

HISTORY OF SCIENCE

Epistemic emotions and the dopaminergic circuit

Sotheran's

EST.

LONDON

1761

HISTORY OF SCIENCE

Epistemic emotions and the dopaminergic circuit

$$x' = \frac{(c-v)t}{\sqrt{1-\frac{v^2}{c^2}}}$$

$$t' = \frac{\left(1 - \frac{v^2}{c^2}\right)t}{\sqrt{1-\frac{v^2}{c^2}}}$$

Sotheran's

INTRODUCTION

The BBC podcast *All in The Mind* recently introduced us to the idea of curiosity as an emotion. The theory is that it is an epistemic emotion, like awe or surprise, triggered by the gap between perception and understanding. It kick-starts the dopaminergic circuit in our brains – the network that stimulates us to look for a reward and makes us feel elated when we find it. We are prompted to take a quest to explain the mysterious.

We are clearly highly emotional at Sotheran's, as we eagerly allow our natural curiosity to lead us down unexpected paths in search of the rare, the beautiful and the erudite. This catalogue is devoted to the curious minds of those ultimate seekers after knowledge - the experimenters and theorists who turned the notion of science as a dry pursuit on its head by following their epistemic emotions until they found a new way of explaining our world.

We include discoveries in all areas. From the first book to discuss electricity and the invention of relativity to a husband and wife's survey of our deepest oceans, from the founding work of evolutionary theory to a crucial treatise on herbal medicine, we represent a huge range of scientific endeavour and enlightenment. Our dopaminergic circuits are lit up like Edison's first lightbulbs, and we invite you to join us on this deeply emotional journey.

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HIGHLIGHTS OF PHYSICS AND TECHNOLOGY



ARISTOTLE FOR DUMMIES

1. **DOLCE, Lodovico.**

Somma della filosofia
d'Aristotele, e prima della
dialettica.

Venice: Giovanni Battista, &
Marchio Sessa, & fratelli. [1565.]

£1,400

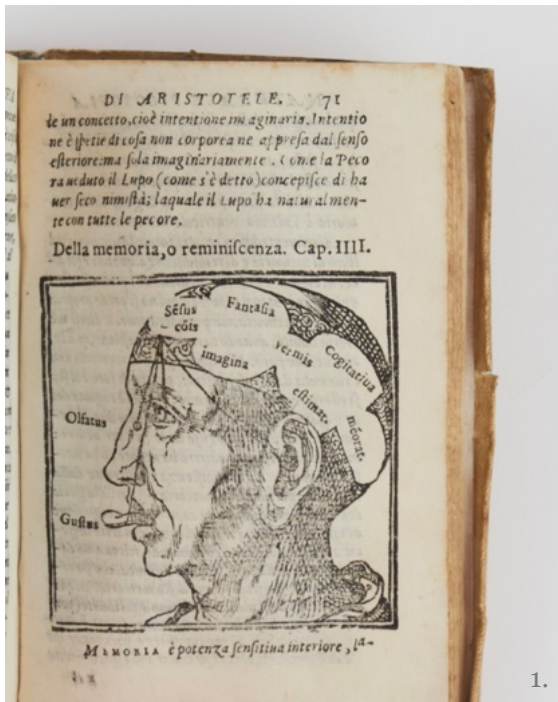
Two parts in one volume, 8vo. Contemporary limp vellum, title in ink to spine; ff. [4], 132; 104, [4, with final blank], bound without final blank; woodcut printer's device to titles, 4 large in-text woodcuts (2 showing a celestial sphere, 2 a mnemonic diagram of the head), woodcut initials and headpieces; binding a little soiled, a few tiny wormholes to covers, endpapers renewed; light, variable spotting and marginal staining, occasional small

worm tracks to outer margins of the first two leaves in gatherings i-q and K-N (far from printed area, and likely incurred before sheets were folded and bound), small paper flaw to final leaf (not touching text), remains of glue to verso final blank; overall a very good copy.

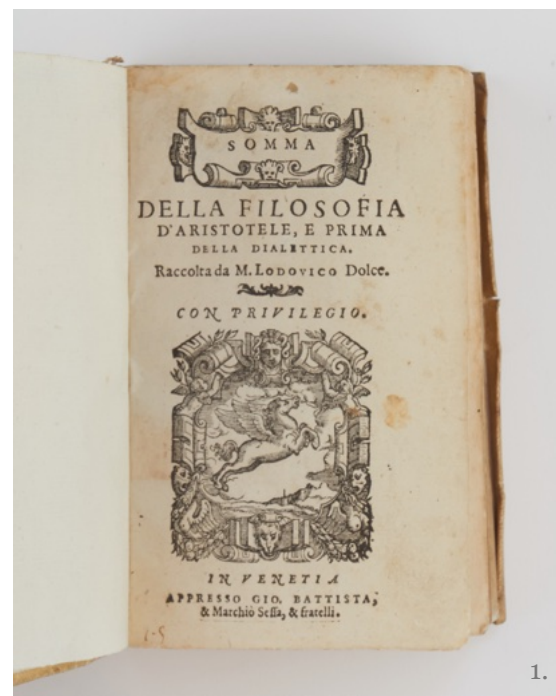
First edition of this Italian compendium of Aristotle's works: an early attempt to make ancient thought accessible to non-specialist readerships.

Born in Venice into an aristocratic but impoverished family, Lodovico Dolce (1508-1568) is best remembered for his *Dialogo della pittura*, a direct response to Vasari's artist biographies which initially overlooked Venetian painters. Dolce devoted his life to a wide range of literary activity: translations,





1.



1.

adaptations, prefaces, editorial projects, and original works, including dialogues and plays. Among his many editorial efforts were translations and popularisations of classical authors such as Cicero, Horace, and Virgil; as well as critical editions of Dante, Petrarch, and Boccaccio, and works by contemporaries such as Ariosto, Bembo, and Castiglione. The *Somma della filosofia d'Aristotele* reflects Dolce's project of making key classical texts accessible to a wider, non-specialist readership.

The *Somma* covers Aristotle's logic, practical philosophy (ethics, economics, politics), and natural philosophy. It stands as a compelling example of how Renaissance authors and publishers adapted complex philosophical material for broader consumption. As a seasoned *poligrafo* – a writer engaged across genres and subjects for a commercial readership – Dolce was keenly aware

of the diverse audiences his work might reach. In his preface, he concedes that scholars will “show their displeasure that a philosopher of so much esteem is being made familiar to the common people”. Yet, he continued, “reducing good authors to a compendium is of very great profit to students, because in large volumes one's memory gets lost ... Therefore it may be of no small profit to see the great books of Aristotle recast in convenient brevity ... **reduced in such form, they can be very easy for everyone**” (transl. from Terpening).

EDIT16 17386; not in Adams. See Allen, “Addressing the Reader: Lodovico Dolce's Somma della filosofia d'Aristotele and the Audience for Vernacular Philosophy in Sixteenth-Century Italy” (2016); Terpening, Lodovico Dolce, Renaissance Man of Letters (1997).



2. BOYLE, Robert.

Hydrostatical paradoxes, made out by new experiments, (for the most part physical and easie.)

Oxford: William Hall, for Richard Davis. 1666.

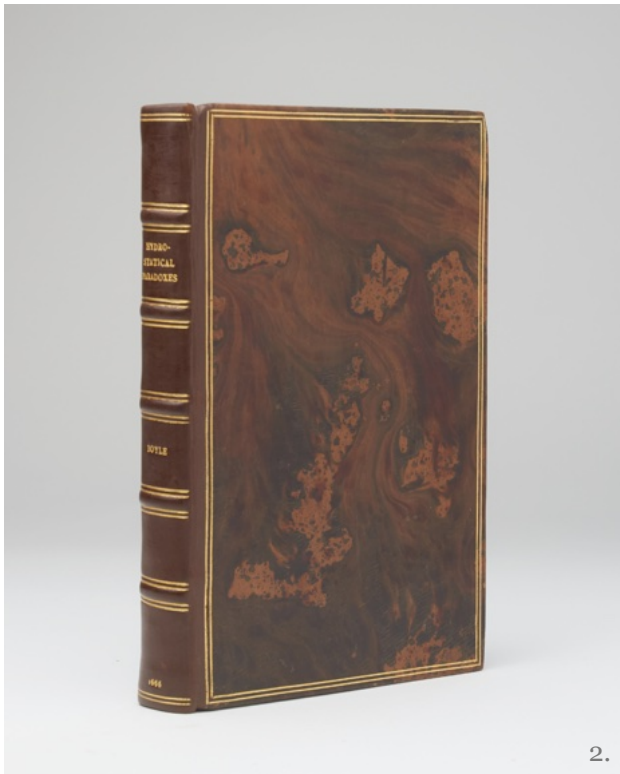
£3,750

8vo. 18th-century polished tree calf, later double fillet border to boards in gilt, rebacked, the spine lettered in gilt to three of the compartments between five gilt-ruled raised bands, original endpapers lifted and bound in; pp. [32], 247, [1 (blank)], with 3 engraved folding plates, bound without b1-2 (contents and imprimatur) as in

some other copies; right margin of title page lightly restored (not affecting text), variable light marginal damp-staining; folded sheets at rear with a few closed tears to edges and folds, though clean and structurally sound, occasional (later) pencilled crosses in margins; a very good, clean copy.

An uncommonly bright, sharp first edition of this elegant, defiantly practical, account of the behaviour of fluids under pressure by “the greatest experimental scientist of the mid-seventeenth century.” (PMM) A subtle challenge to Pascal’s hydrostatic writings, it was one of

the early fruits of the Royal Society.



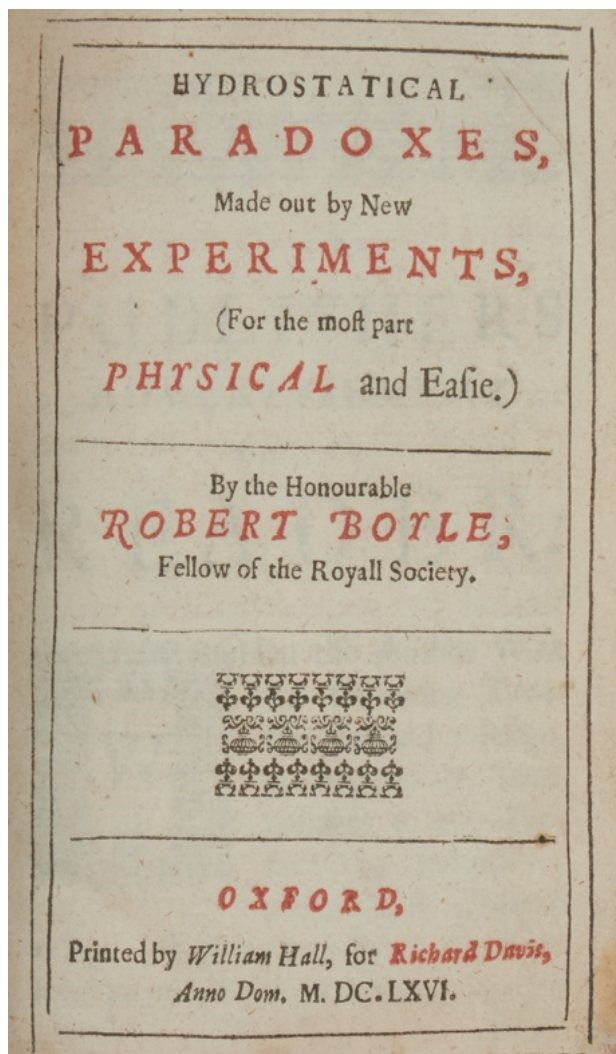
2.

Robert Boyle (1627-1691), the great Anglo-Irish natural philosopher, was born at Lismore Castle in the province of Munster, Ireland. Upon leaving Eton, Boyle travelled widely in Europe, developing a keen interest in the natural sciences. As a founder of the Royal Society, he was an early pioneer of experiment-based, empirical methods of research, and prolific and wide-ranging in his interests. ***The Sceptical Chymist (1661)*** (PMM 141) would become a foundational work in the field of chemistry, while his innovations and experiments with the air, or vacuum, pump, written up and published as ***New Experiments Physico-Mechanical, Touching the Spring of the Air, and its Effects*** (PMM 143) in 1660, includes the “hypothesis” we know as “Boyle’s Law”. A lifelong and increasingly

devout Anglican, Boyle was able to reconcile his scientific interests with his faith, believing natural philosophy offered powerful evidence for the existence of God. In later years, his health declined, and he withdrew from public engagements. The ***Medicina Hydrostatica (1690)*** one of his final works, returns to the subject of hydrostatics, more than two decades after the ***Hydrostatical paradoxes***.

The ***Hydrostatical Paradoxes Made out by New Experiments, for the most part Physical and Easie***, published at the request of the Royal Society in 1666, draws on a series of experiments presented two years earlier to the newly founded Society. Setting out to demonstrate and describe the behaviour of fluids under pressure, both the experiments and the treatise that grew out of them were initially designed as an introduction and response to Blaise Pascal’s posthumously published ***Traité de l’équilibre des liqueurs et de la pesanteur de la masse de l’air (1663)***, attending in particular to the liquid element of Pascal’s title (arguing that the second, Air, had already been superseded by his own experiments with the air pump; Michael Hunter refers to the Paradoxes as “a kind of sequel to *Spring of the Air*”). Boyle approves of the Frenchman’s findings, but questions his experimental methods, or their seeming absence. Pascal, “more ingenious than practicable”,

theorized about fluid pressure and its applications, “yet I remember not that he expresly [sic] says that he actually try'd them.” (5-6) Although he didn't think of himself as a disciple of **Francis Bacon (1561-1626)**, Boyle was nevertheless an early pioneer, in practice, of the scientific methods envisioned by his great predecessor in the *Novum Organum* (1620). The *Paradoxes* test Pascal's theories, and his own, by means of experiments intended to be performed “with [...] ease and clearnesse” (6) by anyone wishing to repeat them.



