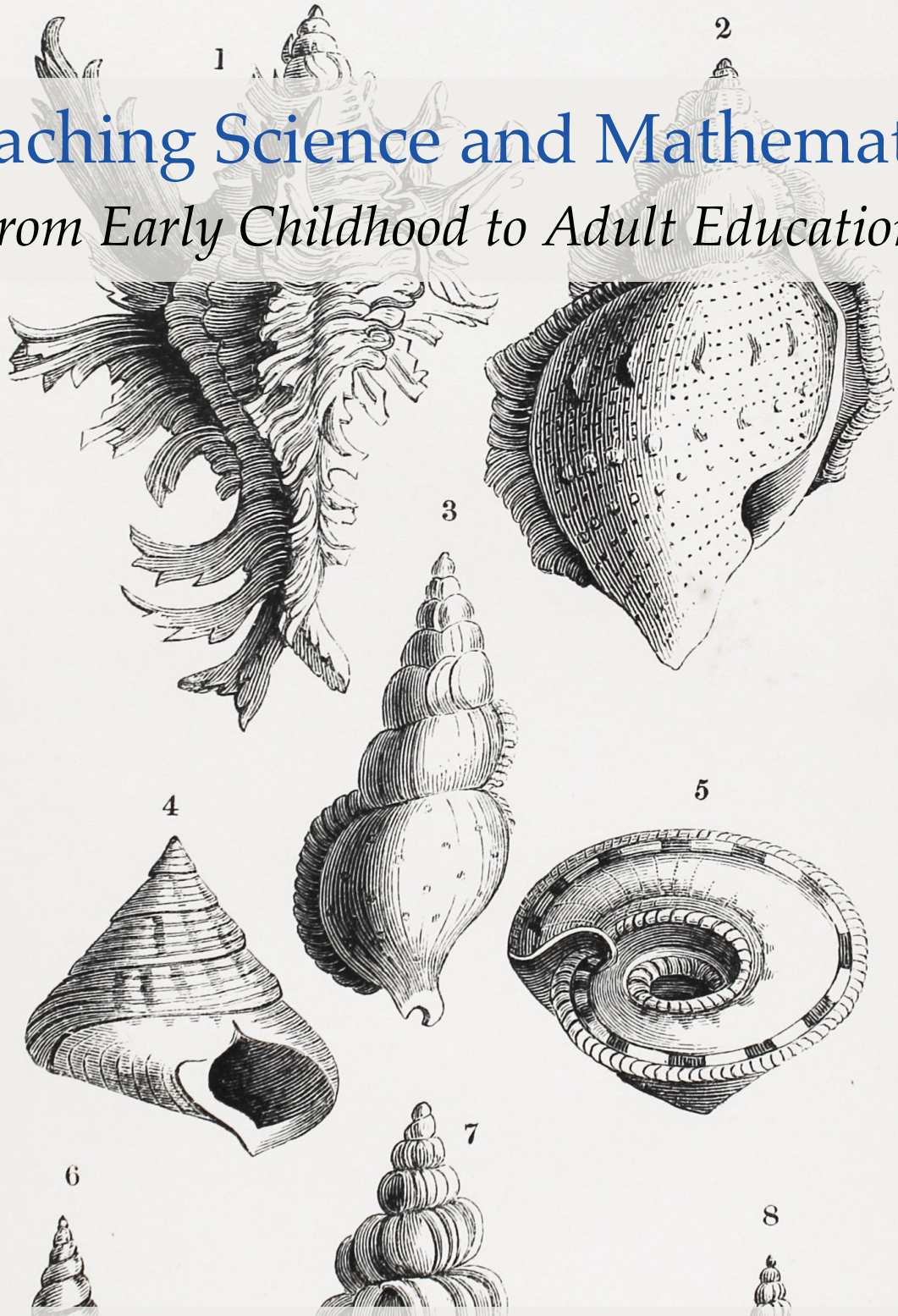
Teaching Science and Mathematics

From Early Childhood to Adult Education



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Teaching Science and Mathematics

From Early Childhood to Adult Education, 1696-1941

Michael R. Thompson Rare Books, ABAA/ILAB
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Geography for Young People with Seven Lithographic Folding Maps

1. *Abrégé de Géographie Pour Les Écoles.* Paris: Chez F.G. Levrault, 1828.

Twelvemo. [3], [1, blank], 92 pp. Seven lithographic folding maps of various countries and continents, including Europe, France, Switzerland, Asia, and Palestine. Rear board printed with ads.

Original pink paper covered boards, lettered in black, edges stained yellow. Binding extremities lightly rubbed, corners a bit worn. Portions of pink paper worn away from lower spine, lettering on spine slightly faded. Slight soiling to boards. Ink stain affecting a very small portion of text on pp. 3-4, contemporary light ink marginalia on same pages. Twentieth-century book label on front pastedown. A very good copy of a rare work.

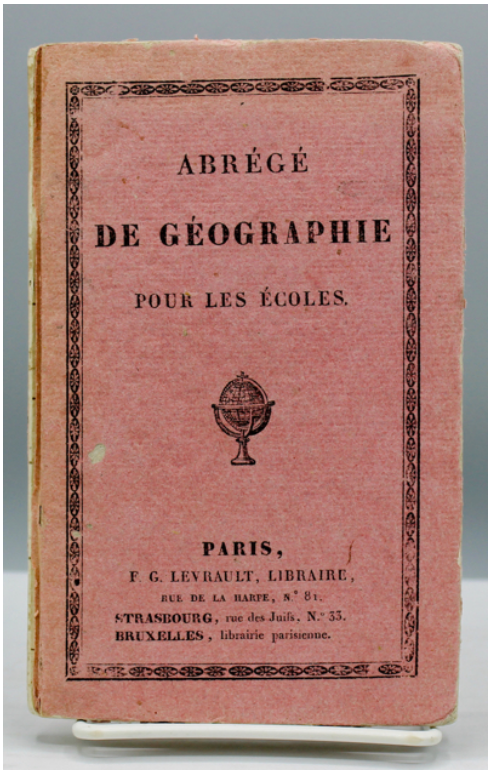
$950

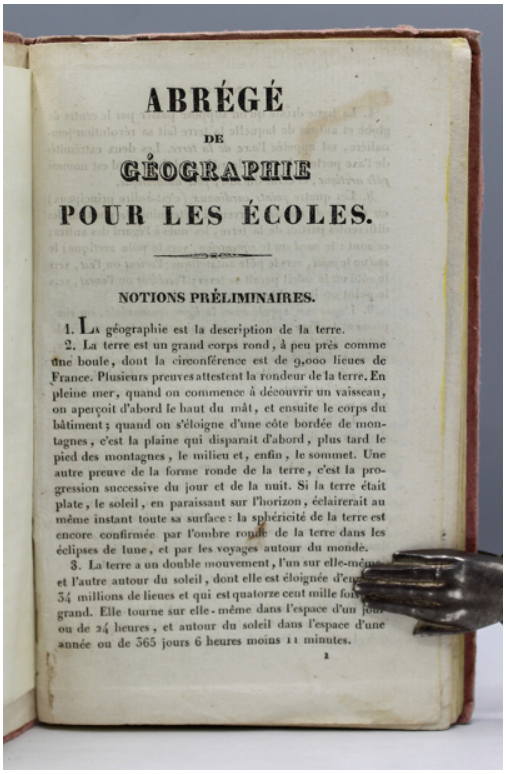
First edition.

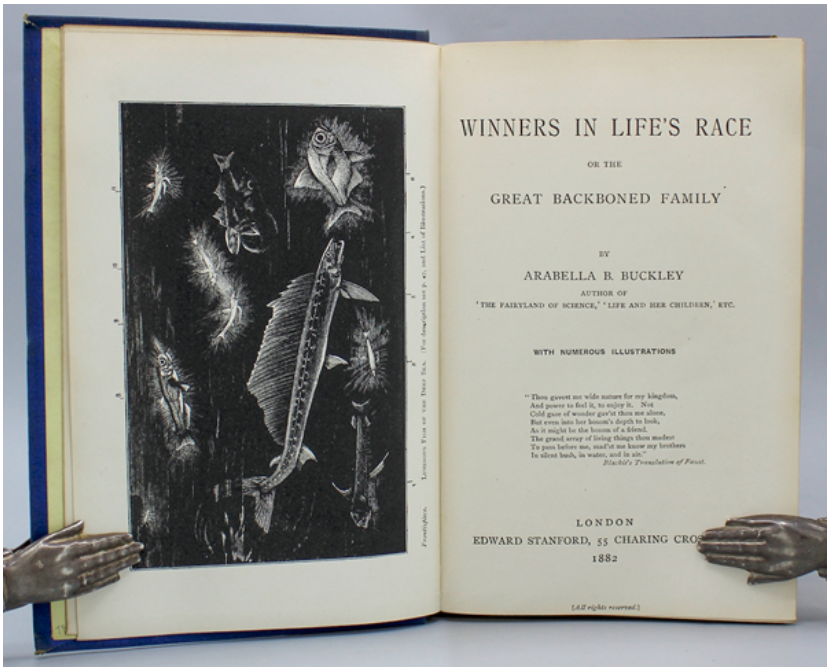
Abrégé de Géographie Pour Les Écoles was published anonymously, but one of two entries in OCLC attributes it to Jean-Frédéric Lamp (b. 1830), a Strasbourg geographer. The present work

begins by covering a few general geographic terms and concepts before concentrating on individual counties and continents. Europe is discussed first, with a substantial portion of the text focused on France, followed by British Isles, Denmark, Sweden, Norway, Russia, Arabia, etc. A brief portion of the text is devoted to North America, though Central America is covered in more detail. Palestine is the penultimate country to be described before the work concludes with Alsace.

OCLC lists only two copies (one in France and one in Switzerland).







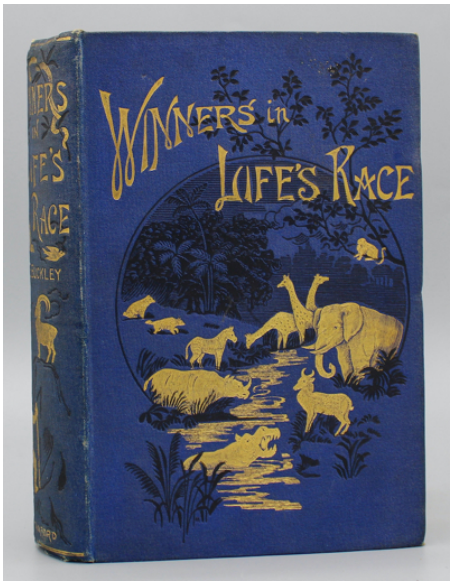
Evolutionary Theory for Children by an Important Woman Science Writer
With Over a Hundred Illustrations

2. BUCKLEY, Arabella B. *Winners in Life's Race, or the Great Backboned Family.* London: Edward Stanford, 1882.

Octavo. xv, 367, [16, publisher's catalogue] pp. Over a hundred illustrations total: A frontispiece, illustrated chapter headings, and ninety text figures.

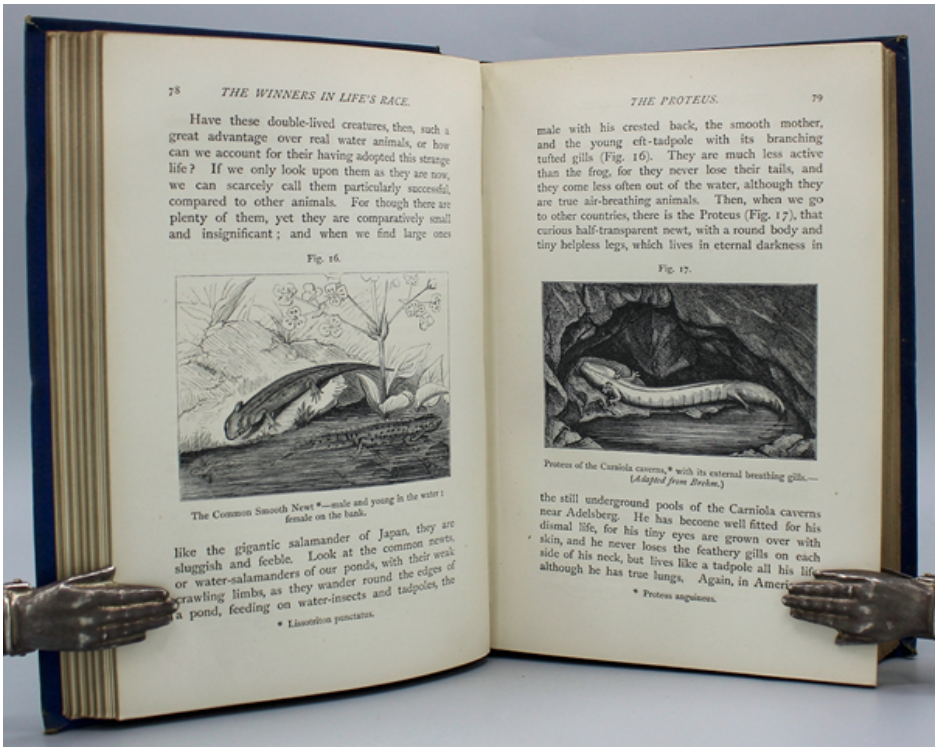
Publisher's pictorial blue cloth stamped in gilt and black. Binding is attractive despite some minor edgewear. All edges gilt. Pale yellow endpapers. Toning to first and last couple leaves. Otherwise, very clean and fresh throughout. A very good, bright copy of a scientific work for children by an important woman science writer.

$250



First edition.

Arabella Burton Buckley (1840 – 1929) was a lecturer, editor, and writer specializing in evolutionary theory. Between 1864 and 1875, she worked as the secretary to the important geologist Charles Lyell, and then went on lecture on natural science between 1876 and 1888. She also edited Mary Somerville's *Connexion of the Physical Sciences* (1877) and Heinrich Leutemann's *Animals from Life* (1887). Her own works include *A Short History of Natural Science* (1876) and children's science books like *The Fairy-Land of Science* (1879) and *Life and Her Children* (1884).



78 THE WINNERS IN LIFE'S RACE.

Have these double-lived creatures, then, such a great advantage over real water animals, or how can we account for their having adopted this strange life? If we only look upon them as they are now, we can scarcely call them particularly successful, compared to other animals. For though there are plenty of them, yet they are comparatively small and insignificant; and when we find large ones

Fig. 16.

The Common Smooth Newt *—male and young in the water; female on the bank.

like the gigantic salamander of Japan, they are sluggish and feeble. Look at the common newts, or water-salamanders of our ponds, with their weak crawling limbs, as they wander round the edges of a pond, feeding on water-insects and tadpoles, the

* Lissotriton punctatus.

THE PROTEUS. 79

male with his crested back, the smooth mother, and the young eft-tadpole with its branching tufted gills (Fig. 16). They are much less active than the frog, for they never lose their tails, and they come less often out of the water, although they are true air-breathing animals. Then, when we go to other countries, there is the Proteus (Fig. 17), that curious half-transparent newt, with a round body and tiny helpless legs, which lives in eternal darkness in

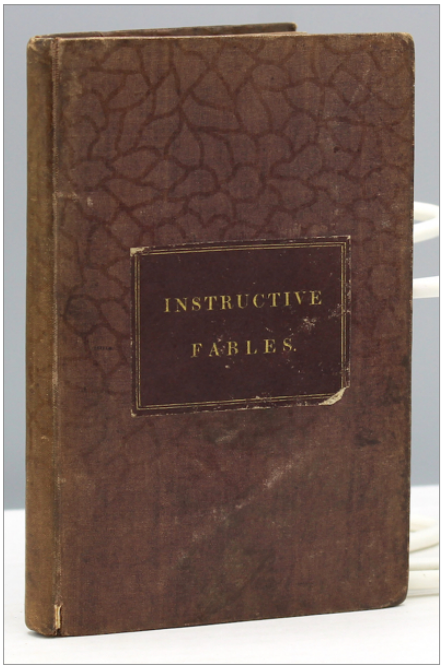
Fig. 17.

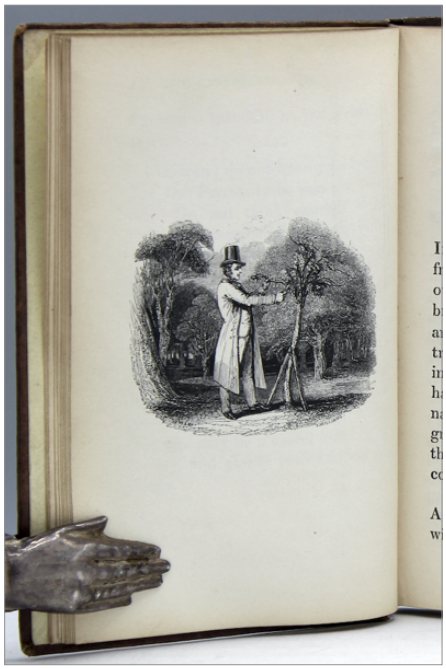
Proteus of the Carniola caverns,* with its external breathing gills.—(*Adapted from Brehm.*)

the still underground pools of the Carniola caverns near Adelsberg. He has become well fitted for his dismal life, for his tiny eyes are grown over with skin, and he never loses the feathery gills on each side of his neck, but lives like a tadpole all his life, although he has true lungs. Again, in Ameri-

* Proteus anguineus.

