176, [4]. *Original blue cloth, titles to spine and upper board gilt. Minor bump to lower corner. A superb, fresh copy.* **£100**

First edition, first printing of the autobiography of distinguished astronomer Dorrit Hoffleit. Presentation copy inscribed by the author on the title, 'Best wishes to Nancy Hawk, affectionately, Dorrit Hoffleit'.

After graduating from Radcliffe College, Hoffleit (1907-2007) became a research assistant at the Harvard College Observatory, where she 'compared photographic plates to find new variable stars and determined their light curves. She discovered about 1,000 new southern-sky variables' (Ogilvie). Observatory Director Harlow Shapley encouraged her to get a PhD, which she completed on the spectroscopic absolute magnitudes of stars, and she was then appointed a research associate at Harvard. Hoffleit's career was interrupted by the Second World War, when she worked as a mathematician at the Aberdeen Proving Grounds Ballistics Research Laboratory, returning to Harvard in 1948.

Hoffleit spent the second half of her career as a senior research astronomer at the Yale Observatory. 'A tireless observer, she studied bright stars, or the roughly 11,700 stars that can be viewed without the aid of a telescope, and compiled several editions of *The Bright Star Catalogue*.

The book and a supplement, published by Yale, list the positions of the stars and describe their color, brightness, motion and velocity, with extensive notes about past names of stars and how they were discovered ... A colleague, William F. van Altena, an emeritus professor of astronomy at Yale, called the work 'the ragged-eared blue book that's always open on an observer's desk'" (*New York Times* obituary, April 23rd, 2007).

In 1956 Hoffleit became director of the Maria Mitchell Observatory, using 'the observatory's resources to fund summer jobs for women undergraduates who were doing variable star research. Many women astronomers began their careers in this program' (*ibid*). In 1988 she was awarded the American Astronomical Society's George Van Biesbroeck Prize for extraordinary service to astronomy, and she received its Annenberg Prize for science education in 1993.

Ogilvie, I. p. 607.



51| **[JOHNSON, Amy]. GILBERT, Joseph George (words) and Horatio NICHOLLS (Music).** Amy. Specially composed for the home-coming of the heroine of the England-Australia Flight 1930. Miss Amy Johnson. Words by Jos. Geo. Gilbert, Music by Horatio Nicholls, Photo by Vaughan [Kay] & Freeman [Pearl]. [London, Copyright in all Countries, MCMXXX, by The Laurence Wright Music Co., Denmark Street, London, W.C.2.] 1930. *Single folded sheet, large 4to, pp. [4]; music score on pp. 2-3, with vertical column of advertisement down central fold; paper somewhat browned and soiled; advertisement on p. [4]; with photographic depiction of the aviator with her plane on upper cover, front lower corner folded over and with a tiny nick, small tear at the top edge without loss, very faint retailer's stamp on the front cover.* **£125**

An appealing ephemeral item: an arrangement 'for "Banjulele" Banjo and Ukele' of a song written by Gilbert and Nicholls commemorating the 'daring deeds' of Amy Johnson (1903-1941).

Born in Kingston upon Hull, Johnson graduated from Sheffield University with a degree in Economics, before moving to London where she trained at the London Aeroplane Club and obtained her pilot's licence in 1929. The following year she undertook the first woman's solo flight from England to Australia in the second-hand de Havilland 'Gypsy Moth' that she

bought with funds from her father and Lord Wakefield. She named it 'Jason' after the trademark of her father's business, and the celebrated plane is featured prominently on the front cover of this song sheet. She flew from Croydon Airport on May 5th., and arrived at Darwin, Northern Territory on May 24th. The aeroplane is now in the Science Museum.



Whilst celebrating her considerable achievements, the song can by no means be considered to be a classic of lyricism and musicality, and the verses jar somewhat with modern sensibilities. 'You deserve a lot of credit for your daring deeds ... You are just the kind of person that the country needs ... Yesterday you were a non-entity, Now your name will go down to posterity, Amy, wonderful Amy, how can you blame me for loving you?'

In 1940 Amy Johnson joined the Air Transport Auxiliary and in January 1941, in poor

weather conditions, had to bail out whilst on a ferrying mission, over the Thames. Her parachute was spotted by the ferry HMS Haslemere, whose commander, Walter Fletcher, dived in to rescue her but both died and Amy Johnson's body was never recovered. In 1999, a member of an anti-aircraft crew claimed that they had shot down the plane as Johnson had failed to give the correct identification code. To further compound the enigma, there have been claims that a third, unidentified, person died in the accident. He had been a passenger on the plane but as the reason for the flight is still covered by the secrecy laws, this remains unverified.

AMERICA'S FIRST PROFESSIONAL FEMALE ASTRONOMER

52| **KENDALL, Phebe Mitchell.** Maria Mitchell. Life, Letters, and Journals. Compiled by Phebe Mitchell Kendall. Boston: Lee and Shepard, 1896. *Octavo, pp. vi, 293, portrait frontispiece and 2 plates. Original blue cloth, titles to spine and top edge gilt, black coated endpapers. Contemporary gift inscription to the front blank. Title leaf unopened. Very lightly rubbed at the tips, a couple of tiny bumps at the edges. A fresh copy in excellent condition.* **£300**

First edition of the biography of Maria Mitchell by her sister, Phebe. A very attractive copy with a contemporary gift inscription from one woman to another, "Caroline C. Thorw (?) - presented by L. Annie Whitney".

America's first professional female astronomer credited her career to her childhood in Nantucket, where the sky overwhelmed the flat landscape, her love of mathematics, and the tutelage of her father, a respected amateur astronomer. She attended school until age sixteen, then taught herself from "Bridge's *Conic Sections*, Jutton's *Mathematics*, and Bowditch's *Practical Navigator*; she studied the works of Lagrange, Laplace, and Legendre in French; and she carefully considered Gauss's *Theoria motus corporeum coelestium*" (Ogilvie).

Mitchell was first acknowledged as a leading astronomer when, in 1847, she observed a new comet and was awarded a gold medal by the King of Denmark. She was elected the first female member of the American Academy of Arts and Sciences and the American Association for the Advancement of Mathematics. After working for nineteen years as a computer for the *American Ephemeris and Nautical Almanac*, she toured Europe and met many of the scientific luminaries of the day, including Mary Somerville.

In 1865 Mitchell was appointed professor of astronomy and director of the observatory at the newly founded Vassar College in Poughkeepsie, and for the rest of her life was 'committed to the cause of higher education for women'. Her experiences as a teacher convinced her that women 'could excel in areas beyond mere "stargazing"—that they could penetrate to the heart of the subject, mathematics' (Ogilvie). A number of female schools in Antebellum America were well equipped with astronomical apparatus, and Vassar College was one of a number to have its own astronomical observatory. In a paper read at an 1876 meeting of the Association for the Advancement of Women, she argued that 'because so few women had been given the educational opportunities that would have fully developed their abilities in science, it was unfair to compare the scientific achievements of men and women' (*ibid*).

Mitchell's own contributions were highly theoretical. She made a number of important observations of the sun, eclipses, and sunspots, postulating that 'changing sunspots indicated that they were rotating vortices in the solar surface' (*ibid*). Her observations of Jupiter led her to consider, at a time when most astronomers believed it was a rocky planet with a cloud layer above, 'that the body of the planet itself was composed of clouds—clouds that were seething upward and downward and moving at different rates' (*ibid*). Among her other insights were that Saturn and its rings were composed of different materials; that nebulae might be variable and that a pair of nebulae in the Great Bear might be revolving around each other; and that the different colours of stars might reflect their different chemical compositions.

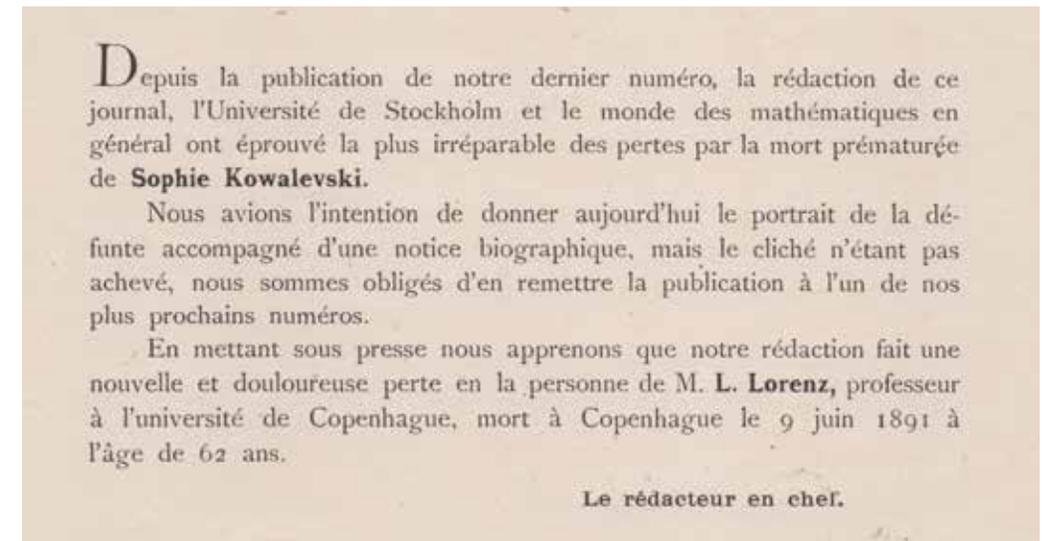
For more on Maria Mitchell see Ogilvie II, pp. 901-904; Proffitt pp. 395-396.

BATTLING AGAINST THE 'HORROR OF LEARNED WOMEN'

- 53| **KOWALEVSKI, Sophie.** Sur une propriété du système d'équations différentielles qui définit la rotation d'un corps solide autour d'un point fixe. [in:] Acta Mathematica. Zeitschrift herausgegeben von G. Mittag-Leffler. Volume 14. Stockholm ... 1890-1891. 4to, pp. 81-93; entire volume, pp. [iv], 375, [1] blank, [4], including notice referring to Kowalevski's premature death; lightly browned throughout, due to paper quality; library stamp on title-page; bound in contemporary plum publisher's cloth over marbled boards, spine ruled and lettered in gilt, head and tail of spine a little bumped, spine lightly sunned, extremities bumped and lightly worn. **£500**

A refinement of her significant work of the previous year, on the subject of non-symmetrical bodies rotating around a fixed point, which had opened up a whole new area of theoretical mathematics and for which she had received the prestigious Bordin Prize from the French Academy of Sciences. In this subsequent paper, she reported new results, and it too was awarded a prize, this time by the Swedish Academy, and she was offered a lifetime appointment at the Stockholm University. 'This mathematical work became relevant to both theoretical and applied mechanics as well as to research in mathematics' (Grolier).

'An outspoken nihilist, a woman who flouted social conventions much of her life and wanted a university education, a litterateur, and a mathematician of great accomplishment are perhaps apt descriptors of Sophie Kowalevski (1850-1891)' (*ibid*). She studied mathematics and physics in secret, and was eventually permitted to pursue formal mathematical studies, in spite of her father's 'horror of learned women' (*ibid*). Extreme measures, however, were required to fulfil her dreams. Running away from home, she entered into an ultimately unhappy marriage of convenience to Vladimir Kowalevski, which enabled her to travel first to St. Petersburg and then to Vienna, in search of academic study. The path eventually led to Berlin where she met the prominent mathematician, Karl Weierstrass, who although opposed to admitting women to the university, agreed to give her weekly tutorials. These continued for almost four years, and in 1874, Weierstrass arranged for her to receive a doctorate in



mathematics - the first by a woman in Europe - from the University of Göttingen. In 1879 she met the Swedish mathematician Gosta Mittag-Leffler, who was inspired to find her an academic position. The death of her husband in 1883 allowed her to take up a position as lecturer at Stockholm University. Only a few of her writings have been translated from Russian. Two subjects became the focus of study in particular: the theory of partial differential equations and the theory of motion of rotating bodies in a

gravitational field. Although her published output is small, numbering less than a dozen papers, over the next few years her significant mathematical papers eventually led to her obtaining a permanent position at the university. Tragically, she died only a few months later of pneumonia at the age of 41, in 1891. The final leaf of this journal notes and mourns her passing.

Alic, pp. 163-173; Grolier, *Extraordinary Women*, pp. 81-85, and item 78; Proffitt pp. 298-300.

- 54| **LAWICK-GOODALL, Jane.** Innocent Killers. London: Collins, St James's Place. 1976. 8vo, pp. 222, [2] blanks; with 26 leaves of photographs, numerous text illustrations, and decorative endpapers incorporating maps; some light foxing to endpapers, and along foreedges, but otherwise clean and crisp; in the original green cloth, spine lettered in gilt, with slight sunning to spine and extremities, some light edgewear, retaining the original pictorial photographic dust-jacket preserved in a removable dust protector, spine a little faded, with some light creasing and edgewear to foot of spine; from the private library of Richard Adams, with his attractive bookplate on front free endpaper, and inscribed to Adams by the author to title page: 'To Richard Adams, with much admiration for your books. Hugo van Lawick'. **£80**



First edition, first reprint (first 1970). A nice association copy, presented to the author of *Watership Down*, Richard Adams. An early joint work by the pioneering primatologist and conservationist, working together with her then husband, the wildlife filmmaker and photographer Baron Hugo van Lawick (1937-2002). Through his still photographs and files, Van Lawick did much to bring Goodall's studies at Gombe Stream National Park to an international audience and find wider acclaim.

In 1977, Jane Goodall founded the Jane Goodall Institute, which supports projects ranging from agroforestry to micro-lending to primate research. Roots and Shoots, a program the institute started in 1991, focuses on environmental education, encouraging young people around the world to make sustainable choices. Today, as she has for decades, she works tirelessly and travels some 300 days a year, speaking as an advocate for the environment and as a United Nations Messenger of Peace. Her message, though one of warning that humanity and the planet on which we depend are at a crossroads, is also flecked with hope that all is not lost.

Proffitt pp. 213-215.

LOOSENING THE 'SHACKLES OF CONVENTIONALITY'

55| LE BLOND, Elizabeth Aubrey. *Adventures on the Roof of the World*. Illustrated. London: T. Fisher Unwin, 1904. Octavo. Original green cloth, titles to spine and upper board gilt, illustration of a mountain landscape blocked in blue, green and purple to the upper board, top edge gilt, others untrimmed. Frontispiece and 31 plates of illustrations from photographs. Ownership inscriptions to the front pastedown and verso of the front free endpaper. Spine rolled, cloth a little rubbed and marked, spotting to edges of text block and occasionally to contents. Very good condition. **£125**

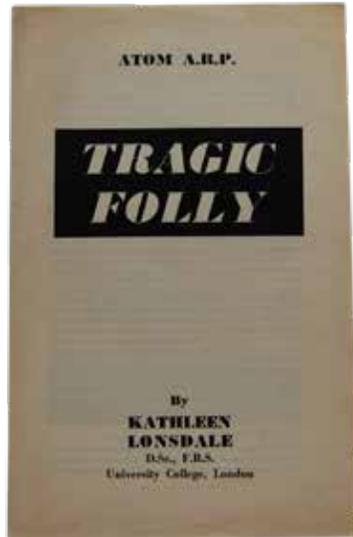


First edition, first impression of this attractive book on mountain climbing by the trailblazing female climber Elizabeth Aubrey le Blond (1860-1934).

Le Blond began climbing in the Alps following convalescence from a suspected case of tuberculosis. 'In Chamonix she made several walks with friends and soon was inspired to climb to the Grands Mulets ... In the summer of 1882 she returned and climbed Mont Blanc twice, as well as the Grandes Jorasses. Beginning in 1882-3, she made many ascents in winter with Eduard Cupelin, her guide, which she described in *The High Alps in Winter, or, Mountaineering in Search of Health* (1883), and *High Life and Towers of Silence* (1886). In this period her great-aunt Lady Bentinck wrote to her mother: "Stop her climbing mountains! She is scandalizing all London and looks like a red Indian!" Contemporary photographs show her climbing in a skirt that barely reached her knees. Le Blond later wrote in her memoir that "I owe a supreme debt of gratitude to the mountains for knocking from me the shackles of conventionality" (Le Blond, 90)' (ODNB). Le Blond founded the Ladies' Alpine Club and became an expert photographer, illustrating her books with her own photos. She was active in a number of winter sports and became the first woman to pass the men's ice-skating test, resulting in separate tests for men and women being abolished. She was also among the first people to make bicycle tours of the alps, and she raced early motor cars.

See <http://womensmuseumofireland.ie/articles/elizabeth-lizzie-le-blond--2>; Rosemary Raughter, *Elizabeth Hawkins-Whitshed of Killincarrick: a Victorian lady in the High Alps* (www.countywicklowheritage.org).

- 56| **LONSDALE, Kathleen.** *Tragic Folly* [Published by the Peace Pledge Union who members are pledged to ‘renounce war and never support or sanction another’. The Union seeks fresh adherents to its pledge and invites you to write to 6 Endsleigh Street, London, W.C. 1. (EUSton 5501). Printed by C.A.P. 1949. Single folded octavo sheet, pp. [iv]; lightly browned and soiled, upper margin a little creased with small 1cm vertical tear, slightly dog-eared. **£85**



Scarce pamphlet highlighting the futility of civil defence precautions and plans in the event of an atomic war, by the noted British crystallographer and renown peace activist Kathleen Lonsdale (*née* Yardley, 1903-1971).

Yardly completed her degree in physics at ULC in 1923, and took up a research position under William Henry Bragg, the Nobel Laureate studying organic compounds using X-ray crystallography techniques. Following Bragg to the Royal Institution, she married her fellow research student Thomas Lonsdale in 1927, and after a brief time in Leeds, the couple returned to London, Kathleen once again becoming a research assistant to Bragg. ‘Here she remained ... until his death in 1942, paid by a series of grants and fellowships. She then worked under Sir Henry Dale and was named a Dewar Fellow 1944-1946. She began to teach only in her forties, as reader in crystallography and then professor crystallography and head of department (1949) at University College, London. In 1945 she was elected among the first women Fellows of the

Royal Society, and she was honored with the society’s Davy Medal in 1957’ (Ogilvie). She is remembered in particular for her classic paper of 1929 on the first aromatic compound to be examined by crystallography, hexamethylbenzen, for her work on natural and artificial diamonds, and for her popular work of 1948 *Crystals and X-Rays*.

Lonsdale and her husband were committed peace activists and she opposed nuclear testing after World War I as a founding member of the Association of Atomic Scientists. ‘She served as its vice-president, and published a book, *Is Peace Possible*, in 1957, at the height of the Cold War. She also was president of the British Section of the Women’s International League for Peace and Freedom ... As a woman scientist, Lonsdale was a pioneer not only as an early member of the International Union of Crystallography (1966) and the first woman president of the British Association for the Advancement of Science (1968). Conscious of the difficulties of being a productive woman scientist, she commented that for a married woman scientist it was necessary above all to have “chosen the right husband” and to learn to concentrate “in any available moment.” She was named Dame Commander of the Order of the British Empire in 1956. In 1965, a rare artificially created mineral was named “lonsdalite” in her honour’ (*ibid*).

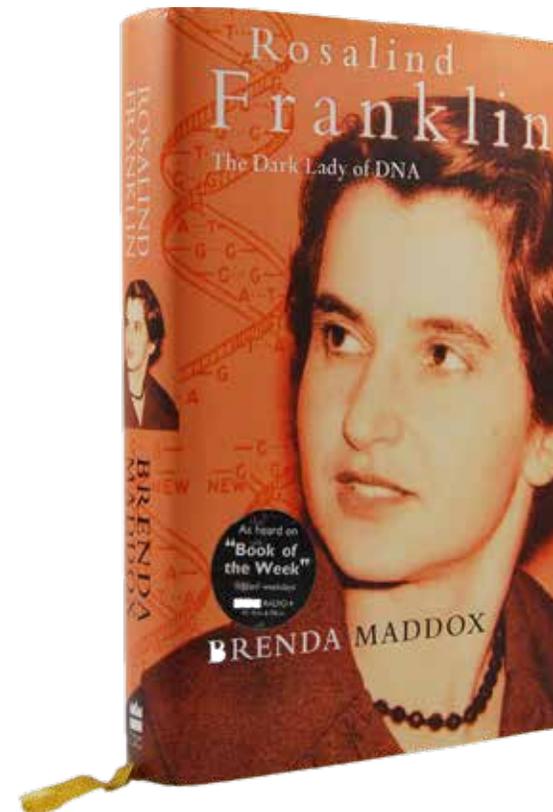
Ogilvie, I. p. 804; Proffitt pp. 333-335; Watts, p. 156-7.

- 57| **MADDOX, Brenda.** *Rosalind Franklin. The Dark Lady of DNA.* London: Harper Collins, 2002. Octavo, pp. [vi]-xix, [i], [2]-380, 8 plates. Original cream boards, titles to spine gilt, yellow bookmark. With the dust jacket. Possible remainder ink stamp to front pastedown, BBC radio 4 “Book of the Week” sticker to the jacket. A couple of tiny bumps, small spot to upper board, contents tanned. An excellent copy in the jacket with some minor creases at the extremities. **£100**

First edition, first impression. Signed by the author on the title, “Brenda Maddox, Edinburgh 2002”.