2.

The work is divided into eleven sections (followed by two Appendices), each

presenting an experiment and its resulting paradox. **Paradox VI**, for example, demonstrates that the pressure exerted by a fluid depends not on its total volume but on the height of the fluid column above a given point, so a small amount of water in a tall, narrow tube will – counterintuitively – exert more pressure than a large quantity in a wider vessel. For Boyle, these puzzles were inherent in hydrostatic effects and constitute the ‘paradoxes of the work’s title. It was **Isaac Newton**, two decades later (in Book Two of the *Principia*), who would unravel some of these paradoxes, “br[inging] to a satisfactory conclusion the line of development begun by Stevin and advanced by Pascal and Boyle” (Chalmers).

Provenance: From the the library of Dr. & Mrs H. R. Knohl – the “Fox Pointe Collection” – with their elegant bookplate to the front pastedown.

See Michael Hunter, Boyle: Between God and Science (New Haven and London: Yale University Press, 2009); Alan Chalmers, Intermediate Causes and Explanations: The Key to Understanding the Scientific Revolution, Studies in History and Philosophy of Science 43 (2012) 551–562; The Bloomsbury Companion to Robert Boyle, edited by Jan-Erik Jones (London: Bloomsbury Academic, 2020).

ESTC R17464; Wing B3985; Fulton 72.

“THE BEGINNING OF MODERN
HYDRAULICS” (*DSB*) BY GALILEO
GALILEI’S PUPIL AND FRIEND

3. CASTELLI, Benedetto.

Della misura dell’acque correnti.

Rome: Nella Stamperia
Camerale. 1628

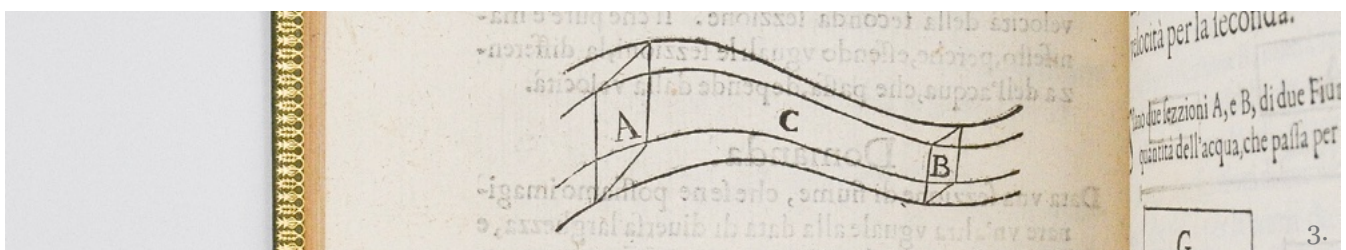
£2,800

4to. Crushed green morocco by Brugalla, dated 1963, spine lettered in gilt, gilt turn-ins, gilt edges; pp. [2], 59, [1], engraved title page featuring a bridge over the Tiber River, engraved vignette of Barberini arms to second title, 11 woodcut in-text diagrams, woodcut initials, head-, and tailpieces (including a woodcut bee), printed correction slip to p. 48; spine and extremities a little sunned, front hinge partly cracked but holding firm; outer lower corner and upper margin of engraved title subtly repaired (not affecting printed area), some occasional, very light spotting, otherwise a very clean and crisp copy; annotation in an early hand in ink to p.48 (trimmed, see below).

First edition of this seminal work of hydrodynamics, “the first book on water flow to have a mathematical basis” (Ashworth).



Benedetto Castelli (c. 1578-1643), born Antonio Castelli, adopted the name Benedetto upon entering the Benedictine Order in Brescia. Around 1600, he was transferred to the Monastery of Santa Giustina in Padua, where he met Galileo Galilei (1564-1642) and became one of his most prominent pupils. Castelli assisted in the publication of Galilei’s *Discorso intorno alle cose che stanno in su l’acqua...* (1612) and was a tireless advocate for his master’s ideas (Galilei addressed to him his famous 1613 letter challenging the Church’s authority in matters of scientific enquiry). Yet Castelli also made a lasting contribution in his own right by laying the foundations of



modern hydrodynamics, or the science of “running water”. **Just as Galilei had formulated the mathematical laws governing motion on inclined planes, Castelli established the basic principles governing the quantity and flow of moving water.** His students included leading physicists and mathematicians such as Evangelista Torricelli (1608-1647) and Bonaventura Cavalieri (1598-1647).

By late 1624, Castelli had relocated to Rome, where the newly elected Pope Urban VIII enlisted his help in resolving the complex hydraulic issues of the Reno River in the Emilia-Romagna and Tuscany regions. As the pope's trusted mathematician, Castelli was sent to the flood-prone plains of Bologna and Ferrara, where the Po River's sluggish gradient caused widespread marshland. Castelli proposed diverting the Reno into the Po through canalization – a plan never executed. In 1628, Castelli published his groundbreaking treatise, *Della misura dell'acque Correnti (On the Measurement of Running Waters)*. The treatise is divided into two parts, dedicated respectively to Urban VIII and to the Cardinal-nephew Taddeo Barberini (1603-1647). The first part, *Della misura dell'acque Correnti*, sets out sixteen corollaries and thirteen appendices that address the incompressibility of water and methods for measuring flow. The second, more technical part, *Dimostrazioni geometriche della*

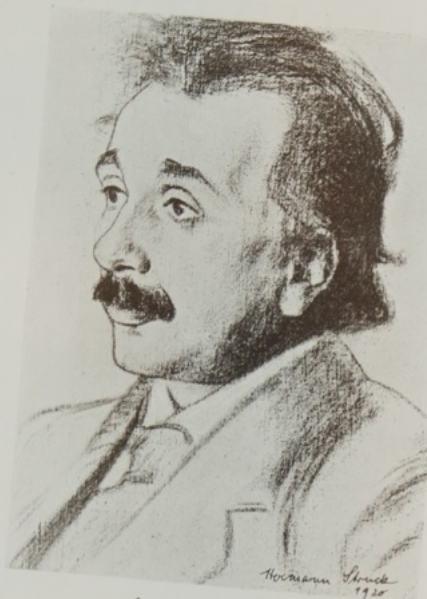
misura dell'acque correnti, lays out three definitions followed by a rigorous mathematical treatment of the subject through axioms and propositions. With them, **Castelli established the direct relationship between the cross-sectional area of a river and the velocity of its waters: an insight that proved essential for managing river floods and improving irrigation.** He also examined the relationship between velocity and head in water flowing through an orifice.

The treatise, praised by Galilei, was expanded and reprinted several times during the seventeenth century. The first English edition appeared in 1661, translated by Thomas Salusbury from the third Italian edition; the first French edition, translated and edited by Pierre Saporita, was published in 1664.

Provenance: A nine-line manuscript annotation in Spanish, written in a contemporary hand and concerning water mills, suggests early ownership in Spain. This Spanish provenance appears to have continued until the book was rebound by the Barcelona binder Emilio Brugalla (1901-1985).

See: Ashworth, *Scientist of the Day – Benedetto Castelli*, Linda Hall, online; De Ferrari, “Castelli, Benedetto”, *DBI*, 21 (1978).





H. Einstein

RELATIVITY

THE SPECIAL & THE GENERAL THEORY

A POPULAR EXPOSITION

BY

ALBERT EINSTEIN, Ph.D.

PROFESSOR OF PHYSICS IN THE UNIVERSITY OF BERLIN

AUTHORISED TRANSLATION BY

ROBERT W. LAWSON, D.Sc.
UNIVERSITY OF SHEFFIELD

WITH FIVE DIAGRAMMS
AND A PORTRAIT OF THE AUTHOR

METHUEN & CO. LTD.
36 ESSEX STREET W.C.
LONDON

34 SPECIAL THEORY OF RELATIVITY

i.e. with the velocity c . According to the equations of the Lorentz transformation, this simple relation between x and t involves a relation between x' and t' . In point of fact, if we substitute for x the value ct in the first and fourth equations of the Lorentz transformation, we obtain:

$$x' = \frac{(c-v)t}{\sqrt{1-\frac{v^2}{c^2}}}$$

$$t' = \frac{\left(1-\frac{v^2}{c^2}\right)t}{\sqrt{1-\frac{v^2}{c^2}}}$$

from which, by division, the expression

$$x' = ct'$$

immediately follows. If referred to the system K' , the propagation of light takes place according to this equation. We thus see that the velocity of transmission relative to the reference-body K' is also equal to c . The same result is obtained for rays of light advancing in any other direction whatsoever. Of course this is not surprising, since the equations of the Lorentz transformation were derived conformably to this point of view.

XII

THE BEHAVIOUR OF MEASURING-RODS AND CLOCKS IN MOTION

PLACE a metre-rod in the x' -axis of K' in such a manner that one end (the beginning) coincides with the point $x'=0$, whilst the other end (the end of the rod) coincides with the point $x'=1$. What is the length of the metre-rod relatively to the system K ? In order to learn this, we need only ask where the beginning of the rod and the end of the rod lie with respect to K at a particular time t of the system K . By means of the first equation of the Lorentz transformation the values of these two points at the time $t=0$ can be shown to be

$$x(\text{beginning of rod}) = 0 \cdot \sqrt{1-\frac{v^2}{c^2}}$$

$$x(\text{end of rod}) = 1 \cdot \sqrt{1-\frac{v^2}{c^2}}$$

the distance between the points being $\sqrt{1-\frac{v^2}{c^2}}$. But the metre-rod is moving with the velocity v relative to K . It therefore follows that the length of a rigid metre-rod moving in the direction of its length with a velocity v is $\sqrt{1-\frac{v^2}{c^2}}$ of a metre. The rigid rod is thus shorter when in motion than when at rest, and the more quickly it is moving, the shorter is the rod. For the velocity $v=c$ we should have $\sqrt{1-\frac{v^2}{c^2}}=0$, and for still greater velocities the square-root becomes

4. EINSTEIN, Albert.

Relativity: The Special and The General Theory: A Popular Exposition.

London: Methuen & Co.
1920.

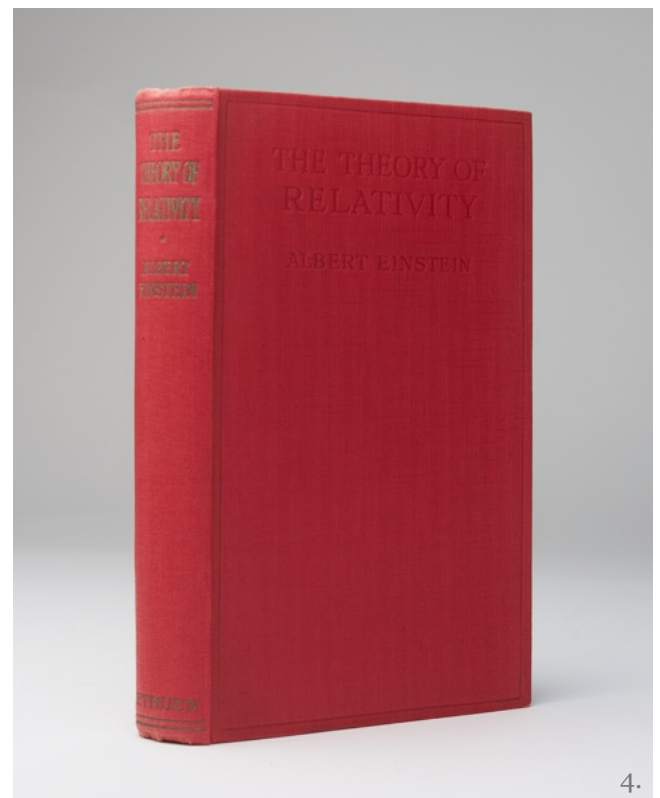
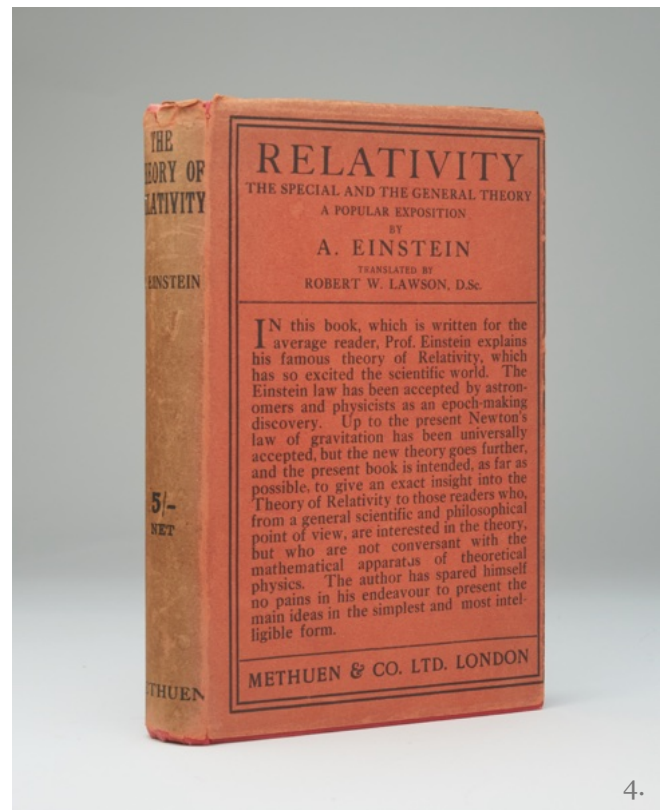
£25,000

8vo. Original red cloth with black lettering to spine, in original printed dust wrapper; pp. xiii + 138 +[8, advertisements]; portrait frontispiece; binding in sparkling condition, unrestored wrapper with sunning to spine and slight chipping to extremities but quite the best example we have ever seen, browning to endpapers and mild spotting to edges, signature at some point clipped from half title, a very fresh copy, very good.