"Buckley was one of a small number of nineteenth-century Darwinians who realized the deficiencies in Darwin's thinking with regard to the development of moral qualities in the animal kingdom…Darwin had observed the competitive advantage species can gain from a well-developed social instinct but had difficulty in explaining its evolution, particularly with respect to parental affections for their offspring. Far from being daunted by this aspect of evolution, Buckley made parents' care for their offspring central to her books on evolution and continued Darwin's observations with far greater emphasis on mutuality. For her the *raison d'être* for evolution was not just the preservation of life, but the development of altruism as well," (Oxford DNB).





Botany and Zoology for Teaching Moral Lessons,
A Scarce Didactic Work for Children with Seven Plates

3. [CHEAP, Eliza]. *Instructive Fables.* London: L.B. Seeley and Sons, 1834.

Twelvemo. 92 pp. With seven attractive engraved plates (including frontispiece).

Publisher's brown cloth with dark brown leather label stamped in gilt. Some soiling to cloth. All edges gilt. Yellow coated endpapers. A clean copy aside from some dampstaining to endpapers. Ink gift signature (1835) to front flyleaf. A very good copy of a scarce work.

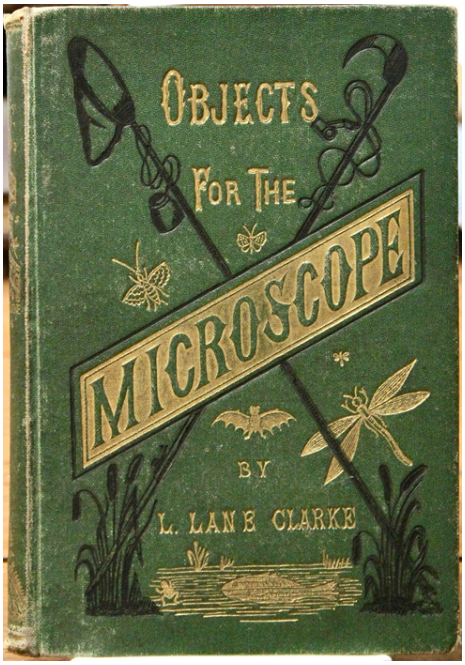
$200

First edition.

A didactic work for children that utilizes natural history to illustrate moral lessons. The first chapter explains the behavior and anatomy of monkeys, bees, parrots, and bullfinches, while the second uses the grafting of fruit trees as a metaphor—complete with an illustration of a man cutting a branch for grafting. Other chapters explain the tools needed for carpentry, sewing, and painting, and revisit botanical and zoological metaphors.

We could not locate much information on Eliza Cheap (fl. 1820s-30s). She wrote many other didactic works, including *The First Day of the Week* (1823), *The Guilty Tongue* (1827), and *The Commandment with Promise* (1830).

OCLC records three copies in the United States (University of Florida, Boston University, Princeton) and two copies in England. However, the OCLC record specifies "one unnumbered leaf of plates," while the present copy has six.



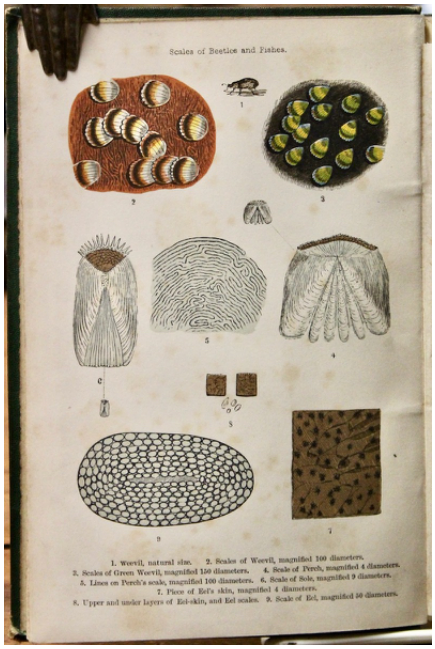
Microscopy for Children with Eight Chromolithograph Plates

4. CLARKE, L[ouisa] Lane. *Objects for the Microscope.* Being a Popular Description of the Most Instructive and Beautiful Subjects for Exhibition. London: Groombridge and Sons, 1871.

Octavo. viii, 230, [34, publisher's catalogue] pp. With eight chromolithograph plates (including frontispiece) and four text figures. At least three of the plates were designed by Mary King Ward and appeared in her own publications on microscopy.

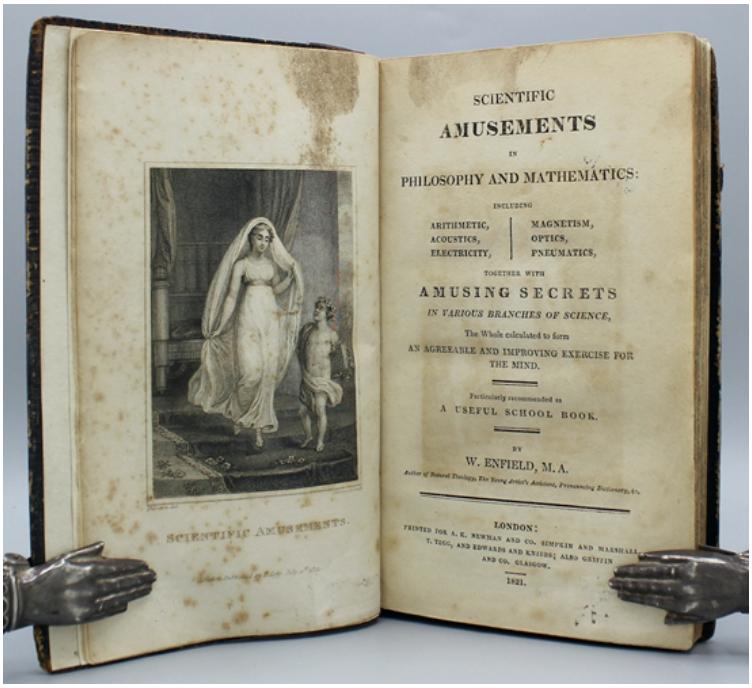
Publisher's pictorial green cloth stamped in gilt and black. Some wear to spine. All edges gilt. Pale yellow endpapers. Prize bookplate (dated 1876) of the Leeds Mechanics Institution, presenting the book to a C.A. Lancaster for a Latin prize. Foxing to title-page, frontispiece, and tissue guard. Otherwise clean. A very good, attractive copy of a work by a woman science and travel writer.

$175



Later edition. The first was published in 1858.

Louisa Lane Clarke (1812 – 1883) was best known for her science writing, which includes the present work and *The Common Seaweeds of the British Coast and Channel Islands* (1865). Clarke, who was born in the Channel Islands, also wrote several travel guides to the area, including *Redstone's Guernsey Guide* (1841) and *The Island of Alderney* (1851).



By the Author of a Landmark Text on the History of Philosophy

5. ENFIELD, William. *Scientific Amusements in Philosophy and Mathematics:* including Arithmetic, Acoustics, Electricity, Magnetism, Optics, Pneumatics, together with Amusing Secrets in various branches of Science, the Whole calculated to form an Agreeable and Improving Exercise for the Mind. London: Printed for A.K. Newman and Co....also Griffin and Co., Glasgow, 1821.

Twelvemo. xii, 276 pp. Engraved frontispiece by Davenport after Thurston, complete with the half-title.

Contemporary calf, rebacked, with original spine laid down. First few leaves with some foxing, old ink number on verso of title. A very good copy of an uncommon book.

$950

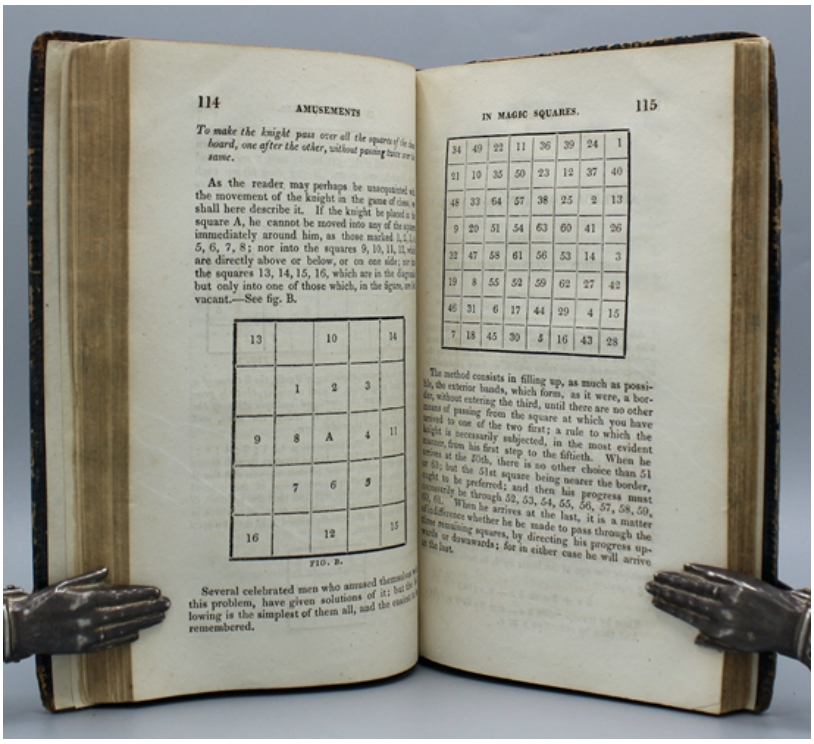
First edition.

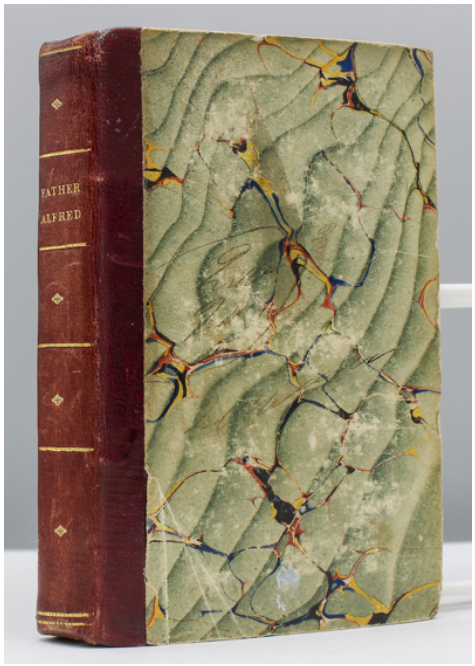
Includes long sections on throwing "any point. . . with One, Two, Three, or more Dice,"card tricks including "The Four Indivisible Kings," an animated feather, artifical spider, "the magician's chace," electrical kite, dancing balls, "the mysterious watch," a magic oracle, and many others.

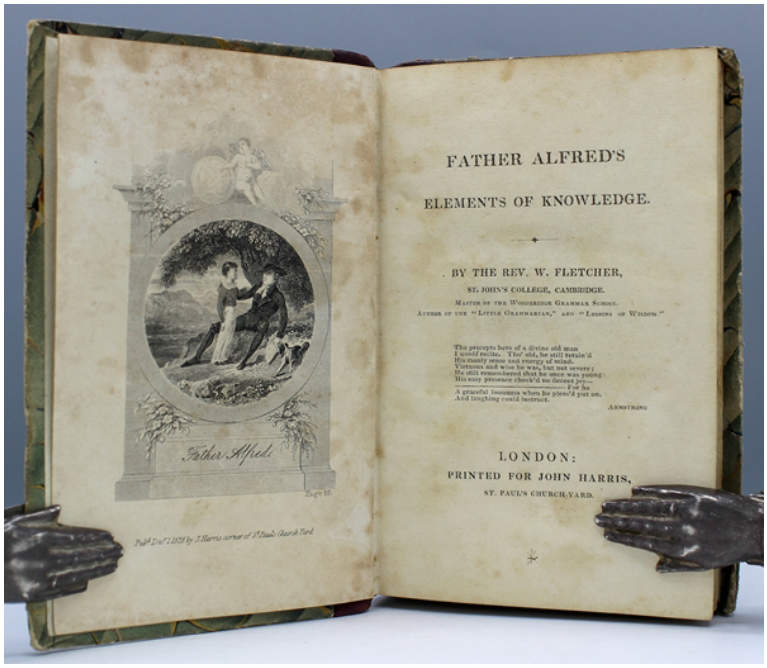
Enfield was a Unitarian minister, dissenting philosopher, educator, and author. His religious, historical, and scientific texts included *Sermons on Practical Subjects* (1798); *An Essay Toward the History of Liverpool* (1774); *Institutes of Natural Philosophy* (1783); and his major commercial success *The Speaker* (1774), an

anthology of extracts from classical and English literature intended for instruction in elocution. He was also a friend of Joseph Priestly, Nicholas Clayton, John Aikin, and Anna Laetitia Barbauld. He is best known for his two-volume history of philosophy, published in 1791, based on Bruckner's five-volume *Historia critica philosophiae.* Enfield's version "won praise on both sides of the Atlantic," (ODNB).

Toole Stott, *Bibliography of English Conjuring*, 274.







6. FLETCHER, W[illiam]. *Father Alfred's Elements of Knowledge.* London: Printed for John Harris [by S. and R. Bentley, 1828].

Twelvemo. vii, [1, blank], 232 pp. Engraved frontispiece, dated 1828.

Contemporary quarter maroon sheep over marbled boards, gilt spine. Some edgewear. Light foxing and offsetting from frontispiece. A very good, clean copy.

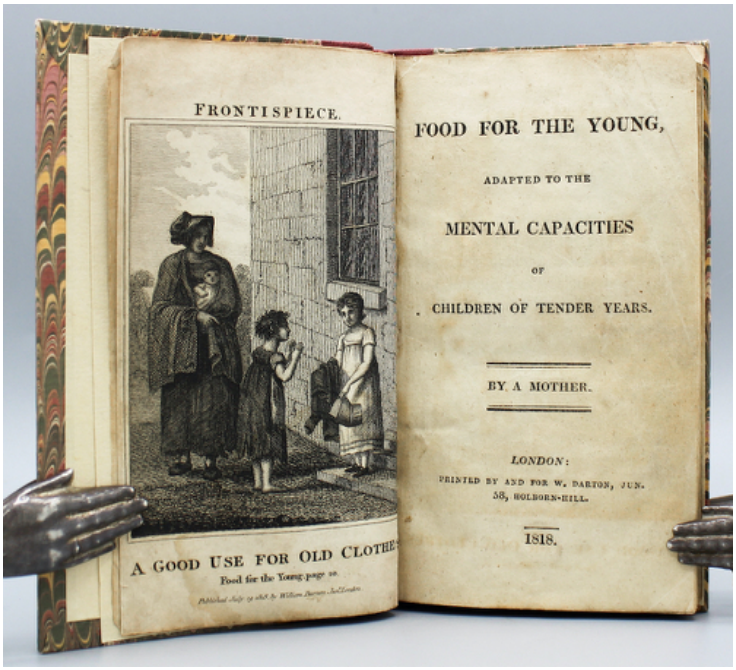
$600

First edition, a work of rudimentary theology, astronomy, natural history, and geography for youth, supposedly published from the papers of a deceased "friend," with a few of Fletcher's own "emendations" and "improvements."

With the exception of him being the Vicar of Stone, we were unable to learn anything about William Fletcher from the resources available to us. In his "Introduction," Fletcher writes, "Inspecting a few months back the literary relics of a departed friend, I stumbled upon a bundle of papers, containing some account of his early life, and the course of instruction he at that time pursued…Trusting it may promote the best interests of those little ones for whom it is intended, by leading them to a more intimate knowledge of their kind and beneficent Creator, through a display of the varied and wonderful manifestations of His power and goodness…" (pp. v-vii).

John Harris (1756-1846) joined John Newbery's publishing firm, which he eventually purchased from Elizabeth Newbery in the early nineteenth-century. He published books in innovative and popular styles is famous for publisher the first edition of *The Comic Adventures of Old Mother Hubbard and her Dog* (1805), which sold more than 10,000 copies in a few months' time.

OCLC lists nine copies, six in North America.



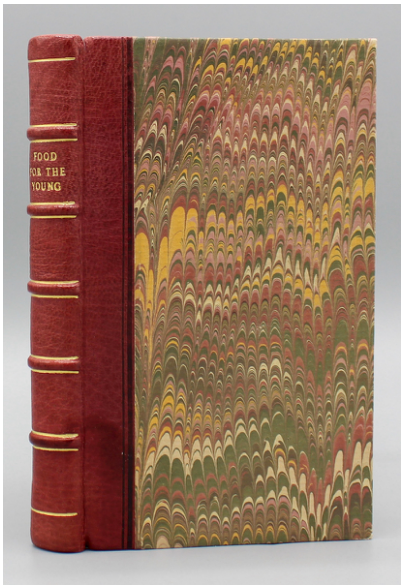
Scarce Work on Zoology, Geography, and Botany for Children

7. *Food for the Young, Adapted to the Mental Capacities of Children of Tender Years.* By a Mother. London: W. Darton, 1818.

Twelvemo. [4], 176 pp. With a frontispiece and two engraved plates.

Handsomely rebound in modern quarter morocco over marbled boards. Ink ownership signature, dated 1819, to preliminary blank. Some dampstaining and dustsoiling to leaves. A very good copy, rare in commerce.