Rosalind Franklin (1920-1958) was an x-ray crystallographer whose research elucidated the microstructures of coal and virus RNA, but she is best known for the superb X-ray images of the DNA molecule that she made while working at King’s College, London. This work, in particular the famous “photograph 51”, was shown without her permission to James Watson and Francis Crick, convincing them that the structure of DNA was a double helix. Franklin’s

work was published third in the series of Nature papers that announced the discovery, and she received only vague acknowledgement from Watson and Crick at the time. She died of ovarian cancer a few years later, and it was only in 1961 Francis Crick admitted in a letter to Jacques Monod that hers was “the data we used” to determine the molecule’s structure (*Nature Correspondence* 425, September 2003). It wasn’t until several decades after her death and the award of the Nobel Prize to Watson, Crick, and Wilkins, that historians succeeded in bringing Franklin into the public consciousness as a key player in the discovery. This biography of Franklin, one of the major contributions to her enhanced public profile, was shortlisted for the Whitbread Biography Award and received the 2002 Los Angeles Times Book Prize for Science and Technology. **(biology/chemistry)**



- 58| **[MARCET, Jane.]** *Conversations sur la chimie, dans lesquelles les éléments d'une manière simple, et éclaircis par des expériences. Traduites de l'anglais sur la dernière édition. Avec des notes et des gravures. Tome Premier [Tome Troisième].* A Genève, Chez Manget et Cherbuliez, libraires. 1809. Three volumes, duodecimo; pp. xxvii, [1] blank, 372; with engraved frontispiece and 8 engraved plates; pp. [iv], 293, [1] blank, with one engraved plate; pp. [iv], 344, [xxv]-[xxviii] duplicated table of contents from volume 1, [2] errata and blank; cancel at A11, with two engraved plates; light foxing and spotting throughout, but overall clean and bright, pp. 339-342 of final volume detached; uncut in the original blue paste-paper wrappers, with waste-paper pastedowns, with printed paper spine labels, head and tail of spines slightly split and worn, spines of Vol I and II cracked with noticeable splits but holding, covers a little sunned and scuffed, extremities slightly dog-eared; a most appealing and unsophisticated copy. **£450**



Uncommon first French edition, and a most appealing copy in the original wrappers, of Mrs Marcet's highly successful *Conversations on Chemistry* first published anonymously in two volumes in 1806, and the work which inspired Michael Faraday.

This French translation is once again published anonymously, and was published in the same year as the third English edition (from which the present translation presumably derives). Barbier then notes two further French editions an 1825 edition (translated from the 12th English edition) *La Chimie enseignée en vingt-deux leçons*, and then an edition of 1826 *Entretiens sur la chimie*.

'Of all the ladies who wrote scientific books in the first decades of the nineteenth century, two achieved lasting eminence. They were Mrs Jane Marcet and Mrs Mary Somerville. Mrs Jane Marcet (1769-1858) was a typical science student turned author. She was a Swiss lady whose husband, Alexander, a wealthy doctor, had retired to London to indulge his passion for chemistry. They moved in the best scientific circles in Britain and Europe. Encouraged by her husband, Mrs Marcet had begun attending the recently established lectures at the Royal Institution in London, among the first to be given there by Humphrey Davy. She had no academic or scientific background and, like most ladies, had to work up her subject from scratch. As she overcame her own difficulties, she hastened to smooth the way for others, particularly the many women whom she knew would have to undergo the same struggles as herself. To this end she produced



several of the most popular and influential scientific textbooks in the early nineteenth century' (Phillips, p. 110). Prior to *Conversations on Chemistry* elementary science texts were practically unknown, and it soon achieved enormous popularity and success, though the identity of the author was not made public until the thirteenth edition in 1837. It reached a sixteenth edition in 1853, and her works spawned a host of successful imitations and near plagiarisms with her highly successful use of the dialogue formula, most notably the *Conversations on botany* by the Fitton sisters Elizabeth and Sarah. Because the tutor in Marcet's work is named 'Mrs Bryan' or 'Mrs B', her work was sometimes ascribed to Margaret Bryan. The work was also translated into Spanish (1830), Italian (1825 and 1846), German (1829) with at least 15 American editions (though it was there referred to as 'Mrs. Bryan's Conversations').

Alic, pp. 176-178; Barbier 758; Blain p. 713; Duveen p. 389 (this edition); Phillips, pp. 110-111; Proffitt, p. 357-359; see Greg Myers, *Fictionality, Demonstration and a forum for Popular Science. Jane Marcet's Conversations on Chemistry* Chapter three [in] *Natural Eloquence*, edited by Gates and Shteir (1997).

- 59| **MARSHALL, Clara.** *The Women's Medical College of Pennsylvania. An Historical Outline.* Philadelphia: P. Blakiston, Son & Co., 1897. Octavo, pp. [ii], [8]-141, [3], portrait frontispiece. Original burgundy cloth, titles to upper board gilt, top edge gilt, others unopened. With the dust jacket. Cloth fresh and clean, contents faintly toned, slight dampstain to the top edge of the frontispiece. An excellent, unopened copy in the dust jacket with some small chips from the edges and small dampstain marks to the lower panel, the upper panel cleanly separated from the spine panel. **£450**

First edition, first printing. An exceptionally nice copy, the cloth fresh and leaves unopened, in the rare dust jacket.

The Women's Medical College of Pennsylvania, founded in 1850, was only the second institution in the world to offer medical degrees to women, the first being the New England Female Medical College, opened two years previously. The author of this history, Dr. Clara

Marshall, not only graduated from the school, but served as a highly effective administrator there for three decades.

Marshall (1837-1941) earned her medical degree in 1875 and 'must have been an exceptional student, for immediately upon graduation the College made her an instructor in materia medica' (*Changing the Face of Medicine*, US National Library of Medicine website). In 1882 she became a demonstrator in obstetrics at the Blockley Medical College for Men, part of the Philadelphia Hospital, where she lectured to large groups of male students. In 1886 she was elected dean of the Woman's Medical College, where she spent the next thirty-one years. 'In 1893, she oversaw an expansion of the College's curriculum from three to four years. Recognizing the importance of the new field of bacteriology, she established the first professorship in this science in 1896 and oversaw the construction of a well-equipped laboratory to train students in the field. Over the course of her tenure, the number of subjects taught at the college expanded dramatically and an entrance examination was introduced. But perhaps her most important legacy as dean of the college was to spearhead a campaign to expand clinical experience for women physicians and interns. Beginning the enormous task of providing the college with a teaching hospital, Dr. Marshall set out to generate funds and government support. By 1904, she had raised enough money to open the small Pavilion Hospital, staffed by Woman's Medical College faculty. Three years later, she presided over the beginnings of what would become the College Hospital, a seven-story modern building that was completed in 1913' (*ibid*).

Marshall retired in 1917, and in 1970 the Women's Medical College became the Medical College of Pennsylvania after opening its doors to men; it has now been merged with Drexel University.

A MATHEMATICS LESSON FOR YOUNG WOMEN

- 60] **(MATHEMATICS).** *The Young Arithmetician; or, The Reward of Perseverance.* Third Series No. 5. New York: Kiggins & Kellogg, ca. 1849-1855. Octavo, pp. 16. Original printed wrappers, publisher's ad to lower wrapper. Small engraving to the upper cover and title, 4 full-page engravings and 2 illustrations within the text. Wrappers tanned and dulled with some small spots, contents tanned with occasional spotting. Very good condition. **£100**

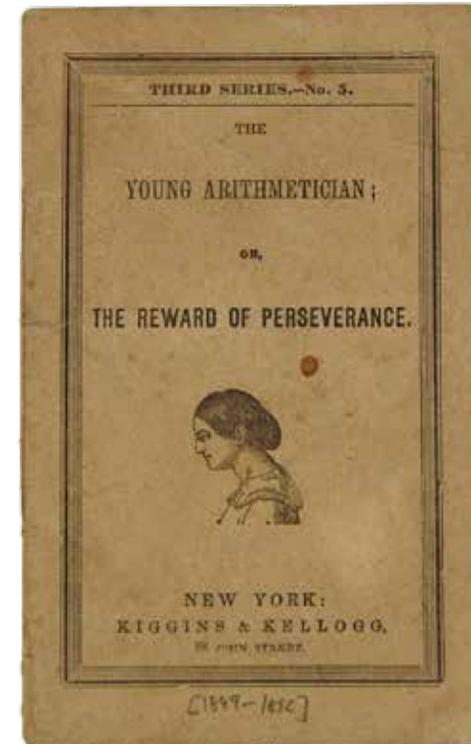
An usual and charming work on mathematics featuring a female protagonist, probably published during the 1850s.

The heroine of the story, Laura Sinclair, is described as 'an intelligent girl, studiously devoted to all her lessons except arithmetic. That to her was a hard, dry study.' Laura complains about her difficulties to her mother, who explains that when she was a girl she always copied from a classmate, resulting in an inability to do simple calculations as an adult. Laura decides to put her mother's advice into practice, and 'instead of being angry because she could not understand her figures, she tried to clear her brow to understand them better; and her tutor

was surprised to find her mind rapidly opening to comprehend the more difficult rules. She now felt the pleasure of self-conquest, besides the enjoyment of her mother's approbation, and steadily gave herself up to the several branches of mathematics'. Laura's success leads her tutor to describe her as 'a better accountant than most men' and she becomes confident

enough to volunteer to assist her father, a prosperous merchant, when his business falls on hard times. After a long evening of analysing the books together, she tells him that, 'You say you cannot afford a clerk ... Now you have tried me, father, and you know I am worth something. I will keep your books, and you may give me a little salary to buy shells for my cabinet'. Mr. Sinclair accepted the proposal, 'Laura's cabinet increased in beauty and the fine female hand in his books and papers was a subject of curiosity and interest to his mercantile friends'.

This pamphlet also includes a two-page story "Mary and Her Dove" on the last leaf. The publisher, Kiggins & Kellogg, was founded in 1848 and specialised in blank books and fancy leather goods. As a sideline they also published four juvenile series of twelve books each, this volume being number 5 of series 3. This copy can be dated to the years 1849-1855, when the firm was based at 88 John Street in New York. (education/mathematics)

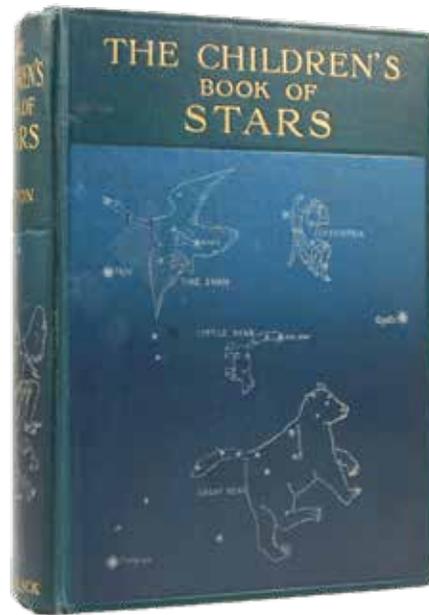


INSPIRED BY AGNES CLERKE

- 61] **MITTON, G[eraldine]. E.** *The Children's Book of Stars.* London: Adam and Charles Black, 1908. Octavo, pp. [iv]-xii, 207, [1], colour frontispiece and 16 plates of which 10 are in colour, engravings within the text, 12 page publishers ads at rear. Original blue cloth blocked in blue, white, and gilt with an attractive depiction of constellations on the upper board and the spine, top edge gilt, others untrimmed. Gilt prize stamp of the London County Council to the lower board and corresponding bookplate. Light rubbing and some spots and marks to the cloth, spine a little darkened, endpapers tanned, spotting to edges of text block occasionally affecting the edges of the contents, small spot to title, a couple of leaves carelessly opened not affecting text. Very good condition. **£75**

Second edition of this charming children's book on astronomy and the solar system, originally published the previous year, with unusual and attractive boards depicting constellations.

Geraldine Mitton was a novelist and author of non-fiction and children's books, and is best remembered for her 1905 biography, *Jane Austen and Her Times*.



Mitton was a friend of the popular astronomy author Agnes Clerke (1804-1907), who was awarded the Royal Institution's Actonian prize for her writings and was made an honorary member of the Royal Astronomical Society. In the introduction, Mitton writes that, 'Whatever merit there may be in the present work is due entirely to my friend Agnes Clerke, the well-known writer on astronomy; the faults are all my own. She gave me the impetus to begin by her warm encouragement, and she helped me to continue by hearing every chapter read as it was written, and by discussing its successor and making suggestions for it. Thus she heard the whole book in MS. A week after the last chapter had been read to her I started on a journey lasting many months, and while I was in the Far East the news reached me of her death, by which the world is the poorer'.

BOOK-READING BAD FOR THE HEALTH

- 62| **MOORE, Annie and Laura D. NICHOLS.** *Overhead; or what Harry and Nelly discovered in the Stars.* Introduction by Leonard Waldo. Boston, D. Lothrop and Company. [1878.] [offered together with:] **NICHOLS, Laura D.** *Underfoot, or what Harry and Nelly learned of the earth's treasures.* A sequel to *Overhead*. Boston, D. Lothrop and Company. [1881.] *Offered together, two works, 8vo; pp. 4, 3-247, [1] blank; with numerous text engravings, a number of which are full-page; lightly browned throughout due to paper quality, with some occasional light soiling, gutters exposed in a couple of places; Octavo, pp. [iii]-234; with numerous text engravings several full-page and including frontispiece; some occasional light soiling and foxing, inner gutter of p. 135 creased; both bound in the original chromolithograph pictorial publisher's cloth, embellished in gilt and silver, head and tail of spines a little bumped, covers a little dulled and soiled, corners lightly bumped, but overall a good copies. £285*



Offered together, the first editions of two attractively produced and charming primers on astronomy and geology, from the pens of Annie Moore and Laura D. Nichols, and both published as part of the Lothrop & Co., series *Natural Science for Young People*. Though written in the form of a story to be read and enjoyed, the opening of *Overhead* is somewhat curious, in that the protagonist Harry, is sent away to the country for the sake of his health, his mother concerned that he is too studious and spending too much time reading books! Indeed the Doctor issues the dire warning to not 'let him take a single book for six months, or you lose him' (p. 9). Perhaps not the most sensible advice to give as the author of a novel! Harry, his sister Nelly, and their chaperone Miranda Roseberry, a teacher, are sent away to New Hampshire. Through their outdoor adventures, and the conversations that ensue, the children ultimately learn more about the stars, the heavens above them, and the work of such noted astronomers as Newton, Copernicus, and Brahe, than they would by studying, in the words of a contemporary review of the book, 'a dry text-book'. The introduction and endorsement is penned by the astronomer, Professor Leonard Waldo (1853-1929), an assistant at the Harvard College Observatory, Cambridge, later also astronomer in charge of the horological bureau of the Winchester Observatory of Yale, and author of a number of scientific publications and papers.

Three years later, Nichols penned the sequel *Underfoot*, the pair enjoying further adventures which this time lead them to a better understanding of geology, caves, mining and precious metals.

The striking pictorial cover design for *Overhead* is the work of the noted book illustrator Edmund H. Garrett (1853-1929).

63| MORIARTY, Henrietta Maria Mrs. *Viridarium*; Coloured plates Greenhouse plants, with Linnean Names, and with concise rules for their culture. London: Printed by Dewick & Clarke, Aldergate- Street, for the Author; and sold by William Earl, No. 47, Albemarle-Street, Piccadilly. 1806. Octavo, pp. xii, 50 hand coloured aquatint plates, each accompanied with a corresponding leaf of descriptive text; [4] 'Index'; some occasional light foxing and soiling, fore-edges cropped close in a few places but never touching image; otherwise clean and bright; contemporary paper-backed blue boards, with printed paper label on spine, head and tail of spine bumped, covers a little soiled, extremities and corners bumped and worn; a good copy. **£1200**

First edition of this most attractively illustrated work, which together with Lady Charlotte Murray's *British Garden* (1799), and Maria Jacson's *Florists' Manual* (1816), is one of the earliest gardening books to be written by a woman.

Until the last few years, little was known about the life of Henrietta Moriarty (1781-1842). According to Ogilvie, she was the widow of an army colonel, who turned both to teaching, and to writing and illustrating, in order to provide for herself and children. Like Charlotte Murray, and the poet Charlotte Smith, though keen to encourage and celebrate the study of botany, Moriarty shared their belief that the Linnaean classification, with its focus up the sexual reproductive system, was 'not strictly proper for a female pen' (George, p. 133). Combining illustrations of flowers, (largely drawn and copied from Curtis's *Botanical Magazine*), arranged alphabetically by their Latin names, together with the Linnaean description of each plant, Moriarty studiously avoids representing the organs of generation. As she reassures her readers, this avoidance of separate illustrations of the stamens and pistils of plants, (as was conventional in the works of male botanical artists) therefore makes the work suitable for 'the rising generation', and by the second edition of 1807, more specifically suitable for 'young ladies'. Whilst rejecting the sexual system, however, she does still follow the Linnaean classification 'and she encourages a scientific engagement with plants which goes beyond feminine accomplishment in drawing' (*ibid*).

Samantha George is not the only historian to have focused attention upon Moriarty's re-imagining of her botanical illustrations to suit her sense of propriety, and this has led to further biographical details emerging, thanks in part, to our colleagues at Marlborough Rare Books. Garden historian, Dr. David Marsh, provides further insights in his fascinating post *Avoiding sex with Mrs. Moriarty*, and it is he who draws attention to her lack of originality, which had first been noticed by James Britten in his article of 1917. He notes too, the impressive subscription list for *Viridarium*, headed by Prince Augustus, the Duke of Sussex and the younger brother of George IV and William IV. The work is dedicated to Lady de Clifford, who also bought five copies. Marsh reveals that Lady de Clifford had built up a significant collection of rare and exotic plants, and it is possible that some of the illustrated specimens come from her collection.

As Ogilvie noted, Moriarty is also remembered for having written a couple of novels: *Brighton in an Uproar* (1811) and *Crim. Con. A novel founded on facts* (1812), the first of which tells the tale of a woman much like herself who turns to writing and publishing small books of botany to



provide a living for herself. Thanks to some detailed research by Marlborough, it does indeed appear to have been semi autobiographical.

"Henrietta Maria was christened on the 22 February 1781 at Romsey in Hampshire. She was the daughter of Major Benjamin Godfrey of the Inniskilling Dragoons and his wife Henrietta. On the 9th July 1796 she married Matthew Moriarty, Esq., of Chatham in Kent and then a Major in the Marines, she would have been barely 15 at the time of her marriage and presumably this was through the consent of her now widowed mother. Unfortunately he was not a good husband, he left a trail of debt and died somewhat dissolute, and worse leaving his widow and children unprovided for. In order to clear the debts she wrote *Viridarium* and later also two novels. . . As a widow Henrietta was not reconciled to her Irish relatives and despite trying to make ends meet by writing she was clearly in financial trouble, worse she seems to have slandered someone and was committed to the King's Bench prison in December 1813. Her occupation as a boarding house keeper, seems slightly desperate and maybe it is not surprising that she is not acknowledged in print from this time forth except the sad record contained in the 1841 census that she was a ward of the Kensington Union Workhouse followed by her death a year later." (<https://graphicarts.princeton.edu/2018/04/08/henrietta-maria-moriarty-artist-and-novelist> quoting the Marlborough Research).

Blunt, p. 218; Samantha George, *Botany, sexuality and women's writing*, p. 133; Ogilvie, II, p. 915; Nissen 1407; Sitwell, *Great Flower Books*, p. 69; for a brief discussion see James Britten, *Mrs Moriarty's Viridarium*, *Journal of Botany*, 55 (1917), 52-4; see the blog post [Avoiding sex with Mrs Moriarty](https://graphicarts.princeton.edu/2018/04/08/henrietta-maria-moriarty-artist-and-novelist) by Dr David Marsh; see the blog post <https://graphicarts.princeton.edu/2018/04/08/henrietta-maria-moriarty-artist-and-novelist>; OCLC locates copies at Cornell, the New York Botanical Garden Library, Delaware, Princeton, Oak Spring, Wisconsin, the National Tropical Botanical Garden, Oxford and the Natural History Museum.

- 64| **MORTEN, Honnor.** *Sketches of Hospital Life.* By the Late Honnor Morten. New Edition. London: Sampson Low, Marston & Company, Ltd. [colophon: Chiswick Press: - C. Whittingham and co., Toaks Court, Chancery Lane.] [n.d. but believed to be ca. 1913.] Octavo, pp. viii, 74, [2]; with appealing engraved head- and tail-pieces; paper a little browned otherwise clean and crisp; with pencil signature dated 1913 on front free endpaper; in the original dark blue cloth ruled in blind and lettered in gilt on upper cover, extremities very lightly rubbed; very good. **£100**

Uncommon new and posthumous edition, first published in 1888, offering an insight into all aspects of nursing and hospital life, both good and bad, by Honnor Morten (1861-1913), herself a nurse. Of the six fictional 'sketches', four had been published previously as magazine articles.

Morten was a proponent of education and training for nurses, and in 1892 published *How to Become a Nurse* which provided advice on the application process, on training schools, on the various branches of nursing, as well as including 'the lives of some eminent nurses'. The present work, though a fictional rather than practical offering, nevertheless reinforces her views on this matter: 'A good nurse should be possessed of rapid intuition and tact, sound nerves, and good health, and a calm and cheerful mind: and most of these qualifications are the result of training ... The glamour of romance which has been thrown round the service of the sick is being rapidly dispelled in these practical days; nevertheless, many sentimental or wayward girls embrace this calling, having no idea idea of the hard physical work and mental strain which awaits them'. (p.2).

