Alembic
RARE ⊖ BOOKS

TWENTY ITEMS FOR THE CALIFORNIA VIRTUAL BOOK FAIR

March 4-6, 2021

NO. 17

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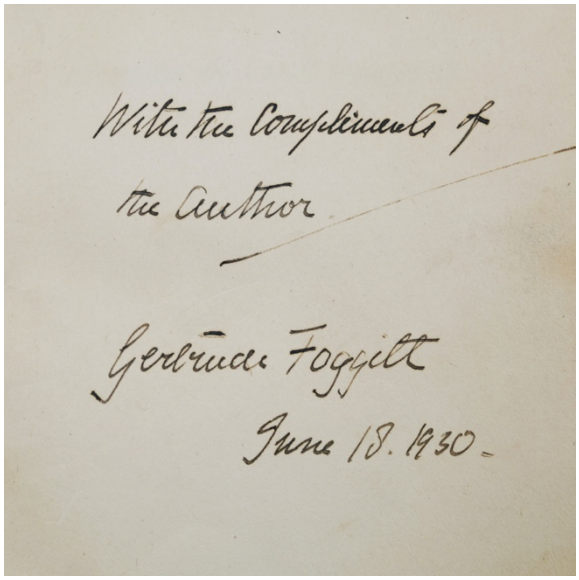


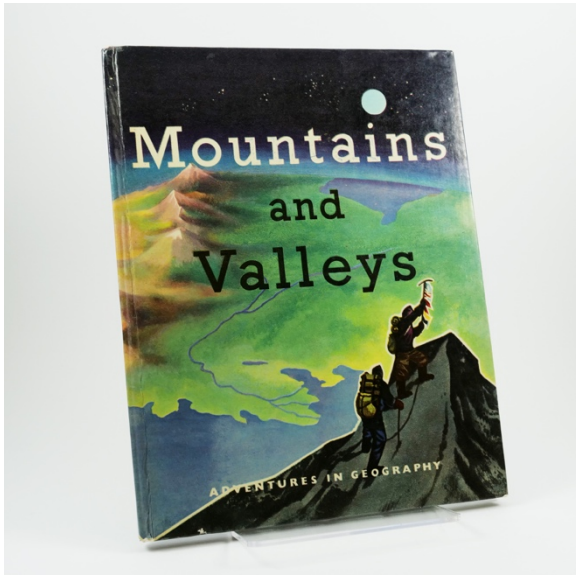
1. **Bacon, Gertrude. Memories of Land and Sky. With Twenty-Four Illustrations.** London: Methuen & Co. Ltd., 1928. Octavo. Original blue cloth, titles to spine gilt and to upper board in blind. 8-page publisher's ads at rear. Portrait frontispiece and 15 plates from black and white photographs. Spine cocked, cloth rubbed at the extremities, occasional light spotting to contents. Very good condition.

First edition of the memoirs of the first Englishwoman to fly. Presentation copy inscribed by the author on the front free endpaper, "With the compliments of the author, Gertrude Foggitt, June 18 1930".

Gertrude Bacon (1874-1949) was the daughter of the scientist and balloonist Rev. John Maczenzie Bacon and accompanied him on most of his expeditions. "Bacon became fascinated by flying and as a journalist reported on the various airships and planes being built." In August 1904 she became the first woman to fly in an airship, being a passenger in the near-disastrous first flight of an 84-foot-long ship designed by Stanley Spencer. "From 22 to 29 August, 1909, the world's first aviation meeting was held at Rheims, France. Bacon was determined to go for a ride in one of the new machines. On the last day she was taken up in a Farman plane, squeezed between the radiator and the pilot. She described the takeoff: 'The motion was wonderfully smooth - smoother yet - and then - ! Suddenly there had come into it a new indescribable quality - a lift - a lightness - a life!' Thus she became the first Englishwoman to fly" (*International Women in Science: A Biographical Dictionary*, p. 15). Bacon flew on several other occasions and was the first ever hydroplane passenger at Lake Windermere in 1912.

Bacon became Gertrude Foggett in 1929, when she married fellow botanist and chemist Thomas Jackson Foggitt.

00596 **£250**



2. **Carpenter, Shirley, Marie Neurath & Stewart Irwin. Mountains and Valleys.** Garden City, NY: Hanover House, 1954. Quarto. Original pictorial boards. Colour illustrations throughout. Pencilled ownership signature of Clarice Margulis to the front pastedown, some childish pen marks in the title on the upper board. Lightly rubbed with tiny worn spots at the tips, small closed tear and fold to page 28 not affecting text or illustrations. An excellent copy.

First edition, first printing of this uncommon children's book co-authored by data-visualisation pioneer Marie Neurath (1898-1986). While most of Neurath's children's books were produced directly for her Isotype imprint and feature her signature style throughout, she

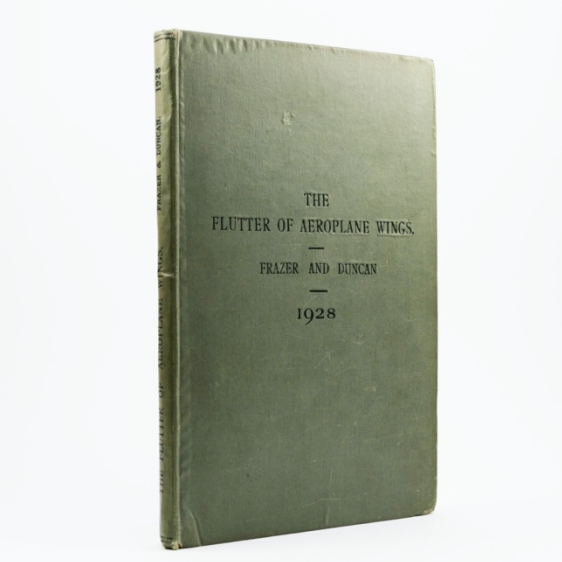
also occasionally collaborated with other authors and publishers. This volume, on Earth's geology and how it impacts ecology and human societies, is an excellent example of how the Isotype visual language could be incorporated into page layouts featuring traditional illustrations and complex text for older children.

Neurath, together with her husband Otto and their colleague Gerd Arntz, was one of the founders of Isotype, a simplified visual method of displaying complex information to the public. First developed in the 1920s, and originally known as the Vienna Method of Pictorial Statistics, the goal of Isotype was "to cross national and social divides in a time before widespread global communication. To do that, Isotype went back to basics and stripped away all things unnecessary, illogical, or alienating—and in doing so, helped to establish some of the core principles of graphic design. Today, Isotype's legacy can be seen everywhere from newspapers and textbooks to signage, transit maps, interfaces, and emojis" (Inglis, "Meet Marie Neurath," September 17, 2019, *AIGA Eye on Design*).