$650

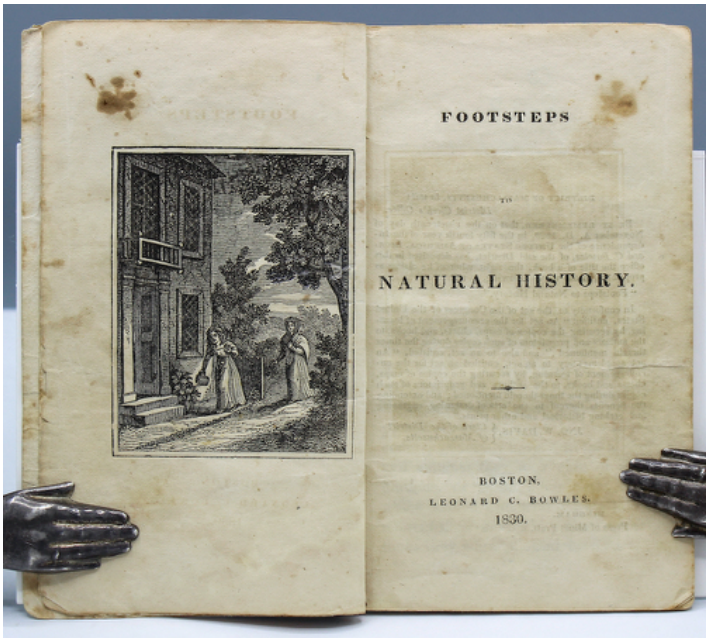


First edition.

A collection of stories "by a mother" to her children on zoology, geography, botany, travel, and morality. Several of the stories are narrated by a character named Mr. Selby, whose travels in Ceylon (Sri Lanka) and India are recounted here: "When I had traveled about four miles," said Mr. Selby, "I was overtaken and stopped by a party of Moors on horseback. I dreaded the consequence of the meeting; for the Moors, who inhabit the same country as the Negroes, are of a very different composition, being as gloomy and cruel as the Negroes are open and friendly," (p. 125).

Other stories describe microscopy, Mt. Etna, and gardening, and animals including beavers, sharks, and camels.

Darton H598(1). Osborne II, p. 708. Gumuchian 2589.

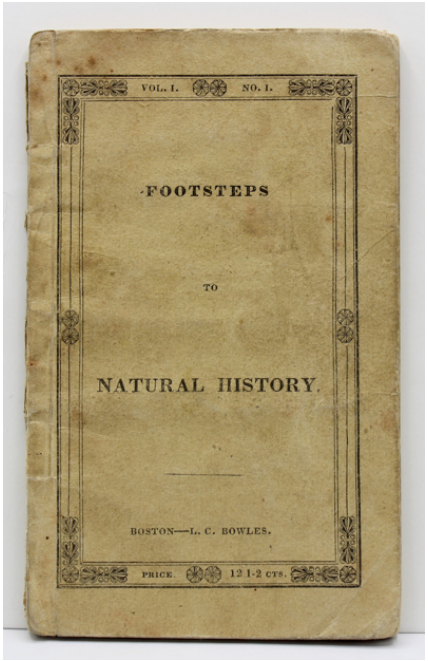


8. *Footsteps to Natural History.* [Vol. I. No. I]. Boston: Leonard C[rocker] Bowles, 1830.

5½ in. by 3½ in. 44 pp. Engraved frontispiece. Rear wrapper printed with publisher's ads.

Publisher's printed paper wrappers. Covers lightly rubbed and soiled with a few small tears and creases. Slight foxing and intermittent minor soiling, short closed 1" tear to title-page, touching text on verso, but not affecting legibility. Contemporary presentation inscription to a young woman from her grandmother on front flyleaf, faint ink library stamp on inner front wrapper. A very good copy of a fragile book.

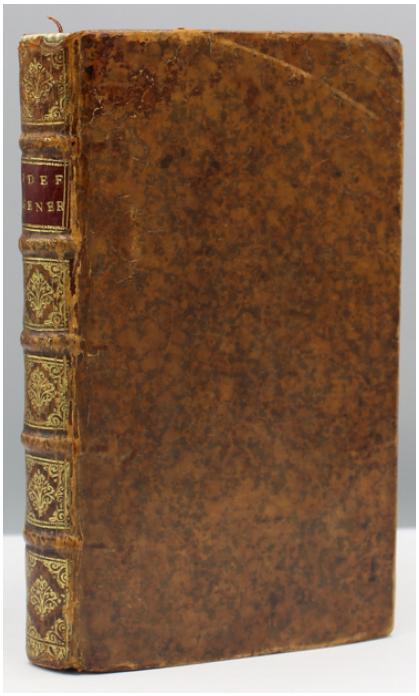
$250

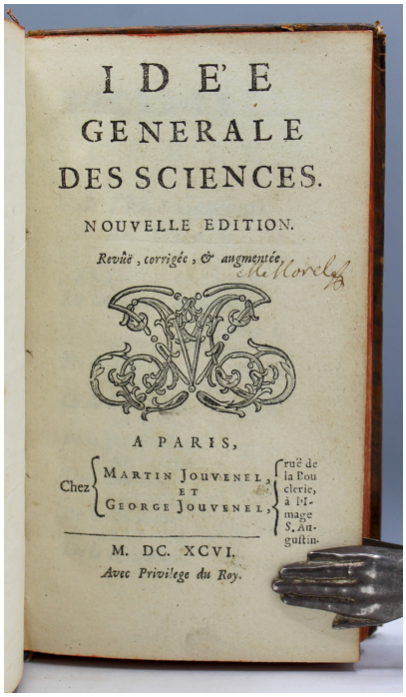


First edition. A companion volume (No. II) was published in the same year.

We were unable to find any information about the author of the present work, including his or her name. *Footsteps to Natural History* is intended for young readers, especially girls. It consists of a dialogue between the characters Mrs. Musgrave and her young daughter Ann. The former asks her child to define natural history, which Ann describes as "...an account of nature; that is, of the works of God, of the things which he has made, whether they are animals or plants or only stones and metals" (p. 10). They proceed to discuss insects and their habitats (the *Coccus Ficus* or the *Coccus Lacca*, aphids, lion ants, dragonflies, etc.).

OCLC records no copies.





Two Rare Publications for Children

9. *Idée General des Sciences.* A Paris: Martin Jouvenel et George Jouvenel, 1696.

Twelvemo. [4], 84 pp. Engraved title page, headbands, and initial letters.

[Bound with:]

LE NOBLE, [Eustache]. *La Grotte des Fables*...Par Mr. Noble. A Paris: George Jouvenel and Martin Jouvenel, 1696.

Twelvemo in five parts (parts 9-14). 36 pp each.

Contemporary mottled calf and gilt-tooled spine with gilt-lettered red morocco label. Edges stained red. Marbled endpapers. Crown of spine worn away less than 1/4." Other binding extremities lightly rubbed with minor scuffing to boards. Contemporary ink signature on title page. A very good copy.

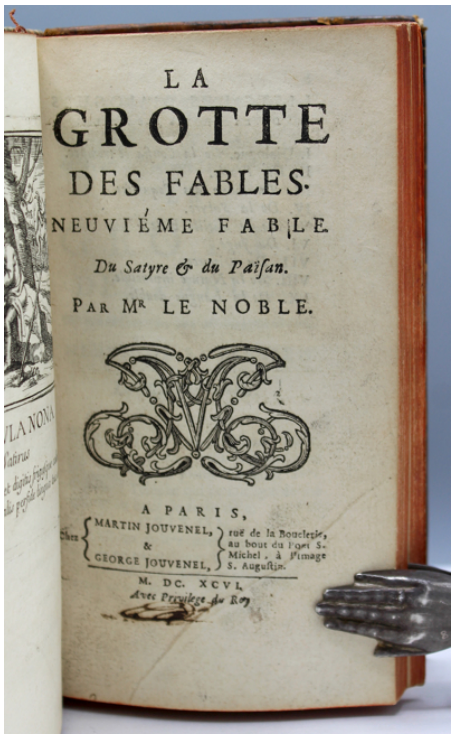
$500

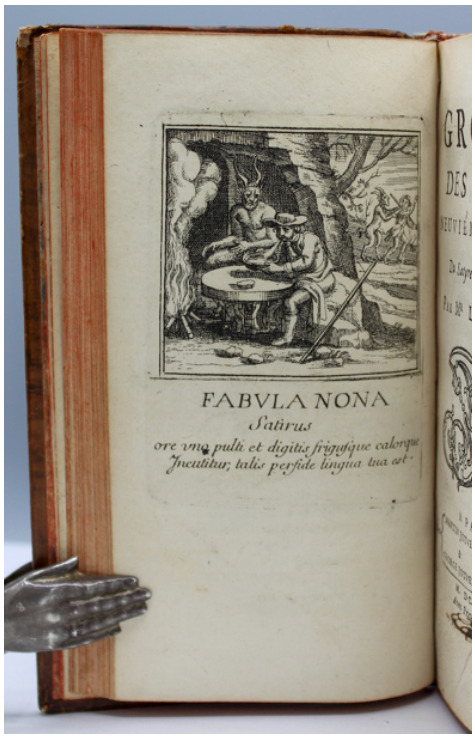
First edition of the first work; first edition in book form of the second, though it only contains a portion of the work.

Idée General des Sciences contains fifteen articles for young students in a questions-and-answers format about many topics including theology, philosophy, and medicine.

Parts nine through thirteen from a fourteen part series published in a weekly periodical. Copper-engraved frontispiece and publisher's woodcut monogram on the title page for each. Likely

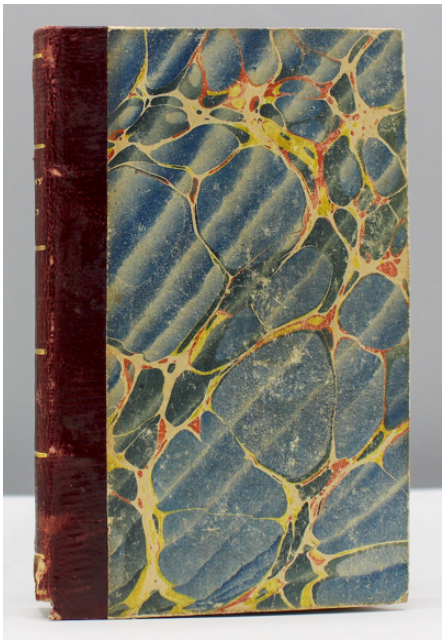
bound together with *Idée*...because they were both intended for a juvenile audience and were published in the same year.

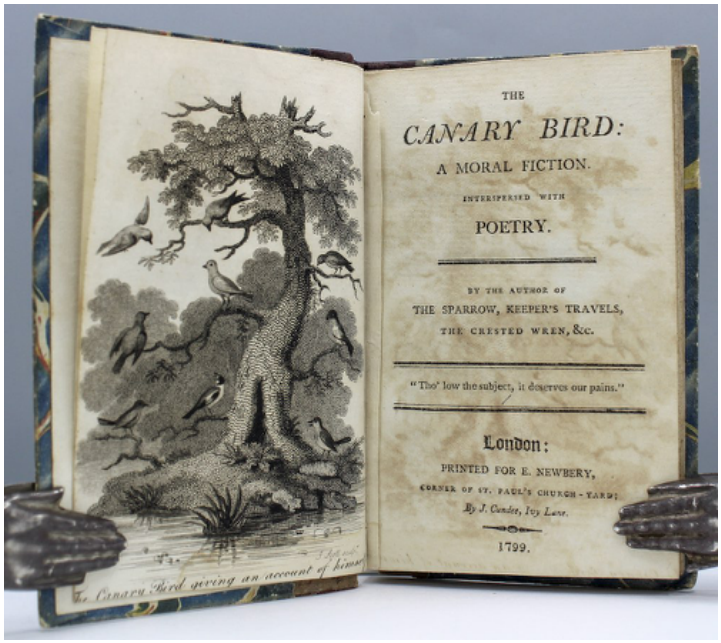




After a life that included banishment and prison, Eustache Le Noble (1643-1711) began a prolific writing career. He was one of the most popular novelists in France.

OCLC lists only two copies of *Idée...*, both of which are in Germany; OCLC lists 5 copies of *La Grotte des Fables* that are complete (parts 1-14).





Combining Morality and Natural History

10. [KENDALL, Edward Augustus]. *The Canary Bird: A Moral Fiction.* Interspersed with Poetry. London: Printed for E. Newbery by J. Cundee, 1799.

Small twelvemo. xi, [1, blank], 148, [+2, publisher's note] pp. Engraved frontispiece by Scott and small woodcut tailpieces.

Contemporary quarter burgundy roan over marbled boards, gilt spine. Binding extremities lightly rubbed, foot of spine partially worn away about ¼." Lacks the half-title, light foxing, intermittent slight browning. Margins closely shaved, just barely touching text at times, but not affecting legibility. Slight offsetting from frontispiece. A very good copy.

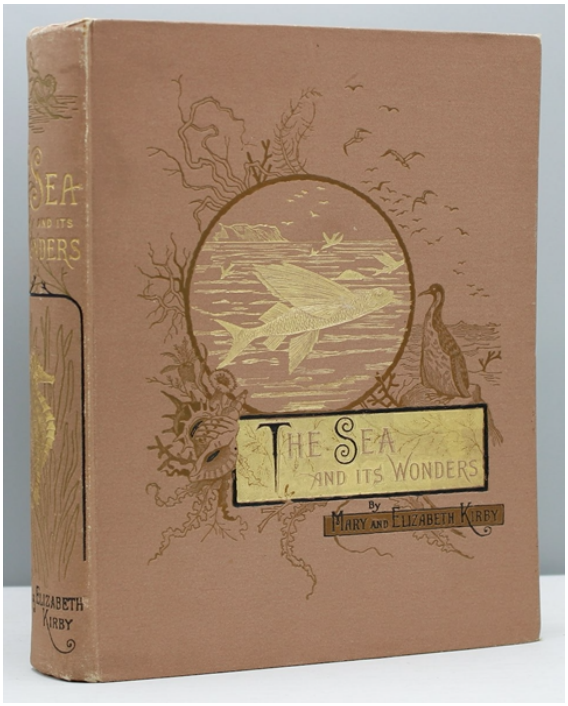
$650

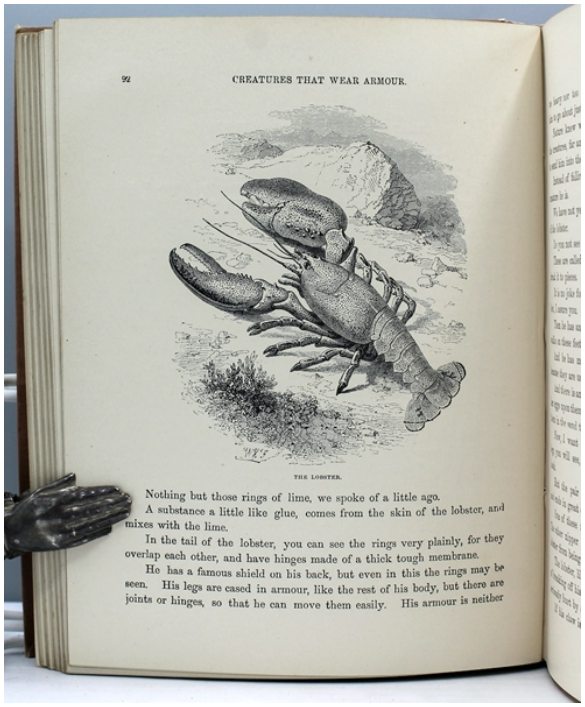
First edition. The Advertisement states, "The Subject of this Volume is the Escape of a Canary-Bird from his Cage: - the Design – to present to young Readers a little Miscellany of Natural History, Moral Precept, Sentiment and Narrative."

Edward Augustus Kendall (1775/6-1842 had a varied literary output that may be divided into four categories: political and social reform, "popular" journalism, translations of French works, and children's books. His most popular works proved to be his books for young readers, which continued to be published fifty years after his death, including *Keeper's Travels in Search of His Master* (1799), *The Crested Wren* (1799), and *Burford Cottage and its Robin Red Breast* (1835). Kendall was also a member of the Society of Antiquaries.

ESTC records eight copies.

Roscoe, *John Newbery and His Successors,* J204.





Marine Biology for Children by Two Important Women Science Writers

11. KIRBY, Mary and Elizabeth. *The Sea and its Wonders.* London: T. Nelson and Sons, 1902.

Octavo. xii, 304 pp. Frontispiece, illustrated title, and 166 text illustrations.

Publisher's light brown pictorial cloth stamped in gilt and blind. Green pattered endpapers. All edges gilt. Prize bookplate of the Walthamstow Education Committee awarding the book to a Charles Woodbridge at the Forest Road Boys' School. Offsetting to front flyleaves. Otherwise, very clean throughout. A bright, near-fine copy.

$250

Later edition of this book on the flora and fauna of the ocean for children. First published by T. Nelson in 1884.

Elizabeth Kirby (1823 – 1873) and Mary Kirby (later Gregg, 1817 – 1893) were children's book authors and science writers. Mary's most important work was the *Flora of Leicestershire* (1848), which she wrote with naturalist Andrew Bloxam. The first edition, which was published with every other page left blank, asked readers to fill in additional botanical information. The 1850 edition compiled these contributions for a total of over nine hundred species. Together, the sisters published popular science texts on botany, entomology, marine biology, and more over the course of twenty-five years.