OCLC locates copies of the 1892 edition at Buffalo, Oxford and Dublin, with other editions at Harvard, Oxford, the Wellcome, Cambridge, Glasgow, the British Library and Minnesota. (Nursing/education)

THE 'REJUVENATION OF WRINKLED FACES' - A SOCIAL AND SURGICAL PIONEER

- 65| **NOËL, Suzanne Blanche Marguerite.** *Die Ästhetische Chirurgie und ihre soziale Bedeutung ...* Deutsche, von der Verfasserin erweiterte und neubearbeitete Ausgabe übersetzt von Dr. A. Hardt-Paris mit einem Geleitwort von Prof. Dr. E. Meirowsky-Köln A. RH. Mit 112 Abbildungen im Text. Leipzig Johann Ambrosius Barth. 1932. Octavo, pp. 70, [2], with 112 half-tone illustrations and diagrams; some very minor soiling and creasing, lower corner of contents leaf furred, but otherwise very clean and crisp; in the original printed brown card wrappers, minor creasing to rear cover with some faint finger soiling, otherwise an extremely good copy. **£800**



Scarce first German edition (first published in French in 1926) of this important and early contribution to the field of cosmetic surgery - effectively the first medical handbook on the subject.

Suzanne Noël (1878-1954) was one of the early pioneers of modern cosmetic surgery and the first woman to practice aesthetic surgery. She is credited with being instrumental in developing the 'face-lift'. The field of cosmetic surgery emerged at the end of the 19th century, and gained more prominence and credence in the wake of WWI. As both Kathy Davis and Nicolas Guirimand highlight in their detailed articles, Noël in many ways epitomised the struggle faced by women hoping to enter professional life at the turn of the nineteenth century. She passed her baccalaureate in 1903 and later trained under Morestin and the dermatologist Brocq. She first became aware of cosmetic procedures in 1912 when the famous actress Sarah Bernhardt returned from an American tour 'rejuvenated'. During WWI she gained experience operating on wounded soldiers and in particular corrected facial disfigurements.

The next few years were fraught with difficulties however: Her first husband died in 1919, her daughter of Spanish influenza in 1922, and her second husband André Noël committed suicide in front of her in 1924. The scandal was considerable and she was forced to enter her thesis in 1925 under an assumed name. It was at this point that Noël became aware of the difficulties that she would face pursuing a surgical career and she became increasingly involved in the feminist movement, in particular the recently formed international women's movement the 'Soroptomists'. The newly emerging field of cosmetic and aesthetic surgery afforded her through private practice the perfect opportunity to create a surgical niche for herself, and she set up a clinic at her own home, which soon won considerable world-wide recognition.

The present work provides an insight into her views about her profession, her techniques and procedures, and the results of her operations. This detailed work discusses matters such as the possible reasons for choosing to undergo an operation, the suitable age for surgery, and how long the results will last, before outlining a variety of different procedures including face lifts and the removal of tattoos. It is copiously illustrated throughout with photographic 'before and after' images. Where Noël differs from similar contemporary works is that she saw no need to try and justify the speciality, but readily acknowledged that for most women the decision to have surgery was a purely economic and materialistic one, and therefore celebrated the chance to provide a solution, where necessary, to women's professional and economic problems, by removing the fear of losing a job or career through advancing age. Amongst several cases cited she notes that of an opera singer and a seamstress - who both opted for surgery to try and advance and prolong their careers. In this respect the work provides a unique and 'different voice' (Davis), and is some ways managed to reconcile the unreconcilable of being a feminist and a cosmetic surgeon.

For a detailed study of her work and influence see Kathy Davis, *Dubious equalities and embodied differences: cultural studies on cosmetic* (2003), ff. 25; see also Guirimand N., 'De la réparation des « gueules cassées » à la « sculpture du visage ». La naissance de la chirurgie esthétique en France pendant l'entre-deux-guerres', *Actes de la recherche en sciences sociales* 2005/1-2, 156-157, p. 72-87; Guirimand cites also Jeannine Jacquemin, *Suzanne Noël (1878-1954) pionnière de la chirurgie esthétique et du mouvement féminin Soroptimist (Le Rotary féminin)* (1988); OCLC locates only one US copy of the German edition at Columbia University, though a small number of European locations are cited.

- 66| NOETHER, Emmy.** Der Diskriminantsatz für die Ordnungen eines algebraischen Zahl- oder Funktionenkörpers. [Offprint from the] *Journal für die reine und angewandte Mathematik*. Herausgegeben von K. Hensel. Sonderabdruck aus Bd. 157. (Jubiläumsband I.) Heft 2. Druck und Verlag Walter de Gruyter & Co., Berlin W. 10. 1926. *Large 4to, pp. 82-104; paper slightly soiled; with several pencil annotations; evidence of previous horizontal and vertical folds, with some creasing and light wear along horizontal fold, most notable along upper cover, with two small holes at tale of upper cover, some light nicking to extremities; stapled as issued, with marble paper strip to spine.* **£250**

An important paper on different and discriminant orders in number fields by one of the most eminent mathematicians of the twentieth century, Amalie Emmy Noether (1882-1935).

The daughter of the professor of mathematics at Erlangen, Max Noether, Emmy began work in mathematics for a Ph.D. in 1904, when women were permitted to enrol at the University. She worked for some time at Erlangen, though without position, until 1915 when she was invited by David Hilbert, to join the mathematics group at the University of Göttingen, the world's center for theoretical mathematics. 'During the next four years she delivered nine lectures ... and in 1918 her milestone paper with the Noether Theorems, important for the development of modern physics, appeared. In 1919 she qualified as Privatdozent, permitting a small salary as an official lecturer; prior to that time her lectures had been announced

under Hilbert's name. During the period from 1920 to 1926, she attracted numerous mathematicians and students - she was the doctoral advisor for ten - to her research program and she became a leader in the development of modern abstract algebra' (Grolier). As a Jewish academic, her permission to teach was rescinded in 1933 and so she accepted a two-year guest professorship at Bryn Mawr College.

Grolier, *Extraordinary Women*, pp. 85-88; Merzbach, *History of Mathematics*, p. 615; Proffitt pp. 418-420.

- 67| PAYNE, Cecilia.** Harvard Observatory Monographs. No. 3. *The Stars of High Luminosity*. Published by the Observatory by the McGraw-Hill Book Company, Inc. New York and London. 1930. *Octavo, pp. xiv, 320; with a number of diagrams within the text; some light marginal browning throughout; ex-library copy for the Manchester Public Library, with their bookplate and accession label on front pastedown, stamp on verso of title-page, and smaller stamps sporadically throughout and on fore-edge, and with remains of further label on front endpaper; in contemporary maroon publisher's cloth, upper cover ruled in blind, spine lettered in gilt, and with library stamp in blind on rear cover, head and tail of spine a little bumped, spine darkened with accession number in mss at tail, covers a little soiled.* **£200**

First edition, and an important contribution to the field of astrophysics and to the understanding of the physics of the universe, by one of the founders in the field, Cecilia Payne, considered by Ogilvie to be a classic monograph.

'The physical study of stars by means of their spectra has gone far in the last five years. In 1925 I attempted, in *Stellar Atmospheres* (Harvard Monograph No. 1), to survey and analyze the current knowledge of the subject. Ionization theory was then less than five years old, and its application was as yet general and empirical. Since 1925 there have been considerable advances in technique, theory has been extended, and, above all, there has been an accumulation of relevant observations. Since *Stellar Atmospheres* is out of print, and (to some extent) also out of date, I have been encouraged to replace it by the present volume' (Preface).

Cecilia Helena Payne-Gaposchkin (1900-1979) grew up in England and studied physics at Cambridge University. She moved to Harvard in 1923, where Harlow Shapley, Director of the Harvard College Observatory, essentially created a graduate program in astronomy just for Payne. 'Just two years after her arrival at Harvard, she had already published six papers and had completed, as Otto Struve, one of the most distinguished astronomers of the twentieth century stated, "undoubtedly the most brilliant Ph.D thesis [*Stellar Atmospheres*] ever written in astronomy"' (Grolier). For many years, however, she was regarded only as a technical assistant to Shapley, and it was not until 1956 that she was appointed a professor at Harvard and made chairperson of the Department of Astronomy - the first woman at Harvard to be appointed a department chair.

Grolier, *Extraordinary Women*, pp. 117-120, and item 109; Ogilvie, II, p. 994-5; Proffitt pp. 441-443.

68| PARSONS, Lady Catherine. Typed notes on “The Woman Engineer” and the Women’s Engineering Society. London, October 30th, 1924. 5 page typescript on Women’s Engineering Society letterhead, rectos only, with some minor handwritten corrections and notations. Together with a pamphlet (single sheet folded once) advertising the International Conference of Women in Science, Industry and Commerce. Mild horizontal creases from folding affecting the typed material, which is also a little spotted and bears the indentation of a paperclip. The pamphlet is slightly more spotted and toned, particularly the cover, and also bears paperclip indentations. **£500**

Five pages of typed notes on The Women’s Engineering Society and its journal, *The Woman Engineer*, by one of the organisation’s founders and its president, Lady Catherine Parsons. Parsons was the wife of engineer and industrialist Charles Parsons and an accomplished engineer in her own right, having ‘the distinction of being an Honorary Fellow of the North East Coast Institution of Engineers and Shipbuilders. At the time of her appointment she was the first lady to be elected an honorary fellow or honorary member of any British engineering society’ (*Women’s Engineering Society website*). Though the recipient of these notes is unknown, it seems they were prepared for an author working on a book, as at one point Parsons writes, ‘These notes are somewhat rambling but you can take out of them anything that you might care to use for your Book.’ Also included is a pamphlet advertising the International Conference of Women in Science, Industry and Commerce, to be held at the British Empire Exhibition at Wembley between July 15th and 17th of 1925.

As Parson writes here, the Women’s Engineering Society was ‘formed in 1919, in order to open up the engineering profession to women’. The founders were drawn from the National Council of Women, which was formed during the First World War to encourage women into industry. ‘Many of WES’s founders had been involved in WWI war work including munitions and other factories. Their experience of running and managing factories, working on the shop floors, design studios, workshops and engine sheds (particularly in the nascent aeronautics industries) gave them experiences and skills they could never have expected to access in peacetime ... Many of the leaders and committee members were from the better off industrial middle or upper classes, but the organisation’s work covered women working on the shop floor, making their way into management, those accessing formal education and even the female end users of engineering innovations such as the introduction of electricity into the home. They worked to build trust with politicians and universities so that negotiations and changes to policies and laws were realistic and constructive’ (*ibid*).

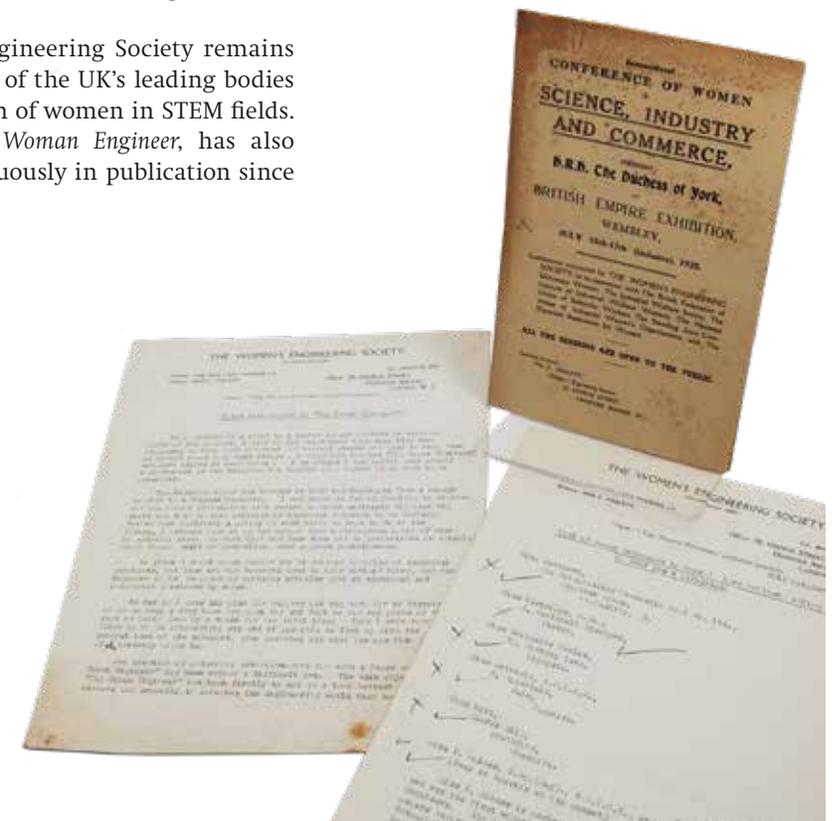
In these notes Parsons describes the origin of *The Woman Engineer*, which she founded in order to keep female engineers around the country in touch with each other. She writes that the journal ‘has developed from a 6-page leaflet to a 20-page magazine. I endeavour as far as possible to include all the latest information with regard to women engineers all over the world and also to give articles of technical interest to my members. Rather than outlining a policy of work which we hope to do in the future, I believe it is far better from a propaganda

point of view to actually state the work that has been done and to concentrate on details which though small in themselves, have a great significance.’

She writes that, ‘At first I found women rather shy at writing articles on technical questions, but they are now becoming used to this sort of thing and the Magazine as far as possible contains articles both on technical and industrial questions by women’. Aware of optics, Parsons explains that ‘the question of obtaining advertisements for such a Paper as “The Woman Engineer” has been a difficult one. The main object ... has been firstly to act as a link between our own members and secondly to convince the engineering world that women are really serious in their desire to become engineers and can at least run a technical paper as well as any man’s organisation. It has therefore been necessary to concentrate wholly on advertisements either of a technical or an educational nature; hence, with much reluctance we have been forced to refuse advertisements for ladies clothing, furs etc.’

The rest of the notes include a short biography of Parsons, explaining that she is also ‘the Chairman of Atalanta Ltd., a little engineering works which is being run by women’. Following this is a list of six other women engineers that the author can contact, with ticks and crosses next to their names, presumably a record of who the recipient of the letter had been in touch with. One of those listed, Miss V. Holmes, was a specialist in diesel engines and described as ‘perhaps the best qualified British woman engineer’ and ‘the first woman to be admitted to the Institution of Mechanical Engineers’.

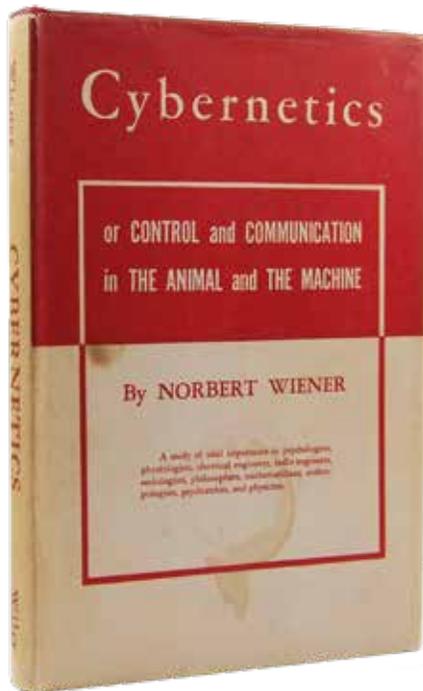
The Women’s Engineering Society remains active and is one of the UK’s leading bodies for the promotion of women in STEM fields. Its journal, *The Woman Engineer*, has also remained continuously in publication since its founding.



- 69| (PERRY-WATTS, Nellie.) WIENER, Norbert. *Cybernetics or Control and Communication in the Animal and the Machine*. New York & Paris: John Wiley & Son, Inc. & Hermann et Cie, 1948. Octavo, pp. [iv], [7]-194, [2]. Original red cloth blocked in black and white. With the dust jacket. Contemporary ownership signature to the front free endpaper and an envelope with related clippings tipped-in on the front pastedown. Cloth bright and fresh, minor bumps and light rubbing at the corners and ends of spine, partial tanning of the front endpapers, some spotting of the edges of the textblock. A very good copy in the lightly rubbed and dulled jacket with a ring stain and large spot on the upper panel and some smaller spots on the lower panel. £450

First US edition, published just a few months after the Paris edition, offset from sheets of that edition and with a new title and half title. With the contemporary ownership signature of a female pharmacologist.

Wiener's *Cybernetics*, a treatise on natural and artificial feedback systems, is one of the key scientific works of the 20th century and 'the first conventionally published book, rather than a technical report, to include a serious discussion of electronic digital computing' (*Origins of Cyberspace* 991).



Interestingly, this copy was owned by a female pharmacologist, Nellie Perry Watts, who graduated from Case Western Reserve University and either attended or worked at the Women's Medical College of Pennsylvania (where she signed a 1943 petition to Congress in support of female physicians in the Medical Reserve Corps). A significant part of her career was spent in the Department of Therapeutics of the New York University Medical School, and she worked briefly in the Department of Pharmacology at Abbott Research Laboratories in Chicago. Two of her publications were "Prophylactic Use of Schistosomal Antigen", published in the *Journal of Immunology* in June, 1949, and "Hospital Pharmacist's Relation to the Medical Intern", in the *Journal of the American Pharmacists Association* in February, 1945.

- 70| PETERSON, Hannah Mary Bouvier. *Bouvier's Familiar Astronomy; or, an Instruction to the study of the heavens. Illustrated by celestial maps and upwards of two hundred finely executed engravings. To which is added a Treatise on the Globes, and a comprehensive astronomical dictionary. For the use of Schools, Families, and Private Students*. Philadelphia, Childs & Peterson, 602 Arch Street ... 1857. Octavo, pp. 11, 'Recommendations' [1] blank, [1] title-page, [2]-499, [1] blank, [12] publisher's advertisements; without the frontispiece double-page folding celestial maps printed in blue; copiously illustrated throughout with text engravings; somewhat browned and foxed throughout due to paper quality, more prominent in places, with some offsetting caused by previous, and existing bookmarks such as newspaper clippings; in contemporary green publisher's cloth, seemingly recased as some point, ruled in blind, spine lettered in gilt, head and tail of spine a little bumped, covers a little soiled; with presentation inscription 'Mrs P. Jenks Smith, with the compliments of the Author, April 15. 1864', with a later inscription in pencil from Anna Pattissen to Mrs Samaha, dated 1917. £150

Third reprinted edition (first 1855, then 1856) of this popular work on astronomy for young children, seemingly one of the earliest astronomical works written by a woman to be published in the US.

Hannah Mary Bouvier Peterson (1811-1870) was a contemporary of Maria Mitchell (1818-1889), and shared her passion for astronomy and science, if not ultimately taking it up as a professional career. The daughter of a Philadelphia lawyer, who clearly ensured that she had a comprehensive education, she married Robert Evans Peterson, eldest son of publisher George Peterson, in 1834. After studying law, Robert established the Philadelphia publishing house R. E. Peterson & Co., in the early 1850s, which became Childs & Peterson in ca. 1854, Hannah taking an active role in running the business. Robert taught Hannah advanced mathematics, and supported her interests in the sciences, and encouraged her to write and publish, although she was often reluctant to publish under her own name, shunning notoriety and preferring to publish either anonymously, or under her maiden name, as with the present work.

Astronomy had long been a field in which women could find more accepted than in other sciences, in due partly to the fact that, like botany, it was a pursuit which could be done at home. Indeed, as one anonymous reviewer for the present edition notes, 'The study of astronomy is peculiarly well adapted to the mind of woman; it gives scope to that imaginative and mystic element which is the leading trait and the crowning grace of her character' (see *Harvard women in science guide website*). A number of female schools in Antebellum America were well equipped with astronomical apparatus, and indeed Vassar College was one of a number of schools to have its own astronomical observatory. It was only a matter of time, therefore, before an introductory book aimed at young students be dedicated to the subject.

Dedicated to her father, John Bouvier, Peterson notes in the preface that ‘This work, embracing all the recent observations of the heavenly bodies, is intended to be a complete treatise on Astronomy, conducting the pupil, step by step, from the base to the summit of the structure; explaining as far as practicable, by figures and diagrams, all the celestial phenomena, and the laws by which they are governed, without entering into those mathematical details which properly belong to treatises designed for those who propose to make Astronomy their chief study’. Following on the tradition of Mrs Marcet, the work is written in question and answer format, and although nearly 500 pages in length, provides a succinct, comprehensive and readable introduction to physical, descriptive, sidereal and practical astronomy. Over 200 engravings are included, many of which are believed to have been prepared by Hannah herself. The work was well received, and was highly commended by George Airy and John Herschel, and indeed the first few pages of the present edition reprint a number of these glowing recommendations.

The work is copiously illustrated throughout with fine text engravings. Sadly, the striking double-page and folding frontispiece, printed in blue, and depicting two celestial charts, is lacking. Designed to be referred to whilst reading, it was almost certainly removed at some point to make this easier, and has sadly been lost overtime. The Harvard copy does retain the frontispiece, though it appears that it is often lacking.

Whilst perhaps happy not to seek the lime-light, her works proved immensely popular, and in addition to the present work, Peterson is remembered for *Familiar Science* (1850, published under her husband’s name) and for her popular cookbooks.

Houzeau-Lancaster, I, part 2, 1026; Kanas, *Star Maps, History, Artistry and Cartography*. ff. 335; see Reed, Elizabeth *American Women in science before the Civil War*, (online) ff. 137; see Warner, *Science Education for Women in Antebellum America*, Isis Vol. 69, No. 1 (Mar., 1978), pp. 58-67; and Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940*.