Marie Neurath "was a remarkable practitioner" who "researched, calculated, and co-designed nearly every Isotype ever created, from the early days in Vienna in 1925 all the way to when she retired in 1971" (Forrest, "The Missing Legacy of Marie Neurath," January 20, 2020, *Medium*). She described her role as that of the "Transformer" of data, writing that, "From the data given in words and figures, a way has to be found to extract the essential facts and put them into picture form. It is the responsibility of the transformer to understand the data, to get all necessary information from the expert, to decide what is worth transmitting to the public, how to make it understandable, how to link it with general knowledge or with information already given in other charts. In this sense, the transformer is the trustee of the public" (Neurath, *The Transformer*, 2009).

Neurath continued the work after Otto's death in 1945, becoming best known for the series of children's books she published over the next twenty years. "In children's educational books Marie found an ideal place to put Isotype's methods into practice. Young readers were more engaged by pictures than words, and this focus on the visual meant these books were easily translated and published abroad, fulfilling Isotype's original aims of being truly international" (Inglis).

00564 **£85**



3. **Frazer, R. A & W. J. Duncan. The Flutter of Aeroplane Wings. Aeronautical Research Committee. Reports and Memoranda No. 1155. (Ae. 320.) August 1928.** London: His Majesty's Stationery Office, 1929. Sextodecimo. Original grey cloth, titles to spine and upper board in black. 3 plates from photographs, 2 double-sided plates of charts, charts and figures throughout the text. Pencilled ownership initials to the front free endpaper. Tail of spine and lower corner bumped, cloth a little rubbed and scuffed, contents faintly toned. A very good copy.

First edition of this key work on aeronautical engineering, widely known as "The Flutter

Bible". Scarce, with only 15 institutional copies recorded in WorldCat and one in auction records, at Dominic Winter in 2011.

The term "flutter" refers to sustained oscillations of the structures of planes that can damage or destroy them. The first documented case occurred in 1916, affecting the tail of a Handley Page O/400 bomber, and by the 1920s flutter was a major area of aeronautics research.

"At the NPL [National Physical Laboratory] work was initiated in 1925 by R. A. Frazer; he was joined in the following year by W. J. Duncan. Two years later, in August 1928, they published a monograph, 'The Flutter of Aeroplane Wings', R&M 1155. This slim volume, of just over 200 pages, has been known ever since as 'The Flutter Bible', and understandably so... it is quite astonishing in its completeness. Frazer and Duncan solved the flutter problem, in all its essentials, laying down the principles on which flutter investigations have been based ever since." (Collar, "The First Fifty Years of Aeroelasticity", *Aerospace*, February 1978, pp. 14-15).

Frazer and Duncan's research programme "made use of simplified wind tunnel models to identify and study phenomena, gave well-considered, cautiously detailed design recommendations, and indicated broad programs required for measurement of aerodynamic derivatives. They introduced an important concept of 'semirigid modes' which greatly simplifies the theoretical analysis... In effect this concept enables the problem to be handled by ordinary differential equations rather than by much less tractable partial differential equations" (Garrick & Reed, "Historical Development of Aircraft Flutter", *Journal of Aircraft* vol. 18, no. 11, Nov. 1981, pp. 900-901).

Bibliography of Vibration and Flutter of Aircraft Wings, US Works Progress Administration, 1937. Bibliography of Aeronautics, National Advisory Committee for Aeronautics, 1930.

00459 **£650**

4. **Fulton, James Alexander. Peach Culture.**
New York: Orange Judd and Company, 1870. Duodecimo. Original red-brown pebble-grain cloth, titles to spine and peach design to upper board gilt, brown coated endpapers. 14-page publisher's ads at rear. A small number of illustrations within the text. Slight musty smell, cloth a little rubbed and dulled, some tanning and offsetting to contents, small brown spot affecting the margins of pages 135 through 158. A very good copy.

The uncommon first edition of this popular guide to growing peaches, in the publisher's cloth with an attractive gilt peach on the cover. Most other copies online are later editions, and this is the only copy of the first edition to appear in auction records.

Little is known about author James Alexander Fulton, but the title gives his residence as Dover, Delaware, which he describes in the introduction as "the very center of the peach-growing district". He describes how, "in the last few years, fruit culture, in all its varieties, has greatly increased in this country; so that, to-day, it is one of the leading interests... Among the fruits, the

Peach, if not the most, is one of the most important of all. It is so easily raised, comes into bearing so soon, and is so delicious, as well as beautiful, it is impossible it should not be a favourite".

Fulton's purpose in writing this guide was three-fold: "to give plain, simple, and specific directions" for both cultivating and marketing the fruit; "to point out, clearly and distinctly, the impositions practised by railroad companies and consignees upon planters, and the means of redress"; and to describe the different peach varieties and give advice as to their profitability.

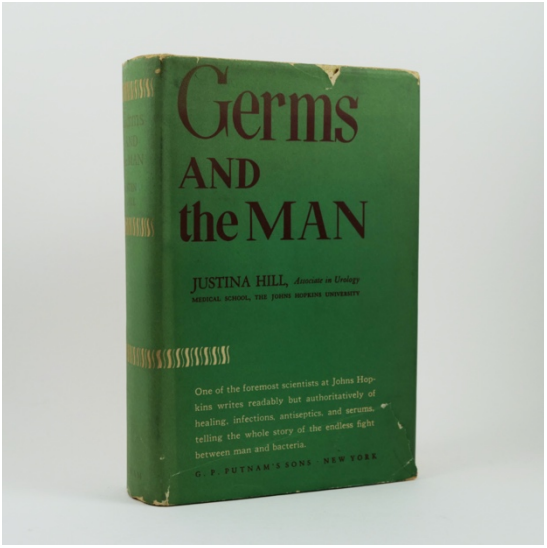
00522 **£350**

5. **Gosse, Philip Henry. The Aquarium: An Unveiling of the Wonders of the Deep Sea.**
London: John van Voorst, 1854.
Octavo. Original blue cloth blocked in blind, titles to spine and all edges gilt, cream coated endpapers. Edmonds and Remnants binder's ticket to rear pastedown. 1 leaf of ads for the author's other publications, 4 page publisher's ads dated July 1854. Frontispiece and 5 chromolithographic plates, 6 steel engraved plates. Bookplate of Robert Vaughan Huges of Wyelands. Pencilled initials to the front free endpaper. Cloth rubbed and spotted and a little worn at the tips, tissue guard of plate IV separated and loosely inserted, rear hinge slightly cracked. A very good copy, the contents fresh.

First edition of the book that sparked the Victorian fad for domestic aquariums, the predecessors to the modern fish tank.