The Kirbys also wrote didactic works for children, including *Julia Maitland; or, Pride Goes Before a Fall* (1857), which emphasized the value of young women's education, and the collection of short stories *The Discontented Children* (1855).

A Miniature Naturalist Guide for Children with Eleven Engraved Plates
In the Original Boards and Slipcase

12. *Le Petit Naturaliste.* Paris: Chez Marcilly [Imprimerie de A. Firmin Didot], [n.d., ca. 1820-1840].

2 ¾ inches by 2 inches. 127 pp. With 11 engraved plates of animals including a lion, a deer, a peacock, a swan, and a goldfinch. Also with an engraving of a bear climbing a tree on title-page.

Original bright green pictorial boards with engraved images of animals and a decorative border. Lettered in black on spine. All edges gilt. Extremities rubbed and some cracking to hinges. Binding thread visible at gutter. Some light foxing, but pages and plates are largely clean. Overall a very good, tight copy of a scarce book, in the original pictorial paper-covered slipcase.

$650

First edition.

Le Petit Naturaliste contains descriptions of over 100 animals (including bears, zebras, porcupines, pigeons, and turtles) written for children. The entries detail the animals' habitats, their physical characteristics, their diets, and other interesting facts. In addition, each animal is used to illustrate a moral virtue, like the courage of the lion and the maternal care of the stork.


Le Petit Naturaliste.

Quadrupèdes.

L'Eléphant.

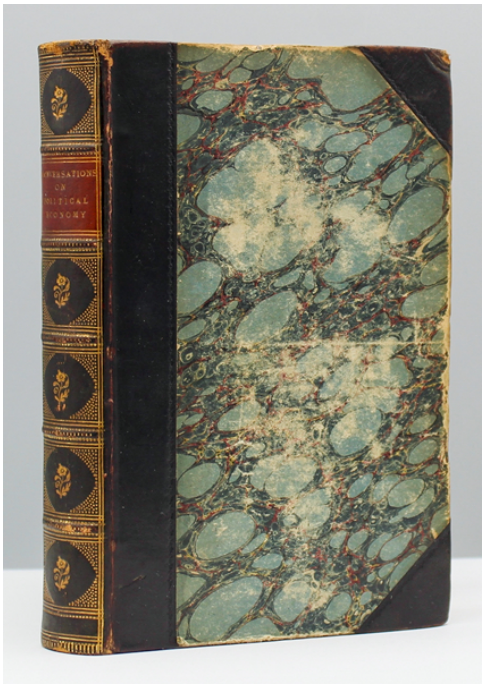
Par sa grandeur, l'Éléphant s'élève au-dessus de tous les animaux; par son intelligence, il approche

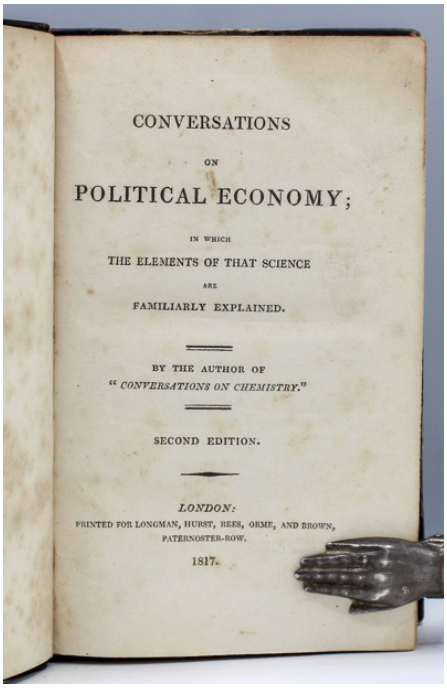
1.

Chez Marcilly published children's books, mostly in miniature, in Paris during the first half of the nineteenth century. Their *Le Petit* series included, other than *Le Petit Naturaliste,* miniature reprintings of fables, songs, and poems like *Le Petit Momus* (1833) and *Le Petit Anacreon* (1831) for a juvenile audience. We could not find any information on the writer or illustrator of the present work.

Ambroise-Firmin Didot (1790 - 1876) was a member of the fourth generation of the hugely influential Didot publishing family. His father, Firmin Didot (1764 - 1836), was the inventor of stereotypography and a pioneering type designer.

OCLC lists six copies total: four in the United States (one each in Indiana, in Virginia, at Stanford, and at the Library of Congress), one in Montreal, and one at the National Library of France.





Influential Work on Political Economy, Inspired by Ricardo, By a Pioneer of Women's Education and a Friend of Edgeworth and Martineau

13. [MARCET, Jane Haldimand.] *Conversations on Political Economy; in which the Elements of that Science are Familiarly Explained.* London: Longman, Hurst, Rees, Orme, and Brown, 1817.

Twelvemo. xii, 485 pp.

Late nineteenth or early twentieth century half calf over blue marbled boards. Gilt spine with red label. Twentieth century bookplate (Dwight Carpenter) to front pastedown. Contemporary ink signature (Phipps Hornby, probably Sir Admiral Phipps Hornby) to preliminary blank. Some toning and foxing, mostly to first and last few leaves, but overall quite clean throughout. A very good copy.

$1,250

Second edition, as stated. First published in 1816.

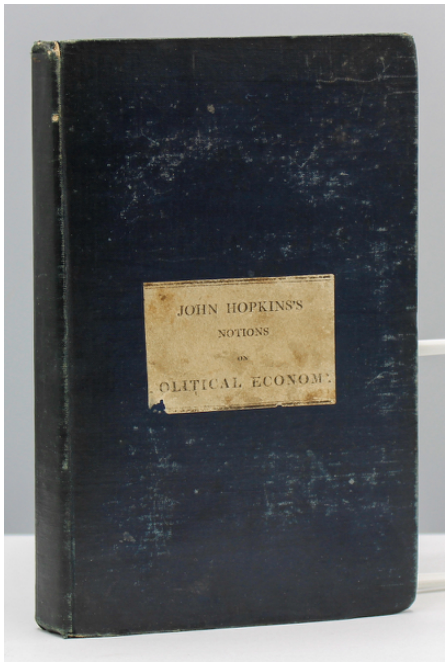
The present work uses the format of a conversation between a teacher and her young pupil Caroline. In the Oxford DNB, Elizabeth J. Morse writes, "*Conversations on Political Economy* utilized Ricardian principles before the publication of Ricardo's *Principles on Political Economy.* "As in all her works Marcet laid no claim to original through, but she wrote in a lucid, pleasant style, incorporating the latest, often controversial, theories in her popular works. *Conversations on Political Economy* was praised by Macaulay and Say, and was approved by Malthus, McCulloch, and Ricardo. Her confident presentation of complex ideas in the form of appealing dialogue repelled later economists (notably Alfred Marshall) and led others to conclude that hers was economics for schoolgirls (Schumpeter), but the book's popularity with adult readers grateful for a simple introduction to a new and forbidding field of knowledege indicates Marcet's accurate perception of a wide and generally sophisticated readership for an introductory economics text." Macaulay added that "every

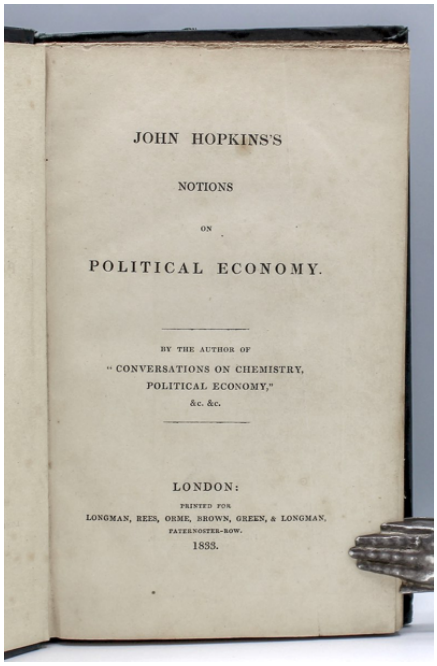
girl who has read Mrs. Marcet's little dialogues on political economy could teach Montagu or Walpole many lessons in finance."

Jane Haldimand Marcet (1769-1858) was a writer on science and economics and an important figure in the history of women's education. Her *Conversations on Chemistry* (1805) was one of the first elementary science textbooks, written after Marcet attended the lectures of Sir Humphry Davy at the Royal Institution. Michael Faraday read it while working as a bookbinder's apprentice. Though the author insists in the Preface that her knowledge of the subject is "but recent" and she "can have no real claims to the title of chymist," her work was popular and influential. Marcet was also a friend and colleague of many important women intellectuals, including Maria Edgeworth and Harriet Martineau. Morse notes that *Conversations on Political Economy* inspired Martineau to begin writing fiction with economic themes, like her *Illustrations of Political Economy* (1832). Marcet was married to the important physician Alexander Marcet (1770 – 1822).

The signature "Phipps Hornby" likely refers to Admiral Sir Phipps Hornby (1785 – 1867), a prominent Naval officer who played a vital role in many English victories during the Napoleonic Wars, including the Battle of Lissa. He served under important Naval officers like Horatio Nelson, on the flagship HMS *Victory;* William Hoste, on the HMS *Volage;* and the Duke of Northumberland. For a time, he was a commander of the Pacific Fleet, and later one of the Lords of the Admiralty. He concluded his naval career in 1853, but continued to receive honors during his retirement. He was eventually promoted to a full admiral and became a Knight Grand Cross of the Order of Bath in 1861.

The Feminist Companion to Literature in English, p. 713.





14. [MARCET, Jane Haldimand.] *John Hopkins's Notions on Political Economy.* London: Printed for Longman, Rees, Orme, Brown, Green, and Longman, 1833.

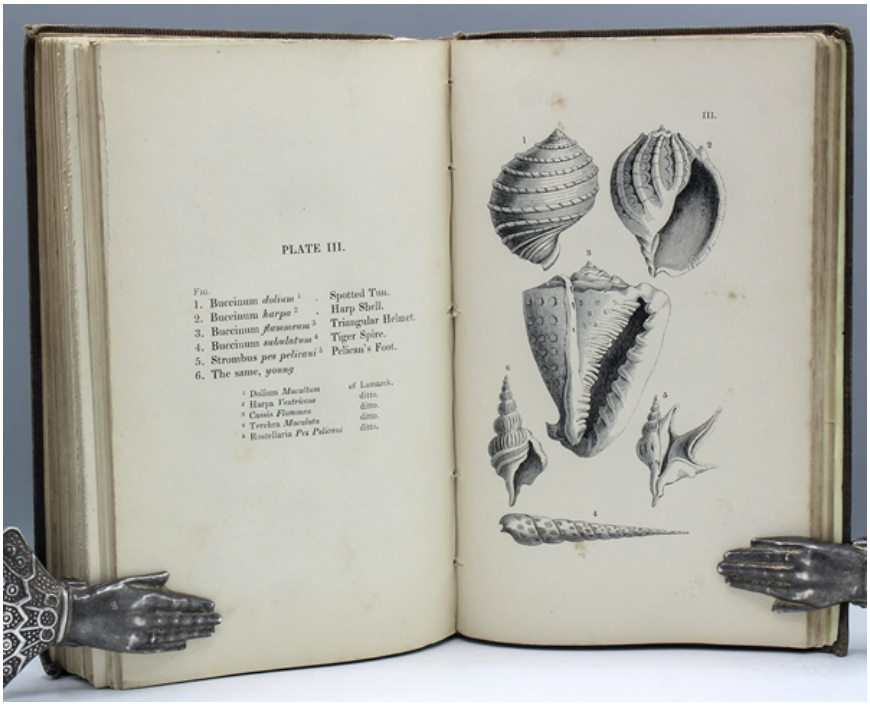
Small octavo. [ii] pp., 188 pp.

Original dark blue cloth with printed paper label. Some rubbing and light fading to cloth. Toning to label. Some creasing at gutter. Some toning to endpapers and some light foxing to edges, but a very good, bright, and tight copy of an important work.

$1,250

First edition.

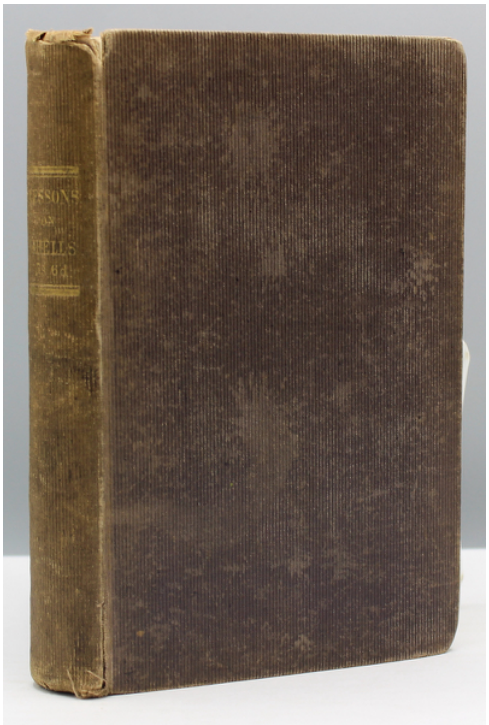
John Hopkins's Notions on Political Economy was published during a period of anxiety in Britain over a potential working-class rebellion. The stories bear titles like "Wages" (pp. 11-26); "Emigration" (pp. 81-99); and "The Rich and the Poor" (pp. 5-10), which is the first story in the collection and expresses a belief in the mutual interests of the upper and lower classes. The final lines of "The Rich and the Poor" assert that "the rich and the poor have but one and the same interest…I am convinced that the comforts of the poor are derived from the riches of the rich," (p. 10). Though members of the working class were the intended audience of *John Hopkins's Notions on Political Economy*, and the author's prefatory note states that its goal is "the improvement of the labouring classes" (p. [ii]), it is unlikely that many working people could have afforded a copy of the book (Oxford DNB).



Popularized the Object Lesson and Influenced a Generation of Teachers

15. [MAYO, Elizabeth.] *Lessons on Shells, as Given to the Children Between the Ages of Eight and Ten, in a Pestalozzian School*. London: Seeley, Burnside, and Seeley, 1846.

Octavo. xiii, [2], 228, [16, publisher's ads] pp. With ten lithographed plates of shells. Preface by Charles Mayo, the author's brother. Also, with the author's preface to the second edition.



Contemporary brown straight-grained cloth. Dustsoiling to cloth and some chipping to head and tail of spine. Very clean and fresh throughout, aside from some light foxing to plates (as usual). Ink gift inscription (dated 1909) to a Helen Wigham on front flyleaf. A very good copy.

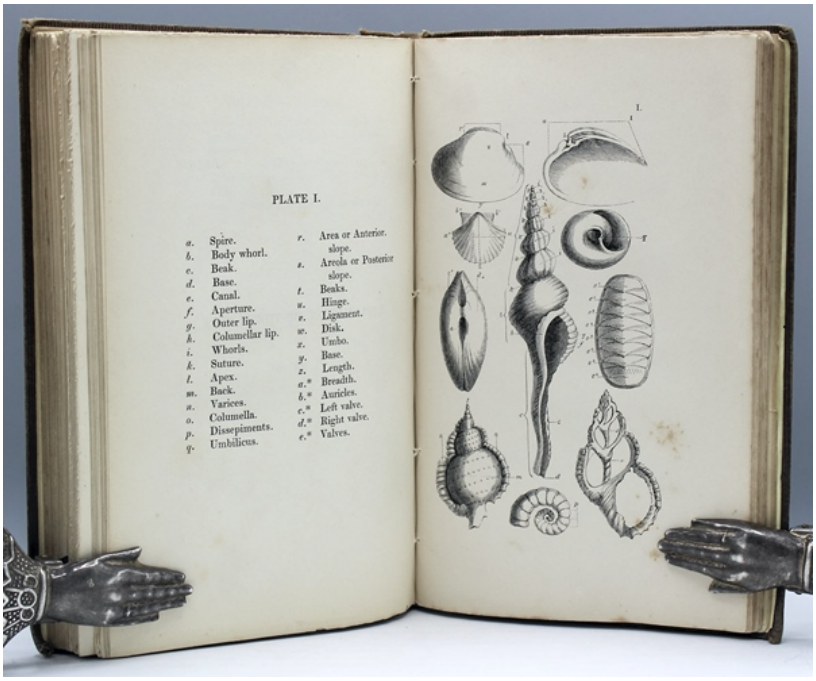
$450

Third edition. First published by Seeley in 1832.

Elizabeth Mayo (1793 – 1865) was an educational reformer and writer who played a major role in popularizing the theories of Pestalozzi in England. Mayo and her brother Charles (1792 – 1846) also ran an evangelical school based on theories that Charles had learned from Pestalozzi. Mayo wrote her two most successful books, *Lessons on Objects* (1830) and the present work, based on the Pestalozzian method of the object lesson, which developed observational skills through the careful examination of objects. These two

books were the first of their kind in England, and popularized the use of the object lesson for generations of teachers.

While running the school in Cheam with her brother, Mayo developed a lifelong interest in early childhood education and the teaching methods best suited for that age group. In 1843, Mayo began working at the Home and Colonial Infant School Society in London, where she became the first woman in England to be employed in teacher training. She developed lesson plans, supervised curricula, and acted as a general consultant at the institution. The institution offered a broad course to prepare students to teach grammar, math, geography, the arts, and physical education. By the late 1840s, the Home and Colonial Society provided teachers to early childhood education programs all across England, and was widely distributing lesson plans and teaching materials to schools as well.