71 | PHELPS, Mrs Almira Hart Lincoln. *Chemistry for Beginners*. Designed for Common Schools, and the younger pupils of Higher Schools and Academies. With engravings. New York: Published by F. J. Huntington & Co. 174, Pearl-Street. 1836. *Duodecimo*, pp. 216; with numerous appealing wood engravings and small vignettes throughout; lightly browned and foxed throughout due to paper quality, with some occasional marginal wear at fore-edge due to rough opening; with later ownership signature in pencil on front free endpaper, and some occasional neat pencil markings in margins; in the original full brown pebble-grained cloth, with brown morocco label lettered in gilt on spine, spine a little cockled, covers lightly sunned and stained, extremities bumped and a little rubbed; an appealing copy. **£225**



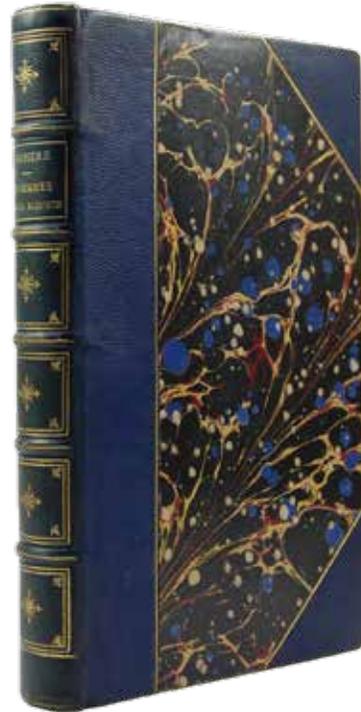
First New York edition of this appealing illustrated chemistry textbook, first published in Hartford in 1834 by the noted educationalist Almira Hart Lincoln Phelps (1793-1884), who did much to further the cause of science instruction in the US.

Phelps first opened a small boarding school in Hartford 1814, before becoming head of an academy in Sandy Hill, New York in 1816. She married Simeon Lincoln in the following year, but upon his death in 1823, returned to teaching and joined the staff at her sister Emma Willard’s boarding school. Willard (1787-1870) was herself a well-known educator and women’s rights activist, and the Troy Female Seminary was the first academically rigorous preparatory school for women in the United States, founded in 1821. It was at this time that she became interested in natural science and in 1829 published her first science textbook, *Familiar Lectures on Botany*, which enjoyed great popularity. She married again in 1831, and together with her new husband John Phelps, ran a number of schools over the next few years, also continuing to publish educational works. ‘She was elected the second woman member of the American Association for the Advancement of Science in 1859. Although she supported educational equality for women, Phelps was opposed to women’s suffrage. In fact, she was active in the Woman’s Anti-Suffrage Association ... [her] major contribution to the history of science was in the area of science education. Both as a teacher and as the author of a widely used school text, *Familiar Lectures on Botany*, she furthered the cause of science instruction’ (Ogilvie).

In her preface, Phelps notes the lack of support for American women with an interest in science: ‘A scientific professor once said to a lady, in a sarcastic tone - ‘and so you are going to attempt to teach Chemistry?’ ‘Yes’, said she, good-naturedly, ‘as fast as I can learn it myself’”.

ANB article by Isabelle Lehuu; Ogilvie, II p. 1015; Watts, p. 125. (Chemistry/popular science/education)

- 72| **REBIÈRE, Alphonse.** *Les Femmes dans la Science ...* Deuxième édition, très augmentée et ornée de portraits et d'autographes. Paris, Librairie Nony & Cie ... 1897. Octavo, pp. [ii] blanks, ix, [i] blank, 361, [1] blank, with 38 full page portraits, illustrations and facsimile autographs (within the text); title-page in red and black; light marginal browning throughout, with occasional neat pencil annotations, else clean and crisp; a very good copy in contemporary blue half-morocco over marbled boards, spine in compartments with raised bands, lettered and tooled in gilt, very light rubbed to extremities and head and tail of spine, retaining green silk marker tie. **£325**



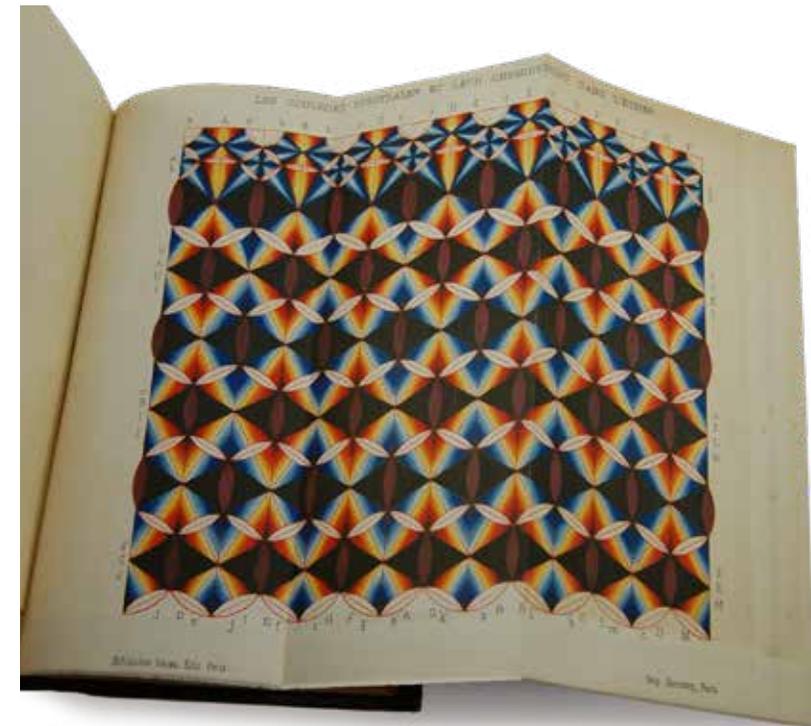
Second edition (first 1894) of this fascinating and detailed biographical compendium of women scientists, written by the noted biographer Alphonse Rebière (1842-1900). Originally published to coincide with a conference of the Saint-Simon Society, Rebière first published a short essay, highlighting in detail the life and work of six female mathematicians, Hypatia, Émilie du Chatelet, Marie Agnesi, Sophie Germain, Mary Somerville and Sophie Kowalevski. By the time of the present second edition three years later, this had been considerably extended, Rebière presenting a comprehensive biographical dictionary

- 73| **ROYER, Clémence.** *Natura Rerum. La Constitution du Monde. Dynamique des atomes nouveaux principes de philosophie naturelle.* Paris, Librairie C. Reinwald. Schleicher Frères, éditeurs ... 1900. Octavo, pp. [viii] including front blank, xxii, 799, [1]; with four lithograph plates (comprising chromolithograph frontispiece, one further chromolithograph, a folding plate and a large fold-

ing graph); title-page lightly browned due to paper quality, some further light foxing and browning throughout, unwise clean and crisp; in contemporary maroon calf backed marbled boards, spine ruled and lettered in gilt, retaining original silk marker, spine a little sunned and stained, some minor surface wear, extremities lightly bumped and rubbed; a good copy. **£685**

First edition, and a very good copy, of this attractively illustrated work by the philosopher, physicist, anthropologist, archaeologist and politician Clemence Augustine Royer (1830-1902).

Largely self-educated, Royer moved to Lausanne in 1857 (having previously taught as a governess in Wales for a brief period). Once in Lausanne she began her career of writing and public speaking, and began an educational course for women in logic. 'Women speakers were fashionable then, and she continued in 1859-1860 with a course in natural philosophy. Because formal advanced education was not yet open to women even in Switzerland, a pioneer in this area of social progress, she had little competition and could attract considerable audiences. Her lecture program expanded, both in Lausanne and in other Swiss cities; later she went to Italy ... her wide reading enabled her to cover many subjects; She liked to combine fields, drawing no separation between science and philosophy' (Creese). Royer is best remembered for her dissemination of Darwin in France, notably through her translation (the first) of the *Origin of Species* in 1862. Publication of the work eventually led to



her controversial election as a member of the *Société d'Anthropologie de Paris* in 1870, Royer becoming an active member of the society until her death in 1902. In addition to her scientific interests, through her long-term relationship with the political activist Pascal Duprat (with whom she had a son out of wedlock) Royer had considerable visibility in Paris social and political circles and from 1870 when Duprat served in the National Assembly her writings focused on political problems, notably the condition of women, and she later became a major figure in the feminist movement.

Though elegantly produced and substantial in content, including two striking chromolithograph plates notably that depicting 'Les Couleurs Spectrales et leur cheminement dans l'éther', of the present work Creese notes that it 'suffered sadly from her lack of scientific training'.

Creese, II, p. 85; Ogilvie, II, p. 1129; OCLC: 7012678 locate copies at Stanford, UCLA, Harvard, Cornell, the Library of Congress, Cleveland, Pennsylvania, Missouri and Leeds; Proffitt pp. 498-500.

74| RUBIN, Vera & Kent W. FORD. *Rotation of the Andromeda Nebula from a Spectroscopic Survey of Emission Regions.* [in] *The Astrophysical Journal* 159, No. 2, Part 1, pp. 379-405. Chicago: University of Chicago Press, 1970. *Octavo, perfect bound. Original white wrappers printed in black. Housed in a custom quarter morocco folding case. Ownership signature 'Tammann' on the cover. Professionally rebacked to style, slightly toned and rubbed at the edges but overall very fresh. An excellent copy.* **£1,750**

First edition, in the original wrappers, of Rubin's key paper presenting the first observational evidence for the existence of dark matter. This copy with the ownership signature 'Tammann' on the upper cover, likely the Swiss astronomer Gustav Andreas Tammann, director of the Astronomical Institute of the University of Basel and recipient of the Albert Einstein Medal.

Vera Rubin (1928-2016) was the only astronomy graduate at Vassar in 1948 and, after discovering that her first choice of Princeton did not accept female graduate students, she earned her Master's at Cornell and doctorate at Georgetown.

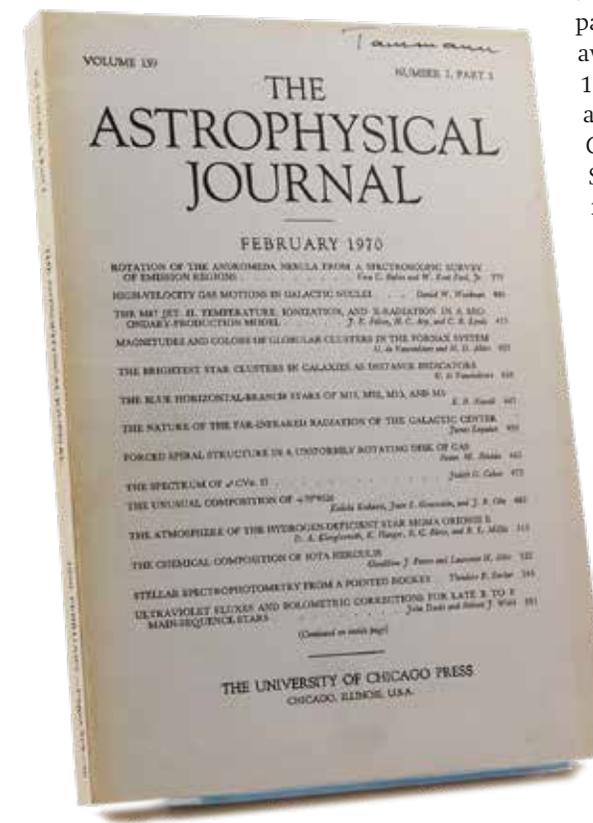
Rubin was particularly interested in the rotation of galaxies, which she researched under Margaret Burbidge in 1963. At the time, galactic rotation had not properly been measured, but it was expected that the same law of motion that governs the movement of bodies in the solar system would apply to the stars in galaxies. As Newton had shown, the speed of rotation of the stars should drop in proportion to the square root of their distance from the centre. But when Rubin and her collaborator Kent Ford measured star speeds in the Andromeda Galaxy they discovered, to their surprise, that the stars at the edges of the galaxy rotated at the same speed, or slightly faster than, those closer to the centre. This violated the laws of both Newton and Einstein, and implied that the galaxies should have been fraying at the edges as stars were hurled into the void.

The only explanation for this result was that some additional mass was holding the galaxies together. The concept of dark matter had first been proposed by astronomers Fritz Zwicky and Jan Oort in the 1930s, but was largely ignored. And because no one had predicted its effects on galaxies, Rubin didn't initially recognise its relevance to their situation. But as she explained in an interview with author Mihaly Csikszentmihalyi, 'Months were taken up in trying to understand what I was looking at... One day I just decided that I had to understand what this complexity was that I was looking at and I made sketches on a piece of paper and suddenly I understood it all. I have no other way of describing it. It was exquisitely clear. I don't know why I hadn't done this two years earlier.' What Rubin realised was that if the outer edges of the galaxy contained a halo of dark matter, the additional mass would hold these quickly rotating stars in place.

Within a few years other astronomers had constructed a theoretical framework for our understanding of dark matter, and we now have multiple ways to observe its effects on galaxies. The discovery of this mysterious form of matter has had a profound impact on cosmology. As astronomer Emily Levasque of the University of Washington at Seattle put it, 'The existence of dark matter has utterly revolutionized our concept of the universe and our entire field; the ongoing effort to understand the role of dark matter has basically spawned

entire subfields within astrophysics and particle physics at this point'. Rubin was awarded the National Medal of Science in 1993 and became only the second woman after Caroline Herschel to receive the Gold Medal of the Royal Astronomical Society. She was long considered a front-runner for the Nobel Prize, and many believe that the Committee's failure to recognise her will be a permanent stain on the prize's credibility.

Ogilvie II, p. 1133; Proffitt pp. 500-502.



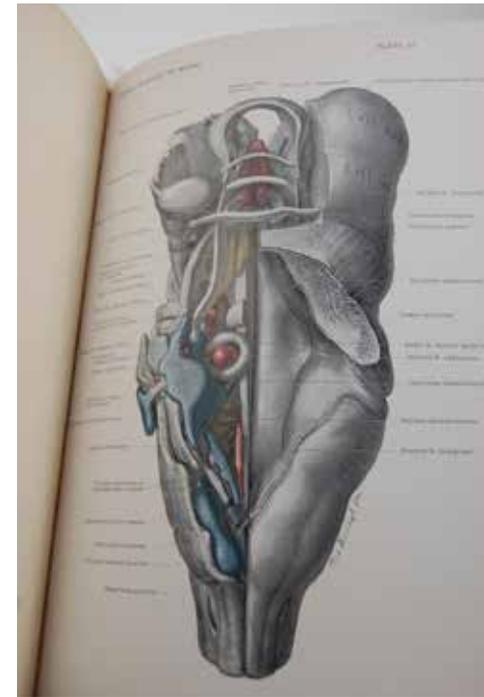
75| SABIN, Florence Rena. *An Atlas of the medulla and brain.* A Laboratory Manual Illustrated with seven colored plates, one black plate and fifty-two figures. Edited by Henry Mc E. Knowler, Ph.D. Baltimore, MD., U.S.A. The Friedenwald Company, Publishers. 1901. 4to, pp. 123, [1] blank, 125-146 (containing numerous illustrations and figures printed on china coated paper), [6] blank; with 8 leaves of plates (seven partially coloured); paper a little browned, with some very occasional minor creasing in places; later biography from a 1971 journal loosely inserted; bound in half blue calf over marbled boards, spine in compartments with raised bands, ruled and lettered in gilt, with attractive decorative endpapers, head and tail of spine a little rubbed, small crack at tail, with further light wear to joints and extremities; with the bookplate of 'B. Richard Stuehler, M.D.' pasted on front pastedown; an appealing copy. **£450**

First book edition of this important contribution to neuroanatomy which was to become a standard work, by the anatomist-hematologist Dr. Florence Rena Sabin (1871-1953), the first woman to teach at Johns Hopkins, and the first to become a member of the Rockefeller Institute and the National Academy of Sciences.

'Sabin's Atlas, based upon her festschrift text [A Model of the Medulla Oblongata, Pons, and Midbrain of a Newborn Babe in Contributions to the Science of Medicine, Johns Hopkins Press, 1900] includes a new author's preface explaining the reasons for creating the three-dimensional model, and discusses changes and additions in this 1901 volume: the Atlas now has fuller plate references, rearrangement of the contents for ease of use, pertinent citations - and most important - an index. Commercially published, the Atlas became broadly disseminated - and it is still in print' (Grolier).

A graduate of Smith College in 1893, Sabin was admitted to John Hopkins Medical School in 1896, it being the first co-educational graduate medical school in the United States. In 1892, the school had received \$500,000 from the Mary Garrett's Women's Fund Committee of Baltimore on the condition that women must be allowed to matriculate. 'Admitted in 1896 and graduating in 1900, Sabin, having already published major work on the medulla and midbrain, was awarded the prestigious and competitive internship at Johns Hopkins Hospital under the famous physician Sir William Osler ... Hopkins' medical school, however, would not hire a woman as faculty. Mary Garrett's fund came through with a research fellowship and an \$800 stipend for Sabin in the Anatomy Department, where she found a sympathetic mentor in the chairman, Franklin Mall. Appointed assistant in anatomy in 1902, she became the first woman faculty member in the School of Medicine' (Grolier).

In 1917 Sabin was appointed professor of histology, the first woman full professor in Johns Hopkins Medical School. She became the first woman president of the American Association of Anatomists in 1924, and was the first woman elected to the National Academy of Sciences in 1925. She was, however, passed over for Chairman of the Anatomy Department at Johns Hopkins in 1919, a slight which she refused to let stand in the way of her research in progress.



In 1925 she was recruited by the Rockefeller Institute as the first full time faculty member to head and establish the Department of Cellular Studies. She is noted for 'organizing an early multi-disciplinary, inter-institutional research effort, integrating bacteriological, chemical, and biological research on tuberculosis carried in private and governmental institutes' (ibid).

Grolier. *Extraordinary Women* pp. 146-50, and item 141; Oglvie, II. pp. 1140-2; Proffitt pp. 509-512.

THE SCIENCE OF CONTRACEPTION

76| SANGER, Margaret. *The Practice of Contraception.* An International Symposium and Survey. Edited by Margaret Sanger and Hannah M. Stone. With a Foreword by Robert L. Dickinson. From the Proceedings of the Seventh International Birth Control Conference Zurich, Switzerland, September 1930. Baltimore: The Williams & Wilkins Company, 1931. Octavo. Original green cloth, titles to spine gilt. With the dust jacket. A superb fresh copy in the jacket with some minor wear and tiny nicks at the extremities and a closed tear to the lower panel. Excellent condition. **£300**

First edition, first printing of the results of the Seventh International Birth Control Conference, a 'major milestone in the history of contraception' (The Margaret Sanger Papers Project, NYU, newsletter 56, winter 2010/2011). A superb copy, scarce in such nice condition.

The conference was conceived and organised by birth control pioneer Margaret Sanger (1876-1966), whose goal was to hold a low-key and little-publicised meeting of scientists and doctors, a 'fact-finding conference' on scientific progress in birth control, rather than a political

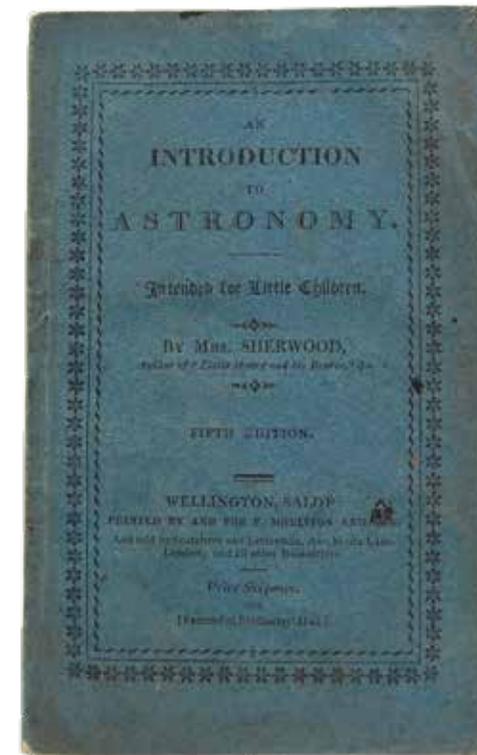
meeting. Notably, 'for the first time in an international gathering, Sanger gave women doctors and clinicians nearly equal time at the podium' (*ibid*).

'The Zurich conference featured forward-looking papers and discussions on new contraceptive technologies and investigations, including an early breakthrough in using hormones to suppress ovulation in mice, the concept that evolved into the birth control pill three decades later. Sessions on various categories of contraceptive methods, on sterilization and on abortion, highlighted new research that led to immediate advancements in the field, such as the independent findings of Dr. Hermann Knaus of Austria and Kyusaku Ogino of Japan that confirmed predictable days of sterility in a woman's cycle and opened the floodgates to rhythm calendars. Other contraceptive technologies that had shown promise, including a new form of an intrauterine device (IUD) and X-Ray sterilization, met with fierce criticism at the conference that slowed the clinical acceptance of these methods. Recommendations of diaphragms and several reports on recent tests of chemical methods provided a much-needed quality control service for the many clinic directors in attendance. In addition, papers by statisticians and demographers led to reappraisals of the links between class and family size. Sanger and her coordinating staff also provided a comprehensive exhibit of contraceptive devices and clinic forms and charts, as well as statistical information gleaned from questionnaires sent out by Sanger to clinics in Europe, Asia and the United States' (*ibid*).