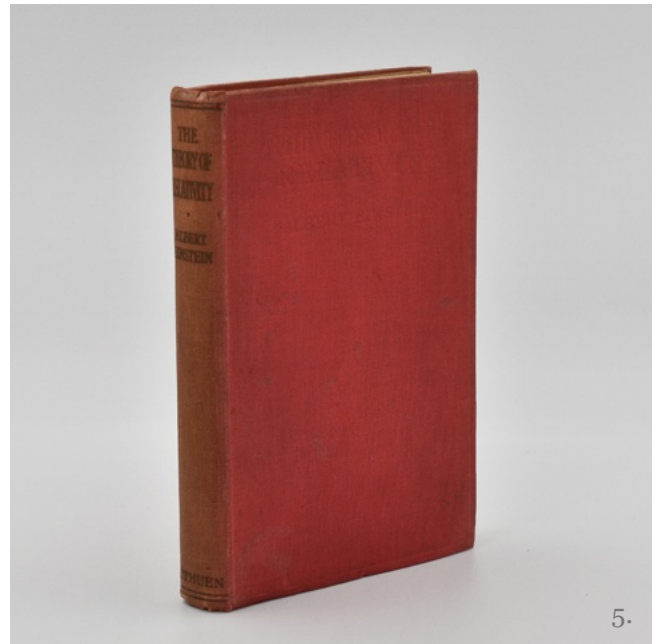
First edition, translated by Robert L. Lawson, very scarce in dust wrapper and with the binding unfaded.

This present edition includes Appendix III, especially written for this translation, on 'The Experimental Confirmation of the General Theory of Relativity'.

This is surely the most important book in twentieth century physics. Although in writing this exposition, Einstein maintained that 'matters of elegance should be left to the tailor and the cobbler', it remains alongside Darwin's *Origin* and Watson's *Double Helix*, as one of the most highly regarded non-mathematical



discussions of extraordinary scientific theories. It introduces ideas that are now central to physics but were at the time revolutionary in their contradictions of Newton and Galileo, and presents a vision of the cosmos as both finite and unbounded that has influenced human thinking beyond the discipline of astrophysics. The concept of the relativity of time has had profound ramifications in areas as diverse as psychology and modern literature. It is difficult to overstate the significance of this work.



5. EINSTEIN, Albert.

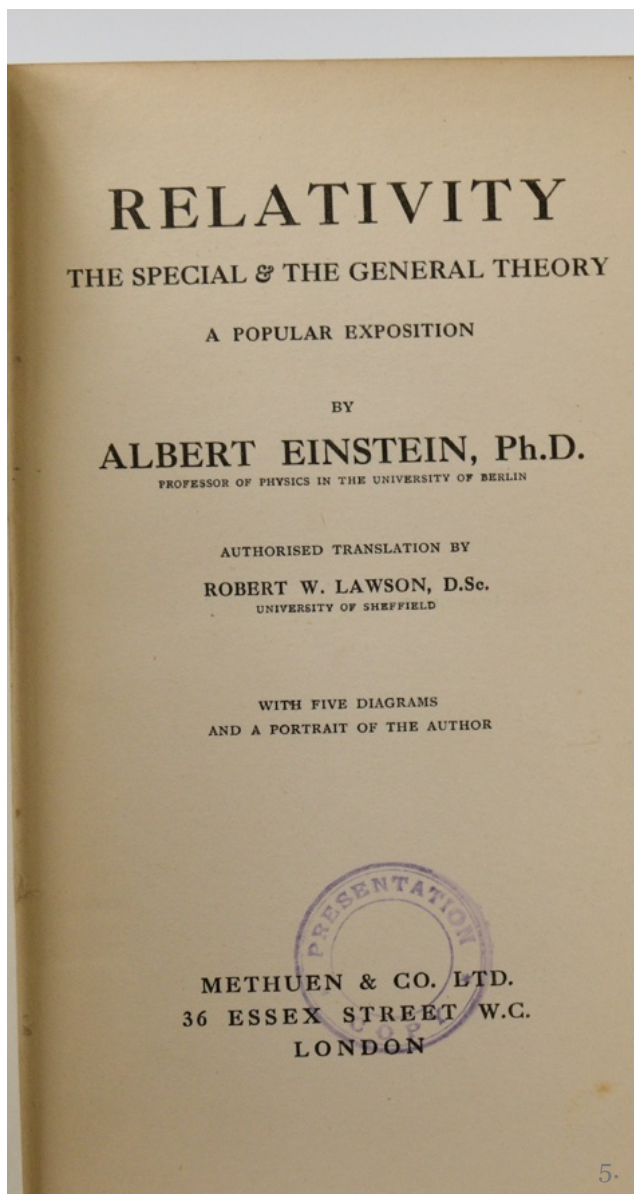
Relativity: The Special and The General Theory: A Popular Exposition.

London: Methuen & Co. 1920.

£2,500

8vo. Original red cloth with black lettering to spine; pp. xiii + 138 + [8, advertisements], portrait frontispiece; spine a little sunned, browning to endpapers, previous owner's pencilled signature to ffeep, very good.

First edition, translated by Robert L. Lawson, publisher's presentation copy with ink stamp to title page (see left).



6. GILBERT, William.

De magnete, magneticisque corporibus, et de magno magnete tellure; Physiologia noua, plurimis & argumentis, & experimentis demonstrata.

London: Peter Short. 1600.

£40,000



6.

Small folio. Late 17th-century mottled calf, double fillet border to boards in gilt, spine gilt in compartments, lettered directly to one, others with central lozenge tool, edges sprinkled red; pp. [16], 240, woodcut printer's device (McKerrow 119) to title, large woodcut arms of Gilbert to title verso, one woodcut folding plate, 88 woodcut illustrations and diagrams in text (4 full-page), woodcut initials, head-, and tailpieces; spine and extremities very skilfully repaired, hinges reinforced, very light wear to boards, a few tiny holes to front board; subtle repair to title (touching one letter), small paper flaw to R1, closed tear (repaired) and

subtle repair to folding plate, a few minor spots, otherwise a very clean, crisp copy; early ownership signature in ink to title, occasional early ink annotations, underlining and corrections (see below).

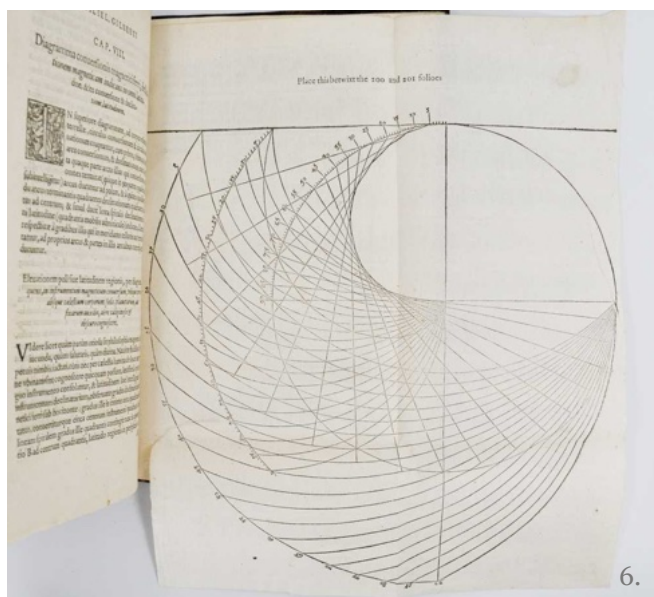
First edition, beautifully preserved, of the foundational work in both magnetism and electricity, and “the first major English scientific treatise based on experimental methods of research” (PMM).



6.

William Gilbert (c. 1544-1603) was a natural philosopher from Colchester, who served as royal physician to both Elizabeth I and James I. Gilbert's scientific endeavours were primarily concerned with magnetism – he is the first to use the term “magnetic pole” – but his exploration of amber's attractive effects led him to coin the terms “electricity”, “electric force”, and “electric attraction.” His versorium (a freely rotating needle, see illustration at p. 49) was the first instrument devised to study electrical phenomena, functioning

as both electroscope and electrometer.



Divided into six books, *De magnete* combines historical review, theoretical innovation, and experimental demonstration. Book I surveys the history of magnetism and culminates in Gilbert's central postulate: that Earth is itself a giant magnet. Books II-V explore magnetic actions such as coition (mutual attraction), orientation, variation, and declination. Gilbert distinguishes magnetic from electric phenomena, formally establishing electricity as a separate field. He introduces the category of "electrics" (substances like amber that attract light objects when rubbed) and provides detailed instructions for the construction and use of testing instruments. Gilbert's experiments with the *terrella* (a spherical lodestone used to model Earth, see p. 192) enabled him to demonstrate and explain phenomena such as the compass needle's orientation, the magnetic dip described earlier by Robert Norman, and variations caused by local irregularities

in Earth's magnetic field. His practical suggestions for improving navigation included constructing instruments and compiling charts of compass variation.

In Book VI, Gilbert turns to cosmology, arguing, drawing on medieval ideas from Peter Peregrinus's *Letter on the Magnet* (1269), that the Earth's diurnal rotation is a magnetic phenomenon. After Peregrinus, "*De magnete* provided the only fully developed theory ... and the first comprehensive discussion of magnetism" (*DSB*). The book had a lasting impact, influencing figures such as "Kepler (112), Bacon (119), Boyle (141), Newton (161) and in particular Galileo (128), who used his theories to suggest his own proof of the findings of Copernicus in cosmology" (*PMM*). Throughout *De magnete*, Gilbert challenges older authorities, favouring firsthand observation and repeatable experiments. His systematic approach, framing new theories, testing them experimentally, and documenting procedures, prefigures the scientific method that would come to define seventeenth-century natural philosophy.

Provenance: The corrections on pages 11, 22, 63, 72 – which are also found in some other copies – are traditionally attributed to **Gilbert's own hand**.

ESTC S121112; PMM 107; Dibner, Heralds 54; Grolier/Horblit 41.

7. [GILBERT, William]. THOMPSON, Silvanus P.

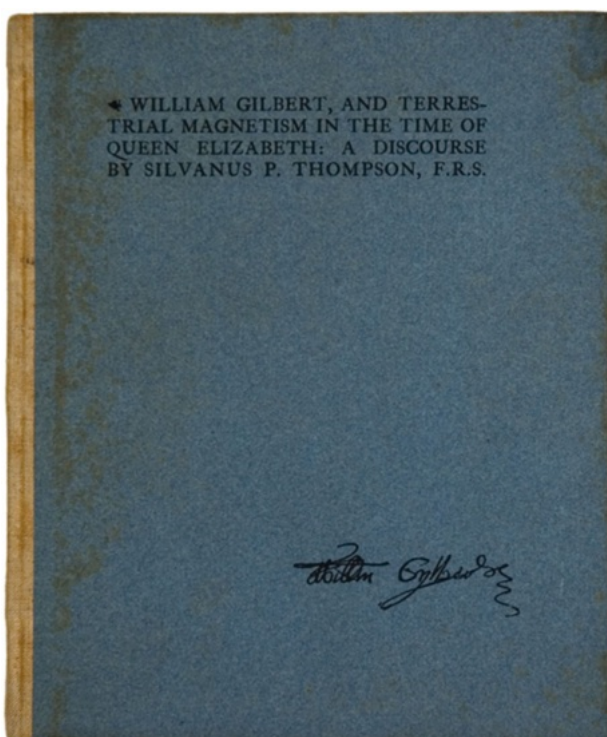
William Gilbert and Terrestrial Magnetism in the time of Queen Elizabeth: A Discourse.

London: Chiswick Press.
1903.

£200

Small 4to. Publisher's linen-backed blue paper boards with signature of William Gilbert reproduced to front; pp.16; a little browning to front board, otherwise a very good, crisp copy, inscribed by the author to another William Gilbert, an electrical engineer from Leeds, to ffeop.

First and only edition. Thompson gave this lecture concerning Gilbert, the 'father' of modern magnetism, at the 23rd March 1903 meeting of the Royal Geographical Society, which was on the occasion of the tercentenary of Elizabeth I's death.



7.

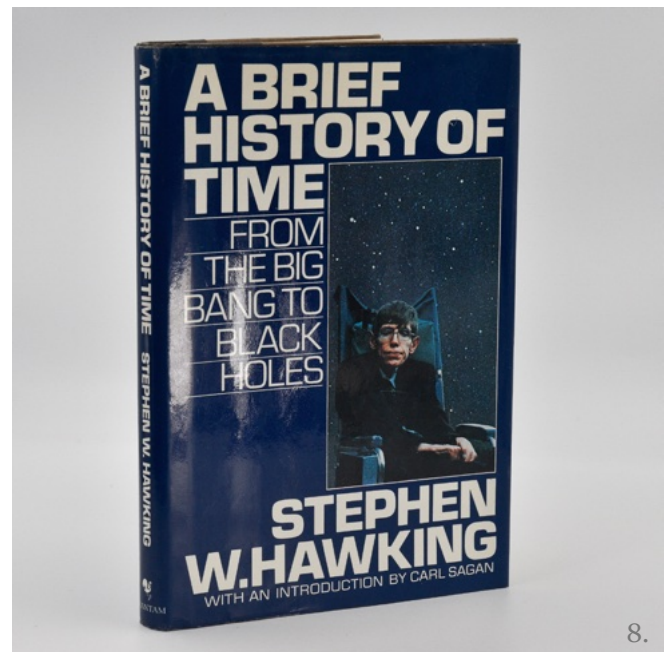
8. HAWKING, Stephen.