Philip Henry Gosse (1810-1888) was an English naturalist and Christian evangelist who first came to prominence in the late 1840s for his important texts on the ecology of Canada and Jamaica. A series of successful books for the general public followed, and in 1853 he published *A Naturalist's Rambles on the Devonshire Coast,* "which brought before the public the science of marine biology, and was partly responsible for the sea-shore craze of the mid-Victorian period. (As the famous, eccentric, and deeply religious Devon naturalist, he is the model for Theophilus Hopkins in Peter Carey's prize-winning novel *Oscar and Lucinda*, 1988.) In May 1853 he helped establish the first public aquarium in Regent's Park and later that year constructed one of the first domestic glass aquariums. The following year he published *The Aquarium* which triggered a second craze to sweep through Victorian society. Much of Gosse's success was due to the fact that he was essentially a field naturalist who was able to impart to his readers something of the thrill of studying living animals at first hand rather than the dead disjointed ones of the museum shelf. In addition to this he was a skilled scientific draughtsman who was able to illustrate his books himself. Indeed the chromolithographic plates in *The Aquarium* and *Actinologia Britannica* (1860) were prepared from his own watercolours and were a major advance in natural history book illustration intended for the mass market" (ODNB). The *Literary Gazette* review of the present volume described Gosse as "alone and unrivalled in the extremely difficult art of drawing objects of zoology so as to satisfy the requirements of science" and in providing "vivid aesthetic impressions" (Thwaite, *Glimpses of the Wonderful*, pp. 240-241).

00595 **£350**



6. **Hill, Justina. Germs and the Man.**
New York: G. P. Putnam's Sons, 1940.
Octavo. Original buff cloth, titles to spine and upper board blocked in green, decorative design blocked in brown, top edge dyed green. With the dust jacket. 8 double-sided plates. Minor bump to the lower corners of the boards, spine slightly rolled. Binding and contents fresh and clean. A very good copy in the toned and price-clipped jacket with several chips and closed tears and fading of the spine panel.

First edition, first printing, presentation copy inscribed by the author on the front free endpaper, "Inscribed for [?] Oliver Shepard, with cordial greetings from Justina Hill, Northampton, June 16, 1941".

This work on disease-causing microbes was described as "the best popular presentation that had yet appeared" on the subject by psychiatrist Karl Menninger (Ogilvie, *Biographical Dictionary of Women in Science*, p. 601).

Author Justina Hill (1893-?) attended Smith College and the University of Michigan, then served as a Red Cross worker, running a bacteriological laboratory in Spartanburg, South Carolina during the final two years of the First World War. She was then transferred with a Smith College unit to the Near East, where she ran a laboratory for five thousand refugees.

"Upon returning to the United States, Hill was made an associate in bacteriology at the Brady Urological Institute and two years later an instructor in urology... She published numerous technical articles in medical journals as well as popular books on bacteriology" (Ogilvie). In 1942 she published *Silent Enemies*, on the communicable diseases of war, and in 1944 she contributed a piece in the *Atlantic*: "How Bad is the Flu? The possibility of recurrent epidemics, perhaps of increasing virulence, even of another pandemic, must be faced".

00585 **£150**

7. **Horcher, Philipp. Libri Tres: In Quibus Primo Constructio Circini Proportionum Edocetur...**
Mainz: Balthazar Lipp, 1605.
Quarto (204 x 150mm). Contemporary mottled calf rebacked to style, spine gilt in compartments with pomegranate tools, red morocco label, double gilt fillets, new endpapers, edges dyed red. Woodcut illustration of the compass to title, folding woodcut plate, numerous woodcut diagrams and figures in the text. Upper corner of binding bumped, B2 and B3 defective in lower blank margin, not affecting text. A very good copy, the contents fresh.

First edition of this rare work on the proportional compass, the first to describe both its construction and application. A very attractive copy in handsome contemporary calf. Rare, only one copy appears in recent auction records, at Sotheby's in 2018, and WorldCat locates around fifteen copies.

The proportional compass, a forerunner of the Galilean compass, was one of the first mathematical calculating instruments. It allowed volumes of solids to be calculated and compared, lines to be divided according to a given proportion, circles and curves to be divided proportionally, surfaces of a given shape to be multiplied or reduced, π to be approximated, shapes to be transformed into other shapes of equal surface area, and spheres and the five regular solids to be transformed. It was invented in antiquity, and later developed by Leonardo da Vinci who referred to it specifically as a proportional compass.

The instrument described by Horcher had its genesis in the observatory of Wilhelm IV, Landgraave of Hesse, at Kassel. He employed Joost Bürgi as an instrument maker, and it is believed that Bürgi devised the instrument described here. It was first publicised in a work by Levinus Hulsius entitled *Dritter Tractat der mechanischen Instrumente...* (Frankfurt 1604). Hulsius withheld details of the compass's construction, as he was offering the instrument for sale. Horcher here gives the first account of its construction, as well as numerous examples of its use in calculating and scaling.

"Important for our purposes is how these new instruments effectively mechanized the basic processes of the geometric game: two-dimensional quadrature of the circle, three-dimensional cubature of the sphere, problems of doubling the volume of a cube or transforming one regular solid into another were now operations which could be analyzed quantitatively. They were physical, mechanical problems which could be reduced to numerical ratios and these could happen without the aid of three-dimensional representations." (Veltman, *Geometric Games: A Brief History of the Not So Regular Solids*).

BL 17thC German H1592; Tomash and Williams H164 00593 **£8,000**

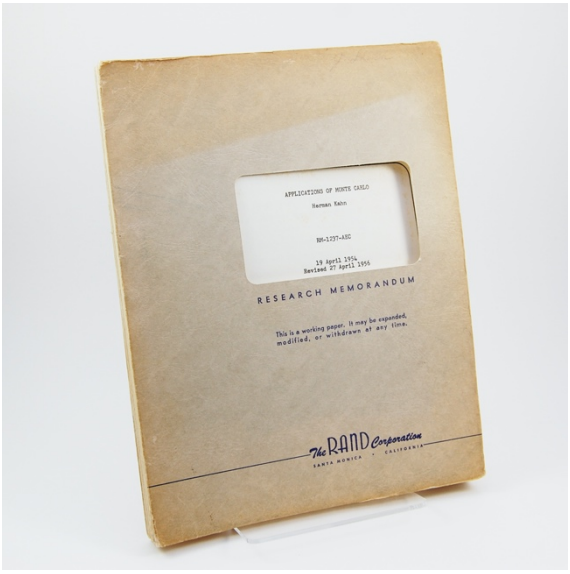
8. **Johnston, Alexander Keith. School Atlas of Astronomy. Comprising, in Twenty-One Plates a Complete Series of Illustrations of the Heavenly Bodies.** New and Enlarged Edition with an Elementary Survey of the Heavens Designed as an Accompaniment to this Atlas by Robert Grant.
Edinburgh & London: William Blackwood and Sons, 1869.
Large octavo (270 x 180mm). Contemporary prize binding of blue calf, spine elaborately gilt in compartments, red morocco label, Tettenhall Proprietary School prize roundel to upper board, laurel wreath with Latin motto in a roundel to the lower board, elaborate ruling and gilt rolls to boards, turn-ins gilt, marbled edges and endpapers. 21 double-page colour lithographs by the author. Some scuffs and abrasions to the binding, joints starting, some toning and light spotting to contents, particularly the early leaves, the plates generally clean. A very good copy.