Hines, *Medical History of Contraception*, pp. 314-17; Ogilvie, II, pp. 1149-50.

- 77| **SHERWOOD, Mrs. [Mary Martha, née BUTT.]** *Introduction to Astronomy. Intended for Little Children. Fifth edition. Wellington Salop; Printed by and for F. Houlston and Son. And Sold by Scatcherd and Letterman, Ave-Maria Lane, London. [Entered at Stationers' Hall]. 1821. Duodecimo, pp. [iii]-54; some very minor spotting and soiling, but otherwise clean and crisp; stitched as issued in the original blue printed stiff wrappers, minor wear to head and tail of spine, covers slightly soiled, extremities lightly worn; an appealing copy.* **£200**

Uncommon fifth edition (first 1817?) of this small work for small children by the noted and prolific children's writer and educationalist Mrs. Mary Martha Sherwood (1775-1851) 'Author of "Little Henry and his Bearer"'.
'The accompanying Lessons are the first of a course of lessons intended to give young persons an introductory view of Astronomy, Geography, and Ancient and Modern History. In the astronomical lessons, every thing difficult and abstruse has been omitted, as far as it was possible so to do; and such parts of Scripture as have been found applicable, have been introduced, in order that in every day's lesson, some little portion of Scripture might be impressed upon the mind of the learner'.



Mrs Sherwood is very much an advocate of rote learning, and sets out some guidelines for how her work should best be used. She recommends that the the section headings, together with the first few words of the accompanying scriptural verse, be written down on a piece of card. These cards are then to be placed in a bag, which is then passed around the class, each child picking a card in turn. Should the child not be able to complete the memorized phrase, they 'are to lose their places and go to the bottom of the class'. What is notable, is that the emphasis appears to be more on the importance of learning the scriptural verse, rather than on the astronomical fact!

'Mary Sherwood's travels and acquaintances expanded her circle of influence and experience. She was definitely more at ease during a meeting with William Wilberforce, in 1820, at the china manufactory in Worcester, when he wanted to hear about India, and in her coach ride to Worcester gaol with Elizabeth Fry, in 1821, where they talked about 'the dangers of celebrity, for females especially' (Kelly, *The Life of Mrs*

Sherwood, p. 537, 1854), than she had been, before her marriage, during an audience at Bath with Hannah More, who 'spoke well' but whose sisters 'gathered up her words carefully, rather Boswellian-like' (Kelly, 217)' (ONDB.)

See Cutt, *Mrs Sherwood and her Books for Children*, 1974; ONDB entry by Patricia Demers; OCLC locates only one copy of this fifth edition at the Free Library of Philadelphia; the British Library holds the first three editions, with Cambridge and Trinity College Dublin noting copies of the first two editions.

INVISIBLE AND INVALUABLE

- 78| **SHETTERLY, Margot Lee.** *Hidden Figures. The American Dream and the Untold Story of the Black Women Mathematicians Who Helped Win the Space Race. New York: William Morrow, an imprint of Harper Collins, 2016. Octavo, pp. [xi]-xviii, [ii], [1]-346, [2]. Original brick red and buff boards, titles to spine gilt. With the dust jacket. Finger soiling and some tiny spots to the boards, ends of spine bumped, text clean and fresh. Slight crease affecting the edge of the lower jacket panel. A very good copy.* **£250**

First edition, first printing. Signed and dated '3.25.18' by the author on the title.

During the Second World War and the decades following, around four dozen African American women worked as computers, mathematicians, and engineers at the National Advisory Committee for Aeronautics, the organisation that became NASA in 1958. Their work, carried out largely at the Langley Memorial Aeronautical Laboratory in Virginia, made enormous contributions to aeronautics research and development, and to the Space Race.

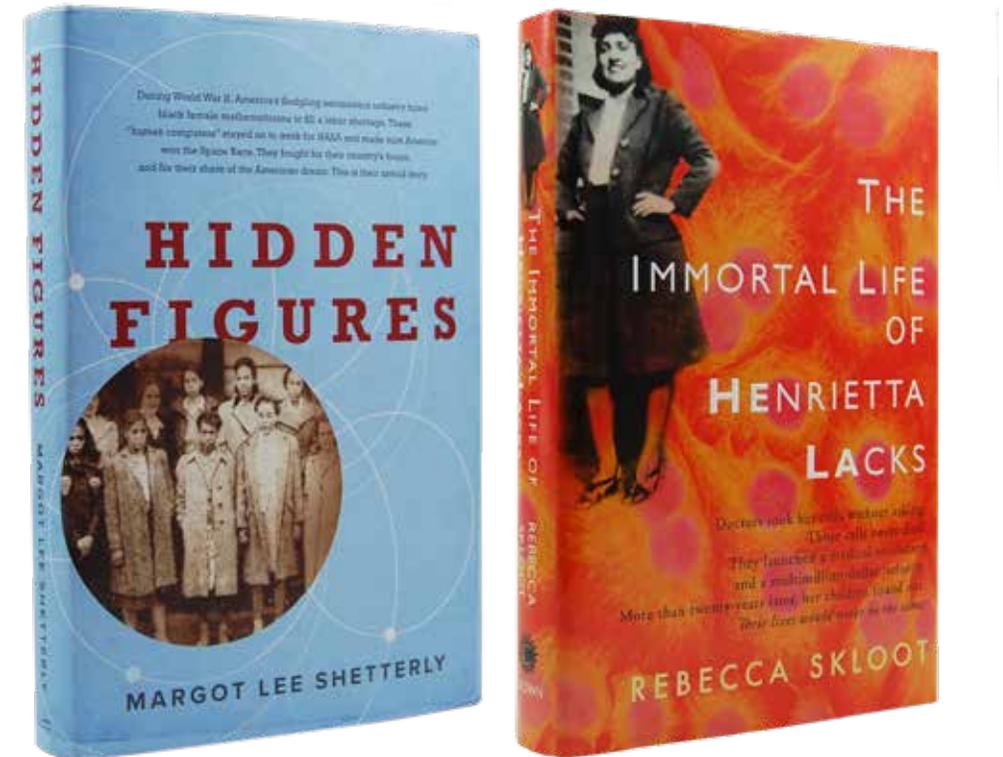
Hidden Figures, based on oral interviews and newly completed archival research, is the story of these women. It reached number one on the New York Times non-fiction list and was described in the *LA Review of Books* as 'a historical homage to the fearlessness of mathematical minds too brilliant to be hindered by racism and sexism—to women who walked away from traditional, low-paying teaching jobs and marched into a predominantly white, segregated work force that considered them, in Shetterly's words, "invisible and invaluable at the same time"' (Toby, *Los Angeles Review of Books* interview with the author, January 19th, 2017).

Among the women profiled in the book are Katherine Johnson, a mathematician so skilled that John Glenn personally requested she calculate the Apollo 11 trajectories, and who refused to use Langley's segregated restroom; Dorothy Vaughan, one of the first Black 'computers' at Langley, who anticipated the rise of machine computation and taught herself and her staff FORTRAN, then headed Langley's Analysis and Computation Division; and Mary Jackson, who began her career as a computer and, after successfully petitioning to be allowed to take white-only night classes in engineering, became NASA's first Black female engineer.

79 | SKLOOT, Rebecca. *The Immortal Life of Henrietta Lacks*. New York: Crown Publishers, 2010. Octavo, pp. [xiv], [1]-369, [1], illustrated title and chapter titles, 4 plates. Original red boards, titles to spine gilt. With the dust jacket. A fine copy in the jacket. **£350**

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 African 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 and treating AIDS and other emerging diseases; to our understanding of cell biology, genetics, and ageing; and in the development of medications for a range of illnesses.



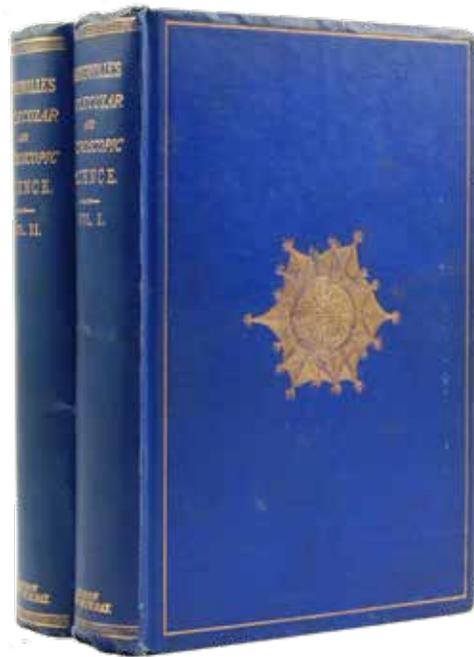
But this scientific success has a darker side. There are serious concerns about how Lacks's race affected her medical care and the treatment of her family by the scientific community. Neither Lacks nor any of her relatives provided informed consent for her cells to be retained and studied, much less 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.

- 80| SOMERVILLE, Mary.** *On Molecular and Microscopic Science*. In Two Volumes - Vol. I. [-Vol. II.] With Illustrations. London: John Murray, Albemarle Street, 1869. Two volumes, octavo; pp. xi, [i] errata, 432, with frontispiece printed in blue and numerous text illustrations; pp. viii, 320, 32 publisher's catalogue dated 1868, with frontispiece and nine plates printed in blue, and numerous text illustrations; with the library stamp of the 'Royal Society of Victoria, Melbourne, 9 June, 89' at head of each title-page, some occasional light foxing and soiling, some light creasing, gutters exposed in Vol. II at pp. 80 and 160, with more marginal tearing due to rough opening at upper margin of pp. 207, 241-249, at the fore-edge of p. 215 and upper corner of p. 320; otherwise clean and crisp; uncut, in the original decorative blue cloth, upper covers embossed in gilt, spines ruled and lettered in gilt, head and tails both a little bumped and knocked, spines a little cockled, covers a little scuffed, dulled with minor staining; still a good copy. **£750**

First edition of this important work by the Scottish mathematician and astronomer Mary Somerville (1780-1872), one of the most influential science writers of her time. Largely self-taught, she became renowned for her skill in interpreting and presenting complex concepts. Her paper, *The Magnetic Properties of the Violet Rays of the Solar Spectrum* (1826), was one of the first to be delivered by a woman before the Royal Society. Following its success, she was

commissioned in 1828 to translate Laplace's *Mécanique céleste* (*Celestial Mechanics*, 5 vols., 1798-1827). The result was her most famous work, *The Mechanism of the Heavens*, which appeared in 1831. Her best-known book, *On the Connection of the Physical Sciences* (1834) played an important part in making known to a more general public, the achievements of great contemporary scientists working in specialised fields. This, her final work *On Molecular and Microscopic Science* (1869) was published three years before her death at the age of 92. 'She had considered revising *Physical Sciences*, but decided instead to write a completely new work on recent discoveries made with the improved microscope. The book opened with a section on atomic theory and the solar spectrum, followed by a catalogue of plants. The second volume covered animals, from protozoa to molluscs, including discussions of internal structure, methods of reproduction, and



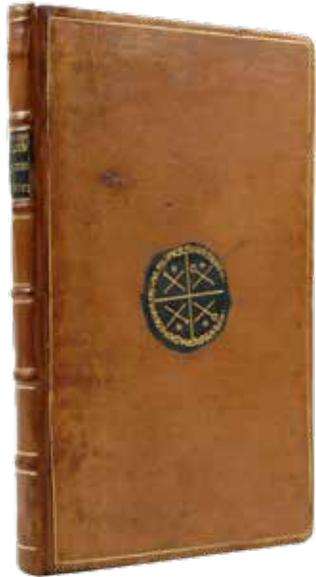
habitats. It was outdated and the least well-written of her books. The reviewers were kind, but it was a financial failure, and her revised edition was never published' (Alic).

'Perhaps no woman of science until Marie Curie was as widely recognized in her own time ... not only did [Somerville's works] bring scientific knowledge in a broad range of fields to a wide audience, but thanks to her exceptional talents for analysis, organization, and presentation, they provided definition and shape for an impressive spread of scientific work' (ODNB). Unlike her contemporary Jane Marcet, Somerville's works were addressed to the professional scientific community as opposed to focusing on the education of women or children in the sciences and so in this sense she broke through a glass ceiling to be taken seriously by mathematicians including Laplace. And the philosopher John Stuart Mill so highly valued her work that he requested hers to be the first signature on his Parliamentary petition advocating for women's suffrage. In 1835, together with Caroline Herschel, Somerville became the first female honorary members of the Royal Astronomical Society. Amongst many honours granted to her, Oxford University named one of its first two women's colleges after her.

Alic, ff. 181; Blain, p. 1006; Creese, I, pp. 201-204; Phillips, ff. 111; Ogilvie, II, p. 1213-5; Proffitt pp. 543-545.

- 81| SQUIRE, Jane.** *A proposal to determine our longitude*. The Second Edition, in English only. London: Printed for the Author, and sold by S. Cope, at the Bible, in King-Street near Golden-Square; and by the Booksellers of London and Westminster. 1743. Octavo, pp. [viii] including initial blank, half-title, title and dedication, 5 - 160, [3] contents, [1] blank, [2] blanks; with large folding engraved table of 'Longitude', and a number of small woodcut illustrations; contents leaves (signed L1 and L2) bound after p. 152, p. 153 unnumbered and blank; slight offsetting from text onto engraved plate, light browning and soiling throughout, but otherwise clean and crisp; some offsetting from binding to endpapers and initial and final blanks; in the original calf, covers ruled in gilt, spine in compartments with raised bands, ruled in gilt and with original black morocco label lettered in gilt, spine expertly rebaked, with the original circular green morocco label in centre of both covers with symbols in gilt within a gilt border (as in other copies retaining the original binding), covers a little bumped and rubbed; an attractive copy preserved in a cloth slip case; with the bookplate of William Cuthbert Brian Tunstall on front pastedown. **£1,500**

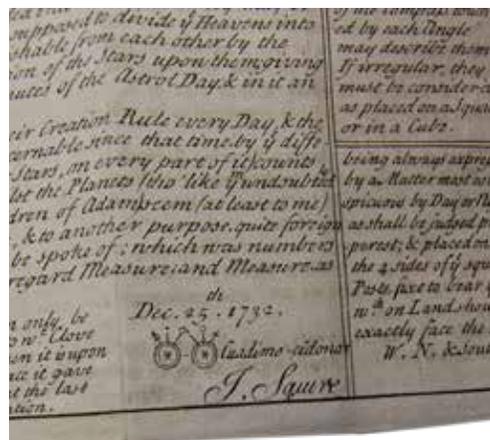
Second edition. Jane Squire (1686-1743), an English scientific writer, was the only known woman to have participated openly in the 18th-century debates and discussions over the solution to finding longitude at sea. She was one of only two who submitted schemes with the aim of receiving a reward under the 1714 Longitude Act (the other being Elizabeth Johnson). She used



her influential connections to pursue her religiously-based longitude project and the circulation of this book, even sending copies to Rome in the hope of gaining the support of Pope Benedict XIV. After receiving Squire's communication the Pope requested the Bologna Academy of Sciences to assess it - their response was negative and they commented that women should not be encouraged to study mathematical sciences.

The work was not considered within any of the minuted meetings of the British Board of Longitude and it has in the 20th century been dismissed as one of the many "nutty solutions" circulating at the time. 'And finally, to complete our roster of nutty longitude theorists, we have Jane Squire ... Squire recognizes that every point on Earth corresponds to a point on the celestial sphere

that is zenithal to it. She divides the globe and sky into a million lozenges, or 'cloves' as she calls them. Since only 3,000 stars are known, she states, there will be only one chance in 300 to find a star in one of the fields, but more stars can be discovered, and eventually there will also be glasses so that stars can be seen in the daytime. She next proposes that the zero of terrestrial longitude be drawn through Bethlehem, and that 'astral time' be reckoned from there, and she requires accurate tables of sunrise there in order to compare the astral time with local solar time at sea [and] an accurate clock will be needed!' (Owen Gingerich, *Cranks and Opportunists* in Andrewes (ed.), *The Quest for Longitude*, pp. 146-148).



More recently, scholars have started to take her contribution, and the responses of her contemporaries, more seriously in order to better understand the scientific and religious cultures of the period, and the importance of gender and social class in gaining a voice in debates. This edition differs little from the first which was published a year earlier in 1742, though that included parallel text in French and English. The Proposal itself was first published in 1731 and is extremely rare (only the BL). It occupies the first 16 pages here, and is followed by correspondence sent and received in the intervening years, and then (p. 61) by 'The Explanation of a Proposal'.

Houzeau & Lancaster 10433; Gingerich, *Cranks and Opportunists* in Andrewes (ed.), *The Quest for Longitude*, pp. 146-148.

82] [STACK, Mary 'Mollie' Bagot, Prunella STACK and Madge GILLINGS.] WOMEN'S LEAGUE OF HEALTH AND BEAUTY. An Early Women's Fitness Programme for class or home use, including vinyl records, accompanying series of instructional 'Exercise Calendar' cards, original League white satin blouse, a small selection of WLHB lapel and metallic badges, a contemporary photograph, and a copy of *Movement is Life*. [presumed London, n.d. but ca. late 1930s]. *Collection comprises, Six 78 RPM vinyl records, each retaining the original plain brown paper sleeve (though all creased and some torn, records 2, 5 and 6 with chipping to extremities, affecting recording on record 2, with further minor wear to other vinyls), 5 (presumably of 6) accompanying double-sided instructional cards, 258 x 280mm (lightly browned with some minor edgewear), an original League white satin blouse, complete with WLHB badge sewn on left side, with buttoned gusset strap, small photograph 61 x 85mm, two yellow enamelled lapel, and two metallic badges, a further loose cloth badge, and a card record cover for 'Weston's Radio Service Station' of 99 High Street, Epsom.* **£675**

An evocative and presumably scarce and early surviving set of what must surely be one of the first exercise programmes, for use either in a group or perhaps at home, and issued by the Women's League of Health and Beauty, recognised as being the original mass movement women's fitness organization.

'The term 'keep-fit' seems first to have been used in about 1929, in relation to a campaign in the north of England, sponsored by the National Council of Girls' Clubs to cater on a large scale for the physical exercise needs of working girls. But as a mass movement it began in 1930 in London in an organization called the Women's League of Health and Beauty, a self-supporting commercial enterprise established by Mary Bagot Stack' (Matthews p. 23).

Like far too many of her generation, Mary 'Mollie' Bagot Stack (1883-1935) found herself a widow after WWI, her husband Edward Stack killed in the early days of the war, as Mary and her daughter Prunella (1914-2010), were on the boat home to Britain from their colonial posting in India. Mary had witnessed the benefits of yoga during her time abroad, and in 1925 she established the Bagot Stack Health School, giving exercise classes for both children and women. Here she taught others to teach, including her Prunella, who by the age of 16 in 1930 was already an experienced practitioner of her mother's system. Through a series of structured exercise sequences set to music, the exercises were also graded to suit the needs of all ages and abilities, whilst at the same time presenting fitness in an acceptably feminine form.

Although Mary's health was failing, in 1930 she set up the WLHB in the YMCA premises on Regent St. At a time of female emancipation, with women gaining the right to vote in Britain in 1928, the League seemed to cut across class barriers, and it became very much an urban



movement, which made physical fitness accessible to working women—shop, factory and office workers—as well as housewives for whom there were few other recreational opportunities. Membership was affordable at half a crown and then sixpence a class. There was a uniform of a white sleeveless blouse and black shorts. The League created its own energetic (though not too sexy) style, first shown publicly in the Albert Hall in 1931, when 500 members put on a display of exercises to music; five years later, 5,000 members performed in Olympia. By this time, however, Stack, aged just 20, was now head of the organisation following the death of her mother a year earlier. In 1930s Britain, austerity sparked public-health fears and the fitness craze gathered pace as Europe began to re-arm and the threat of war loomed large again. By 1937 nearly 166,000 women had signed up, and indeed the momentum built by the Women's League prompted the government to begin a national health campaign. Invited by Prime Minister Neville Chamberlain, Stack was appointed to the campaign to stress physical exercise as “a matter of national importance”. Stack proved more than capable, teaching, performing, and public speaking with skill and charm. With her long legs and radiant smile, the popular press adored her and dubbed her the “perfect girl”. By the start of the war, there were 50 nation-wide centres, all with the motto: ‘Movement is Life’.

The collection on offer includes not only an original white satin blouse, with a sewn on WLHB label on the sleeve and gusset strap to help keep the shirt in place, but the six vinyl records (a complete set), together with 5 (presumably of 6) accompanying ‘Exercise Calendars’ showing the exercises. It is interesting to note that the cards state that the aim was to promote ‘Racial Health’ - a somewhat uncomfortable reminder of the National Socialist’s search for perfection which was emanating from Germany at the time. Indeed Prunella Stack took a League delegation to festivals in Hamburg in 1938, and although apparently unnerved by the experience, hosted a returning German delegation in London in 1939, meeting Frau Getrud Scholtz-Klink, the 36-year-old leader of Germany’s National Socialist Womanhood, whom Hitler described as “the perfect Nazi woman”. The meeting of these two ‘perfect’ women inevitably caused somewhat of a stir at the time, and gives pause for thought today. The cards also give the headquarters of the League as being ‘The Mortimer Halls’, and which points to a date of ca. 1937.