In the Oxford DNB, Janet Shepherd writes, “Elizabeth's emphasis on structure, at a time when early years teaching tended to be unsystematic, secured her importance in the history of infant education.”

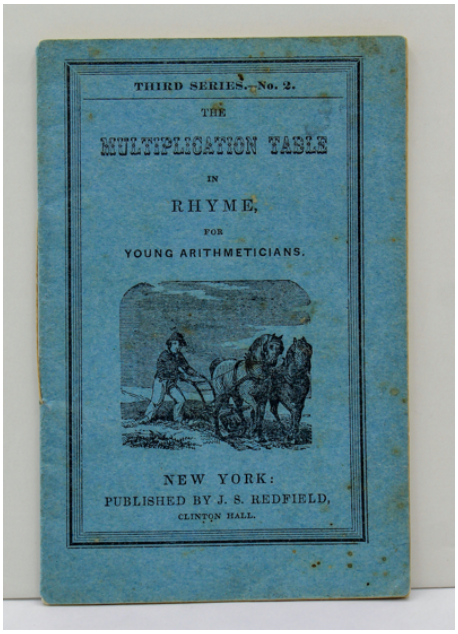
"Three Times Eleven are Thirty-Three, Let Your Manners Gentle Be," Making Multiplication Easy, with Three Full-Page Illustrations

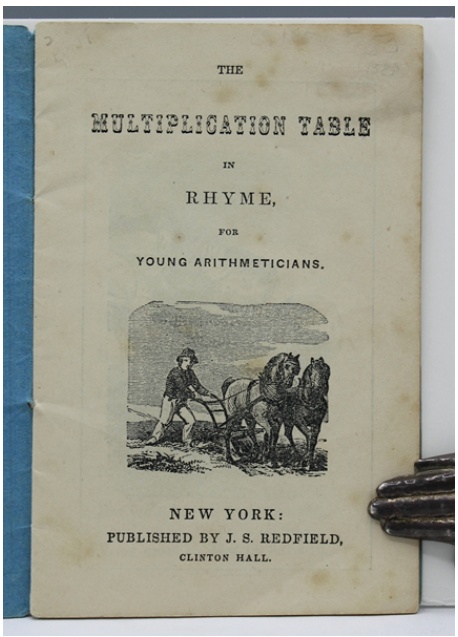
16. *The Multiplication Table in Rhyme for Young Arithmeticians.* New York: J.S. Redfield, [1843 - 1852?].

Sixteenmo. 16 pp. With a title-page vignette, three full-page illustrations, and one half-page illustration. Wood engravings by William Howland and Lossing & Barritt.

Original pictorial blue paper wrappers. Light foxing to wrappers. Publisher's ads on back cover. Very clean overall despite some minor foxing to title-page and a few leaves. A very good, bright copy of a scarce item.

$100





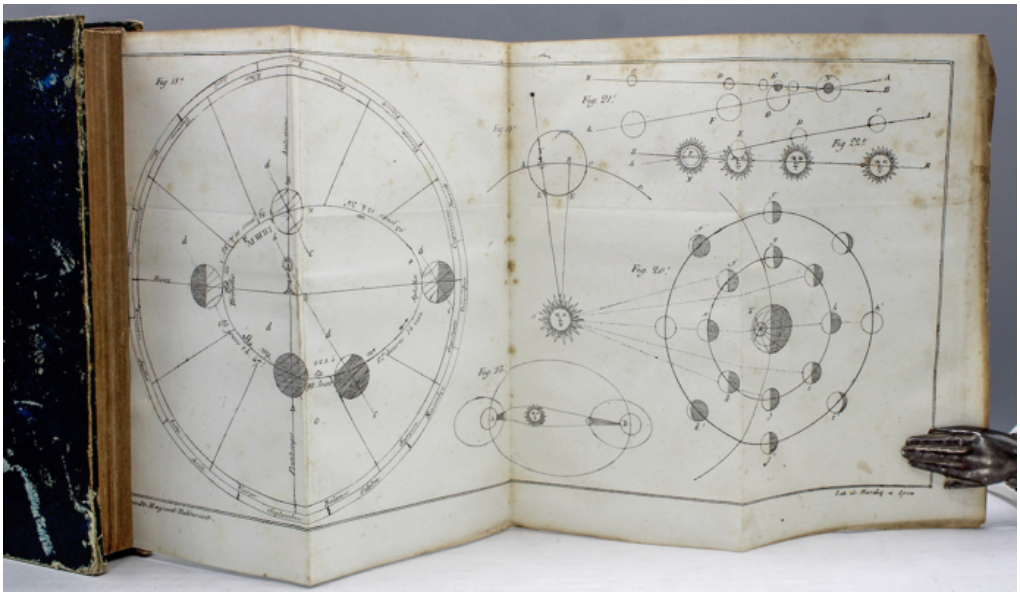
First edition. The present work is number two in the third series of Redfield's Toy Books. There were four series of Redfield's Toy Books, each comprising twelve titles. J.S. Redfield was located at Clinton Hall (137 Nassau Street), the address noted in the imprint, between 1843 and 1852.

The present work uses cheerful poems, most morality or the beauty of nature, as an easy way for children to memorize the multiplication tables: "Three times ten are thirty, / Let not your hands be dirty. / Three times eleven are thirty-three, / Let your manners gentle be," (p. 5).

Benson John Lossing 1813 – 1891) and William Barritt (ca. 1822 - ?) were the co-proprietors of the wood engraving business Lossing & Barritt. The business was founded Lossing, Barritt's relative by marriage, in 1838. At the time of its closure in 1862, it was the oldest extant wood engraving business in New York. The two worked together until 1869.

We could not locate much information on wood engraver William Howland (1822 – 1875), nor on the author of the present work.

OCLC records five copies: AAS, University of Rochester, University of Chicago, the Free Library of Philadelphia, and the State Library of Victoria in Australia.



Rare Introduction to Astronomy with Four Folding Plates

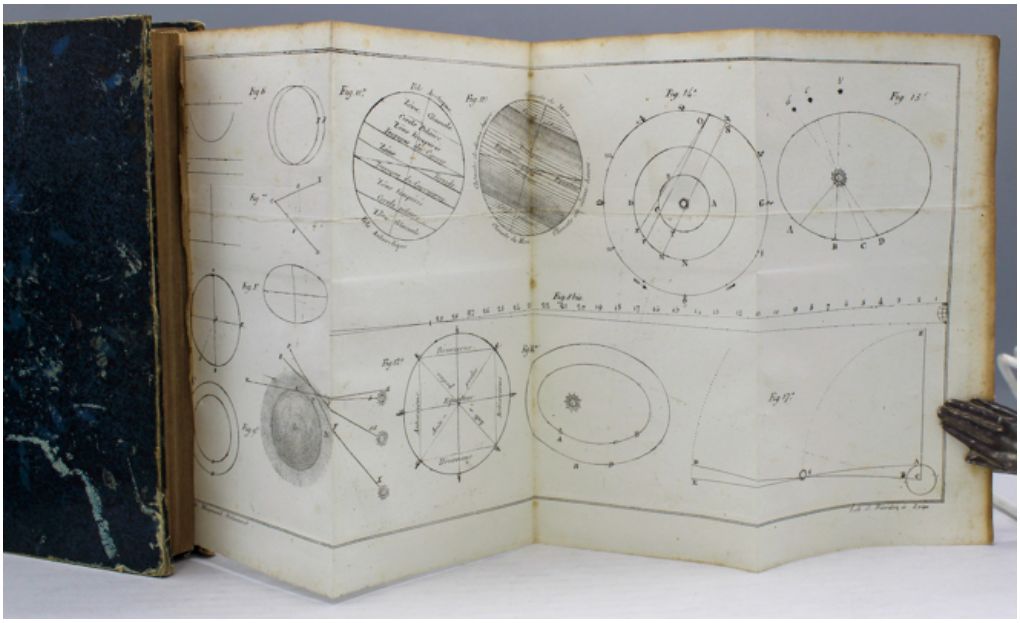
17. PERRAULT-MAYNAND, Aloyd [or Alois]. *Uranographie de la jeunesse, ou Leçcons de sphere d'astronomie, démontrées sans le secours de mathématiques.* 3e edition. Lyon: Chez Perisse Frères, Libraires…Paris. Au Dépot Central de Libraire…1835.

Twelvemo. viii, 335, [1, blank] pp. With four large fold-out lithographic plates. Contemporary blue marbled paste-paper boards with gilt red spine label. Binding extremities lightly worn, covers a bit scuffed. Intermittent light foxing and browning, mostly marginal, plates also a little foxed. Overall, a very good, clean copy.

$950

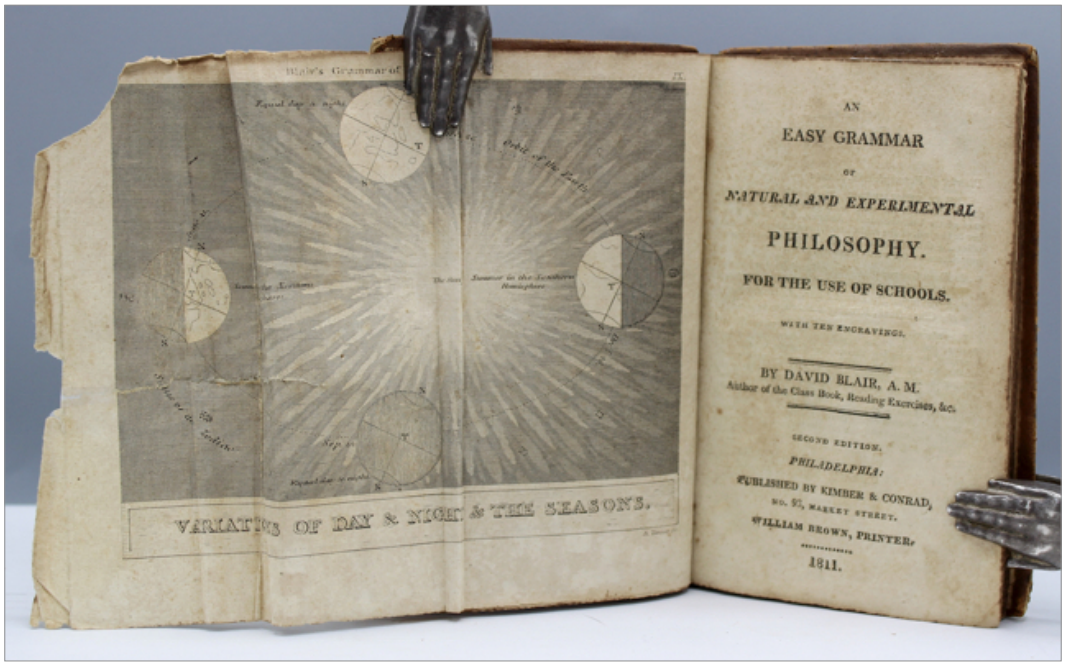
Third edition, a rare introduction to astronomy and the use of spheres for young children. Originally published in 1832, this work went through eight editions by 1855. All are rare, and OCLC lists no copies of any edition outside of France.

Perrault-Maynand gives a basic introduction to the history of astronomy, explaining the different theories of the solar system, with separate chapters on each of the planets, the fixed stars, the movements of tides, eclipses, etc. His primary objective, however, is to explain the use of globes, the final chapter providing a series of forty-three problems to be solved. The plates are very appealing, especially the last one depicting the "Planosphere Céleste presentant touts les Constellations visibles à Lyon."



We could not locate much information about the author in the sources available to us. He was a prolific educational writer and "Chef de L'Institution" at an institution in Lyon, apparently a Catholic one, as some of his publications deal with ecclesiastical history. In 1834 he published *Eucologium Catholicum*. He also makes clear in the present work that the wonders of the heavens are "chef-d'oeuvre des mains du Créatur."

Houzeau and Lancaster 8173.

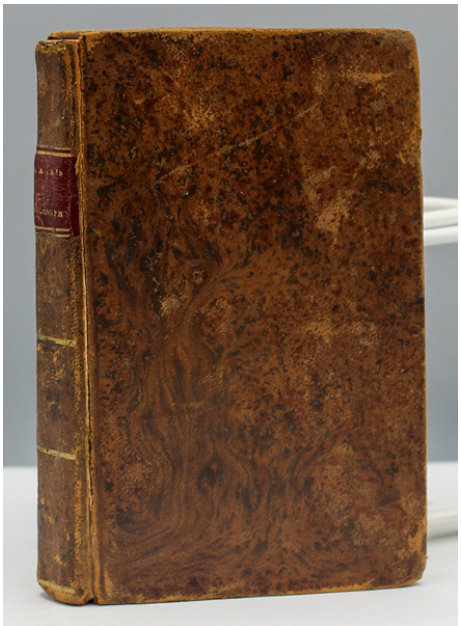


Science for Young People,
With Ten Engravings Depicting Various Experiments

18. [PHILLIPS, Richard]. *An Easy Grammar of Natural and Experimental Philosophy.* For the Use in Schools. By David Blair, A.M [pseudonym]. Philadelphia: Published by Kimber & Conrad, 1811.

Twelvemo. 160, [2, publisher's ads] pp. Engraved frontispiece and nine engravings depicting the book's experiments, including a folding plate that illustrates the phases of the moon.

Contemporary tree calf, gilt-lettered red morocco spine label, spine ruled in gilt. Leaves slightly browned, light foxing, a bit of offsetting from engravings. Small tears to upper corner and outer margin of frontispiece and 2" closed tear, touching frontispiece image, but with no loss. Reinforced on verso with archival document tape. Contemporary ink inscription on recto of preliminary blank. A good copy of a fragile work.

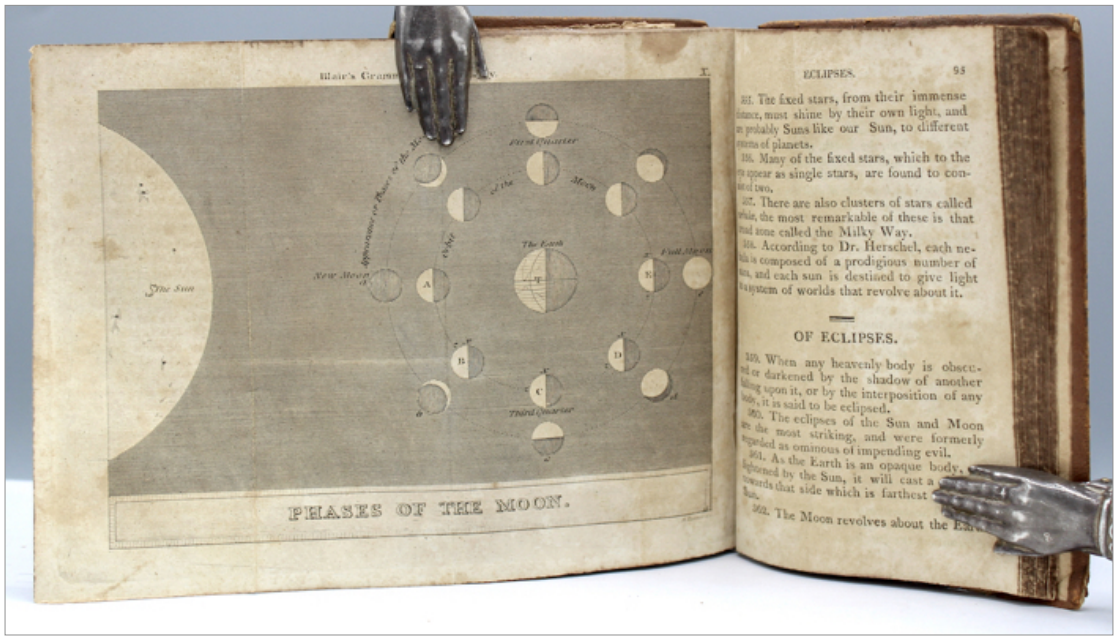


$450

Second American edition. A scientific work for young people that explores central forces and the center of gravity, mechanical powers, hydrostatics, hydraulics, pneumatics, optics, astronomy, electricity, etc. It also contains a question-and-answer section and a glossary. The first London edition was published in 1807 and the first American edition was published in Philadelphia (1809); both editions are scarce.

Sir Richard Phillips (1767-1840) was a publisher, an editor of the *Leicester Herald*, and, at one time, the sheriff of

London, knighted by the king in 1808. He held unorthodox opinions in matters of literature and science, conceiving at an early stage that the theory of gravitation had no foundation. Phillips also developed strong radical and republican views in politics. Though he authored such works as *Morning's Walk from London to Kew* (1817) and *Golden Rules of Social Philosophy* (1826), he is best known as a purveyor of inexpensive miscellaneous literature designed for popular instruction (Oxford DNB). In the Preface, he writes, "All the definitions and elementary principles have been written with a studied brevity so that they may be learnt by rote. With these have been intermixed such easy and familiar Experiments and Illustrations, as enable the young student to work in each science, and at the same time render its principles intelligible to the lowest capacity. The exercises and questions have been drawn up in such a manner, as that in answering them the student may be forced to apply the several experiments, and reflect on what he has previously committed to memory" (pp. v-vi).