A Brief History of Time. From the Big Bang to Black Holes.

New York: Bantam Books. 1988.

£400

8vo. Original black-backed grey cloth; pp. x + 198, numerous text illustrations by Ron Miller; with contents or dedication, both absent in first issue; binding a little rubbed to extremities, small mark to contents page, very good.



8.

First US edition, second issue, with introduction by Carl Sagan. Professor Hawking demanded the recall of the first issue of the US edition, and it is not surprising. Apart from the omissions of the contents and dedication pages, figure 5.2 on page 73 was misidentified as a proton and antiproton collision when it should in fact be figure 6.2 on page 95. The two figures were put in their correct places in this, the second, issue, and it is this version that became a bestseller across the United States. This remains a book

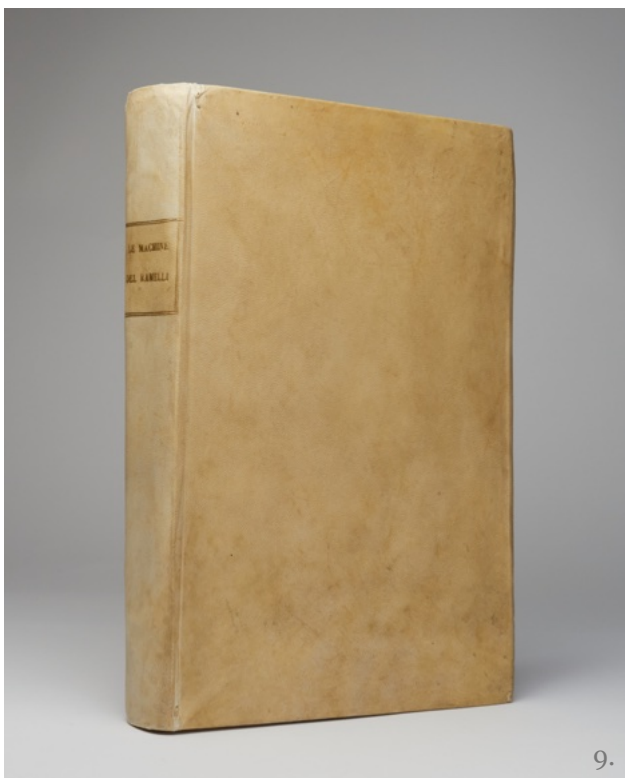
that was perhaps bought by more people than read it, but nevertheless it is a masterpiece of scientific communication, a work that explains with admirable concision and clarity concepts of the most mind-bending proportions.

9. RAMELLI, Agostino.

Le diverse et artificiose machine ... Nelle quasi si contengono varij et industriosi Movimenti, degni digrandissima Speculatione, per cavarne beneficio infinito in ogni sorte d'operatione. Composte in lingua Italiana et Francese.

Paris: "In casa del'autore". 1588.

£24,000



9.

Folio. 17th-century vellum over boards, modern gilt lettering to spine, edges stained red; ff. [16], 338, engraved architectural title page by Léonard Gaultier, engraved portrait of Ramelli by Gaultier to title-page verso, 195 engraved plates numbered I-CXCV (20 of which double-page), text within typographical frames, woodcut initials and tailpieces; recased, extremities lightly rubbed, small marks to boards, small ink stains to edges of textblock; 8.5-cm open tear to outer margin of first leaf, with old paper repair and missing printed surface supplied in ink, occasional marginal staining and light offsetting, occasional tiny wormhole to inner margin (touching only double-page plates), but generally a very good, bright copy; ink annotations by a contemporary hand to verso of final leaf.

First edition of one of the most celebrated illustrated books of the sixteenth century, and "one of the most elegantly produced of all technological treatises" (Norman).

Born near the Swiss-Italian border, Agostino Ramelli (1531-c. 1610) trained in military architecture before joining the army of the renowned *condottiero* and Spanish general Gian Giacomo Medici (1498-1555). After Medici's death, he entered the employ of the Duke of Savoy, and by 1565 had relocated to France, where he entered the service of the future Henry III. In 1572, during the siege of La

Rochelle, Ramelli was gravely wounded and taken prisoner by the Huguenots. Upon his release, he remained in the French king's service and, in 1587, was entrusted by Catherine de' Medici with overseeing the fortification of Paris.



Ramelli's *Le diverse et artificiose machine* stands as his magnum opus, renowned for its blend of technical innovation and artistic refinement. The treatise explores the vast potential of mechanical invention and had a profound impact on the development of mechanical and military engineering in early modern Europe, including the work of Grollier de Servière and Jacob Leupold. The work was developed over several years in collaboration with fellow military engineer Ambroise Bachot, and was likely printed in a press installed in Ramelli's own Paris residence.

Dedicated to Henry III, the volume opens with Léonard Gaultier's striking



portrait of the author: richly attired, seated at a table, helmet in one hand and compass in the other, measuring the plan of a fortress. The book presents an extraordinary array of mechanical inventions: “110 water-lifting machines, 21 grain mills, 4 alternative mill designs, 10 cranes, 7 transport mechanisms for heavy loads, 2 earth-lifting devices, 2 cisterns, 4 fountains, 15 military bridges, 14 screw jacks and other wall-demolishing tools, one artillery mechanism, and more” (*DBI, transl.*). Many of these are supported by enlarged schematics showing the intricate gear systems that animate them, testament to Ramelli's meticulous concern for mechanical precision.

Among the 195 plates is **the earliest known European depiction of a**

book wheel (plate CLXXXVIII): a rotating reading desk modelled after a water wheel, designed to allow simultaneous consultation of multiple large volumes. It is often cited as one of the earliest “information retrieval” machines, and was especially recommended by Ramelli for readers “troubled by gout or otherwise incapacitated”, an early nod to accessibility in design. Also featured is an automaton inspired by Hero of Alexandria, comprising a group of birds perched on the branches of a large vase which move and sing when activated by air pressure (plate CLXXXVII).

Plates CXLVIII and CXLIX appear as a single engraving; three others are signed with the cipher “JG”, possibly referring to Jean de Gourmont. A German translation, titled *Schatzkammer, Mechanischer Künste*, appeared in Leipzig in 1620.

Provenance: An early owner of this copy has inscribed an apparently unpublished love poem on the verso of the final leaf, beginning: “La fontaine qui long voudra croissir en quelque lieu que long...”.

Adams R-52; Brunet, IV, 1095 (“*Cet ouvrage, écrit en italien et en français, est rare et recherché*”), *Dibner Herald* 173 (“*The engravings are among the best in technological illustration*”); *Norman 1777* (“*The plates in Ramelli’s treatise are artistically as well as technologically superb, the bilingual text beautifully printed*”). See Signorelli, “Ramelli, Agostino”, *DBI*, vol. 86 (2016).



9.



9.



10. RUTHERFORD, Ernest.

Radioactive Transformations.

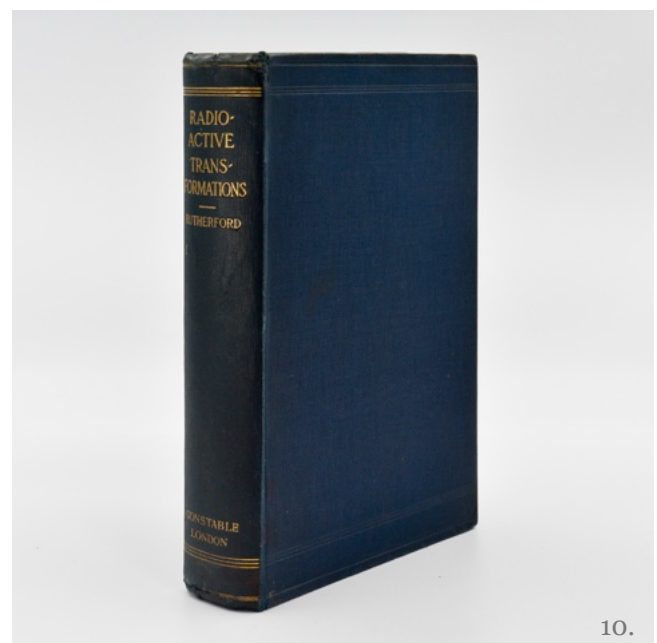
London: Archibald Constable.
1906.

£1,000

8vo. Original blue cloth, gilt lettering to spine; pp. [vi], 287, text diagrams throughout; bumped to extremities, a little foxing to endpapers, previous owner's signature to ffep, very good.

First edition, rare. This book contains 11 lectures Rutherford delivered at Yale University on the degradation of radioactive substances. His subjects include the discovery of the concept of radioactive half-life, the element radon,

and the differentiation of alpha and beta radiation, all of which contributed to his winning of the Nobel Prize in 1908.



10.

THE DAWN OF NATURAL SCIENCE

THE "SHARED WORK" OF HUSBAND
AND WIFE

11. ALDROVANDI, Ulisse; Francesca ALDROVANDI (editor).

De reliquis animalibus
exanguibus libri quatuor, post
mortem eius editi: nempe de
mollibus, crustaceis, testaceis et
zoophytis.

*Bologna: Giovanni Battista
Bellagamba. 1606 [colophon:
1605].*

£6,000

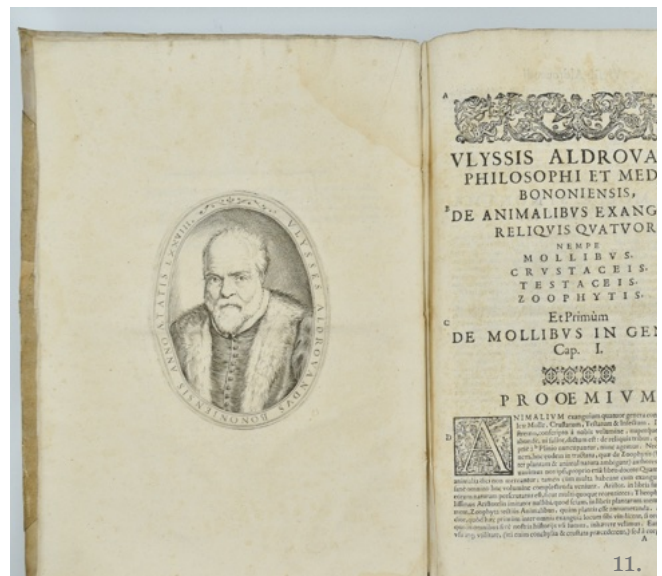


11.

Folio. Contemporary half vellum, lettering piece to spine, title in ink to lower edge of text block, paper library shelfmark label to foot of spine; pp. [8], 593, [29], engraved title and engraved portrait of Aldrovandi after Caracci, large woodcut illustrations throughout, many

full-page, woodcut initials, head- and tailpieces, 3F6 colophon with printer's device (verso blank); extremities a little worn, lettering piece chipped; some light marginal waterstaining throughout, occasional light spotting and offsetting, but generally very good; library stamp "Congreg[atio] Min[orum] Conv[entualium] S[ancti] F[rancisci] Lomb[ardiae] Aust[ralis]" to verso of engraved title; printed paper label "Biblioteca Fagnani" of Federico III Fagnani (1775-1840) and library stamp "Libreria de Cappuccini di Cremona" to front free endpaper.

First edition, complete with Aldrovandi's portrait and in a contemporary binding, of this richly illustrated treatise on molluscs, crustaceans and zoophytes – one of the earliest works devoted almost entirely to shells – edited and likely co-authored by his wife, Francesca Fontana.



11.



11.

Ulisse Aldrovandi (1522-1605) is widely considered the father of modern natural history. He was the first professor of natural science at the University of Bologna, where he established a botanical garden and a private museum of specimens. *De reliquis animalibus exanguibus* (“On the Remaining Bloodless Animals”) forms part of his monumental zoological encyclopaedia and represents the most comprehensive conchological work of its time, both in textual scope and in visual documentation. It includes circa 600 illustrations of animals that Aristotle had classified as “bloodless”, many of them based on specimens from Aldrovandi’s famed cabinet. Among these are squids and octopods, various species of crabs and crayfish (including a giant variety, represented in the act of suffocating a man) and a wide array of shells, such as the nautilus, whose shell is also shown carved with fanciful scenes.

Aldrovandi discusses not only their natural characteristics but also their culinary and medicinal uses. Several of the original woodblocks and drawings used for this work survive today in the Aldrovandi Museum in Bologna.