A handsomely bound prize copy of this enlarged edition. Originally published in 1856.

The School Atlas of Astronomy is known for its attractive illustrations, comprising twenty-one double-page colour lithographs depicting the solar system, stars, nebulae, and comets. Author Alexander Keith Johnston (1804-1871) was one of Victorian Britain's leading cartographers, whose most important work, the *Physical Atlas*, was published in 1848.

"The use of lithography allowed the Johnstons to produce cheap educational and popular maps and atlases, through which Johnston hoped to establish the same respect for geography in Britain as it commanded in Germany. His multiple-sheet wall maps were of high quality and widely used in schools and other public institutions. *The Royal Atlas* (1861) became the firm's standard. Honours were heaped upon Johnston from an early date in recognition of his services to geography: he was geographer at Edinburgh in ordinary to the queen, fellow of the Royal Society of Edinburgh, honorary doctor of the University of Edinburgh, and medallist, honorand, or member of most of the world's important geographical societies. In 1851 he was awarded a medal by the London exhibition for his globe, the first to show the geology, meteorology, and hydrography of the earth. He was honorary secretary and one of the founders of the Scottish Meteorological Society" (ODNB).

00588 **£300**



9. **Kahn, Herman. Applications of Monte Carlo. RM-1237-AEC. 19 April 1954. Revised 27 April 1956. Prepared under contract with the U. S. Atomic Energy Commission...**
Santa Monica, CA: The RAND Corporation, 1956.
Perfect bound. Original grey, morocco-patterned paper wrappers printed in dark blue with a window for the title. Equations and charts within the text. Pencilled ownership signature to the upper wrapper. Wrappers partially tanned and rubbed and creased at the edges, light spotting to title and edges of text block. Very good condition.

First edition in the original wrappers. Though described as "revised", this refers only to a shorter version presented at a meeting in 1954, and we can locate no copies of a 1954 edition in the record, only this 1956 edition. A significant and uncommon report by nuclear war theorist and futurist Herman Kahn (1922-1983) on using the Monte Carlo method in computer simulations.

The Monte Carlo method was developed by John von Neumann, first as a way to simulate the physics of gases in the atmosphere, then to predict the behaviour of neutrons in nuclear chain reactions. Because the number of potential interactions in each case were so large, it wasn't feasible to program each one into a computer simulation. Instead, von Neumann realised that a representative sample of the possible interactions could be produced. "A roulette wheel, later a table of "pseudo-random" numbers, could be used to generate the path any one particle would follow. What emerged was the shape — the upper and lower boundaries — of the probabilistic distribution of the event" (Ghamari-Tabrizi, *The Worlds of Herman Kahn*, p. 133).

Kahn's first years at the RAND Corporation "were devoted to simulating the activity of elementary particles and gamma rays that might penetrate various thicknesses of protective shields in nuclear reactors. He delivered papers on this topic at all three of the major unclassified conferences that introduced the Monte Carlo technique to the physics, engineering, mathematics, computing, and operations research communities in 1949 and 1954" (Ghamari-Tabrizi).

Monte Carlo continued to influence Kahn's methods and philosophy as he moved into more speculative pursuits, such as nuclear game theory. "He exulted in the 'complete control' that allowed him to tinker with probabilistic events. Like genies tumbling out of bottles, improbable events sprang forth and frolicked on command", though he also warned against the dangers inherent in designing simulations based on statistical probabilities rather than real events. (Ghamari-Tabrizi).

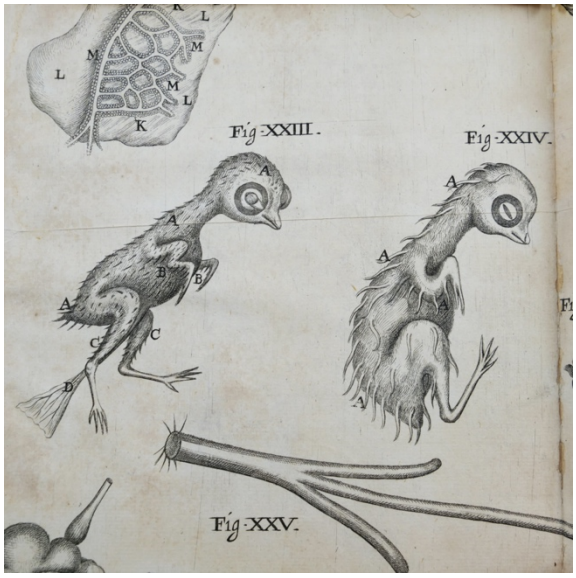
00425 **£350**

10. **Leredde, [Laurent V.]. La Réaction de Wassermann. Sa Valeur dans le Diagnostic et le Traitement de la Syphilis.** Paris: A. Maloine, 1912.
43-page pamphlet, octavo. Original grey wrappers printed in silver with an illustration of test tubes pasted on. 3 colour plates depicting reaction results. Early-20th century library ticket to the upper wrapper, ink stamp of the Rush Medical College library to the title, first leaf of text, and page 37. Upper wrapper partially loose, loss from the ends of the spine, corners a little creased.

First and only edition of this attractive, illustrated pamphlet on the first serologic test for syphilis, published only six years after its development. Rare, with only five institutional copies located in WorldCat: at the Bibliothèque Interuniversitaire de Santé, Bibliothèque Nationale, Pasteur Institute, University of Barcelona, and Johns Hopkins. Undoubtedly most copies were destroyed through laboratory use.

The Wassermann reaction (also referred to as Bordet-Wassermann) is performed by mixing a sample of the patient's blood or spinal fluid with cardiolipin, found in bovine muscle. Cardiolipin is an antigen, meaning that it binds with syphilis antibodies present in the sample, and the intensity of the reaction indicates the severity of the infection. The test is no longer used because false positives and negatives are common, and early-stage syphilis cannot be detected, but it was an important step forward in the identification, prevention, and treatment of the disease.