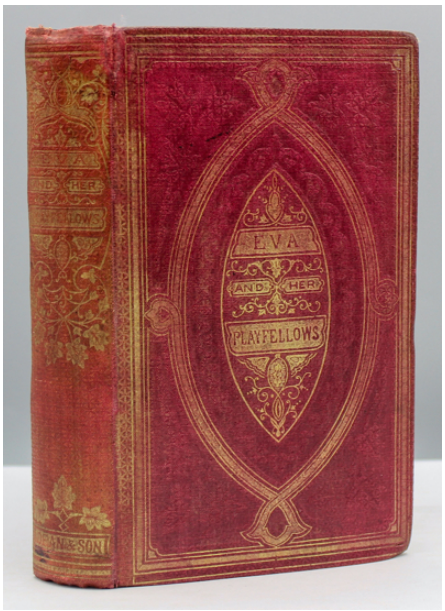


Botanical Work for Young Readers with Four Hand-Colored Illustrations

19. SMITH, C[aroline] M[ary]. *Eva & Her Playfellows.* London: Dean and Son, [ca. 1860].

Octavo. [1], [1, blank], [1], [1, blank], 255, [1, blank], [4, ads] pp. Errata leaf tipped-in before ads. Four hand-colored illustrations, including frontispiece and title-page.

Publisher's red cloth tooled decoratively in blind and gilt, all edges gilt. Yellow coated endpapers. Corners slightly rubbed, gilt a bit faded. Minor soling and toning to cloth. Lacking front flyleaf. Contemporary ink signature on front pastedown. A few leaves at front and rear very slightly foxed. A very good, tight copy.

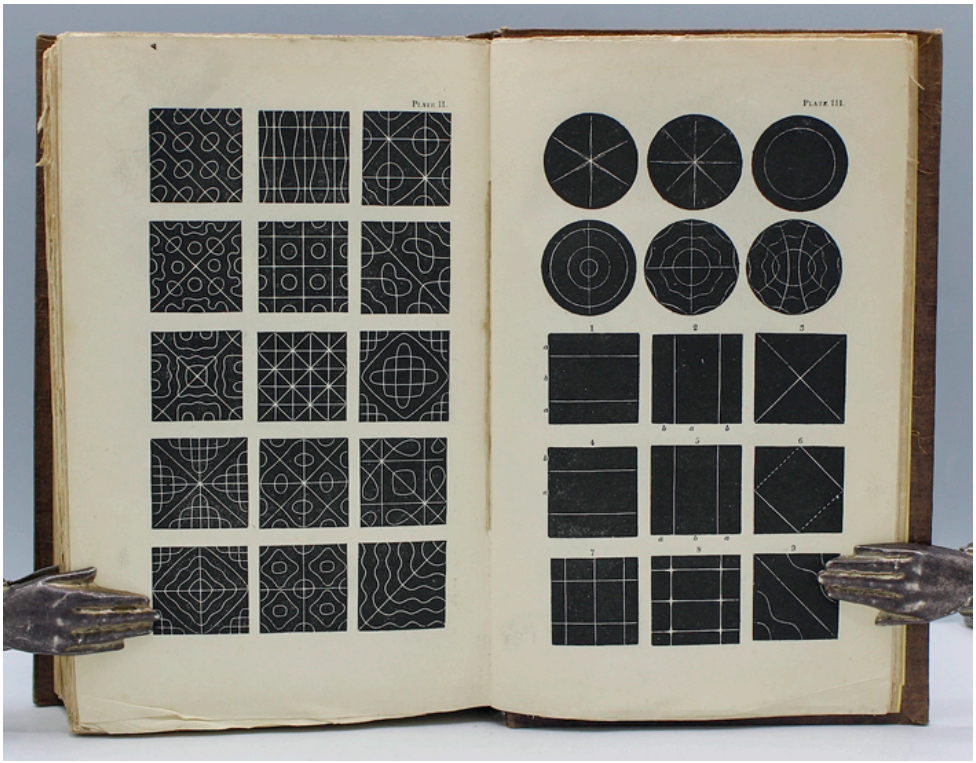


$350

First edition.

We were unable to find much information about Caroline Mary Smith, including her dates, except that she wrote several other works, including *Magdeln Havering* (1861) and *Grace Alford; or, The Way of Unselfishness* (1865). *Eva & Her Playfellows* is a fictional work that is primarily narrated through dialogue between a child named Eva and several talking flowers, including a buttercup, a shepherd's purse, a dandelion, a flax flower, and others.

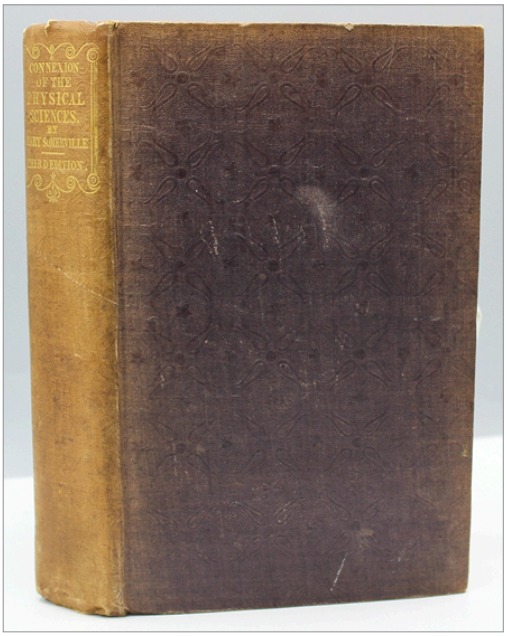
OCLC records seven copies in the U.S.



The "Progress Report for Physical Science," Revised with Findings that Led to the Discovery of Neptune

20. SOMERVILLE, Mary. *On the Connexion of the Physical Sciences*. London: John Murray, 1836.

Octavo. xv, 475 pp. With five astronomical black-and-white plates (including frontispiece). Also with astronomical diagrams and illustrations on over forty pages (in index). Both previous editions do not include plates, and the present edition has four times the number of illustrations as the first. Dedicated to Queen Adelaide.



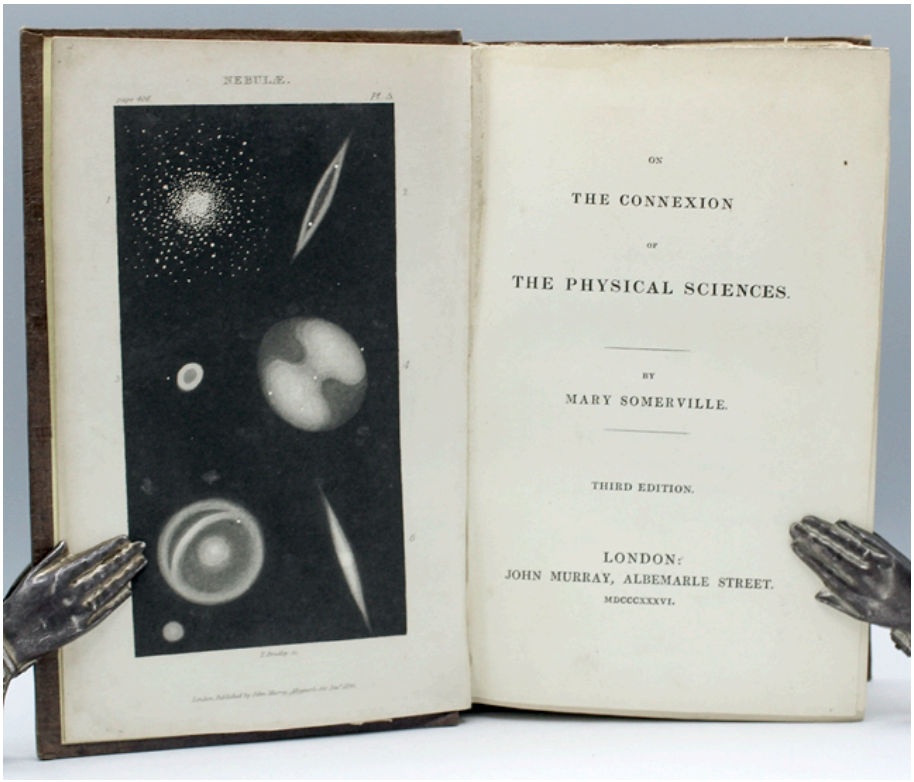
Publisher's blindstamped dark brown cloth with gilt title. Spine sunned. Fabric creased along lower board. Edges untrimmed. Yellow coated endpapers. Contemporary ink signature to front flyleaf and nineteenth century bookplate to front pastedown. A very good, tight, and fresh copy of an influential work by one of the first two woman members of the Royal Astronomical Society.

$1,250

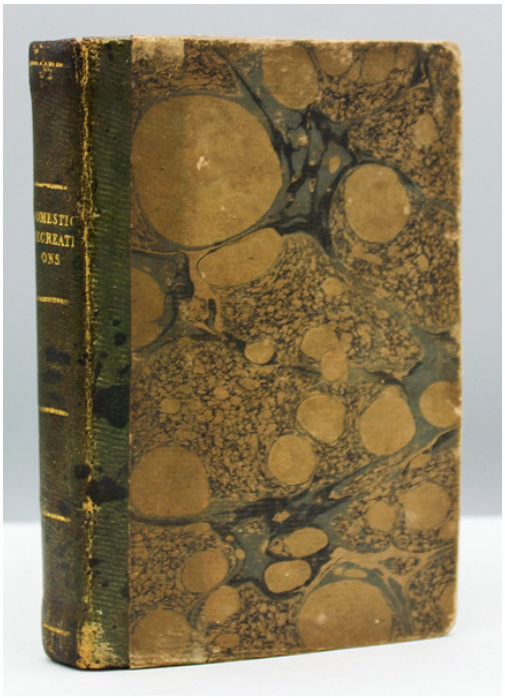
Third edition, revised by Somerville to "incorporate the most recent research findings" since the publication of the first two editions in 1834 and 1835, respectively (Oxford DNB). One such finding was Somerville's hypothesis that unexpected changes in the orbit of Uranus may point to the existence of an undiscovered planet. This hypothesis was

later confirmed by Alexis Bouvard, John Couch Adams, and Urbain Le Verrier, leading to the discovery of Neptune in 1846.

Mary Somerville (1780 - 1872) consulted with leading scientists including Brougham, Faraday, Lyell, Whewell, Ampère, and Becquerel in the writing of the present work. It was "an up-to-date account of what would later be classed as astronomy and traditional physics, with…sections on meteorology and physical geography…Supplemented with concise introductions to the technical material, it presented all in straightforward prose backed by mathematical notes. It was immensely popular…Soon an established scientific classic and best-seller, it functioned for a time as an annual progress report for physical science," (Oxford DNB).



"Perhaps no woman of science until Marie Curie was as widely recognized in her own time" as Mary Somerville, a science writer, mathematics expositor, and one of the first two women to become a member of the Royal Astronomical Society (Oxford DNB). Her other works include an extremely popular translation of Pierre-Simon Laplace, as well as *The Mechanism of the Heavens* (1831), which was adopted by Cambridge as an advanced mathematics textbook in 1837. She was also the author of *Physical Geography* (1851), which was the first English-language geography textbook and required reading in many university courses.



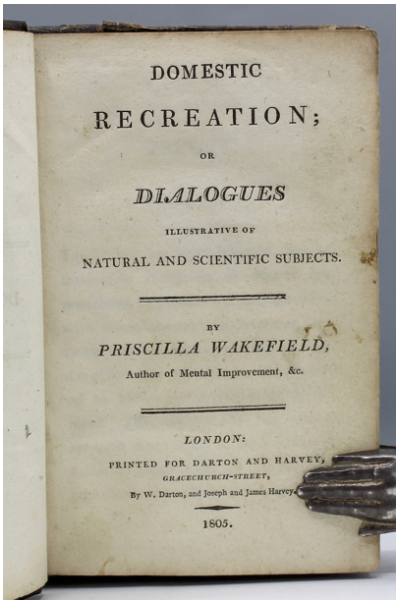
Natural History and Science for Young People, Illustrated with Five Engravings of Insect Wings, Anemones, and More

21. WAKEFIELD, Priscilla. *Domestic Recreation; or Dialogues Illustrative of Natural and Scientific Subjects.* London: Printed for Darton and Harvey, 1805.

Eighteenmo. vi, [2], 215, [4, ads] pp. With five plates of magnified insects, fish scales, shells, anemones, and more. Lacking the frontispiece (of a girl in a greenhouse).

Original green quarter roan over marbled boards with gilt-ruled and gilt-lettered spine. Front hinge a bit tender. Contemporary ink inscription to front free endpaper. Some light toning to leaves. Despite lacking plate, a good, very clean copy of a scarce work.

$175


DOMESTIC
RECREATION;
OR
DIALOGUES
ILLUSTRATIVE OF
NATURAL AND SCIENTIFIC SUBJECTS.
BY
PRISCILLA WAKEFIELD,
Author of Mental Improvement, &c.
LONDON:
PRINTED FOR DARTON AND HARVEY,
GRACECHURCH-STREET,
By W. Darton, and Joseph and James Harvey.
1805.

First edition. OCLC records just one copy at the British Library.

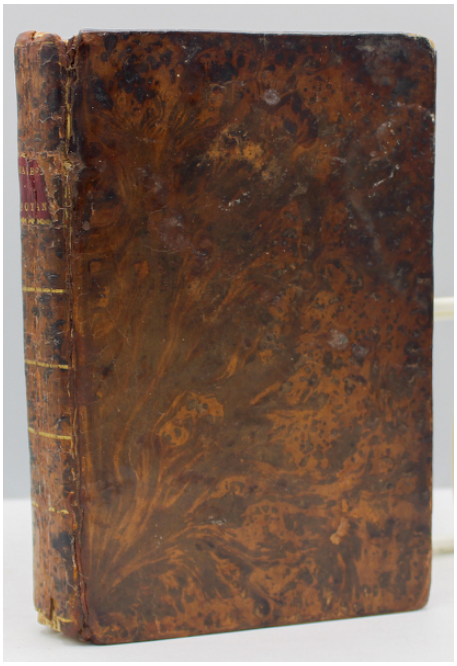
Domestic Recreation was composed in the then-burgeoning style of "progressive pedagogy based in domestic conversations; mothers often teach their own children, and girls receive as much attention as boys," (Oxford DNB). It covers subjects like the anatomy of the human eye, rainbows, sea anemones, salts and minerals, insects, meteors, birds, and the evolution of civilization.

Priscilla Wakefield (née Bell, 1751 - 1832) was the author of introductory science texts on botany and entomology, moral fiction

for children, and travel literature. Along with Jane Marcet, Almira Lincoln Phelps, and Maria Edgeworth, Wakefield was a pioneer of educational writing for young women, and she valued a well-rounded education that included topics from politics and trade to natural history to decorative art. Her other science texts included *An Introduction to Botany* (1789), which she wrote to introduce young women to the subject, since many young women at the time were not permitted to study Latin and were thus unable to read earlier botany texts.

Wakefield's most popular works were her series of travel books for children, beginning with *The Juvenile Travellers* (1801), which reached nineteen editions by 1850. She was one of Darton and Harvey's major authors; eleven of her juvenile works were published by them (*The Dartons,* p. 279). As a philanthropist, Wakefield established a pension fund and a savings bank for the poor, which was England's first savings bank. She also paid expenses and purchased supplies for midwives.

The Dartons, G992.

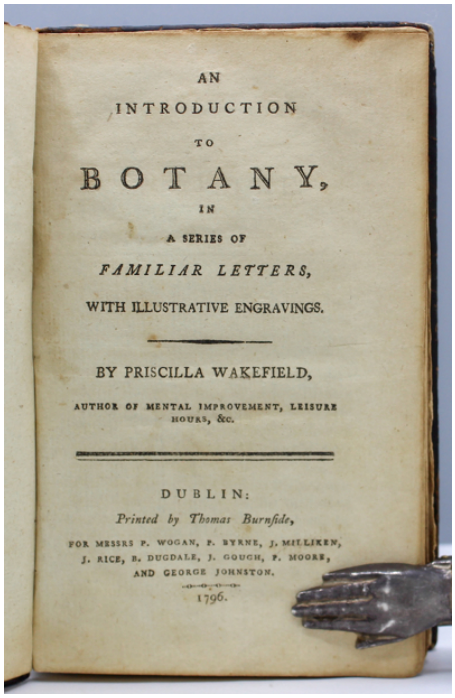


Botany for Young Women with Eleven Plates, By a Women's Educational Pioneer and a Contemporary of Marcet and Edgeworth

22. WAKEFIELD, Priscilla. *An Introduction to Botany, in a Series of Familiar Letters.* With Illustrative Engravings. Dublin: Printed by Thomas Burnside, 1796.

Twelvemo. 186 pp. With eleven engraved plates and a fold-out table listing botanical classes according to Linnaean taxonomy.

Contemporary brown tree calf. Spine ruled in gilt with red morocco label. Joints somewhat tender, as usual, with some chipping to head and tail of spine. Contemporary ink ownership signature to front flyleaf. Some foxing, as usual. A very good copy of an important botany textbook for young women.


AN
INTRODUCTION
TO
BOTANY,
IN
A SERIES OF
FAMILIAR LETTERS,
WITH ILLUSTRATIVE ENGRAVINGS.

BY PRISCILLA WAKEFIELD,
AUTHOR OF MENTAL IMPROVEMENT, LEISURE HOURS, &c.