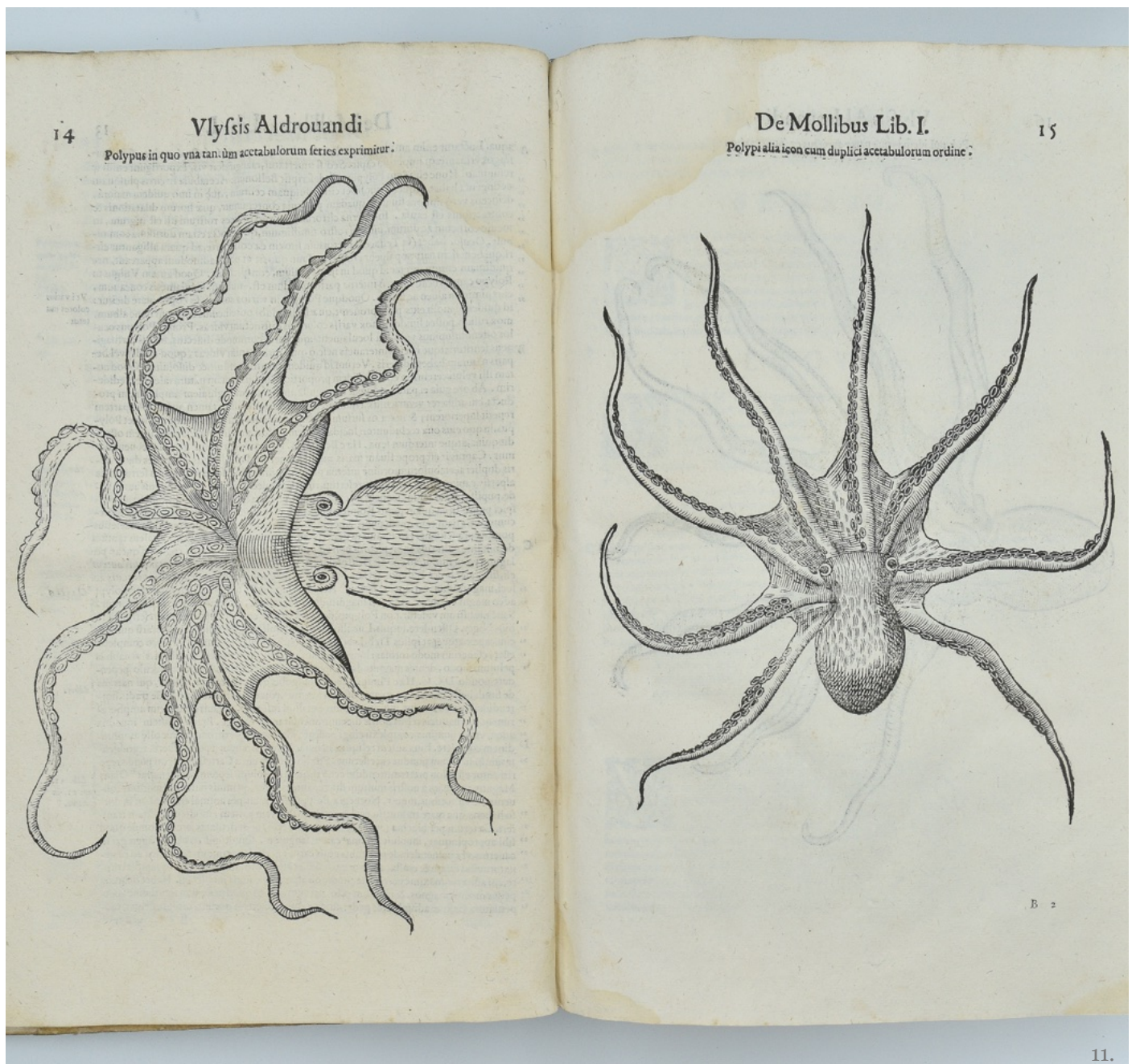
Published posthumously, this volume was edited by Aldrovandi’s wife, Francesca Fontana, who also contributed the preface. **Francesca played a vital role in her husband’s scholarly output: she not only managed the museum (established with her dowry) for a decade after his death, but she located texts for citation, edited his manuscripts, and is thought to have contributed to the writing of several sections.** *De reliquis animalibus exanguibus* may justly be considered “their shared work” (Le-May Sheffield).

Provenance: From the library of the

Franciscan convent of San Francesco Grande in Milan, once the city's most important church after the cathedral and the original home of Leonardo's *Virgin of the Rocks* (London version), suppressed and demolished under Napoleonic rule in 1806. The volume was likely transferred around that time to the library of the Friars Minor Capuchin in Cremona, before entering the collection of Federico III Fagnani (1775-1840), a Milanese nobleman and bibliophile. Fagnani's vast library

of nearly 50,000 volumes was largely donated to the Biblioteca Ambrosiana.

Nissen ZBI 68. See Le-May Sheffield. Women and Science: Social Impact and Interaction.



12. BAKER, Henry

Beytrage zu nützlichem und vergnügendem Gebrauch under Verbesserung des Microscopii.

Augsberg: Klett. 1754.

£950

8vo. Original boards, paper label to spine (half missing); pp. [xx] + 576 + [xiv, index], 17 folding plates; boards somewhat worn, remnant of modern bookplate to front pastedown, ink annotations to title page, faint browning, very good.

First German edition of *Employment for the Microscope*, first published in 1753. Baker (1698–1774) won the Copley Medal of the Royal Society in 1744 for his microscopical observations on the crystallization of saline particles, to which much of the first part of this book is devoted. The second part is more concerned with microbiology and includes the first description of dinoflagellates, here called “Animalcules which cause the Sparkling Light in Sea Water”. Baker “had the rare gift of communicating his knowledge of, and above all his enthusiasm for, the microscope to others. This was what made his two books so widely popular” (DSB I, 411).

Nissen ZBI 201.



12.



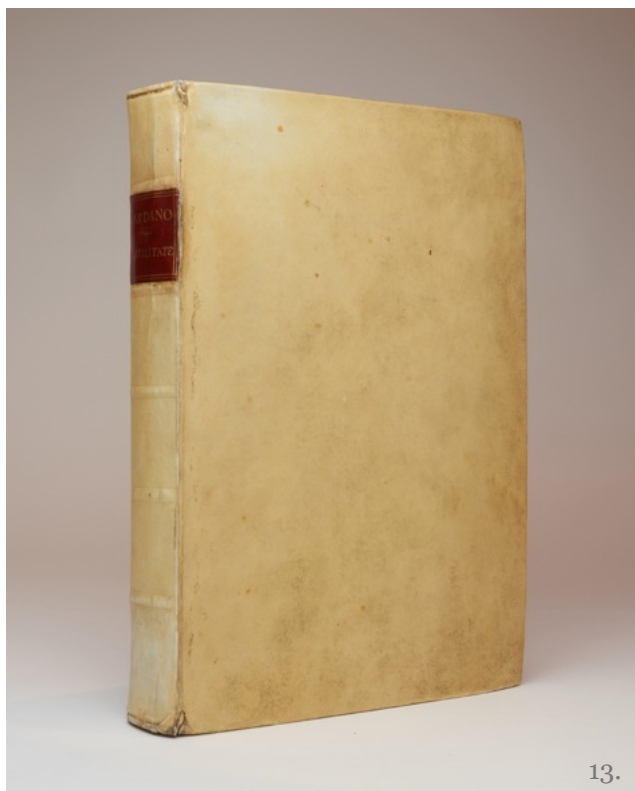
12.

13. CARDANO, Girolamo.

De subtilitate libri XXI. Nunc demum recogniti atq[ue] perfecti.

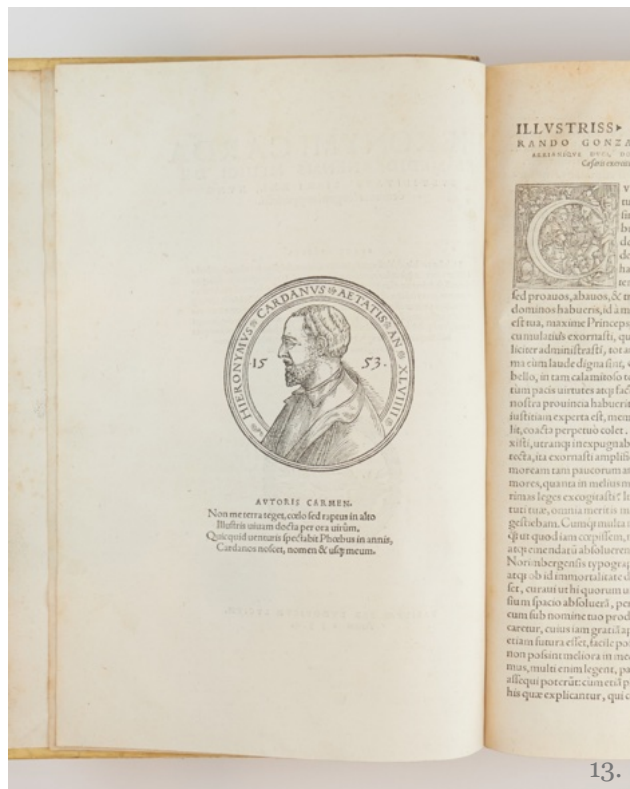
Basel: Ludovicus Lucius. 1554.

£8,000



Folio. 18th-century vellum over boards, red morocco lettering piece, edges sprinkled blue; pp. [24], 561, [1], woodcut printer's device to title, woodcut portrait of Cardano on verso of title, bound without two final blanks, numerous in-text woodcut illustrations and diagrams, woodcut initials; extremities very lightly rubbed; light, variable spotting, very light dampstaining to outer lower corner of quire "a"; occasional early marginal annotations, underlining and sidelining in ink.

Second edition, expanded and corrected, of Cardano's



encyclopaedia of sciences, with over one hundred woodcut diagrams and illustrations in the text.

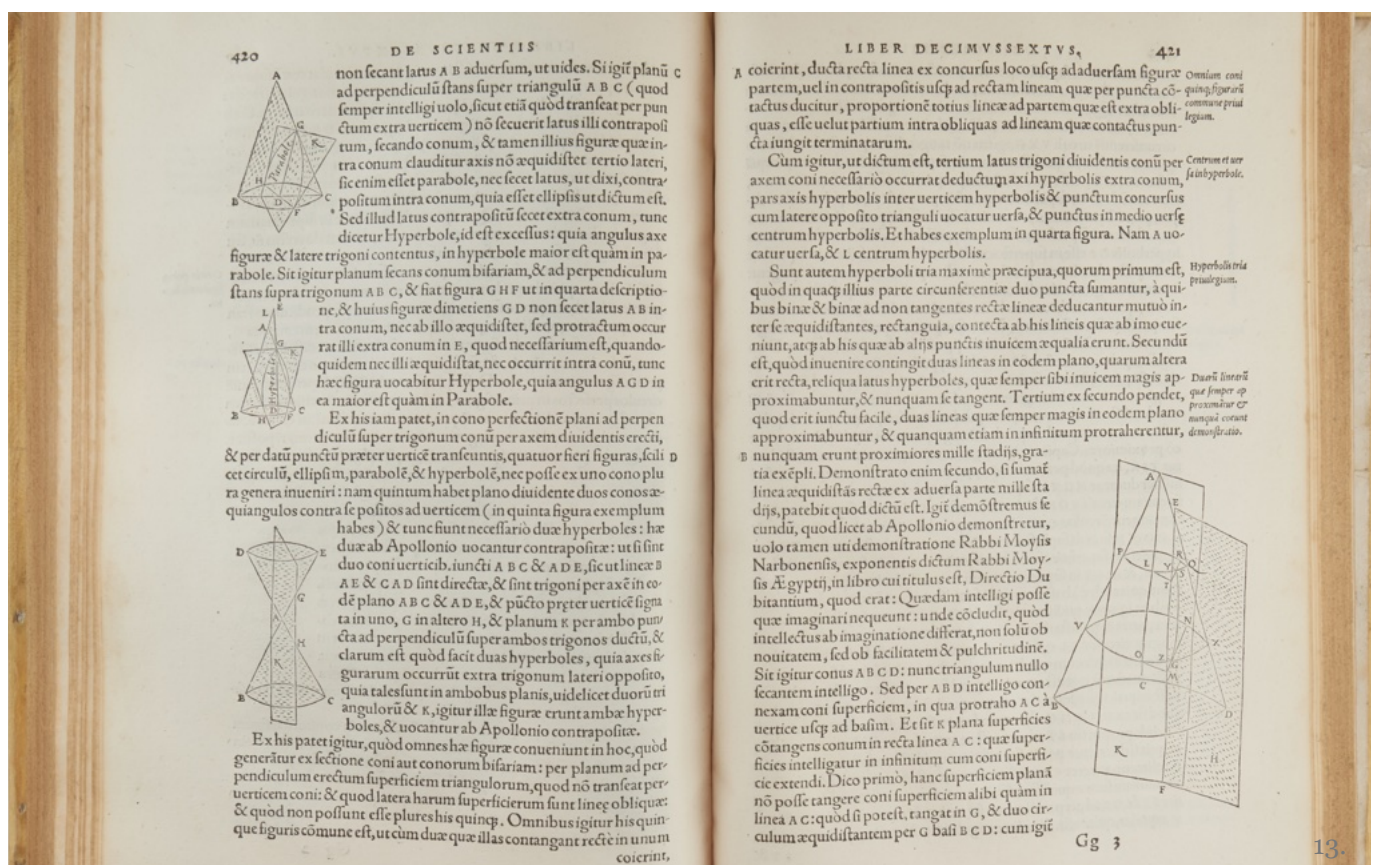
Girolamo Cardano (1501-1576) was a mathematician, physicist, and astrologer from Pavia in northern Italy. A friend of Leonardo da Vinci, he gained fame for his algebraic studies and numerous inventions, including the universal joint, the combination lock, and Cardano's rings. Arguably his magnum opus, *De subtilitate* is a vast and audacious encyclopaedia of the "subtle": those things that elude the senses and pose a challenge to the intellect. A veritable "mine of facts, both real and imaginary" (DSB), the work ranges across an astonishing array of subjects: from cosmology and mechanics to cryptology and demonology. Its twenty-one books cover: 1) matter and its natural motion; 2) the elements; 3) the heavens; 4)

light; 5) mixtures and compounds; 6) metals; 7) stones; 8) plants; 9-10) animals; 11-12) humans, their form and temperament; 13) the senses; 14) soul and intellect; 15) “miscellaneous or useless subtleties”; 16) sciences; 17) arts; 18) miracles; 19) demons; 20) angels; 21) God and the universe.