The six records provide spoken instructions given by Mary and Prunella, together with music specially composed by Deirdre Welsh and Madge Gillings. The records were produced in co-operation with the Linguaphone Company. The records deal in turn with: ‘breathing exercises’; ‘exercises for the slim-through middle’; ‘should exercises sitting down’; ‘circulation exercises’; feet and leg movements standing and sitting down; ‘swinging shoulder movements’; head and waist movements; ‘swinging waist movements’; and ‘the seal sequence’. The final record is described as ‘Marching Feet’ and ‘Selection of waltzes for breathing exercises’ so it is possible that no accompanying card was required for this final record (recorded by both mother and daughter and so presumably ca. 1934/5). The records, all of which, aside from record 2 which is chipped interrupting the play, seem to be in generally good condition, are each retain their original brown paper cover - and included is a card record cover for ‘Weston’s Radio Service Station’ of 99 High Street, Epsom - perhaps an indication of the district in which the WLHB member lived. The previous owner clearly took the exercise regime seriously and we presume is one of two women, in their WLHB attire, who appear, sitting cross-legged on the grass, in a snapshot that accompanies the collection. Also included are five WLHB badges - two are round and metallic with the ‘Movement is Life/’ logo, another two are small yellow lapel badge with initials ‘W.L.H.B’, and the fifth is a spare cloth oblong badge, a duplicate of the one sewn onto the blouse. A copy of the 1937 work by Prunella Stack and A. Cruickshant, *Movement is Life*, providing a biographical account of the Stacks, the development of the movement, and their plans for the future, is also included.

The movement continues to be active today, though now known as FLeXercise, and whose President is the renown naturalist Saba Douglas-Hamilton (daughter-in-law of Prunella) and whose patron is the singer Sophie Ellis-Bextor.

Matthews, Jill Julius, *They had such a lot of Fun: The Women's League of Health and Beauty between the Wars*, History Workshop, No. 30, 1990, pp. 22-54.

- 83| STALEY, Dr. Mildred E.** *Handbook for Wives and Mothers in India*. Thacker, Spink & Co., Calcutta, 1908. Octavo, pp. viii, 332, [x] advertisements, 60 publisher's illustrated catalogue; lightly browned and foxed throughout due to paper quality, with gutter cracked at p. 192, 208, 272; with small booksellers stamp from 'Trall & Co., Calcutta' at tail of title-page and on rear pastedown; contemporary green cloth backed cream printed boards, spine lettered in gilt, lower inner hinge cracked but holding, cloth nicked at tail with loss, with further bumping and wear to head of spine, joints and extremities, spine a little darkened, covers a little soiled and dinked. **£285**

Scarce first edition of this colonial health guide for wives and mothers. 'The subject of this book is principally the prevention of disease in mothers and their children during their sojourn in a tropical country, and it embodies the result of many years' experience in India. I have ventured to write it, trusting that it may be of use not only to Wives and Mothers, but also to nurses and others, who in these countries are oft-times left alone to face difficulties and responsibilities for which their training has not sufficed to prepare them' (p. v).

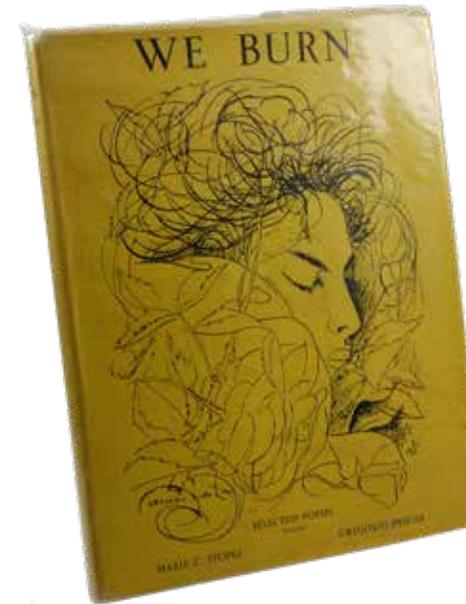
Staley divides the work into four parts providing advice on general hygiene and giving an introduction to some common Indian diseases. Part two deals with the prevention of a variety of common women's diseases. Part III addresses pregnancy and child-birth, with the final section on the care of the infant.

The volume includes a number of advertisements for such famous names as 'Horlick's', 'Virol', 'Mellin's Food', as well as for 'Southalls' compressed towels ... specially designed for ladies when travelling'.

The extensive illustrated publisher's catalogue for Thacker, Spink & Co., Calcutta, is dated 1910, and provides a fascinating insight into Anglo-Indian publishing at the turn of the century.

OCLC locates copies of this edition at Emory University, the British Library and the National Library of Sweden, with three copies of the second edition of 1916 at the NLM, the College of Physicians of Philadelphia, McGill and the Wellcome.

- 84| STOPES, Marie Carmichael.** *We Burn*. Selected Poems. Portrait frontispiece and twelve full page illustrations by Gregorio Prieto. Delamore Press, Alex. Moring Ltd. 2A Cork Street, London, W. 1. 1949. 4to, pp. [iii]-7, [i] blank, [ii] contents, 9 - 100; with half-tone frontispiece and twelve full-page engravings; occasional minor bleed from top-edge colouring to upper margins, some light soiling; in the original yellow publisher's cloth lettered in red, preserving the dust-jacket (unclipped), though with loss at head, tear at tail of upper joint and along fore-edge, and some nicking and fraying to outer margins, preserved within glycine wrappers; a good copy. **£125**



First edition and a nice reflection of the varied publishing career of Marie Stopes (1880-1958), graduate in chemistry, noted paleobotanist, but who found world-wide fame as the pioneer of birth control and sex education, famously expressed in her ground-breaking work *Contraception* (1923). Stopes's legacy is complex, however, as in addition to her birth control work she was a vocal supporter of eugenics and opposed interracial marriage.

Eaton & Warnick, *Marie Stopes: A Checklist*, 601; Ogilvie, II, p. 1242 (focusing on her work as a paleobotanist).

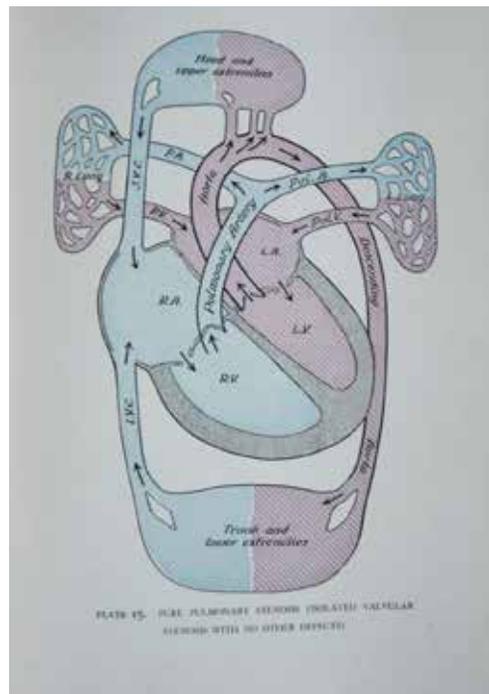
- 85| TAUSSIG, Helen B.** *Congenital Malformations of the Heart*. New York. The Commonwealth Fund. [London, Geoffrey Cumberlege, Oxford University Press] 1947. Large octavo, pp. xxxvi, 618; copiously illustrated without, with 177 text figures and half tones (including 3 full page coloured figures 142, 148 and 149 on two leaves), and coloured plates numbered 1-46 on 36 leaves; generally clean and crisp, with slight kink in upper margins of pp. 491-516; in the original grey publisher's cloth, spine ruled and lettered in black and gilt, head and tail of spine lightly worn, joints, surfaces and extremities lightly scuffed, rubbed and bumped. **£485**

First edition of this landmark work, considered to be the foundation for pediatric cardiology, and for which the author received the 1954 Albert Lasker Award for outstanding contribution to medicine. Describing the diagnosis and cure of innumerable congenital malformations, the book had an immediate and vast influence on pediatric cardiology worldwide. Helen Brooke Taussig (1898-1986) 'conceived the idea of anastomosing the subclavian artery to the pulmonary circulation to improve the blood supply of the lungs; the operation was carried out by Alfred Blalock in 1944, and is now known as the Blalock-Taussig operation' (Bedford, 821).

'As a pediatric cardiologist, she carefully observed her patients, listened to their hearts, studied their x-rays and fluoroscopies and, when they died, examined their hearts at autopsy. Her precise records and correlation of observations made possible accurate diagnosis and understanding of pathological cardiac physiology resulting from congenital malformations. Her studies led her to design an operation to solve a problem of post-birth anoxia, the Blalock-

Taussig procedure, known as “the blue baby operation” that has saved countless infants from death’ (Grolier, p. 141)

‘To arrive at her great achievements, Helen Taussig had much to overcome - the early death of her mother, dyslexia, severe hearing impairment and the discrimination of much of the medical establishment’ (*ibid*). The daughter of Frank W. Taussig, the eminent Harvard professor of economics, Helen overcame severe dyslexia to matriculate as one of the first students at what is now Radcliffe College ‘but seeking broader social and educational experience, she transferred to the University of Berkeley, California and graduated in 1921. Determined to study medicine, she was forced, like so many others, to travel the long way round to fulfill her goal ... Since Harvard Medical School would not accept a woman (first doing so only in 1945) she applied to Harvard School of Public Health, which allowed her to attend classes but would not award her a degree. She was also allowed to study histology at the Harvard Medical School but with a caveat: she was kept in a room by herself so as ‘to not contaminate’ the male students. She finally found a sympathetic mentor in Alexander Begg, professor of anatomy at Boston University, who led her to study isolated heart muscle contractions. This resulted in her first publication and set the stage for her life’s work in cardiology ... Even with her major publication, Harvard Medical School would not permit her to matriculate, so she applied to The Johns Hopkins School of Medicine, admitted as a function of the legacy of Mary Elizabeth Garrett and the Women’s Fund Committee that stipulated that women be accepted on the same terms as men, and she graduated from Hopkins in 1927’ (*ibid*).



In 1959 she became Hopkins’ first woman full professor in clinical medicine. She was awarded the Presidential Medal of Freedom by President Lyndon Johnson in 1964, and was elected the first female president of the American Heart Association in 1965. It was Taussig who was instrumental in recognising the link between thalidomide and the rise in cases of congenital malformations, and helped to end its use in the US. She died in a car accident in 1986.

Bedford, *Evan Bedford Library of Cardiology*, 821; Garrison-Morton 2878; Grolier, *Extraordinary Women*, pp 141-145, and item 136; Ogilvie, II, pp. 1265-7; Proffitt pp. 568-570.

86| **TWINING, Elizabeth.** *The Plant World*. London: T. Nelson and Sons, Paternoster Row ... 1866. Octavo, pp. 414, [2] blank and publisher’s advertisement on final verso; with five striking chromolithographs (including frontispiece and title-page) each retaining the original tissue guards; light browning and spotting throughout but otherwise clean and crisp; gutter cracked in a couple of places but holding; contemporary ownership signature in pencil on front free endpaper; in the original decorative maroon publisher’s cloth, with bright gilt design and lettering on spine and upper cover, all edges gilt, head and tail of spine lightly bumped, covers with minor soiling; a good copy. **£200**

First edition, and relatively uncommon, of this beautifully illustrated work. Twining (1805-1889), part of the famous and wealthy tea dynasty, was the author and illustrator of several botanical works. Her upper-class education and upbringing provided the means for her to pursue personal interests in art and botany. She is probably best remembered for her two volume folio work *Illustrations of the Natural Orders of Plants* (1849-1855) which contained colour illustrations of 160 indigenous plants. The original drawings are housed in the British Museum, a testament to their accuracy. In addition to the present work she also published *Short Lectures on Plants for schools and adult classes* (1858). She lectured on botany to young women at the Working Men’s College, and her work like many of her contemporaries carried a moral and religious message demonstrating the wonders of nature. A noted philanthropist, Twining not only established Saint John’s Hospital for the treatment of the poor, but was the founder of Bedford College for Girls.

Alic, p. 203n7; Ogilvie, II, p. 1309; NSTC 2T21308; see also Lightman, *Victorian Popularizers of Science*, pp. 145-6; OCLC: 3709101 including Toronto, Yale, the Library of Congress, Princeton, Cornell, the New York Botanical Library, Ohio State, and the NLS.



87| **ULLIAC TREMADEURE, Sophia.** Bibliothèque des Enfants. Petit Cours D'Histoire Naturelle en Huit Parties. Entretiens familiers sur l'histoire naturelle. Les Quadrupèdes. Paris, Librairie D'Éducation de Didier, 47, Quai des Augustins. 1838. [together with:] Les Oiseaux. Paris, Librairie D'Éducation de Didier, ... 1838. [together with:] Les Reptiles et les Poisons. Paris, Librairie D'Éducation de Didier, ... 1838. [together with:] Les Coquillages Paris, Librairie D'Éducation de Didier, ... 1838. [together with:] Les Insectes.. Paris, Librairie D'Éducation de Didier, ... 1838. [together with:] Les Animaux-Plantes. Paris, Librairie D'Éducation de Didier, ... 1838. [together with:] Les Végétaux. Paris, Librairie D'Éducation de Didier, ... 1838. [together with:] Les Minéraux. Paris, Librairie D'Éducation de Didier, 47, Quai des Augustins. 1838. Offered together eight volumes (mixed set) duodecimo; I. pp. [iv], 182, [2], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; II. pp. [iv], 202, [2], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; III. pp. [iv], 218, [2], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; IV. pp. [iv], 220, [2], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; V. pp. [iv], 217, [3], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; VI. pp. [iv], 217, [3], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; VII. pp. [iv], 212, [2], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; VIII. pp. [iv], 215, [3], with additional engraved title-page lettered in red, engraved frontispiece, and one further engraved plate; Vols I, III, IV, V, VI, and VIII displaying evidence of some dampstaining, mainly affecting the upper margins, and more prominent in Vols V and VIII, with further occasional light foxing throughout; Vol II a little foxed; Vol VII a little creased, with suggestion of damp although not dampstaining; six of the volumes uncut, and bound in the original decorative printed wrappers (either yellow or green), with waste-paper pastedowns, head and tail of spines bumped and lightly worn (notably Vols I and IV), upper margins with some dampstaining, covers lightly soiled, all a little dog-eared but nevertheless appealing; Vol II in contemporary mottled sheep, rebacked, corners a little worn; Vol VII in contempo-

rary paper backed boards, two morocco labels lettered in gilt on spine, spine sunned, covers a little scuffed and soiled, extremities lightly rubbed and worn. **£1,200**

An appealing, though mixed set, of these early works by the noted educationalist and popular scientific writer Sophia Ulliac-Trémadeure (1794-1862), and of particular appeal having six of the eight volumes being bound in the original decorative printed wrappers. Vols II and VII, bound in contemporary mottled sheep, and contemporary paper boards, provide nice examples of alternative bindings available for purchase.

Published as part of the forty volume series for young children, *Bibliothèque des Enfants*, the present works, all available for individual purchase, formed an eight part sub-series under the sub-heading of *Petit Cours d'Histoire naturelle*. We have so far traced only one complete set at the BnF, and all the separate volumes appear to be very scarce. In total, Ulliac Trémadeure contributed 21 volumes to the *Bibliothèque des Enfants* series. A full list of the titles in the series on found on the verso of the half title, with a note saying of the series: 'Ces jolie volumes sont imprimés avec soin sur beau papier, ornés de jolies vignettes gravés sur acier, d'un titre orné imprimé en couleur, et d'une jolie couverture ornée et gravée sur bois par Porret'.

These pretty volumes introduce the young reader to the basic principles of the subject in the form of a conversation between M. and Madame Derville and their daughters Cécile and Amédée, each accompanied by two attractive engraved plates.

Sophia Ulliac-Trémadeure wrote a large number of works and was later a moving force in the *Bibliothèque de la jeune Fille*, for which she produced during the 1850s a number of beautiful and striking works on natural history, adorned with colour plates, and often in striking bindings.



Gumunchian 5674 for a complete set; OCLC locates only one copy at the BnF. (natural history/popular science/education)

- 88| **ULLIAC-TRÉMADEURE, Sophia.** *Astronomie et Météorologie à l'Usage des Jeunes Personnes d'après Arago, Laplace et W. Herschell ...* Paris, Didier, Libraire-Éditeur ... 1854. Large octavo, pp. vi, 400, [2]; with eight colour-printed engraved plates finished by hand and engraved vignette on title; some foxing throughout as usual, a couple of plates are somewhat browned; uncut in the original printed wrappers, head and tail of spine nicked and worn, spine cracked but holding, upper lower corner torn with loss, covers somewhat soiled, and extremities nicked with small tears; overall a little dog-eared, but unusual to retain the original wrappers, preserved in a custom made clamshell box. **£285**

First edition of this most attractive astronomy designed for children and young adults, particularly girls, written by the educationalist and popular scientific writer Sophia Ulliac-Trémadeure (1794-1862). Ulliac-Trémadeure wrote a large number of works and was a moving force in the *Bibliothèque de la jeune Fille*, for which the present publication was written as the

fourth of five volumes on natural history and astronomy. The highly attractive frontispiece shows a young girl being exhorted to discover the world of the heavens by another, ethereal, young girl representing knowledge - instruments to aid her in her studies are also depicted, including a telescope and a magnificent gilded planetarium. The other plates, principally depicting planetary systems, are equally attractively coloured. In this work on astronomy and meteorology she acknowledges Laplace's 'l'Exposition du système du monde' and John Frederick William Herschel's 'Treatise on Astronomy' as sources.

The work is more usually found far more ornately bound in decorative cloth. Though a little dog-eared, there is an unsophisticated charm about this copy retaining as it does its original printed wrappers, the once proud possession of a less privileged young reader, perhaps.

Gumuchian 5665; OCLC: 30882403 locates copies at Montreal, UCLA, Stanford, the Adler Planetarium and Cambridge.



- 89| **VARLEY, Mrs D.[elvalle Lowry].** *Rudimentary Mineralogy for the use of beginners; Author of 'Conversations on mineralogy', etc. Part I -[II].* Together. Complete. With illustrations. London: John Weale, Architectural Library, 59, High Holborn. 1849. Octavo, pp. [iv], 164, vi index; with coloured engraved frontispiece, one further engraved plate, and numerous illustrations within the text; small closed tear in gutter of advertisement leaf, some occasional faint marginal browning and soiling, final endpaper a little dust-soiled, otherwise clean and crisp; in the original red blindstamped publisher's cloth with paper label on upper covers, inner hinge cracked but holding, head and tail of spine worn with slight loss, with small split in centre of upper joint, spine and covers a little soiled, extremities lightly bumped and corners furled; a good copy. **£285**

Second edition (first published in 1848) of this appealing guide to mineralogy, written by Delvalle Varley (*née* Lowry), daughter of the innovative engraver Wilson Lowry, and subsequently wife of the renowned landscape painter John Varley.

Aimed in particular at the 'student and amateur in Natural Science', this small work devotes sections to the principal metals and minerals, including silver, copper, iron, tin, lead, zinc, manganese, arsenic, and cobalt, as well as mineral rocks such as quartz, and gypsum. For each, Mrs Varley provides a brief physical description, before noting in what conditions and locations they are usually located.

Mrs Varley was the author of similar works, notably her *Conversations on Mineralogy* in 1822, aimed in particular at children, and was clearly influenced in style by the works of Mrs Marcet. The uncommon first edition of 1848 was published in two volumes, and was interestingly aimed more at engineers, rather than as here at a more general readership. The coloured frontispiece is found here for the first time.



- 90| **VENNING, Mary Anne.** *A Geographical Present; being descriptions of the principal countries of the world. With representations of the various Inhabitants in their respective costumes, beautifully coloured.* Third Edition. London: Printed for Harvey and Darton, Gracechurch-Street. 1820. Duodecimo, pp. 144; with 60 charming hand-coloured engraved plates of costumes, hand-coloured; lacking front free endpaper; some light marginal browning and occasional light foxing and soiling, one plate with small nick in fore-edge but otherwise clean and crisp; with contemporary ownership signature on recto of frontispiece dated 1849; later 19th century binding by Bayntun's of Bath, in full red morocco, with gilt floral border, spine in compartments with raised bands, lettered and tooled in gilt, all edges gilt, head and tail of spine and joints a little rubbed; with small ownership label on rear pastedown 'AHA'. **£325**

A charming hand-coloured copy, and in an attractive later Bayntun binding, of the third edition (first 1817), of this geographical primer, one of the most successful works by Mary Anne Venning. The work 'skillfully blends quantitative statistics about manufactures and major rivers with qualitative judgements about national greatness. This combination propelled the text into two more editions in 1818 and 1820, and it was later published in America (in 1829, 1830, and 1831) as three separate volumes on Europe, Asia, and Africa by children's publisher William Burgess ... Venning's ideas had a broad circulation, launching her career as a scientific writer and establishing her authority as an educator of the young' (Norcia, p. 34).

Darton: G975 (3); Lipperheide, 480; Osborne, I, p. 193 (first edition); see Megan Norcia, *X Marks the Spot: Women Writers Map the Empire for British Children, 1790-1895* ff. 33 for a detailed discussion of the work.