The present pamphlet was written for doctors and describes precisely and in technical language the basis for the test, how it is performed, and how it should be used diagnostically. The three colour plates are charts for analysing samples based on their colour after the reaction is completed. Its author, Dr. Laurent V. Leredde (1866-1926), was a French physician specialising in dermatology who published a number of works on syphilis and also an important paper on the rare genetic disease tuberous sclerosis. 00597 **£350**



11. **Malpighi, Marcello. Dissertatio Epistolica de Formatione Pulli in Ovo.** London: John Martyn, 1673.
Quarto (242 x 167mm). Recently rebound to style in panelled calf, red morocco spine label. Contemporary manuscript notes to title and page 25. Plates on new guards, edges of plates just a little frayed, small, professional repairs to plates 2, 3, and 4, not affecting the images. An excellent, fresh and wide-margined copy.

First edition, large-paper copy, of this fundamental work which "placed the study of embryology on a sound basis, surpassing in accuracy all other contemporary work on the subject and foreshadowing some of the more important general lines of research in embryology" (Garrison & Morton 469).

"As with his investigations in comparative anatomy, Malpighi was led to embryological research as a means of understanding more highly developed structures. His study of the development of the chicken in the egg went far beyond the work of Harvey and Fabrici, dealing with the internal structures to an unprecedented extent: his chief discoveries, illustrated in his four beautifully detailed plates, were the vascular areas embraced by the terminal sinus, the cardiac tube and its segmentation, the aortic arches, the somites, the neural folds and neural tube, the cerebral and optic vesicles, the protoliver, the glands of the prestomach, and the feather follicles. Malpighi established the paths of subsequent embryological research, making the important connection between emryogenesis and phylogenesis, and playing a formative role in the development of preformationist theory, which would pose a strong challenge to the traditional doctrine of epigenesis" (Norman 1429).

Garrison & Morton 469; Norman 1429; Wing M350 00594 **£3,000**

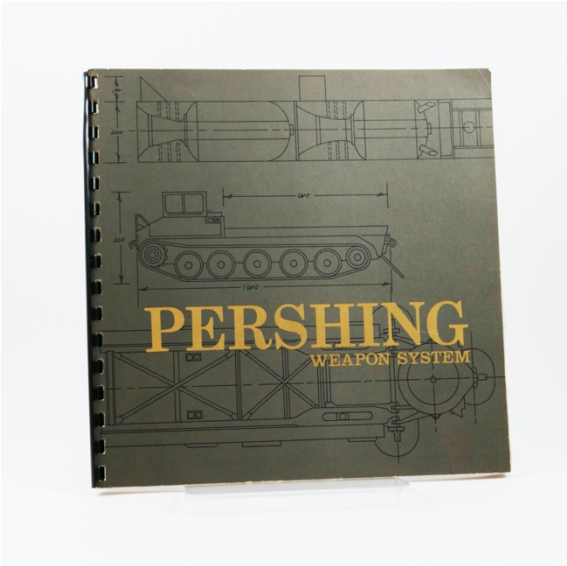
12. **[Marsh, John]. The Astrarium Improved; or, Views of the Principal Fixed Stars and Constellations, Represented on Twelve Plates, (One for Each Month of the Year;)** from which their Names and Relative Situations may be Known by Simple Inspection. London: for George and John Cary, 1833.
Quarto (220 x 184mm). Contemporary calf, black morocco label to upper board, spine gilt in compartments with floral tools, elaborate rolls to boards in gilt and blind. 12 engraved plates. Contemporary gift inscription in ink to the front free endpaper. Some rubbing and scuffing of the binding, hinges cracked, contents a little spotted. A very good copy.

The final issue of this rare publication of twelve star charts. A handsomely bound copy with a charming gift inscription, "To dear Miss Howard in remembrance of stargazing in 1835, S. K.".

The Astrarium Improved was first published in 1806, with several reissues appearing up to 1833. All are now rare in commerce and uncommon institutionally, with WorldCat locating only one copy of the 1833 edition, at the British Library.

Marsh's goal was to improve upon the astrarium (planetarium), which had been "contrived to show the positions of the fixed stars at any time of the night. Since, however, in order to set this astrarium, the sun's place in the ecliptic must first be found, and the stars shown as they would appear at noon, from which an arithmetical calculation must be made... and this calculation is liable to mistakes; I have, with a view to prevent such inconveniences... contrived the following diagrams, which, by simple inspection, and without any kind of calculation, will show the relative positions of the principal fixed stars, and constellations, for every month in the year" (preface).

00589 **£650**



13. **Martin Marietta Corp. Pershing Weapon System.**
Orlando, FL: Martin Company, [1965]. 32-page booklet, quarto. Original grey wrappers printed in black and gold, plastic comb binding. Photographic frontispiece and 7 plates from photos on glossy photo stock, 3 double-sided plates of blueprints, illustrations within the text. Just a little rubbing and creasing at the extremities of the wrappers. An excellent copy.

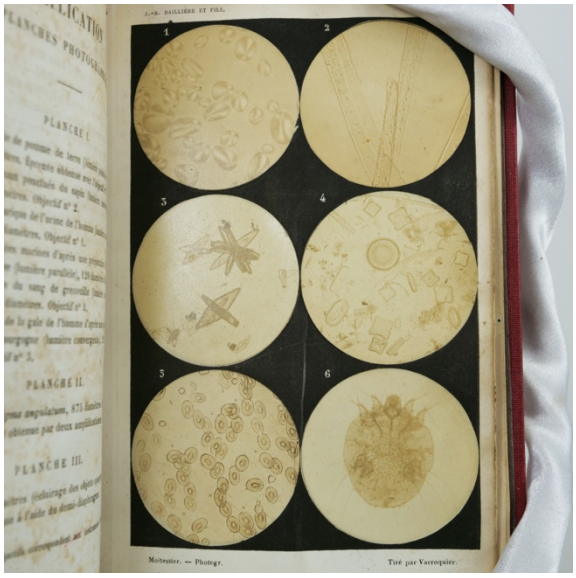
First edition of a rare promotional booklet for the original Pershing missile system (MGM-31A). WorldCat locates only one institutional copy, at the US Army Field Artillery School in Fort Sill, Oklahoma.

Pershing was conceived during the late 1950s as a nuclear weapon system to be deployed in defense of NATO countries on the European continent. Testing occurred during 1960 and 1961, and production began in 1962. "As the successor to the Redstone [ballistic missiles], the Pershing inherited the Redstone's mission of acting as a forward-based SRBM [short-range ballistic missile] that could strike critical targets in Warsaw Pact nations from U.S. bases in NATO-aligned nations. Unlike the Redstone, the Pershing 1 used solid fuel which could be stored indefinitely inside the missile, eliminating an otherwise lengthy fueling process prior to launch. Additionally, the missile's size and weight made it easier to transport. Due to these factors, the missiles were valued for their survivability and short launch time. The only significant factor that slowed launch time for the Pershing 1 was that, due to the missile's length, the warhead was carried on a separate vehicle and attached once a launch order had been received" ("MGM-31 Pershing 1", Missile Threat website, the Missile Defense Project at the Center for Strategic and International Studies).