First published in Nuremberg in 1550, *De subtilitate* was an immediate and controversial success, with further editions issued in Paris and Lyon within the same year. The present second edition – corrected and expanded, and widely regarded as the most complete – followed in 1554; a third edition appeared in 1560, preceded by a French translation by Richard Le Blanc in 1556. The book includes **groundbreaking sections on the hydrodynamics of river**

water, the “new” stars observed by Amerigo Vespucci during his voyages to the Americas (p. 104) and Leonardo’s failed attempts to build a working flying machine (p. 452). It also addresses theological questions, such as the nature of God: “You ask, then, what He is? if I knew, I would be God, for no one knows God ... except God alone” (transl., p. 560). Such passages fuelled accusations of heresy and the suspicion of atheism. In 1570, Cardano was arrested by the Inquisition in connection to this and other works (including a horoscope of Christ) deemed irreverent toward the Church, and was compelled to recant. He was later rehabilitated by Pope Gregory XIII.

Adams C-670; See Gliozzi, “Cardano, Gerolamo”, DBI, vol. 19 (1976).



14. COLONNA, Fabio.

Minus cognitarum stirpium
aliquot ac etiam rariorum nostro
coelo orientium ΕΚΦΡΑΣΙΣ.
Qua non paucae ab antiquiorib.
Theophrasto, Dioscoride Plinio
Galeño alijsque descriptae
declarantur ... Item De
Aquatilibus, alisque animalibus
quibusdam paucis Libellus.

Rome: Guglielmo Facciotti. 1610.

[bound with:]

_. Minus cognitarum stirpium
pars altera. In qua non tam novae
plures platae...

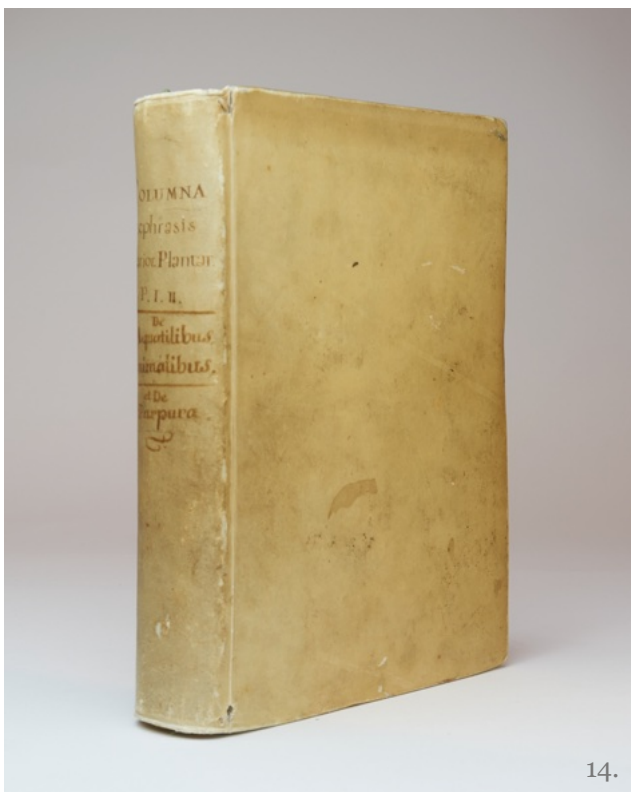
Rome: Giacomo Mascardi. 1616

[and with:]

_. Pupura, hoc est de pupura
ab animali testaceo fusa, de hoc
ipso Animali aliisque rarioribus
testaceis quibusdam...

Rome: Giacomo Mascardi. 1616.

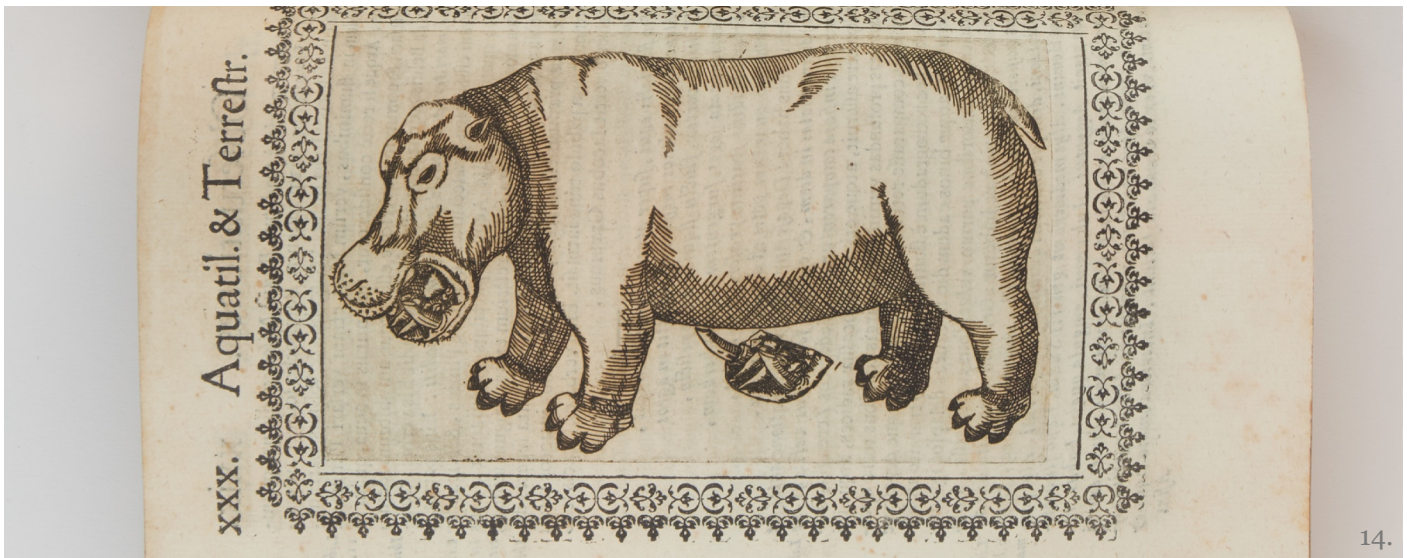
£9,000



14.

Three works in one vol., small 4to. 17th-century vellum over boards, title in ink to spine, edges sprinkled red and blue, green silk page marker; pp. *Minus*: [8], 3-340, lxxiii, [7], with engraved title page and 114 full-page engraved illustrations (included in pagination); *Pars altera*: [14], 99, [1 (blank)], engraved title, portrait of the author, and 30 full-page illustrations (in pagination); *Purpura*: [8], 42, engraved title and 8 full-page illustrations (in pagination); **all illustrations by Colonna** and within type-set frames; woodcut initials, woodcut and typographic head-, and tailpieces; extremities lightly rubbed, boards a little soiled; light, variable spotting, occasional light offsetting and toning, *Minus* with pin wormholes to first 4 quires (occasionally touching a few letters) and light marginal dampstaining to upper edge of [*]1-D1; *Pars altera* with small loss to outer margin of title (not affecting printed area and neatly repaired); *Purpura* with small wormhole to lower margin of A1-D4 (partly repaired) and small paper flaw to D2 (all far from printed area); overall a very good, bright copy; library stamps "Bibl. SS Apostolorum Neapolis" to pp. 93 and lxxiii of *Minus*; early ownership signature to first title; some early annotations and corrections in ink.

First complete edition (second edition of Part I; first editions of Parts II and III) of this illustrated work on botany and

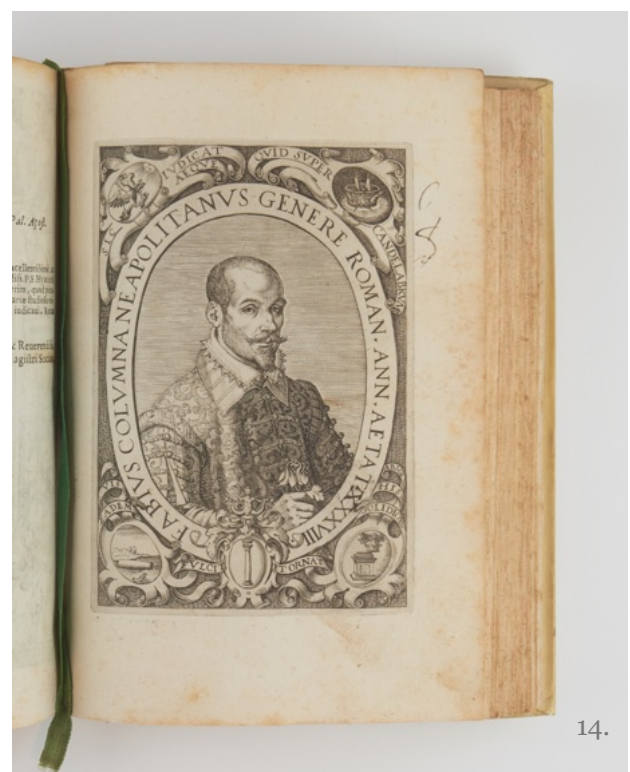


aquatic animals, notable for containing some of the earliest examples of botanical etching.

Fabio Colonna (1567-1650) belonged to a Neapolitan branch of the prominent Roman noble family. Trained as a lawyer, he turned to the study of medicine and botany in search of a cure for his epilepsy. Among the first members of the *Accademia dei Lincei* in Rome, he corresponded extensively with several prominent figures of his day, including Galileo Galilei, Tommaso Campanella and Carolus Clusius. He also invented the “pentecontachordon”, a fifty-string keyboard instrument similar to a harpsichord.

Although ready by 1603, the publication of the *Minus cognitarum* was delayed until 1606 due to the difficulty of securing a publisher and preparing the 156 etched copperplates, each carefully designed by Colonna himself. **This 1610 second edition is unrecorded in standard bibliographies.** It is nearly identical to the first and third

editions (1606 and 1616), save for minor variations in the title wording. As in the 1616 edition, the dedicatee is Marzio Colonna, rather than Cardinal Scipione Caffarelli-Borghese in the first edition. The first part, devoted to plants (340 pages), is followed by a treatise on aquatic animals (*De aquatilibus aliisque animalibus*, 73 pages) and an extensive index. Colonna’s work marked a departure from earlier herbals through the accuracy of its illustrations. Executed







in pure etching (with no support from the burin), they depict in detail the structure and form of plants, often with separate views of flowers and fruits. He also included notes on the geographical origins of the specimens.

The second part of the book, *Minus cognitarum pars altera*, was first published in 1616 together with *De purpura*, a treatise on the purple dye extracted from shellfish. This second part enjoyed more success than the first; yet Colonna never recovered the 500 scudi he personally invested in the project – an expense that placed considerable strain on his already modest finances.

Provenance: From the library of the Theatines at Santi Apostoli in Naples. The church and monastery of Santi Apostoli served as the headquarters for the Theatine order from 1574 until the order's suppression in the early nineteenth century. The library at Santi Apostoli was likely dispersed around that time.

The 1610 edition of the Minus cognitarum stirpium is very rare: OCLC records only one copy in the US (Academy of Natural Sciences of Drexel University) and no copies in the UK. OPAC SBN adds four copies in Italy.

Minus: Brunet II, 172-173 & Nissen BBI 385 (1606 and 1616 editions);
Purpura: Nissen ZBI 927.



15. CULPEPER, Nicholas.

The English Physitian: or an astrologo-physical discourse of the vulgar herbs of this nation. Being a compleat method of physick, whereby a man may preserve his body in health; or cure himself, being sick, for three pence charge, with such things only as grow in England, they being most fit for English bodies.

London: Peter Cole. 1652.

£8,500



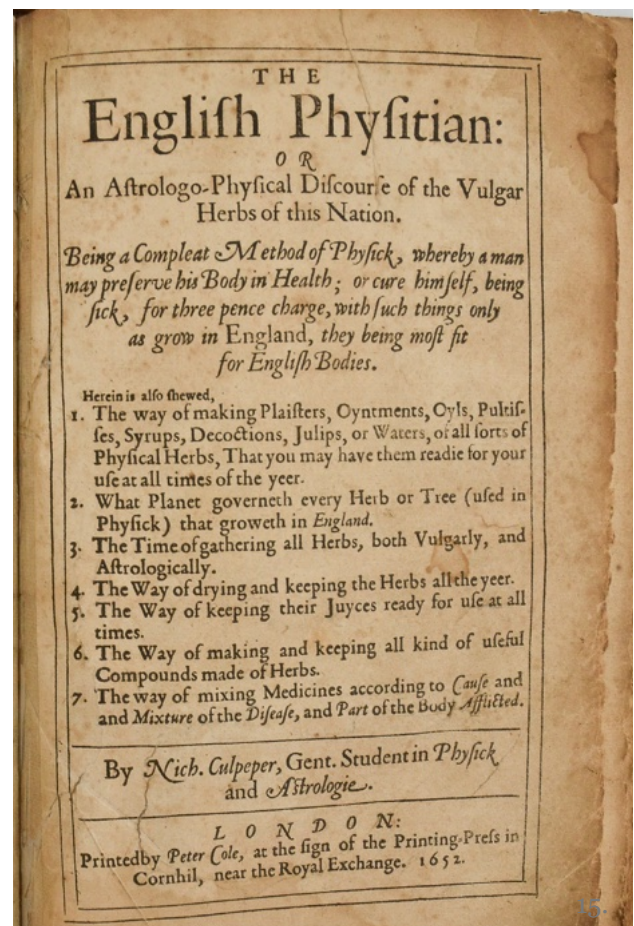
15.