- 91| **[VENNING, Mary Anne.]** *Rudiments on Conchology: Designed as a familiar introduction to the science, for the use of young persons. With explanatory plates, and references to the collection of shells in the British Museum. By the Author of "The Geological Present" etc.* London: Printed for Harvey and Darton, Gracechurch-Street. 1826. Duodecimo, pp. vii, [i], 103, [1] blank; with ten hand-coloured lithograph plates (unnumbered frontispiece and plates 1-9); title-page a little soiled, with further light browning and soiling throughout, some off-setting from plates visible; without the front free endpaper, and upper section of rear endpaper excised; contemporary roan-backed marbled boards, spine ruled and lettered in gilt, head and tail of spine nicked with loss, both joints starting but holding firm, covers scuffed and rubbed, extremities lightly bumped and worn. **£250**

First edition of this charming conchological guide for children which takes the form of an instructive dialogue between a father and his two children, and one of a number of pedagogical works written by Mary Anne Venning, a contemporary of Priscilla Wakefield, although little is known about her life. As she states in the advertisement, her intention was to compare the classification systems of Linnaeus and Jean-Baptiste Lamarck to aid the young readers' understanding, and so was clearly conversant with some of the leading scientific arguments of the day, even if social constraints prevented her from penning nothing more than primers for young readers.

The plates are exquisitely engraved and coloured by hand. There are several references to Pacific shells from Australia, New Zealand and California, including a detailed description of the *Cyproea aurora*, which was worn by Maori chiefs as a badge of honour. Another interesting vignette is the story of the Argonauta which was presented to the Natural History Museum in Paris by Huon, who had found it during the voyage in search of La Pérouse.

Venning had previously published *A geographical Present; being descriptions of the principal countries of the world* (1817, see above); *A Botanical Catechism* (1825), and subsequently published *Rudiments on Mineralogy* (1830). All proved relatively popular, going through several editions with the present work reprinted in 1837.

Darton: G976 (1); Freeman, 3823; Gumuchian 1834; Osborne I, 214.

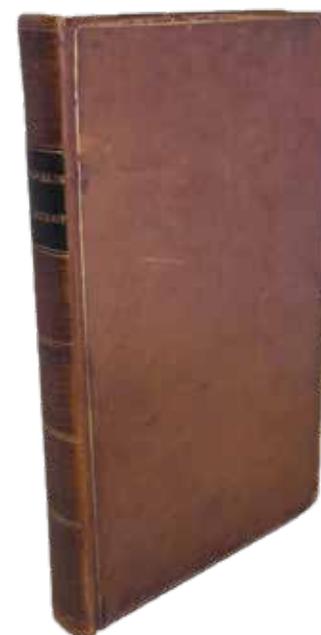
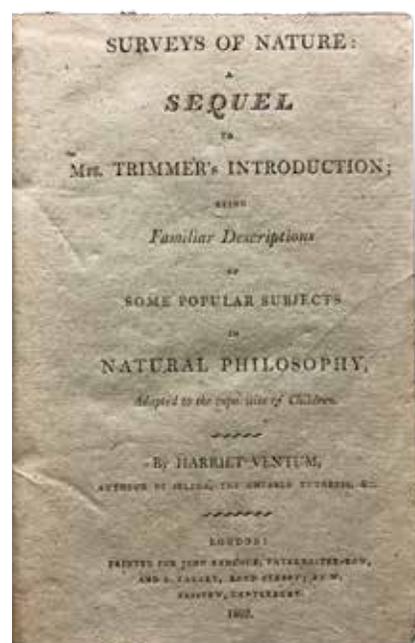


- 92| **VENTUM, Harriet.** *Surveys of Nature: A sequel to Mrs. Trimmer's Introduction; being familiar descriptions of some popular subjects in Natural Philosophy, adapted to the capacities of Children. Author of Selina, The Amiable Tutoress, &c.* London: Printed for John Badcock, Paternoster-Row, and B. Tabart, Bond Street; by W. Bristow, Canterbury. 1802. Duodecimo, pp. vi, 138; lightly browned throughout with some occasional minor staining; cropped close in a number of places at both head and tail, shaving headlines, page numbering, and a couple of catchwords, notably at p. 43, 94-101, and with small nick at tail of p. 103; in contemporary quarter sheep over marbled boards, with remains

of later label on spine, head of spine chipped with loss, with slight loss at tail, upper joint repaired, corners little worn; with inscription on front pastedown 'Edward Hurt June yr 26th 1802' 'the above my mother's handwriting ENH 26th June 1851'. £585

Uncommon first edition, and a nice association copy, of this appealing work for children, by the novelist and author of didactic works, Harriet Ventum. Edward Nicholas Hurt was the son of Susanna Arkwright (1761-1835), daughter of the famous 18th inventor and industrialist Sir Richard Arkwright (ca. 1732-1792). She married Charles Hurt in 1780. Susannah and Charles lived at Wirksworth Hall and had eleven children (only seven survived to adulthood). Edward died in 1867.

Little is known about the life of Harriet Ventum. Born in the 1760s she married Thomas Ventum in 1786 and according to the Times for 10 December 1790, the couple had taken up residence in a house in Holborn. According to records he was at the time a 'court officer' and 'gentleman pensioner', though only a few months later he appears to have vacated his position, the Times noting two 'sales by auction' of household furniture. The reasons for the sale are unclear, but it is interesting to note that her first novel, *Selina*, published in 1800, includes some extremely detailed descriptions of living in poverty suggesting that the Ventums' may well have experienced at first hand real penury (echoing perhaps the experience of Henrietta Moriarty). A second novel, *Justina; or, The History of a Young Lady* followed in 1801. For the next thirteen years, Ventum turned her attentions almost exclusively from novels for adults to didactic prose intended to improve and inspire children and young people, writing seven books for children, four of which were published by J. Harris.



93| **WAKEFIELD, Priscilla.** *An Introduction to Entomology, or the classification of insects.* In a series of familiar letters. With illustrative engravings. London: Printed for Darton, Harvey, and Darton, No. 55, Greenchurch-Street. 1815. *Duodecimo, pp. x, 192; with twelve finely engraved plates; p. x slightly offset and browned from facing first plate, with some occasional light foxing and soiling throughout, and remains of insect at head of p. 160; with small illegible signature at head of the title-page, and errata corrections neatly inserted in a contemporary hand; in contemporary full calf, expertly rebacked and nicely tooled in blind and gilt, with black morocco label, covers slightly scuffed, extremities bumped and lightly worn; a very good copy.* £800

The present work is her fifth book (and her third for children). In her preface she writes: 'Engaged in the business of a school, and constantly in the habit of teaching, I found that although Mrs Trimmer's *Introduction* was a very serviceable work for the perusal, something on the same plan, but on a rather more enlarged scale, with more particular descriptions, would be highly necessary to assist my purpose of instruction with the elder ones' (p. iii). She was clearly inspired however, as the title of the present work highlights, by the growing canon of work by contemporaries such as Maria Edgeworth and Sarah Trimmer, which sought to meet the social mood of concern for the 'rising generation' during turbulent times at home and abroad.

Moon 949; OCLC locates copies at UCLA, Indiana, Toronto Public Library, Southern Mississippi, Oxford and the British Library.

Rare first edition of this book, re-issued in 1816 under the title *An Introduction to the natural history and classification of insects in a series of letters*, and described by Philips as 'a complete guide to entomology' (p. 108). Lawrence Darton in his bibliography *The Dartons* was unable to trace a single copy dated 1815, and believed incorrectly that the work was not published until 1816. All copies of the 1816 edition have cancelled title indicating that a change of title was made shortly before the issuing of the new edition.

'A committed campaigner for the improvement of the conditions of women of all classes, she had great expectations of the role that science could play in those changes ... Above all, she saw it as a tool that could not only contribute

to developing the understanding of women, but also open up new possibilities of employment for them' (*ibid*).

'One of her first publications was a presentation of the outlines of botany to her female audience. At this time botany had not yet acquired hobby status among women. Geology, entomology and chemistry were much more popular. Priscilla Wakefield thought that women should investigate all branches of science, even those that had hitherto seemed too esoteric for them. Botany was one science still in the hands of the learned Latinists ... Mrs Wakefield, however, decided that it was up to her to open up the subject in a way comprehensible to women' (*ibid*).

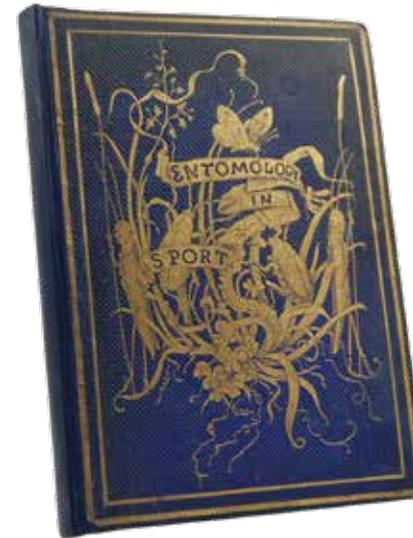
Her works inspired a rash of handbooks for ladies, often written in dialogue form, providing introductions to the various branches of science which they could then pursue as hobbies.

See Darton, G997; Alic, p. 112; Blain, p. 1121; Freeman 3850 (1816 handcoloured edition); Phillips, pp. 107-109; Proffitt, p. 599; Sage, p. 647; Todd, p. 313; see George, *Botany, sexuality and women's writing 1760-1830*, (2007) for an extensive discussion on Wakefield; no copy list in either COPAC or OCLC.

- 94| **[WARD, Mrs Mary and Lady Jane.]** *Entomology in Sport, and, Entomology in Earnest* by the Honorable [sic] Mrs. W. and Lady M. London: Paul Jerrard & Son ... [1859]. Duodecimo, printed on thick paper; pp. [iv] comprising lithograph title-page with chromolithograph title-page on verso (retaining original tissue guard), chromolithograph frontispiece with chromolithograph dedication on verso, 68; with several enchanting colour vignettes in part I; title-page and final leaf somewhat browned, with further light browning and soiling throughout, more prominent marginal browning affecting upper and outer margins of pp. 11-13, evidence of glue remains in gutters of title-page and final verso (presumably from previous gutter repairs); in the original blue decorated pebble-grained cloth, neatly recased and rebacked, all edges gilt, upper cover with intricate gilt design of insects and foliage, rear cover with same image in blind, some slight spotting to covers, extremities lightly rubbed and bumped. **£650**

Uncommon first edition, seemingly a variant copy, of this most appealing children's natural history, and a lesser known work by Mrs Mary Ward and Lady Jane Mahon.

Divided into two parts, the first contains a poem which introduces the reader to various insects, with each stanza beginning with an illuminated vignette or historiated initial, together with many subsequent appealing vignettes. The second part explains how to study the insects themselves, outlining the equipment needed and providing a brief definition of insects in their various stages.



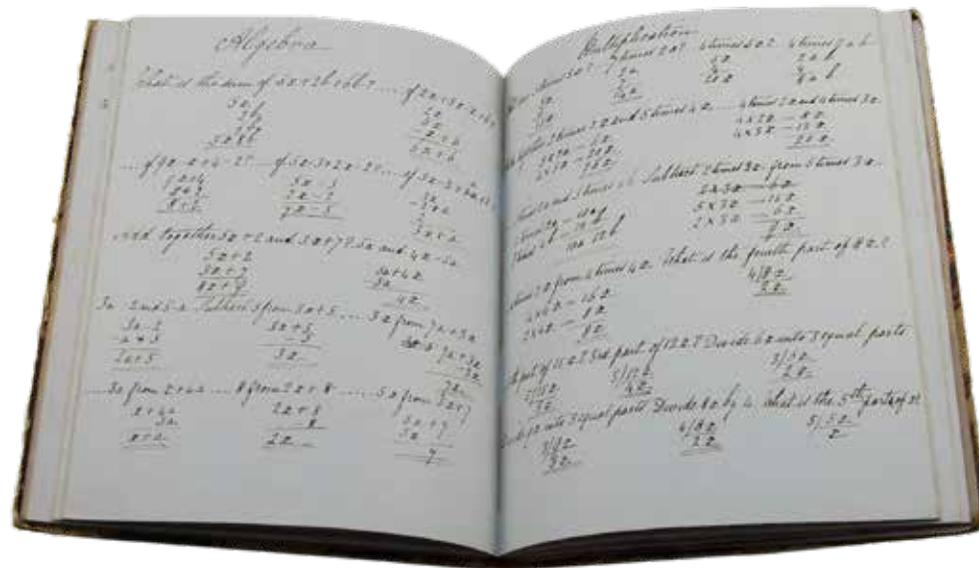
Mary Ward (*née* King) was born in Ballylin, near Fermoy, Co. Offaly in April 1827. Encouraged to study science from an early age, she went on to illustrate several books and scientific articles by Sir David Brewster, the famous Scottish physicist who invented the Kaleidoscope, and who often sent her scientific papers and specimens. Her first book, *Sketches with the Microscope*, was published privately, but was then published in the following year by Groomsbridge of London, as *The World of Wonders as revealed by the Microscope*, and proved to be extremely successful, going through several editions. Her books, simply written, appealed to all. Further works included *Telescope Teachings* (1859) and *A World of Wonders Revealed* (1858). She also published articles in journals like *Recreative Science* and *The Intellectual Observer*. She was added to the Royal Astronomical Society's mailing list, one of only three women to have this privilege, the others being Queen Victoria and Mary Somerville. Two of her books were selected to be displayed at the international exhibition at the Crystal Palace in 1862. She was tragically killed, in what is believed to be the world's first automobile accident.

Freeman 3881; OCLC: 5076749 locating copies at Toronto, UCLA, Princeton, NYPL, Yale, North Carolina, the British Library, Cambridge and Oxford: a variant issue notes a pagination of pp. 20, 48; Proffitt pp. 600.

95| WATKINS, E. *Mathematical workbook.* Stow Lodge, August 1st, 1855. Original marbled boards, roan backstrip, all edges marbled, light blue paper. Ticket of 'Murphy, Bookseller & Stationer, Brentford' to the front pastedown. Printed calligraphic title with space for the owner's name, 74 pages of manuscript calculations, 21 pages of transcribed verse at the rear, 14 blank pages. 20th-century ownership signature in pencil to the front pastedown. Binding a little rubbed, corners worn, small crack at the edge of the upper hinge, occasional light spots to contents. Very good condition. **£500**

An advanced mathematical workbook begun in August 1855 by a 'Miss E. Watkins' of Stow Lodge, an unusual survival in that 19th-century mathematical workbooks by girls are less common than those by boys, particularly at this educational level.

This notebook includes a printed title page depicting calligraphic birds and quill pens, with a space for the owner to write their name, which Miss Stow has done. The leaves are blue paper, and seventy-four of the pages are filled with elegantly presented mathematical work, while the final twenty-one are a transcription of the poem "The Ministry of Angels" by Thomas Edwards Hankinson (1840). The identity of Miss Watkins is unclear, as is the location of Stow Lodge, though it may have been the one in Stow-on-the-Wold, Gloucestershire, which at the time was occupied by Robert William Hippisley and his wife; was Miss Watkins perhaps a relative or ward?



The mathematical contents are sophisticated for a young woman of the period, going beyond simple arithmetic and indicating that her (probably upper-middle class) family had the means to provide her an education that was practical—strong on bookkeeping and business activities—and also well-rounded, with an emphasis on broad knowledge of the world. The workbook opens with eight pages on 'Motion', being questions about the Earth: 'How many geographical miles are there round the globe, it being 360 deg in circumference?' 'Suppose a ship sailing to Calcutta in the East-Indies passes through 5,000 leagues of sea, how many days will it require to perform the same, admitting she sails uniformly 7 miles an hour?'

A significant portion of the workbook—twenty-eight pages—covers interest calculations, and another eight pages teach fractions by way of mercantile problems: 'How many lbs of tobacco can be purchased for £15 3/6 at the rate of 28 3/4 s. per cwt?' 'A stationer bought 4 1/8 quires of foolscap paper at 4 1/2 per quire, what must be given for 15 3/4 reams?' Additionally, there are twenty-one pages of algebraic problems, moving from simple to quadratic equations, and including complex equations with two unknown quantities.

An interesting and elegant example of the type of mathematical education accessible to well-off British girls during the nineteenth century.

TECHNOLOGY FOR EMANCIPATION

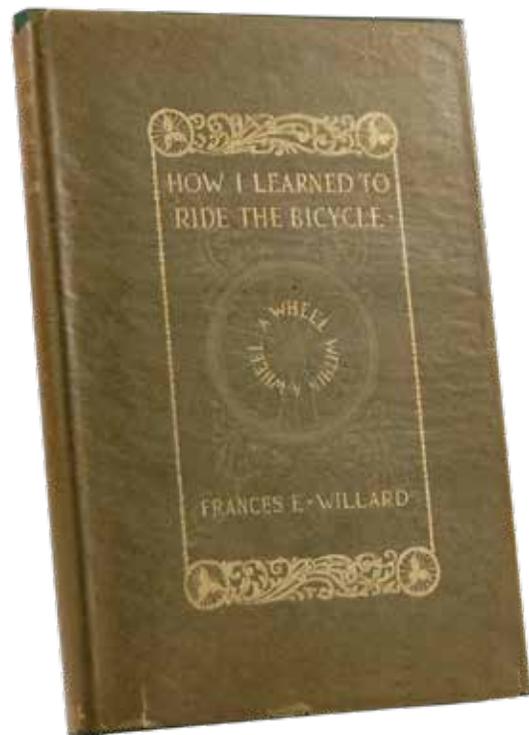
96| WILLARD, Frances E. *A Wheel Within a Wheel. How I Learned to Ride the Bicycle. With Some Reflections by the Way. Illustrated.* New York: Fleming H. Revell Company, 1895. Octavo, pp. [ii], [4]-75, [3], portrait frontispiece and six plates. Original red cloth blocked in silver and green on the spine and upper cover. A superb, fresh copy in excellent condition in the glassine dust jacket with just a little toning and some minor chips and short closed tears. There are a few tiny spots along the edge of the spine where the jacket has adhered to the cloth, and we have not tried to separate them. **£750**

First edition, first printing. A superb copy with the rare glassine dust jacket. Copies of the first edition in such immaculate condition are scarce, and we have never handled a copy in the original jacket such as this one. There appear to be two states of the title page, one listing the Woman's Temperance Publishing Association and the Fleming H. Revell Company, the other listing only Revell, as here. It is unclear whether there is any priority between the two.

This important meditation on bicycling as a tool for the emancipation of women was written by the American suffragist leader Frances Willard. The invention of the safety bicycle in the 1870s made the technology broadly accessible to the public for the first time, and by the beginning of the 1890s the US was experiencing bicycle mania. The bicycle appealed particularly strongly to women, who found in it a new freedom and power. Debates over the propriety of women cycling, and the push for non-restricting clothing for female cyclists,

provided an arena in which women 'actively contested and rethought femininity' (Scranton, *Beauty and Business*, p. 26). Many leading suffragists were enthusiastic cyclists, and the bicycle was an important symbol for the women's movement.

Frances Willard was fifty-three, with a long career as a suffragist and temperance activist behind her, when she first took up cycling. Her initial interest in the sport was sparked by the belief that cycling could draw men and boys away from alcohol by offering more wholesome thrills. But she also felt stifled by a lifetime of restricted movement and sought to regain the joy of physical activity she had experienced as a child. This elegant little volume charts Willard's progress as she learns to ride, and it describes how she 'found a whole philosophy of life in the wooing and winning of my bicycle' (p. 25). She muses eloquently on the thrill of speed, the joy of mastering an athletic skill, and the delights of the outdoors, and compares the tribulations of learning to ride with those of life in general. Most importantly, Willard discusses how the bicycle will transform 'the woman question'. 'If women ride they must, when riding, dress more rationally than they have been wont to do. If they do this many prejudices as to what they may be allowed to wear will melt away. A reform often advances most rapidly by indirection. An ounce of practice is worth a ton of theory; and the graceful and becoming costume of woman on the bicycle will convince the world that has brushed aside the theories, no matter how well constructed, and the arguments, no matter how logical, of dress-reformers' (pp. 38-39).



'We saw with satisfaction the great advantage in good fellowship and mutual understanding between men and women who take the road together, sharing its hardships and rejoicing in the poetry of motion. The old fables, myths, and follies associated with the idea of woman's incompetence to handle bat and oar, bridle and rein, and at last the cross-bar of the bicycle, are passing into contempt in presence of the nimbleness, agility, and skill of "that boy's sister"' (pp. 40-41).

Scranton, *Beauty and Business*, p. 26.

- 97| **WOOD-ALLEN, Mary.** *Marvels of our bodily dwelling.* Physiology made interesting. Suitable as a Text-Book or Reference Book in Schools, or for pleasant home reading. Published by Wood-Allen Publishing Co., Ann Arbor, Michigan. 1895. Octavo, pp. 275, [1] publisher's advertisement; without the frontispiece portrait, seemingly never bound in; with five half-tone plates, and numerous text illustrations; with some light marginal browning, otherwise clean and crisp; in the original yellow publisher's cloth, upper cover and spine lettered in red, head and tail of spine bumped, covers slightly stained and soiled with evidence of silverfish damage to covers. **£125**

Uncommon first edition of this popular treatise on human physiology, one of a number of works on sexuality, health and self improvement published by the noted physician, lecturer and leading light of the social purity movement of the late 19th and early 20th century America, Mary Wood-Allen, M.D. (1841-1908).

Some, but not all, of the editions of 1895 cautiously added a sixteen-page supplementary chapter, "The Birthchamber", which was more readily available as a separate publication. It is not found in the present copy, although a note stating its availability is printed on pink paper and tipped in at p. 12. The chapter was included in later editions.