DUBLIN:
Printed by Thomas Burnside,
FOR MESSRS P. WOGAN, P. BYRNE, J. MILLIKEN, J. RICE, R. DUGDALE, J. COUCH, P. MOORE, AND GEORGE JOHNSTON.
1796.

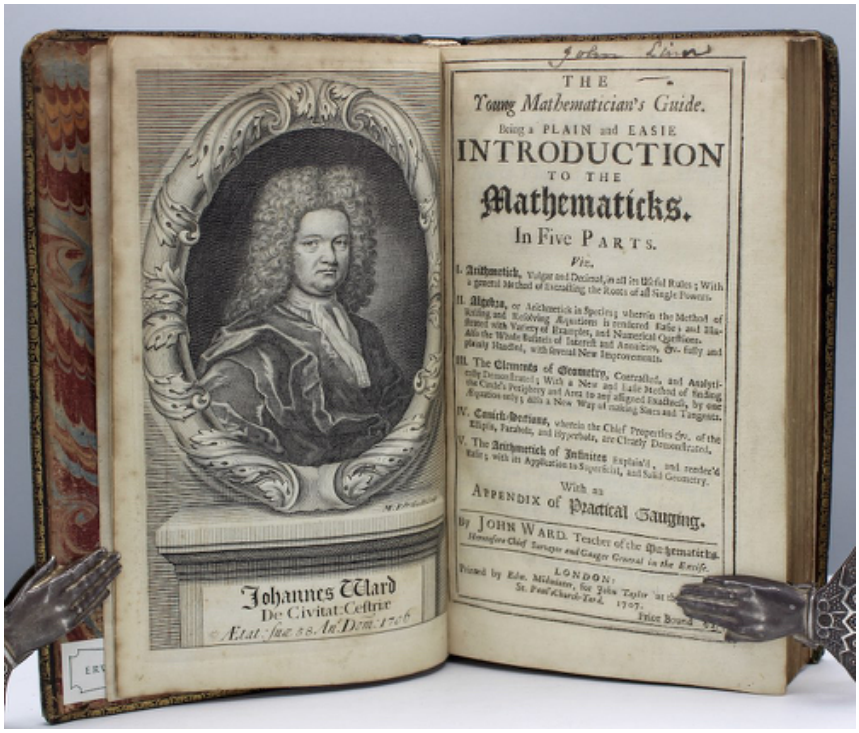
$850

First Dublin edition, second overall. The first edition was published in London in 1794.

The lessons in *An Introduction to Botany* are staged as conversations between two sisters, Felicia and Constance. In the preface, the author explains that she wrote the present work to introduce young women to botany, since many young women at the time were not permitted to study Latin and were thus unable to read earlier botany texts.

Priscilla Wakefield, née Bell (1751 - 1832) was the author of introductory science texts on botany and entomology, moral fiction for children, and travel literature. Along with Jane Marcet and Maria Edgeworth, Wakefield was a pioneer of educational writing for young women, and she valued a well-rounded education for children that included topics from politics and trade to natural history to decorative art. Her most popular works were her series of travel books for children, beginning with *The Juvenile Travellers* (1801), which reached nineteen editions by 1850. She was one of Darton and Harvey's major authors; eleven of her juvenile works were published by them (*Dartons,* p. 279). As a philanthropist, Wakefield's projects included establishing a pension fund and a savings bank for the poor, as well as paying expenses for and providing supplies to midwives.

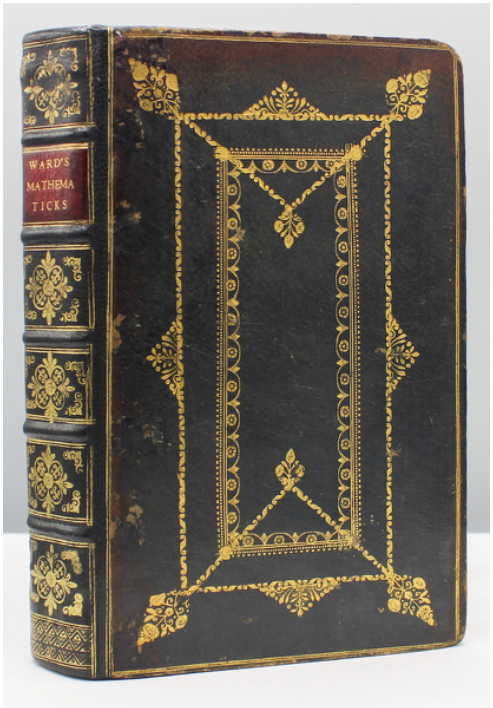
Oxford DNB. *The Dartons,* G996.



Important Introductory Mathematics Text for Young People,
A Fine Copy of the First Edition, in a Contemporary Morocco Binding

23. WARD, John. *The Young Mathematician's Guide.* Being a plain and easie Introduction to the Mathematicks. In Five Parts. Viz. I. Arithmetic…II. Algebra…III. The Elements of Geometry…IV. Conick-Sections…V. The Arithmetic of Infinities…. With an Appendix of Practical Gauging. London: Printed by Edw. Midwinter, for John Taylor…1707.

Octavo. [viii], 451, [1, errata] pp. With an engraved frontisportrait by Vander Gucht. Text supplemented with numerous tables, equations, and diagrams throughout.



Finely bound in contemporary green morocco paneled in gilt. Gilt spine expertly rebacked to style with red morocco spine label. Binding is very attractive despite some light wear and toning at top edge. All edges gilt. Marbled endpapers with contemporary bookplate of Yorkshire gentleman Ellerker Bradshaw of Risby and modern bookplate of book collector Erwin Tomash. Bradshaw's signature and inscription, dated 1707, to preliminary blank. A fine copy, remarkably clean and fresh throughout, of one of the most popular English texts on mathematics of the eighteenth century.

$1,750

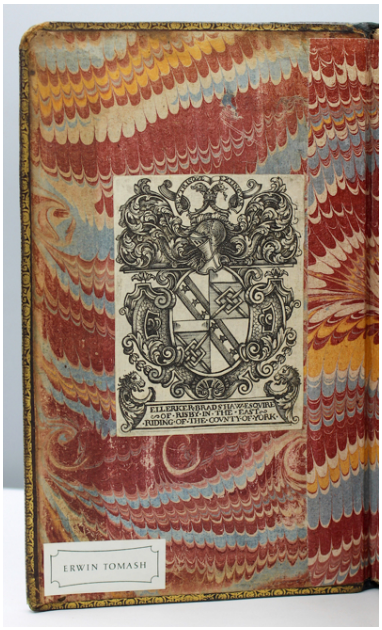
First edition.

The present work was "a mathematical bestseller in Georgian England and Ireland… [It] was attractive not only to school boys trying to learn mathematics for the first time, but also… to adult readers eager to have an easy, portable mathematical compendium in the vernacular." The work went through twelve printings in London, Dublin printings, and a French translation.

The title-page of the present work describes John Ward (1648/9 – ca. 1730) as a former "Chief Surveyor and Gauger-General in the Excise," and the title-page of the 1719 edition notes that he was a "Professor of Mathematicks in the City of Chester." The first indication of Ward's career in print is a 1695 broadsheet that advertised his beginner course in mathematics. Ward promised that his students "in a Month or Six Weeks, may know more in *Arithmetick* and *Geometry*, by help of this *Analytics*, than 'tis possible he should *Ever* comprehend by any other Method." The course was intended for boys of about twelve or thirteen years old. Ward's first major publication was *The Compendium of Algebra* (1695), probably produced as a textbook for the course. The 1698 reprint of the work identifies him as a "teacher of the mathematicks, at the Globe i[n] Fleet street."

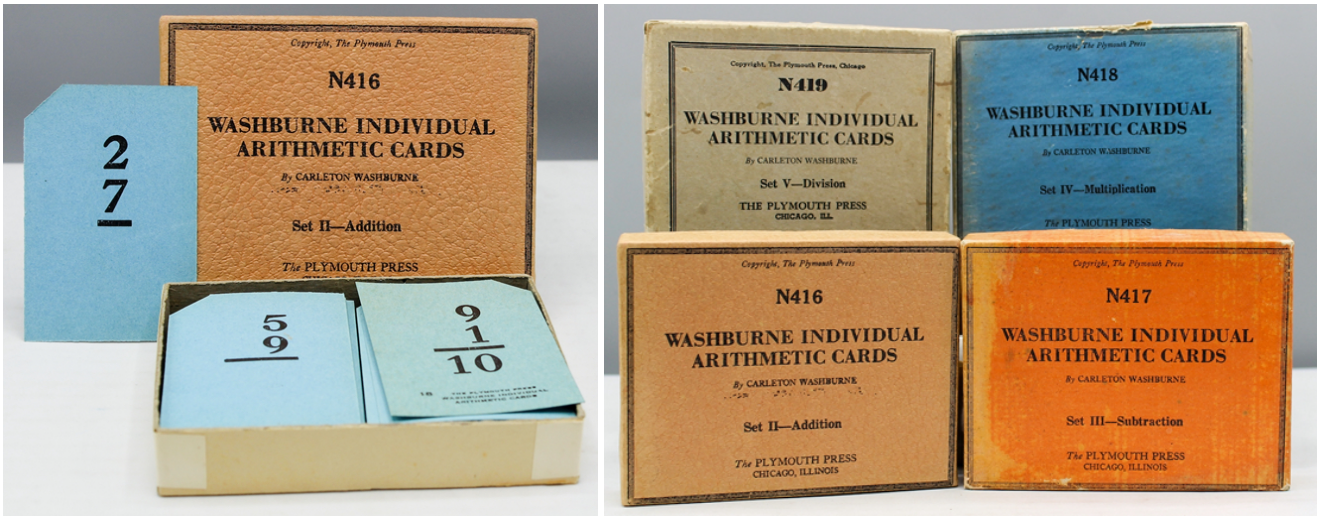
Ward dedicates the present work to Sir John Wentworth of North Elm's Hall in West Yorkshire, who not only encouraged the publication of the work but actually read Ward's manuscript. Ward also includes a laudation from two famous Newtonian mathematicians, Joseph Raphson (fl. 1689–1712), and Humphrey Ditton (1675–1714), which strongly suggests Ward's connections with the rising Newtonian movement within the Royal Society.

Ellerker Bradshaw of Risby (1680 – 1742) was MP for Beverly in 1727-9. Bradshaw's inscription on the preliminary blank notes, in Latin, that he received the book from a friend. The fine morocco binding also indicates that it was a gift, possibly from the author or the dedicatee.



Erwin Tomash (1921 – 2012) was a computer development pioneer, a founder of computer technology company Dataproducts Corporation, a founder of the Charles Babbage Institute, and a collector of books and manuscripts on the history of computing. His collection consisted of over five thousand items ranging from twelfth century manuscripts to modern publications. A portion of the library was donated to the Charles Babbage Institute.

Boran, Elizabethanne and Alan Noone. "John Ward" article (webpage) on the Mathematics at the Edward Worth Library website.



Rare Mathematics Flash Cards for Children

24. *Washburne Individual Arithmetic Cards.* [Four sets of arithmetic flash cards.] Chicago: The Plymouth Press, [1928].

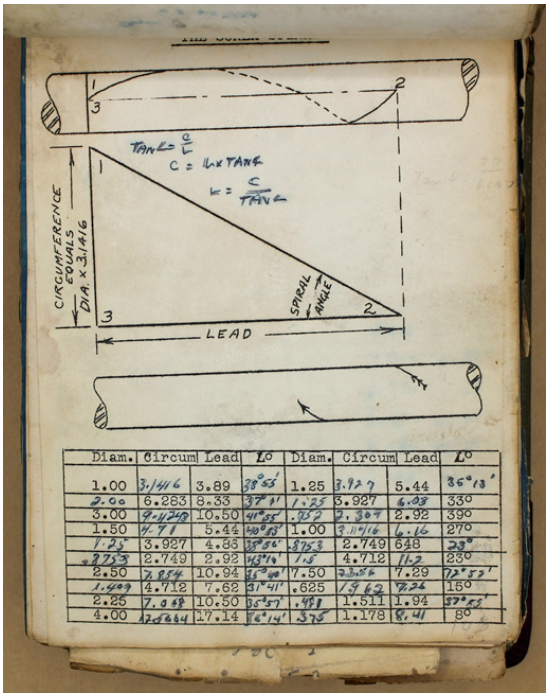
4⅜ x 3⅜ x ¾ in. Includes sets II – Addition (100 cards), III – Subtraction (100 cards), IV – Multiplication (100 cards), V – Division (89 cards out of 100). Flash cards measure 2 x 3 in. and each have a notch in the left hand corner (presumably for easy removal from the box). Each card has a math problem on one side and the answer on the other.

Original colored paper over card boxes. Corners of box bases reinforced with paper. Boxes somewhat sunned and some soiling to paper. A very good collection of these rare flash card sets.

$450

First edition. Two other sets were issued: set I, which teaches the numbers from zero to twenty; and set III A, which is a supplemental subtraction set. Also issued with a teacher's manual that is not present here. OCLC shows one record for the full collection of six boxes and the teachers manual but does not specify a holding library. OCLC locates one other copy of the teacher's manual (the Royal Danish Library in Copenhagen).

We could not locate any information on who created these cards. Set I (not included here) includes domino dots and illustrations by Margaret Iannelli (b. 1893), a commercial artist and pupil of John Vanderpoel.

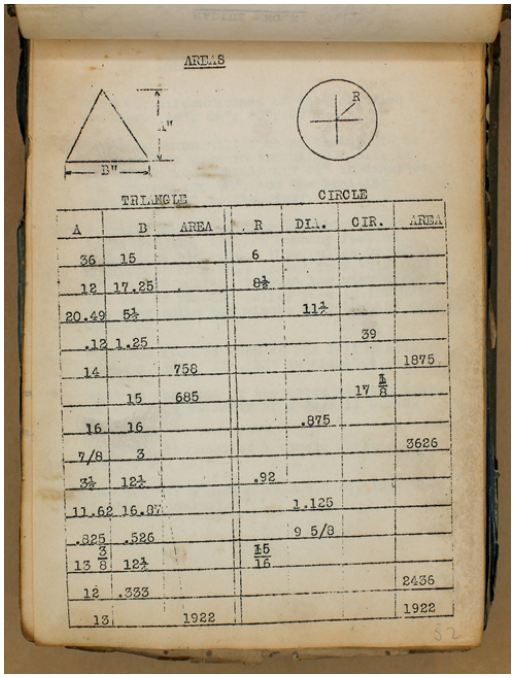


Manufacturing Vocational School Lesson Book,
A Remarkable Survival

25. WILSON, Richard R., compiler. *The Continuation School for Factory Apprentices.* [Lesson book.] Waterbury, Connecticut: Waterbury Mfg. Co., 1941.

8¾ in. x 6½ in. Approx. [500] ff. Cyanograph title-page, which is filled out with the name of student Richard R. Wilson. With typewritten, mimeographed, and manuscript equations, diagrams, tables, and lessons throughout. Also with several other cyanograph leaves with the same content.

Contemporary green cloth punch-hole binder with shop sticker on front inner cover. Lower cover detached. Soiling to boards. Some soiling and toning to leaves and some creasing and chipping to edges, but overall quite clean. A unique, fragile item in very good condition.



$500

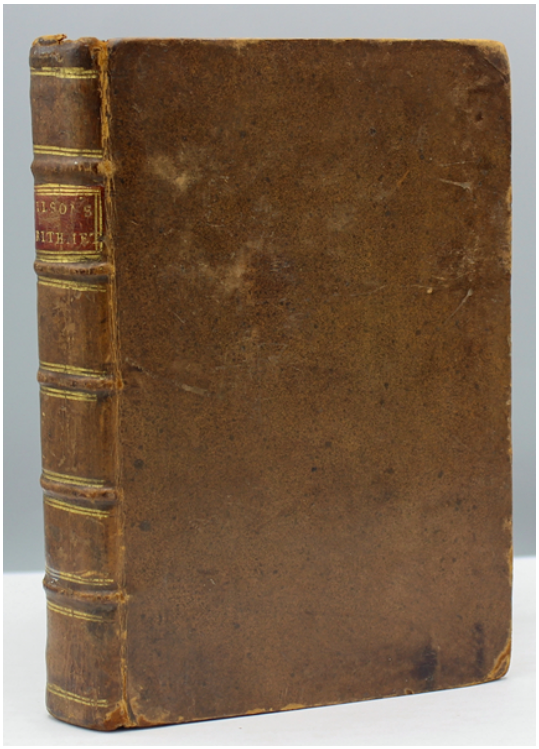
The present item is the workbook of a student training to be a machinist. The lessons focus on fractions, physics, and geometry, as well as the practical use of specific machines.