This booklet describes and illustrates the technical aspects of the Pershing system, describing it as "containing all the elements necessary to complete a deep penetration, nuclear fire mission... a missile, automatic checkout and pre-flight programming equipment, an electrical power station, a small portable launch platform, and communications equipment" that would allow it to be a self-sustaining and highly responsive in unstable battlefield conditions. Eight glossy photographs depict a Pershing missile in the launcher, at the moment of launch, the equipment carrier,

erector-launcher, programmer and power stations, and the separate warhead vehicle. They are accompanied by stylish technical drawings and blueprints that give an idea of scale and functioning.

00598 **£350**



14. **Moitessier, A. La Photographie Appliquée aux Recherches Micrographiques. Avec 41 Figures Gravées d'Apres des Photographies et Trois Planches Photographiques.**
Paris: J. B. Ballière et Fils, Libraires de l'Académie Impériale de Médecine, 1866.
Octavo (179 x 107mm). 20th-century red quarter calf, black morocco label, red cloth sides, grey endpapers. Single leaf of publisher's ads at rear. Eight mounted albumen photographs on 3 plates, 41 steel engravings within the text. Small ink note on page 271 converting quantities of distilled water and tannin in a recipe. Some light spotting and occasional faint spots of dampstain. A very good copy.

First edition of this early technical work on microphotography, illustrated with eight albumen photomicrographs. Uncommon, with only four copies at auction in the past four decades.

The earliest photomicrographs were made by William Henry Fox Talbot during the 1830s, but it was Moitessier who pushed the technique forward during the 1860s. *La Photographie Appliquée aux Recherches Micrographiques* "was one of the first instructional books to outline techniques combining photography and microscopy" and "Moitessier was unique among his contemporaries in his emphasis on stereoscopy and binocular vision" (Wasielewski, "Lurking Within Reach: Stereoscopic Photomicrography in the 1860s", *History of Photography* vol. 39, issue 1, 2015).

00591 **£750**

15. **Petri von Hartenfels, Georg Christoph. Elephantographia Curiosa, seu Elephanti Descriptio, juxta Methodum et Leges Imperialis Academiæ Leopoldino-Carolinæ Naturae Curiosorum adornata, multisque selectis observationibus physicis, medicis et jucundis historiis referta, cum figuris æneis.**
Erfurt: for the author by Johann Heinrich Grosch, 1715.
Quarto (210 x 157 mm). Contemporary sheep rebacked with the original spine laid down. Quadruple rules to boards and triple rules to spine panels. Engraved frontispiece and 27 copperplate engravings of which 1 is folding, half-page engraving within the text, elaborate head and tail-pieces and historiated initials.

Presentation and ownership inscriptions to the front pastedown, title and recto of the frontispiece. Rebacked as noted, spine a little rolled, a little wear at the corners, occasional small spots to contents but overall clean. A very good copy.

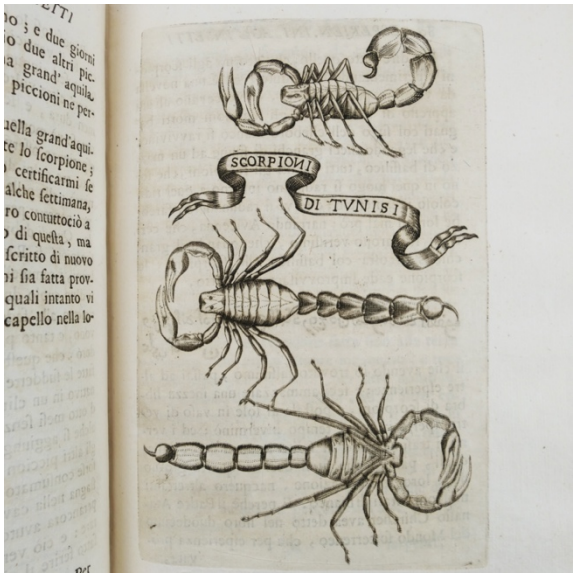
First edition of the first monograph on the elephant. Presentation copy inscribed by the author on the front pastedown to the Monastery of St Peter in Erfurt: "Instructissimae Bibliotheca Regalis Monasterii Petrensis hunc de Elephanto Tractatum in sui memoriam offert Author. Erfordiae, die 3 Novembris, Anno 1714". Also with the ownership inscription of the monastery library on the title and a later ownership inscription on the recto of the frontispiece, "H. Graf du Moulin, München 20 Nov. 1839".

This copiously illustrated work – uncommon with all 28 plates – explores every aspect of elephant life as understood by 17th-century Europeans. The first part is devoted to fossil remains and anatomy of elephants, their lives and habits, and the differences between Indian and African elephants. The author is particularly concerned with elephant teeth and tusks, their properties, and their use in art. The second part deals with elephants' moral virtues and attributes, such as sympathy, gratitude, intelligence, and courage. The third part is devoted to the use of elephants in war, hunting, construction, and entertainment.

The frontispiece was designed by T.J. Hildebrandt and engraved by Jakob Petri, an Erfurt engraver; the plates are signed by the latter only. They depict a variety of scenes involving elephants, some being depictions of historical events, others showing elephants in their natural habitats engaged in various activities. The folding plate depicts elephant anatomy, including the skeleton, skull, internal organs, and dissected trunk.

Author Petri von Hartenfels (1633-1718) was a Leipzig Burgomaster and professor of medicine who was named count palatine by the Emperor Leopold. The monastery to which this copy was presented was constructed in the 12th century on St. Peter's Hill in Erfurt, and was one of the largest and most significant church structures in the region at the time. The monastery building was destroyed, and the adjoining church severely damaged, when Prussian forces tried to retake the town from the French in 1813.

Nissen ZBI 3149 00581 **£8,750**



16. **Redi, Francesco. Esperienze intorno alla Generazione degl'Insetti. All'Illustrissimo Signor Carlo Dati.**
Florence: All'insegna della Stella, 1668.
Quarto (234 x 165mm). 19th-century dark green half skiver, tan morocco label, marbled sides, red speckled edges. Engraved device to title, 38 full-page engravings of which 2 are folding, 2 small illustrations on text pages. Bookplate, punch stamp, and withdrawn ink stamp of the John Crerar Library. Binding a little rubbed, bumped, and scuffed, particularly along the edges, corners worn, occasional light spotting to the contents but generally clean save for the second folding plate, which is more heavily foxed. Very good condition.

First edition of the text that disproved spontaneous generation. First issue without the rare 29th plate which is lacking in most copies.