Small folio. Contemporary full brown calf boards, twentieth century rebacking, spine with raised bands and red morocco gilt lettering piece; pp. [xii], 255, [5, index and ads], frontispiece portrait of Culpeper; extensive paper repairs to frontispiece and title page, f. G2 roughly opened with portion torn from margin affecting text, toned throughout, a very good example of an extremely rare book.

First edition. Better known in its later incarnations simply as *Culpeper's Herbal*, this was a highly popular work,

combining astrology with herbalism to create an oddly coherent medical system. The book itself is more a digest of the work of other physicians made affordable by the omission of illustrations and accessible by a focus on medicinal plants available in England.

Culpeper was regarded as something of a quack even in his own day, but his significance in being among the first British physicians to work with the plants being discovered in the New World and in, for instance, identifying the foxglove, or digitalis, as a treatment for heart conditions should not be underestimated. Certainly, his name has become synonymous with herbal medicine to this day.



15.

16. GERARDE, John.

The Herball or Generall Historie of Plantes ... Very much Enlarged and Amended by Thomas Johnson Citizen and Apothecarye of London.

London: Adam Islip, Joyce Norton, and Richard Whitakers. 1633.

£10,000



Folio. Contemporary polished calf, double fillets in blind, sometime very skilfully rebacked, spine with raised bands, lettered directly in gilt; pp. [38], 1-30, 29-30, 29-369, 400-401, 373-1630, [1], [1 (blank)] [46 (index and table of errata)], woodcut initials, head-, and tailpieces, engraved title page by John Payne, and nearly 2800 woodcuts in text; corners restored, boards slightly rubbed, extremities a little worn; bound without initial and final blanks, endpaper renewed, corners of title restored, a few leaves with old paper repairs and short closed tears to lower

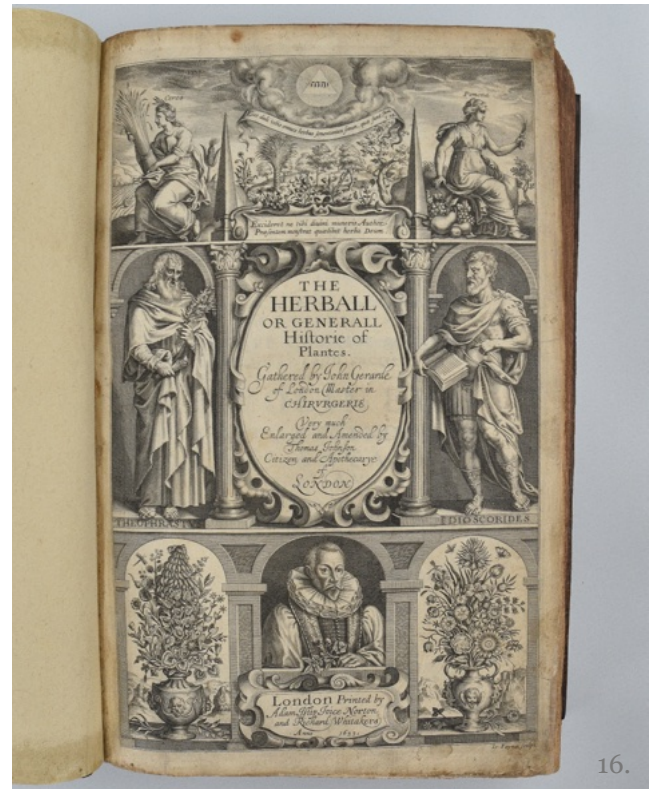
margin (not affecting text), one leaf of table and final errata leaf with paper repairs (also not affecting text), generally very clean, extremely handsome, very good; 19th-century bookseller's ticket "R. Riviere Bookseller ... Bath" and modern ticket "R. D. Steedman ... Newcastle" to front pastedown.

Second edition, the first to be edited by Thomas Johnson. This work started life as a translation of Dodoens's *Stirpium Historiae Pemptades Sex* by Dr Robert Priest. After Priest's death, the distinguished herbalist and Master of the Barber-Surgeons' company John Gerarde took over the manuscript. He added English locations, folklore and his own observations on the uses of plants to create the first great English-language herbal. It was impressive in its literary style and was hugely important in its scope, containing the first known illustration of the potato. Its influence spread beyond England, as it formed the basis of medicinal botany for the settlers in the New World. The first edition was published in 1597 and was followed by this revised edition in 1633; Johnson's input was invaluable because Gerarde's rather basic knowledge of Latin had led to some serious errors. Johnson's edition is considered far superior to the first edition because of the improved scholarship.

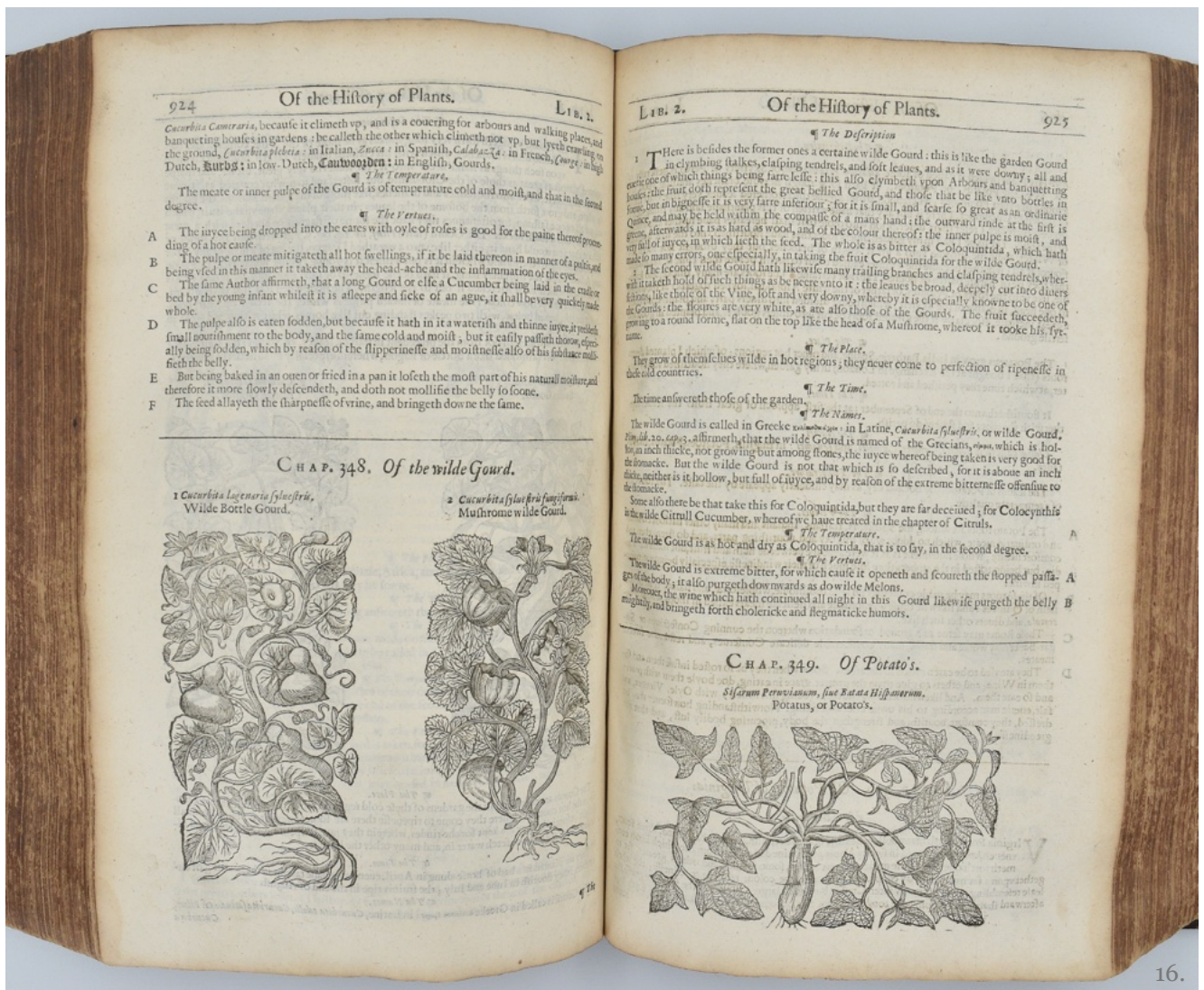
"...the best-known and most often quoted herbal in the English language. Its lasting repute is due not so much

to its originality and accuracy, which are oftentimes questionable, as to its entertaining Elizabethan descriptive style, its interspersed anecdotes and comments, and antique remedies, and its woodcuts" (DSB). Notwithstanding its inaccuracies, the scientific groundwork for the study of medicinal plants that this book represents is still valuable and fascinating.

Nissen 698; Hunt 230.



16.



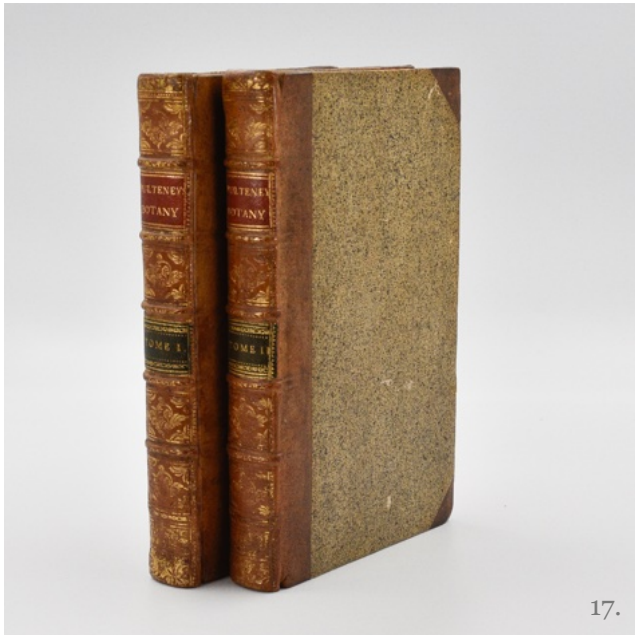
16.

17. PULTENEY, Richard.

Historical and biographical sketches of the progress of botany in England, from its origin to the introduction of the Linnaean system.

London: T. Cadell. 1790.

£550



8vo. 2 vols. Contemporary half brown calf, spine with gilt raised bands, gilt tools and contrasting red and green morocco gilt lettering pieces; pp. xvi, [iv], 360; [vi], 352, [34]; very good. *Provenance:* front pastedowns with bookplates of Alexander Baron Seton of Ekolsund (1738-1814), the Scottish owner of a large estate in Sweden.

First edition. Pulteney (1730-1801) was Linnaeus's first English biographer and in this book provides an overview of British botany from druidic times to the eighteenth century that proves how profound Linnaeus's impact was. The biographical details are still very

useful and his grasp of scientific history is impressive. Pulteney's career as a physician was held back by his unpopular dissenting views; however, he was able to make a name for himself as a botanist through his advocacy of the new Linnaean system, and was elected FRS in 1762.

18. ROUSSEAU, Jean Jacques.

Letters on the elements of botany, addressed to a lady... translated into English, with notes, and twenty-four additional letters, fully explaining the system of Linnaeus. By Thomas Martyn, B.D. F.R.S.

London: B. White and Son. 1788.

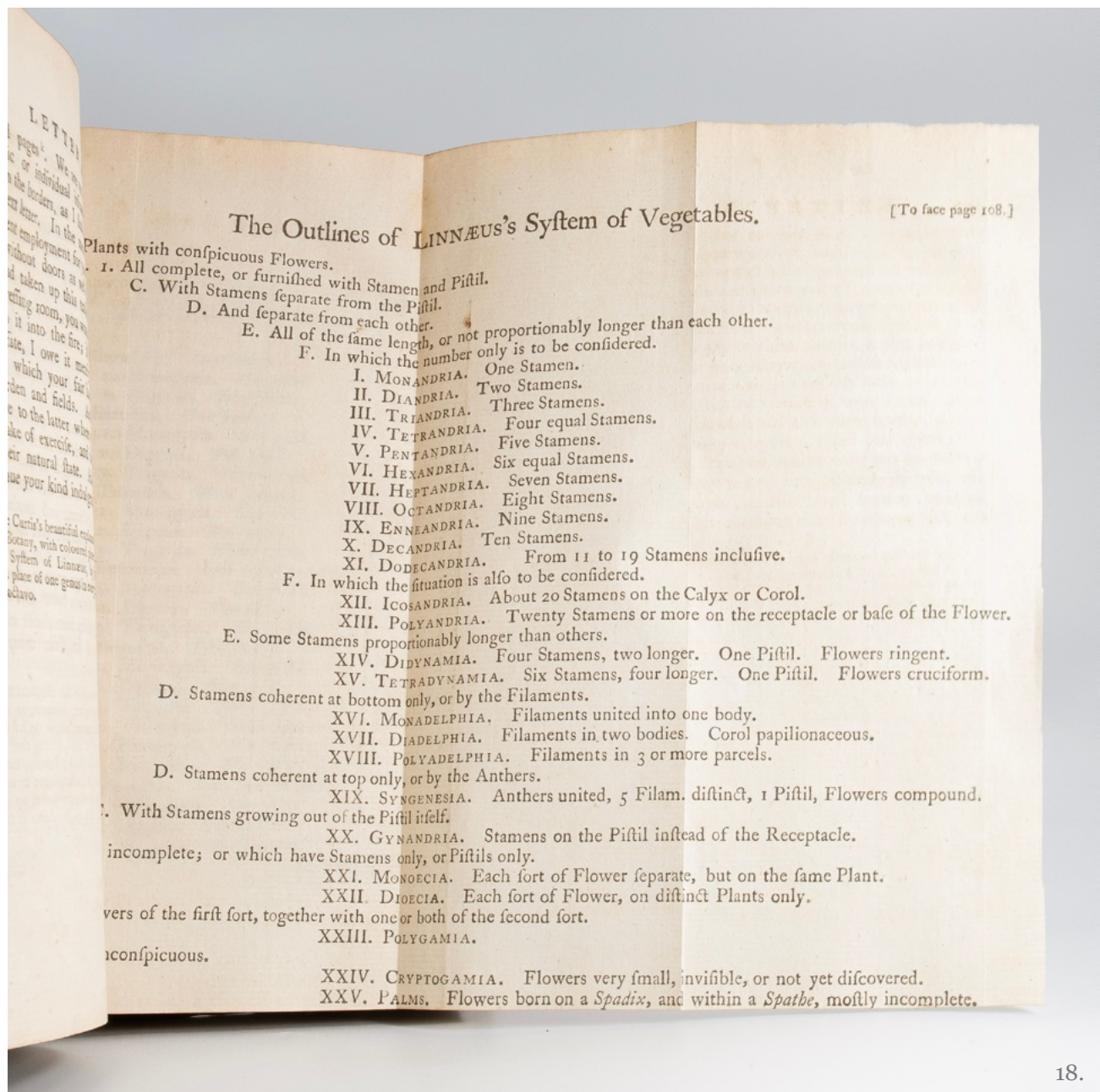
£400



8vo. Contemporary brown mottled calf, spine with gilt rules and red morocco gilt lettering piece; pp. xxvi, 500, [28, indices], 1 folding table; spine creased, hinges tender and extremities a little bumped, previous owner's bookplate to front pastedown and signature to ffeep, internally very clean, very good.