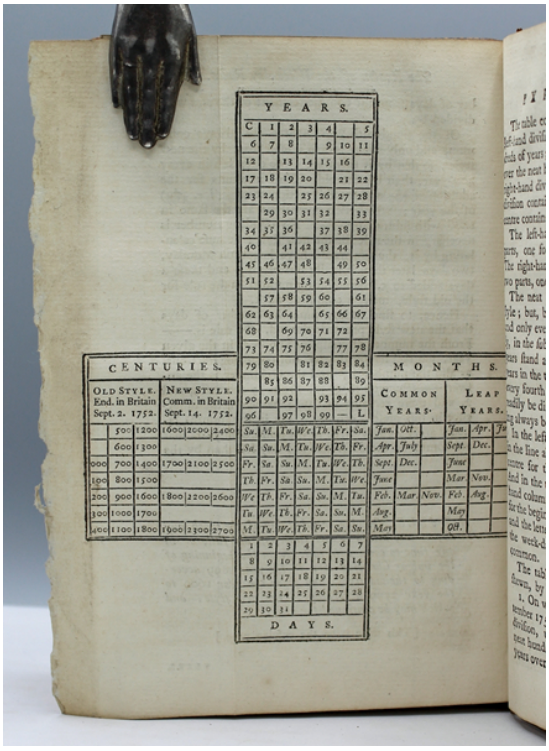
In 1917, the Smith-Hughes Act of authorized federal funding for vocational schools in the United States. These institutions, usually a replacement for traditional high school, were established to divert children from low-income families into labor roles, often in factories, while

wealthier children went to universities. The vocational education movement was prompted in large part by rapid industrialization resulting in a shortage of skilled labor in factories at the same time that more immigrant families were moving into cities and sending their children to public schools. In addition, just a year after the passing of the Smith-Hughes Act, Mississippi became last state to enact a compulsory education law, which caused an additional influx of students to public schools.

We could not locate any information on Richard R. Wilson, nor on Waterbury Manufacturing Company's Continuation School.

Hanford, Emily. *The Troubled History of Vocational Education.* American Public Media Reports (website). September 9, 2014.





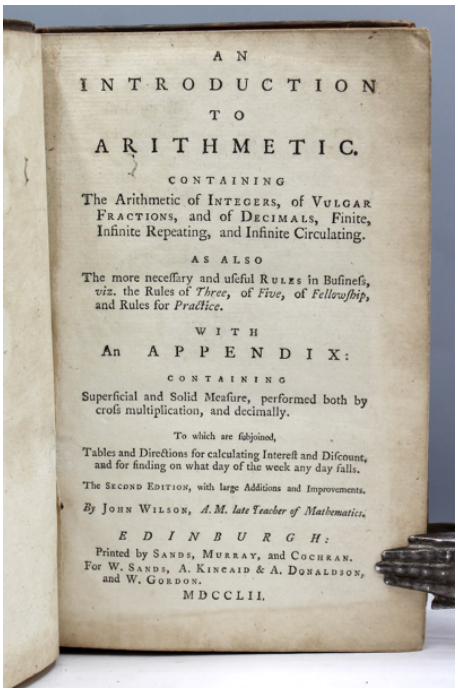
Delves Deeper into the "Doctrine of Infinite Decimals" Than Any of Its Predecessors, The Second Edition With Considerable Revisions and Additions

26. WILSON, John [and John Mair]. *An Introduction to Arithmetic.* Containing the Arithmetic of Integers, of Vulgar Fractions, and of Decimals, Finite, Infinite Repeating, and Infinite Circulating. As Also the more necessary and useful rules in business, viz. the Rules of *Three*, of *Five*, of *Fellowship*, and Rules for *Practice*...Edinburgh: Printed by Sands, Murray, and Cochran, 1752.

Twelvemo. xvi, 312 pp. Numerous diagrams and one folding table.

Contemporary polished calf. Binding extremities lightly rubbed, minor wear to crown of spine. Trivial offsetting to endpapers, a little worming to flyleaf and title-page, not affecting text. Contemporary ink signature on front flyleaf. A very good, clean copy of a scarce book.

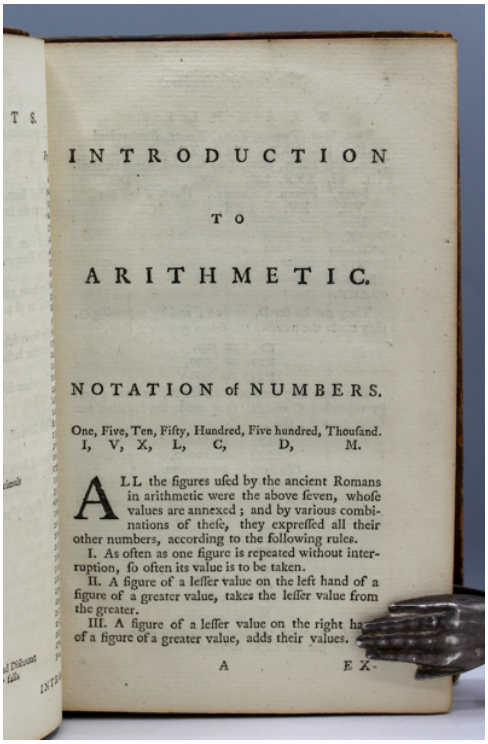
$950



Second edition, expanded by Mair, of a work that delves deeper into the "doctrine of Infinite Decimals" than any of its predecessors. This edition includes the following: an Appendix that is "almost entirely new," "the doctrine of vulgar fractions...laid down at greater length," "the origin of decimals more minutely inquired into," and "several of the methods of operation rendered more simply, easy and concise" (p. v). It is

approximately 50 pages longer than the first edition (*An Introduction to Arithmetick*, 1741). Both editions are scarce.

John Wilson (d. 1746) was a mathematics teacher in Edinburgh. He wrote works on trigonometry, the use of globes, architecture, and spheric geometry.



INTRODUCTION

TO

ARITHMETIC.

NOTATION of NUMBERS.

One, Five, Ten, Fifty, Hundred, Five hundred, Thousand.
I, V, X, L, C, D, M.

ALL the figures uſed by the ancient Romans in arithmetic were the above ſeven, whoſe values are annexed; and by various combinations of theſe, they expreſſed all their other numbers, according to the following rules.

I. As often as one figure is repeated without interruption, ſo often its value is to be taken.

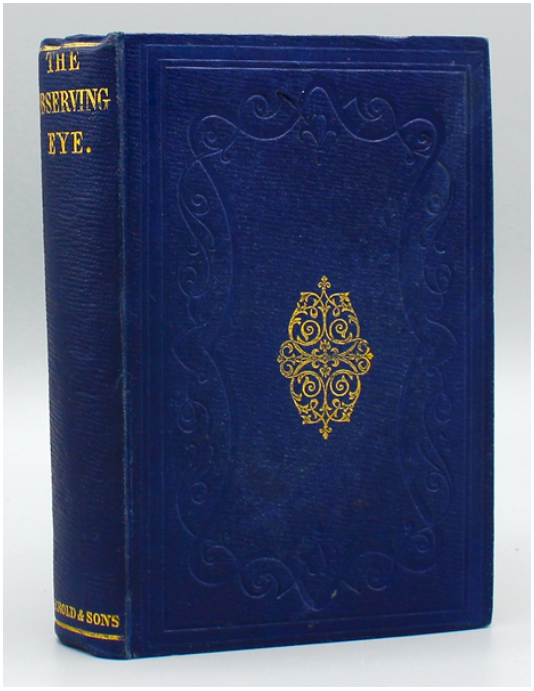
II. A figure of a leſſer value on the left hand of a figure of a greater value, takes the leſſer value from the greater.

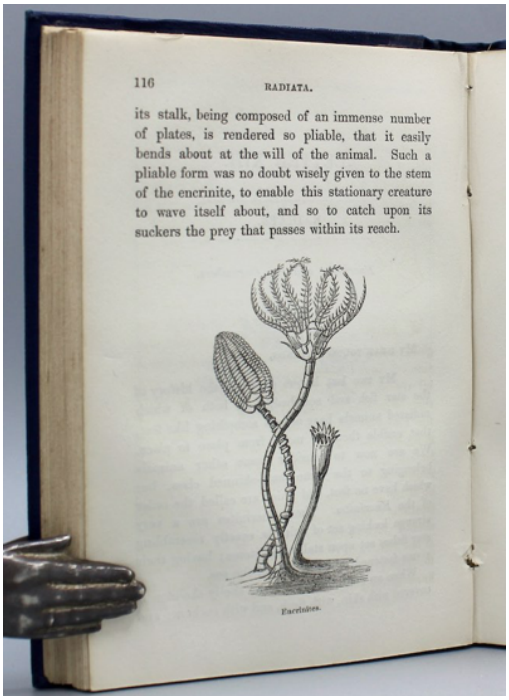
III. A figure of a leſſer value on the right ha of a figure of a greater value, adds their values.

A EX-

John Mair (1702/3-1769) wrote books on mathematics, bookkeeping, Latin and geography, which were bestsellers in Britain and Ireland and included *Bookkeeping methodiz'd* (1736) and *An Introduction to Latin Syntax* (1750). He graduated from St. Andrews University and taught mathematics and bookkeeping at Ayr Grammar School and Perth Academy. Mair writes the following about the first edition of Wilson's *Introduction to Arithmetic*: "...on its first publication, it was...soon met with general approbation...He traces things to their source and lays the foundation on first principles...[Wilson] enters deeper into the Doctrine of Infinite Decimals, than any that wrote before him, gives their theory in clearer terms and at greater length..." (pp. iii-iv).

ESTC notes fewer copies of the expanded second edition (nine copies, three in North America) than the first edition of 1741 (eleven copies, two in North America).



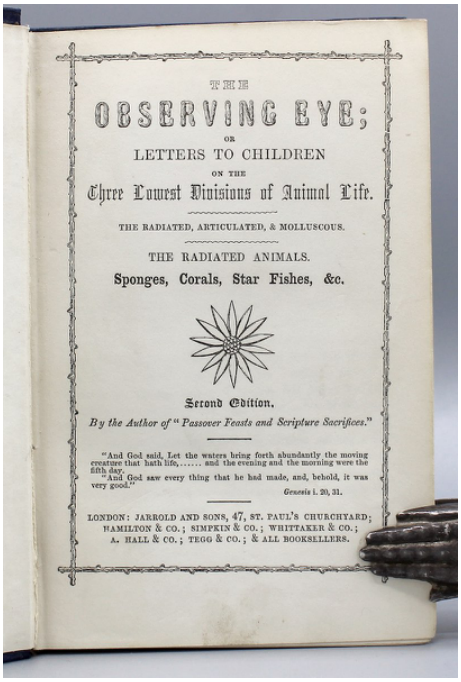


A Fine Copy of a Children's Natural History Text By a Science Writer Admired by Queen Victoria

27. [WRIGHT, Anne.] *The Observing Eye; or, Letters to Children on the Three Lowest Divisions of Animal Life.* The Radiated, Articulated, & Molluscous. The Radiated Animals. Sponges, Corals, Star Fishes, &c. London: Jarrold and Sons, [1851].

Twelvemo. [x], 122, [xi], 132-264, [viii], 64 pp. Each section with its own title-page. Section two covers worms, lobsters, spiders, and insects, and section three covers slugs and mollusks. With dozens of text figures throughout.

Publisher's blue cloth with stamped and titled in gilt. Yellow endpapers printed with publisher's ads. Ink ownership signature, dated 1853, to preliminary blank. A fine, bright copy, rare in this condition.

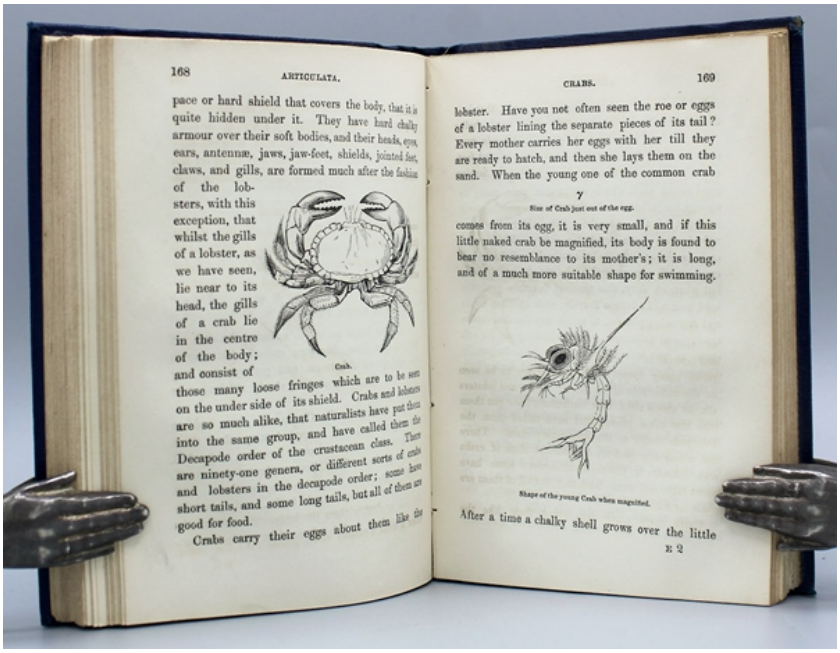


$375

Second edition. First published the previous year. All editions are scarce in commerce.

A natural history text for children that, additionally, encourages learning through careful observation of nature. This method of learning recalls the pedagogical concept of the object lesson, innovated by Swiss educator Johann Pestalozzi and popularized in the English-speaking world by Elizabeth Mayo (1793 – 1865), which allows children to develop observational

and critical thinking skills while they closely examine objects. Applied to natural history, the object lesson method allows children to develop an understanding of the foundational concepts of taxonomy, animal anatomy, and the interaction of animals with their ecosystems.



168 ARTICULATA.

pace or hard shield that covers the body, that it is quite hidden under it. They have hard chalky armour over their soft bodies, and their heads, eyes, ears, antennæ, jaws, jaw-feet, shields, jointed feet, claws, and gills, are formed much after the fashion of the lobsters, with this exception, that whilst the gills of a lobster, as we have seen, lie near to its head, the gills of a crab lie in the centre of the body; and consist of those many loose fringes which are to be seen on the under side of its shield. Crabs and lobsters are so much alike, that naturalists have put them into the same group, and have called them the Decapode order of the crustacean class. There are ninety-one genera, or different sorts of crabs and lobsters in the decapode order; some have short tails, and some long tails, but all of them are good for food.

Crab.

Crabs carry their eggs about them like the

CRABS. 169

lobster. Have you not often seen the roe or eggs of a lobster lining the separate pieces of its tail? Every mother carries her eggs with her till they are ready to hatch, and then she lays them on the sand. When the young one of the common crab comes from its egg, it is very small, and if this little naked crab be magnified, its body is found to bear no resemblance to its mother's; it is long, and of a much more suitable shape for swimming.

7

Size of Crab just out of the egg.

Shape of the young Crab when magnified.

After a time a chalky shell grows over the little

Anne Wright, *née* Harford (1793 – 1861), was an educator, educational reformer, and writer on natural history. *The Observing Eye,* which was given by Queen Victoria to her children, was Wright's first scientific book. She also published *The Globe Prepared for Man: A Guide to Geology* (1853), *What is a Bird?* (1857), and the monthly series *Our World: Its Rocks and Fossils* (1859). The latter two titles were based on lectures that Wright gave to her classes of young men at a reformatory school founded in part by her husband. Wright's works explored the concept of natural theology, which attempted to reconcile Christian beliefs with advancements in contemporary science. She can be counted among writers like Arabella Burton Buckley, Mary and Elizabeth Kirby, Sarah and Elizabeth Fitton, and Mary King Ward in her efforts to bring scientific education to the wider public.

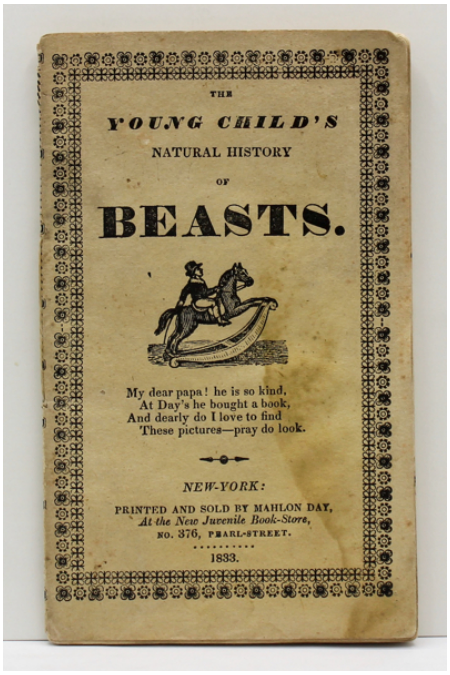
Natural History for Children, with Twenty-Seven Illustrations

28. *The Young Child's Natural History of Beasts.* New York: Printed and Sold by Mahlon Day, 1833.

Twelvemo. 17 pp. Illustrated with twenty-seven cuts of various animals (an ape, a lion, a porcupine, etc.); vignette title-page.

Printed paper wrappers with engraved border and vignette on front cover. Wrappers lightly soiled. A very good copy of a rare and fragile item.

$150



An early edition of this title. OCLC gives the earliest date as 1822; it also lists editions dated 1828, 1829, 1830,1832, 1835, and 1836. Each edition cited, including the present one, is noted in two copies or less.

We were unable to find any information about the author, including his or her real name or dates, in the resources available to us. *The Young Child's Natural History of Beasts* opens with a brief paragraph that serves as homage to the "Creator" ("If the care of the Creator extends to animals, what will he not do for us?" – p. 3), which is then followed by a listing of various animals in alphabetical order, each listing with an illustration that is accompanied by a few short sentences. The work actually begins with "Zebu," followed by "Ape," "Bear, "Cat," "Dog," etc.