"In this scientific attack on the doctrine of spontaneous generation, Redi demonstrated, by means of a series of simple experiments involving sealed, open and gauze-covered flasks of meat, that organic matter remained free of larva when protected from insect contamination... Having shown that insect contagion was necessary before decaying substances could develop worms, Redi applied the same principle to parasites found in living creatures. However, he was led astray by his observations into claiming that gall insects were spontaneously generated by the plants housing them, an error that Malphigi corrected in 1679" (Norman 1812).

Norman 1812, Dibner 188, Horblit 88 00592 **£2,000**

17. **Ritter, Franz. Astrolabium, Das ist: Gründliche Beschreibung und Unterricht,** wie solches herrliche und hochnützliche Astronomische Instrument, auff allerley Polus Höh, so wol auch nach eines jeden selbst gefälligen Gröss auffgerissen, und verfertigt werden soll. Darnach wei dasselbe vielfältig zu gebrauchen: Mit Kupferstücken verfertiget. Nuremberg: Christoff Gerhard for Paul Fürst, [mid-17th century].
2 parts in 1, quarto (174 x 142 mm). Contemporary binding of vellum manuscript leaf over boards, manuscript title to head of spine. In a brown morocco-backed folding box, together with an early-20th century 112-page typescript English translation bound in half brown morocco with marbled sides, top edges gilt. Engraved half title and 21 integral engravings in the first part, 15 folding plates in the second part. Elaborate head and tail-pieces and decorative initials. Engraved seventeenth-century armorial bookplate with initials "OGHZS" to front pastedown. Inked initials "OG" in the margin of the frontispiece, next to a faint signature in ink. Bookplate of Samuel Verplank Hoffman (1866-1942) to the front free endpaper and also the front pastedown of the typescript. Some loss from the lower half of the spine and the upper joint, a little spotting to the frontispiece, a little offsetting affecting gatherings G and H in the second part, tiny spots of dampstain on the first two folding plates, some small closed tears in the folds. A very good, unsophisticated copy.

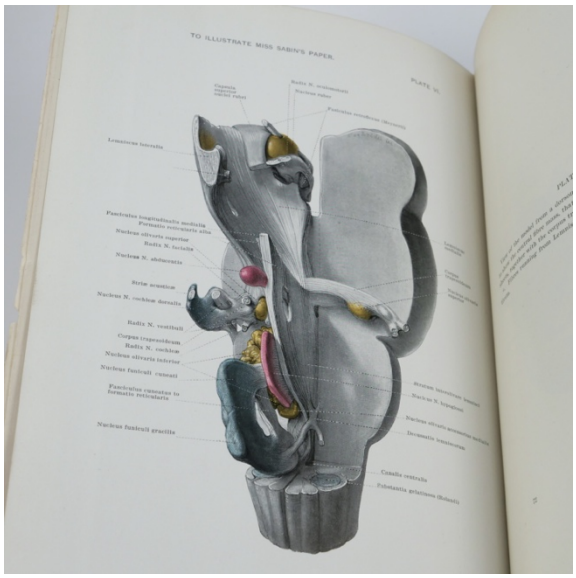
A very attractive copy, with the rare suite of fifteen folding plates missing from almost all copies, of this magnificently illustrated treatise on the construction and use of astrolabes. These fifteen plates appear first in this edition. In an attractive binding incorporating a late-medieval manuscript leaf, and from the library of astrolabe collector Samuel Verplank Hoffman with what is presumably his typescript translation into English.

Franz Ritter (b. Nuremberg, d. 1640) was an astronomer and innovative cartographer, famous for his 'sundial' world map. He had studied under Johann Praetorius at the University of Altdorf and specialized in the design and manufacture of astrolabes, sundials, and other astronomical, horological and cartographical instruments.

The two parts of this text were first published separately in Nuremberg in 1613, and there appear to be numerous variant editions. This one conforms to that of Yale and Brown, which they date to the 1640s, but other authorities give 1659 and 1660 as the dates of publication. The plates in the first part are printed from the same coppers used in the 1613 edition. The second part of the 1613 edition was unillustrated and the publisher of this edition, Paul Fürst (1608-1666), added the suite of engravings and signed the first plate. The fourth plate is a map of the southern hemisphere.

The previous owner, Samuel Verplank Hoffman (1866-1942) studied and taught astronomy at Johns Hopkins University until his father's business interests commanded his full attention. He was president of the New York Historical Society between 1903 and 1912 and his exceptional collection of astrolabes was acquired by the Smithsonian in 1959. The typescript translation with this volume was presumably by, or commissioned by, him.

00578 **£10,000**



18. **Sabin, Florence R. A Model of the Medulla Oblongata, Pons, and Midbrain of a New-Born Babe.** [Reprinted from Volume IX of the Johns Hopkins Hospital Reports, Contributions to the Science of Medicine: Dedicated by His Pupils to William Henry Welch on the Twenty-Fifth Anniversary of His Doctorate, pp. 925-1023. Together with Clark, "the Blood Vessels of the Human Ovary" and Young, "The Gonococcus".
Baltimore, MD: Johns Hopkins, 1900].
Tall quarto. Original buff wrappers. 6 doubled-sided greyscale plates and 3 single-sided chromolithographic plates at rear accompanying the Sabin paper. 5 plates, of which 2 are folding, accompanying the Clark paper. The title page and early portion of the Clark paper seem to be lacking, perhaps due to a production error. Wrappers just a little rubbed with some short splits and creasing at the edges. The extreme edges of the contents, particularly at the front, are a little toned and creased with some nicks and short splits. Excellent, fresh condition.

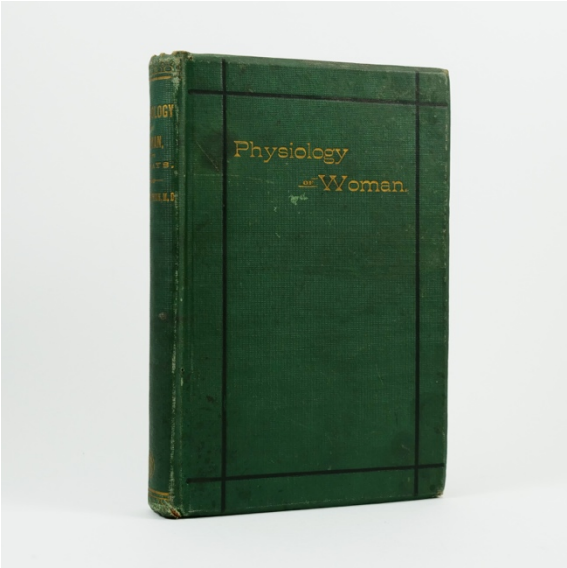
Offprint of physician and anatomist Florence Sabin's first major work, undertaken when she was an undergraduate and published the following year as the classic textbook *An Atlas of the Medulla and Midbrain*. WorldCat locates only four copies of this offprint, at King's College London, Brown University, Washington University St Louis, and the University of Sydney.