Wood-Allen is also noted for her pseudo-fiction *Almost a Man* (1895), considered by some to be the first young adult novel, together with a number of popular advice manuals published as part of the *Self and Sex Series* commissioned by Sylvanus Stall (1847-1915), the proprietor of the Vir Publishing Company. This series provided "pure books on avoided subjects" and were devoted to the moral, physical, and sexual health and hygiene of men and women through all stages of life. Two of her contributions includes *What a Young Girl Ought to Know* (1897) followed by *What a Young Woman Ought to Know* (1898).

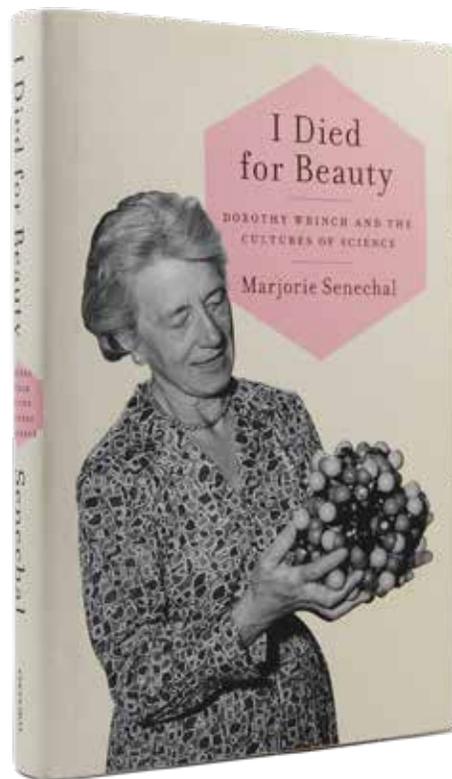
Atwater 3854; See Campbell, *Sex Guides: Books and Films about sexuality for young adults*, p. 1903; OCLC locates copies at Buffalo, New York Public Library, Stanford, Yale, Harvard, NLM, Library of Congress, Detroit, Cleveland, Oregon and Wisconsin.

- 98| **(WRINCH, Dorothy) SENECHAL, Marjorie.** *I Died for Beauty*. Dorothy Wrinch and the Cultures of Science. New York: Oxford University Press, 2013. Octavo. Original grey boards, titles to spine in silver. With the dust jacket. Illustrations from photographs throughout the text. An excellent, fresh copy in the lightly rubbed jacket. **£125**

First US edition, first printing. Originally published in the UK the previous year. From the library of Nobel Prize-winning biologist Sydney Brenner, with his ownership inscription on the front free endpaper, 'Sydney Brenner, Cold Spring Harbour, 3 March 2013'. The receipt from the Cold Spring Harbor Laboratory bookshop is loosely inserted, together with a TSA baggage inspection notice.

Mathematician Dorothy Wrinch (1894-1976) was the first woman to receive a doctorate of sciences from Oxford. She was mentored by Bertrand Russell and 'between 1918 and 1932 she published sixteen papers on scientific methodology and philosophy of science' and began expanding her interests to biology, physics, and many other fields (Ogilvie). Wrinch was a founding member of the Biotheoretical Gathering, a group dedicated to using methods from physics and mathematics to solve problems in biology, and she was awarded a grant from the Rockefeller Foundation for this type of research. Inspired by the work of Dorothy Hodgkin and John D. Bernal on protein structures, Wrinch focused on geometrical approaches to determining protein structures. 'She developed a new theory of protein structure that combined ideas of mathematical symmetry with the notion of a relatively rare type of chemical bond, the cyclol bond', which she believed was 'the main link between the amino acids that made up proteins' (*ibid*). This model was controversial, causing rifts between Wrinch and the British crystallography community. It was eventually shown to be only partially correct – cyclol bonds exist but are not the main bonds in proteins – nevertheless, she is important "as an early physical scientist who applied mathematical skills to biological problems. This type of approach eventually led to the rise of molecular biology in the 1930s" (*ibid*).

Ogilvie, II. pp. 1407-8; Watts, p. ; Yount, pp. 318-320.



- 99| **WU, Chien-Shiung.** Experimental test of parity conservation in beta decay [IN:] *Physical Review*, Volume 105, Second Series, Number 4, February 15, 1957. Published for the American Physical Society by the American Institute of Physics, 1957. Large quarto, pp. 1413-1415, [entire issue pp. 1131-1420]; upper outer corner a little creased throughout, otherwise clean and crisp; a very good copy in the original blue printed wrappers, head of spine slightly nicked and worn, spine a little sunned; with previous owner's stamp 'C. Møller' on upper wrapper. **£400**

First printing of this important paper.

'In 1956 a major question arose from the deliberations of two theoretical physicists, Chen Ning Yang and Tsung-Dao Lee: was parity - left-and-right-handed, mirror symmetry - conserved in beta decay? Such symmetry is familiar in everyday life and was known to be correct for other nuclear processes' (Grolier). The Columbia University based physicists turned for assistance to their colleague and expert on beta decay, Chien-Shiung Wu, who had by then established a sophisticated laboratory to perform such complex experiments. 'The surprising answer determined by Wu and collaborators at a government research laboratory was the negative: the number of electrons emitted in opposite directions with respect to the axis of the nucleus was different. With the question answered, the result was an immediate Nobel Prize for Yang and Lee, but not to We for answering the question' (*ibid*).

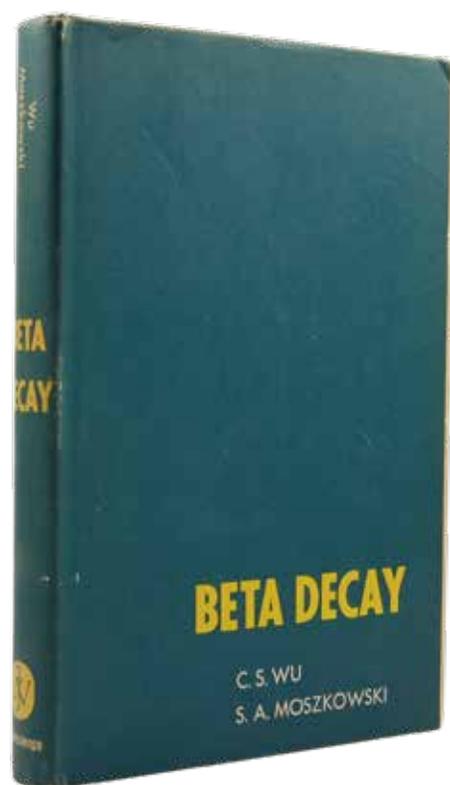
'Born in a small town near Shanghai, C.-S. Wu had the good fortune to have a father so interested in education for girls, then uncommon in China, that he started a school for girls. Wu continued her education at the University in Nanjing, where she majored in physics and had a teacher who had worked with Marie Curie. While a student Wu became a leader of political action groups focused on Chinese nationalism during the turbulent 1930s. After college and working as a research assistant, her supervisor, who had a Ph.D. in physics from the University of Michigan, encouraged her to consider advanced education in physics in Michigan. With financial help from an uncle, Wu came to San Francisco in 1936. Upon hearing stories of discrimination against women students at Michigan and aware of the reputation of the physics department at the the University of California, Berkeley, she enrolled at Berkeley. She completed work for a Ph.D. in 1940, and her first published paper, having to do with nuclear fission, appeared with a future Nobel laureate as co-author. In 1942 Wu married a fellow physicist. Unable at first to obtain an academic appointment at a research university, she took positions as a physics instructor at Princeton University and at Smith College. In March 1944 she moved to Columbia University to work on radiation detectors for the Manhattan Project. An academic position at Columbia materialized for Wu and she made a sagacious decision to undertake the investigation of beta decay - ejection of an electron from an atomic nucleus that transforms the nucleus into that of a different element - as her primary research topic. At this time in the development of nuclear physics, perhaps no other subject in the hands of a skilled experimentalist could have been more fruitful for the future of nuclear physics. It is not surprising, therefore, that she authored what is still the standard monograph on the subject (Grolier).

Grolier, *Extraordinary Women*, pp. 68-72, and item 63; Proffitt pp. 622-623; Yount, pp. 320-322.

100 | **WU, Chien-Shiung and S. A. MOSZKOWSKI.** *Beta Decay*. Interscience Publishers. A division of John Wiley & Sons New York, London, Sydney. 1966. Octavo, pp. xiv, [ii], 394, [6] blanks; with one folding table and a number of text diagrams and illustrations; clean and crisp; in the original grey publisher's cloth, lettered in blue, retaining the original dust-jacket printed in blue and yellow, joints and extremities of jacket a little rubbed and worn, corners slightly bumped, covers slightly sunned and soiled. **£150**

First edition. 'Without doubt, the research results of Chien-Shiung Wu made critical contributions essential for many discoveries in nuclear physics during the second half of the twentieth century. Her selection of beta decay as a research subject was a prescient choice made very early in her career; beta decay was the most mysterious and subtle of the three types - alpha, beta, and gamma - of radioactive decay processes. Her research results on the spectra of beta decay explained former discrepancies, confirmed for the first time Enrico Fermi's theory of beta decay, and was important to complete the understanding of beta decay ... Her book on beta decay remains the standard work' (Grolier Club, p. 70).

Grolier, *Extraordinary Women*, pp. 68-72, and item 64; Proffitt pp. 622-623.



POSTSCRIPT

In 2009 I sent out one of my earliest printed catalogues as DCRB. Called 'Ladies in the Laboratory' it was a chronological list of works relating to women in science and medicine. At the time, two reference books proved invaluable: Mary Creese's two volume *Ladies in the Laboratory* (1998 and 2004) – from which I shamelessly drew inspiration, and Marilyn Ogilvie and Joy Harvey's *The Biographical Dictionary of Women in Science. (2000)*. I was unaware at the time, that the now renown Grolier Club exhibition *Extraordinary Women in Science & Medicine. Four Centuries of Achievement* was in the early stages of planning. Curated by Ronald K. Smeltzer, Robert J. Ruben, and Paulette Rose, it opened in 2013, and I was delighted to discover that a couple of items from my earlier list were included for display. Laura and I are indebted to the excellent catalogue which accompanied the exhibition. It was in many ways the inspiration for our joint venture this year, and has been quoted extensively. Great progress has been made since 2009, in terms of the increased recognition of the important contribution to all of the sciences made by women over the centuries. The Grolier Club exhibition undoubtedly provided much momentum amongst book collecting circles. Much more is now being done to celebrate the achievements of women both past and present, and to recognise diversity and the work of women of colour, though as is still widely acknowledged, there is a long way to go before women are equally represented in the sciences. The work of uncovering these women's stories, led by librarians, academics, authors, and indeed booksellers, is well under way at least.

DC.



Selected Bibliography

Alic, Margaret. *Hypatia's Heritage. A history of women in science from antiquity to the late 19th century*. The Women's Press Limited, 1986.

Blain, Virginia, editor. *The Feminist Companion to Literature in English*, New Haven, 1990.

Bloom, Abigail, editor. *Nineteenth century British Women Writers*. Greenwood Press, 2000.

Creese, Mary R. S. *Ladies in the Laboratory [volumes I and II – American and British Women in Science, 1800-1900 and West European Women in Science 1800-1900]*. A Survey of their contributions to research. Scarecrow Press, 1998 and 2004.

Erdmann, Axel. *My Gracious Silence, Women in the mirror of 16th century printing in Western Europe*, Gilhofer, 1999.

Findlen, Paula editor. *The Contest for Knowledge. Debates over women's learning in 18th century Italy*. Chicago, 2005.

Gates, Barbara, editor. *In Nature's Name. An anthology of women's writing and illustration, 1780-1930*. Chicago 2002.

Gates, Barbara and Ann B. Shteir. *Natural eloquence: women re-inscribe science*. University of Wisconsin Press, 1997.

George, Samantha. *Botany, Sexuality and Women's Writing, 1760-1830*: Manchester University Press, 2007.

Henrey, Blanche. *British Botanical and Horticultural Literature*, Three volumes, 1975.

Herzenberg, Caroline L. *Women scientists from antiquity to the present*, West Cornwall, CT, 1986.

Hilton, Mary. *Women and the Shaping of the Nation's Young*. Ashgate, 2007.

Hurd-Mead, Kate Campbell. *A History of Women in Medicine*, Haddam, 1938.

Kloek, Els, et al, editors. *Women of the golden age: an international debate on women in 17th century*, Verloren, 1994.

Lightman, Bernard, editor. *Victorian Science in Context. Designing nature for new audiences*. Chicago, 1997.

McKenna-Lawler, Susan M. *Whatever shines should be observed*. Dublin, 1998.

Ogilvie, Marilyn and Joy Harvey, editors. *The Biographical Dictionary of Women in Science. Pioneering lives from ancient times to the mid-20th century*. Routledge, 2000.

Perez, Janet. *The Feminist Encyclopedia of Spanish Literature*. Westport, 2002.

Phillips, Patricia. *The Scientific Lady, A Social history of Woman's Scientific Interests 1520-1918*. Weidenfeld & Nicholson, 1990.

Proffitt, Pamela, editor. *Notable women scientists*. Detroit, 1999.

Rayner-Carter, Marelene and Geoffrey, editors. *A Devotion to their Science, Pioneers in Radioactivity*. Chemical Heritage Foundation, & McGill-Queens University Press, 1997.

Sage, Lorna, editor. *The Cambridge guide to Women's writing in English*, Cambridge, 1999.

Shearer, Benjamin F and Barbara S., editors. *Notable women in the life sciences and Notable women in the physical sciences*, Westport, 1996, and 1997.

Sheffield, Suzanne Le-May, *Revealing new worlds: three Victorian women naturalists*. London, 2001.

Todd, Janet. *Dictionary of British and American Women Writers, 1660-1800*. London, 1984.

Watts, Ruth. *Women in Science. A Social and Cultural History*, London, 2007.

Wilson, Katharina. *An encyclopaedia of continental women writers*, Garland Publishing, 1991.

Women in Technology and Science. *Stars, Shells and bluebells: women scientists and pioneers*. Dublin, 1997.

Yount, Lisa. *A to Z of Women in Science and Math*, New York, 2008.

A selection of on-line sources have also been used including:

Aletta Institute for Women's History:
<http://www.aletta.nu/aletta/eng>

Biographies of Women Mathematicians:
<http://www.agnesscott.edu/lriddle/women/women.htm>

Charlotte M Yonge Fellowship web-site:
<http://www.dur.ac.uk/c.e.schultze/context/goslings.html>

Collected Biographies of Women. An Annotated Biography:
<http://womensbios.lib.virginia.edu>

Gerritsen collection online:
<http://gerritsen.chadwyck.com> – (available via the British Library and affiliated libraries)

Scienza a due Voci:– Le donne nella scienza italiana dal Settecento al Novecento:
<http://scienzaa2voci.unibo.it/index.asp>

Reed, Elizabeth. *American Women in science before the Civil War*
4000 Years of Women in Science -
<https://4kyws.ua.edu/>

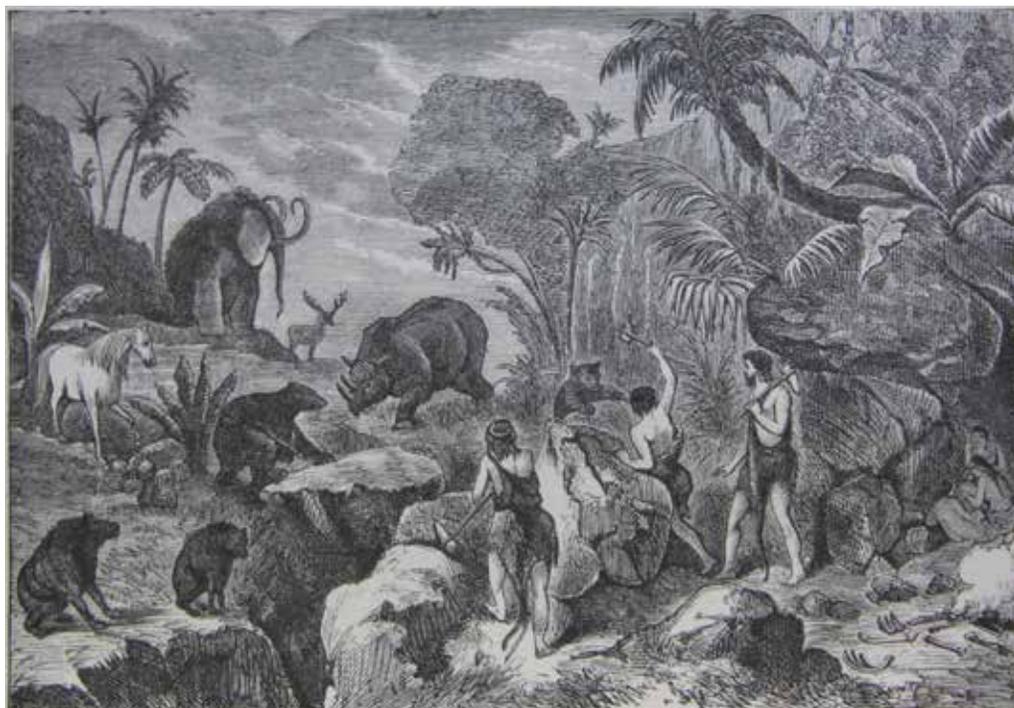
Women's History:
<http://womenshistory.about.com>

Women philosophers:
www.women-philosophers.com

Women in Astronomy Bibliography, the Wolbach Library, Center for Astrophysics.
<https://library.cfa.harvard.edu/wiabib>

Women's Engineering Society.
<https://www.wes.org.uk>

Women in Science:
<https://guides.library.harvard.edu/WomenInScience>



Item 47, HERRICK, Sophie Bledsoe. *Earth in Past Ages*.

Subject Index

- Activism – 42, 43, 44, 56, 68, 76, 78, 79, 84, 96
- Anatomy – 21, 36, 39, 75, 85
- Anthropology – 54
- Astronomy – 10, 23, 38, 46, 48, 50, 52, 61, 62, 67, 70, 74, 77, 78, 81, 88
- Aviation – 17, 51
- Biography – 23, 36, 50, 52, 57, 72, 78, 79, 98
- Biology – 14, 25, 35, 36, 39, 9, 54, 57, 63, 79, 80, 86, 93, 94, 98
- Botany – 6, 9, 63, 86
- Cardiology – 85
- Chemistry – 58, 71, 98
- Conchology – 26, 91
- Contraception – 76, 84
- Computing – 69, 78
- Ecology – 25, 35
- Education – 9, 12, 19, 20, 21, 26, 46, 47, 59, 60, 61, 62, 70, 71, 77, 87, 88, 89, 91, 92, 95
- Embryology – 36, 39
- Engineering – 10, 68, 78
- Ethnology – 24, 45, 90
- Entomology – 9, 93, 94,
- Ephemera – 1, 8, 17
- Darwinism/Evolutionary Science – 32, 54
- Genetics – 7, 14, 57
- Geology/Minerology – 3, 11, 16, 37, 47, 62, 89
- Health and Well-being – 21, 44, 82, 83, 97
- Herbals/Herbaria – 4, 6, 63
- History & Philosophy of Science – 4, 5, 15, 23, 78, 79
- Horticulture – 20, 63,
- Longitude – 81
- Mathematics – 1, 2, 8, 15, 40, 53, 60, 66, 81, 95, 98
- Medicine – 12, 31, 34, 44, 59, 64, 65, 76, 79, 83, 84, 85
- Microscopy – 80
- Mountaineering – 55
- Natural History – 6, 26, 35, 9, 86
- Natural Philosophy/Newtonianism – 18, 27, 73, 92
- Neurology – 36, 39, 75
- Nobel Prize Winners- 22, 23, 28, 29, 30, 31, 36, 41
- Nuclear Physics – 13, 28, 29, 30, 41, 99, 100
- Nursing – 64, 83
- Paediatrics – 83, 85
- Pathology – 34,
- Peace Movement – 42, 43, 56
- Pharmacology – 4, 69
- Photography – 13
- Physics – 13, 22, 23, 27, 40, 41, 67, 74, 99, 100
- Physiology – 21, 36, 39, 76, 97
- Popular Science – 9, 19, 26, 80, 91
- Radiology/Radioactivity – 7, 13, 28, 29, 30, 31, 42, 43, 56, 99, 100
- Sexual Health – 33, 76, 84, 97
- Social Reform – 33, 44, 97
- Sociology – 33
- Surgery – 65, 85
- Travel & Exploration – 10, 24, 45, 55, 78

Published 2019 by
Alembic Rare Books
Deborah Coltham Rare Books

Copyright © Alembic Rare Books
and Deborah Coltham Rare Books
Texts © Deborah Coltham and
Laura Massey

Designed by Dean Pavitt
dean@pavittandpavitt.co.uk
Printed by

ISBN 978-1-9160561-0-7

All rights reserved. No part of
this book may be reproduced in
any form by any electronic or
mechanical means (including
photocopying, recording or
information storage and retrieval)
without permission from the
author(s) and publisher.



Alembic Rare Books
113c Mount View Road
London
N4 4JH
United Kingdom,

+ 44 (0) 7503 785296
info@alembicrarebooks.com
alembicrarebooks.com



Deborah Coltham Rare Books
PO Box 523
Sevenoaks
Kent
TN13 9PN

+ 44 (0) 1732 887252
deborah@coltham.co.uk
www.dcrb.co.uk

Back cover: Item 58, MARCET, Jane. *Conversations sur la chimie*.



ALEMBIC RARE BOOKS
DEBORAH COLTHAM RARE BOOKS