Sabin was born in 1871, and attended Smith College, where she decided to become a doctor. "The newly opened Johns Hopkins Medical School was the obvious choice for an aspiring woman physician, for it had been financed by a group of Baltimore women who had attached to their gift the stipulation that women be admitted on the same terms as men" (Ogilvie, *Biographical Dictionary of Women in Science*, p. 1140). Sabin began her medical training in 1896, quickly becoming a favourite of anatomist Franklin Mall, who "encouraged her to go into research. As an undergraduate she constructed a three-dimensional model of the medulla, pons and midbrain,

and in connection with this project wrote a laboratory manual, *An Atlas of the Medulla and Midbrain*. This manual was published in 1901 and became a popular textbook" (Ogilvie).

Sabin received her medical degree in 1900, began an internship in internal medicine, and was then awarded a fellowship in anatomy. "She became the university's first woman faculty member in 1902 and progressed through the ranks, receiving an appointment as professor of histology in 1917 — the first full professorship awarded to a woman at Hopkins" (Ogilvie). Over the course of her career Sabin studied a wide range of subjects, including cell morphology, the physiology of connective tissues and blood cells, immunology, and particularly the body's reaction to tuberculosis. "Her research on the lymphatics was original, though controversial at the time. Her idea that the lymphatics represented a one-way system closed at the collecting ends, where the fluids entered by seepage arising from pre-existing veins instead of independently was later proved correct" (Ogilvie). After retiring from Johns Hopkins and moving to Denver Colorado, she had a second career as a public health advocate who achieved the passage of a number of public health reform bills.

00542 **£650**



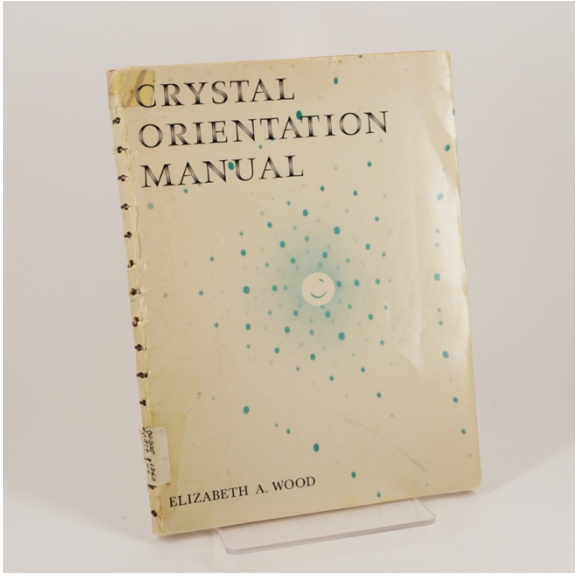
19. **Stevenson, Sarah Hackett. The Physiology of Woman, Embracing Girlhood, Maternity and Mature Age...**
Chicago: Cushing, Thomas & Company, 1880. Octavo. Original green cloth, titles to spine and upper board gilt, rules to boards in black, brown coated endpapers. Cloth rubbed and marked with some dark dampstain spots, abraded area to the lower board, spine rolled, contents shaken, occasional spotting and inky fingermarks to text. A very good copy.

First edition, first printing of this rare women's health guide by one of the earliest female doctors in the United States.

Sarah Stevenson (1841-1909) "was involved in many 'firsts' in medicine. She was the first woman physician granted membership in the American Medical Association, the first woman on the staff of Cook County Hospital in Chicago, and the first woman appointed to the Illinois State Board of Health" (Ogilvie, *Biographical Dictionary of Women in Science*, p. 1233).

Her original career was as a teacher, but she moved to Chicago intending to become a science writer and began studying anatomy and physiology at the Woman's Hospital Medical College of Chicago. "After beginning the medical courses, she broke up her training with a year in London at the Kensington Science School. She studied with Thomas Henry Huxley and was considered one of his brightest students. She wrote a high school text, *Boys and Girls in Biology*, based on his lectures. When she returned to Chicago she completed her medical degree in 1874 as class valedictorian" then travelled through Europe visiting hospitals and clinics (Ogilvie). In addition to her successful private practice, Stevenson was on the faculty of the Women's Medical College, served as a consultant at Woman's and Provident Hospital, and attending physician at the Mary Thompson Hospital, and was involved in the founding of the Illinois Training School for Nurses.

00574 **£150**



20. **Wood, Elizabeth A. Crystal Orientation Manual.**
New York and London: Columbia University Press, 1963.
Spiral bound. Original cream wrappers printed in black and green with an x-ray crystallograph. Diagrams, charts, and illustrations from photographs throughout the text. Old tape repair at head of spine, library ticket to tail of spine, ink stamp "Property of the US Army Redstone Scientific Information Center" to the inside of the cover, library pocket to inside lower wrapper. Wrappers toned and rubbed with some light marks and creasing and a small area of dampstain to the lower wrapper. Very good condition.

First edition of this introductory crystallography manual by the first female scientist at Bell Labs.

As the author writes in the preface, "Many chemists, physicists, engineers, and technicians who are today confronted with the problem of obtaining a slice or rod of suitable orientation for their experiments have not had crystallographic training: it is for these that the manual was written". Elizabeth Wood (1912-2006) was educated at Bryn Mawr, where she became an instructor in geology. Following teaching stints at Barnard and Columbia she joined Bell Labs in 1942 and remained there for the next twenty-four years. Wood's interests "ranged from the growth of single crystals with useful semiconducting, lasing, magnetic or superconducting properties to the crystallographic investigation of new materials with unusual properties such as the exhibition of both ferromagnetism and piezoelectricity. She also worked on material phases that could be changed by the application of appropriately oriented electric fields and on the formation of new superconductors" (International Union of Crystallographers obituary).

Wood was a highly respected scientist, whose advice was often sought by colleagues. She was also a talented science writer, publishing books for both popular and professional audiences. "Her reputation for clearly written texts spread as a result of her *Rewarding Careers for Women in Physics* (1962) and *Pressing Needs in School Sciences* (1969) published by the American Institute of Physics (AIP) in 1962. It became wider still with the publication of her *Crystal Orientation Manual* in 1963, which expounded the art and science of preparing shaped pieces of large accurately oriented single crystals for technicians... Five years later, her *Science for the Airplane Passenger* was published and proved very successful, appearing for many years in airport bookstores throughout the US and other countries. Her deep interest in improving the scientific understanding of the general public was recognized by the ACA's establishment of an Elizabeth A. Wood Science Writing Award. Its purpose is to honor the authors of outstanding publications that bring science to the attention of the general public" (International Union of Crystallographers obituary).

00491 **£100**