Second English edition.

Intended as botanical lessons for the daughters of Madame Delessert in Lyon, these letters became one of the most lucid and accessible introductions to Linnaean botany. Remaning unpublished until after Rousseau's death, this translation by Martyn, himself an early master of the new system of botany, was instrumental in introducing Linnaeus to the English general reader and expanding the reputation of Rousseau as a pedagogue.



19. SMITH, James Edward.

An Introduction to Physiological and Systematical Botany.

London: Longman, Hurst, Rees, Orme, and Brown. 1814.

£400



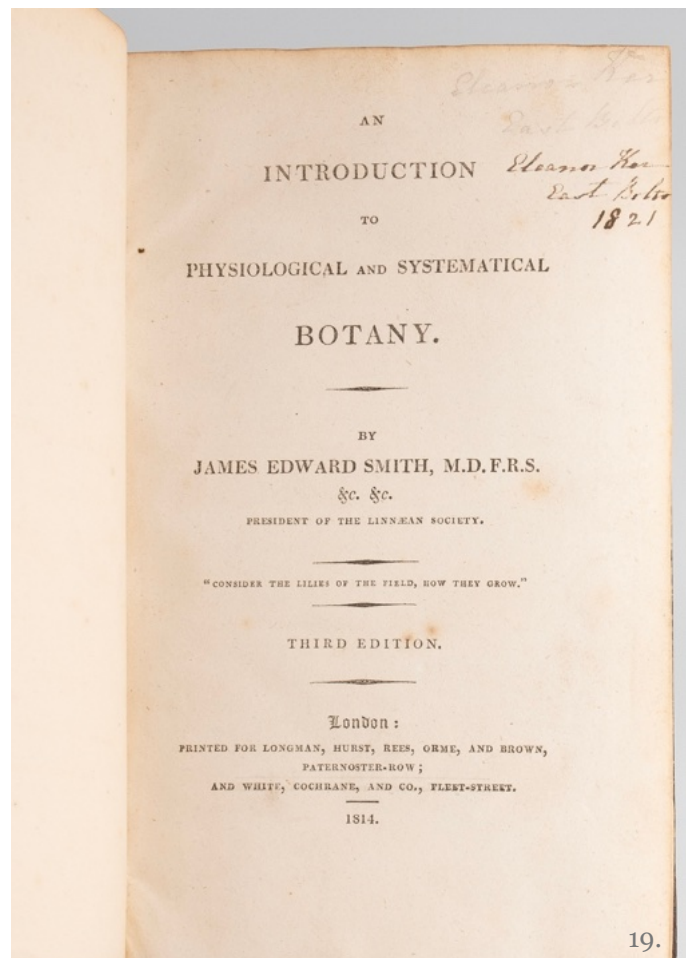
19.

8vo. Contemporary half brown calf, marbled boards, spine with raised bands, gilt rules and black morocco gilt lettering piece; pp. xxiv, 407, [1, publisher's catalogue], 15 plates; front hinge tender, a little occasional spotting, previous owner's inscription to title page, very good.

Third edition. This work by the founder of the Linnean Society is an attempt to introduce the general reader to the idea of botany as a science. He contends that it should be regarded a rigorous academic discipline underpinned by the work of Linnaeus. On top of his thesis, Smith's book is also an excellent survey of plant anatomy, taken structure by structure, and includes some charming plates.



19.



19.

DARWIN AND EVOLUTIONARY THEORY



‘EVOLUTION’ MENTIONED FOR THE FIRST TIME BY DARWIN

20. DARWIN, Charles Robert.

The Descent of Man, and Selection in Relation to Sex.

London: John Murray. 1871.

£8,000

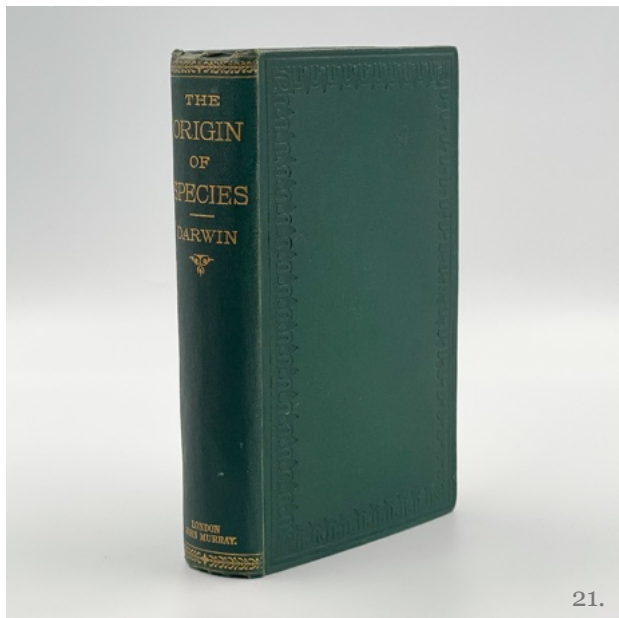
8vo. Original green cloth, covers embossed in blind, spines titled in gilt; pp. 423 (+ 16pp. adverts.), and pp. 475 (+ 16pp. adverts.), with 76 wood-engraved illustrations; cloth a little mottled, light foxing to prelims and ads, previous owner's pencilled signature to half-titles, otherwise very clean, hinges strong, very good.

First edition, first issue, with Murray's advertisements at the end of each volume dated "Jan. 1871". Vol. I, p. 297 starts with "transmitted". Vol. II has the inserted postscript and the errata on the verso of the title-page. Freeman points out that "the word evolution occurs, for the first time in any of Darwin's works, on page 2 of the first volume." In this work Darwin expounded fully his theory of sexual selection and discussed at length the



link he recognised between human and ape lineage. This piece further enhanced Darwin's fame, if not his popularity, and is one of the most significant works in the evolutionary debate. It addresses the issue of human evolution in terms that Darwin had shied away from in *On the Origin of Species*, knowing how controversial his ideas would be. By 1871, he had the confidence and stature to publicise this crucially important part of his theory of natural selection.

Freeman 937.



21.

THE LAST ISSUE PRINTED IN
DARWIN'S LIFETIME

21. **DARWIN, Charles Robert.**

The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life.

London: William Clowes and Sons for John Murray, 1880.

£1,000

8vo. Original green cloth, boards with blind-ruled borders, spine titled in gilt, brown endpapers; pp. xxi, [1 (blank)], 458, folding lithographic plate by W. West; a little spotting to endpapers, overall a fresh copy in an unusually bright binding.

Sixth edition, twenty second thousand. The last issue to be printed in Darwin's lifetime. Apart from the change of the title to *The Origin of Species*, and the addition of a glossary, compiled by W.S. Dallas, the sixth edition is notable as that in which "the word 'evolution' occurs for the first time. It had been used in the first edition of *The Descent of Man* in the previous year, but not before in this work. 'Evolved' had been the last word of the text in all previous editions, but 'evolution' had been omitted, perhaps to avoid confusion with the use of the word by Herbert Spencer or with its more particular embryological meaning. The word had however been used in its transformist sense by Lyell as early as 1832 (*Principles of Geology* [...]). In this edition it occurs twice on page 201 and three times on page 424" (Freeman, pp. 79-80).

Freeman 405.

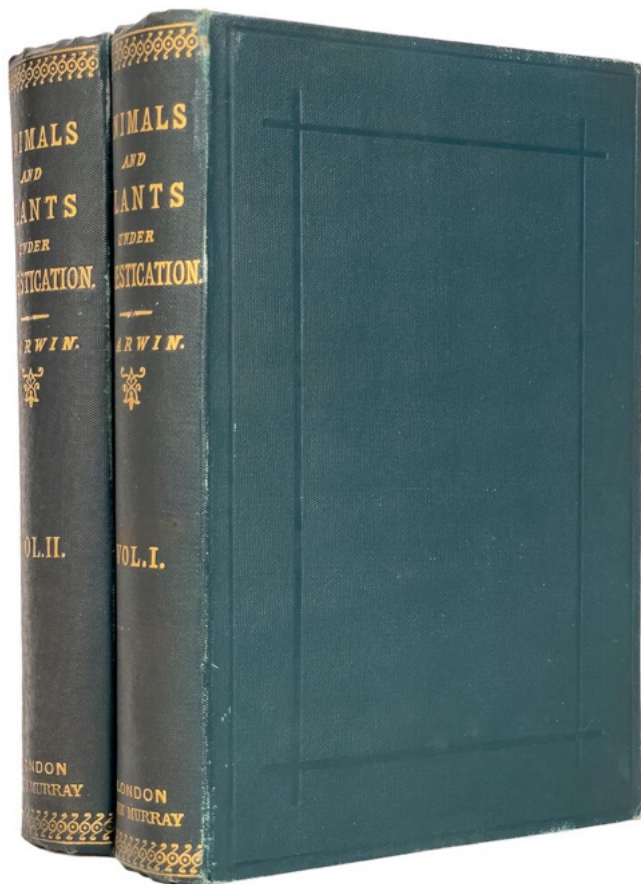
DARWIN ON MAN'S INFLUENCE ON NATURE

22. DARWIN, Charles Robert.

The Variation of Animals and Plants Under Domestication.

London: William Clowes and Sons for John Murray. 1899.

£500



22.

8vo, 2 volumes. Original green cloth, boards with blind-ruled borders and panelled in blind, spines gilt, dark-brown endpapers, partially unopened; pp. I: xiv, 473, [1]; II: x, 495, [1], 32 (publisher's catalogue); previous owner's signature to prelims, occasional faint foxing, very good.

Second edition, eighth impression.

In the preface Darwin draws attention to important revisions made to the previous edition, and especially to the content of Chapter XI. The theory of Pangenesis, currently discussed as the inheritance of acquired characteristics and here expounded by Darwin for the first time, was enlarged and amended for the second edition. Other chapters consider "the amount and nature of the changes which animals or plants have undergone whilst under man's dominion", employing observations of inheritance within a species in an effort to understand the causes of variability. It is one of Darwin's most influential and wide-ranging works.

BM(NH) I, p. 422; Freeman 898; Waller 10789.

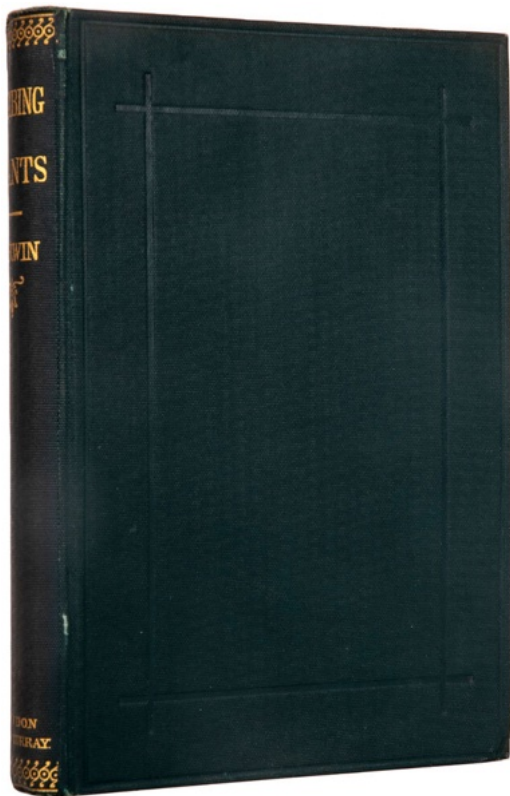
Pioneering work on botany

23. DARWIN, Charles Robert.

The Movements and Habits of Climbing Plants.

London: William Clowes and Sons for John Murray. 1891.

£300



23.

8vo. Original green cloth gilt; pp. x, 208, 32 (ads), wood-engraved illustrations in the text after George Darwin; previous owner's signature to prelim, partially uncut, very good.

Second edition, fifth thousand.

Darwin's investigation of the adaptive value of climbing plants was originally issued in the *Journal and Proceedings of the Linnean Society of London* in 1865. It was first published in book form in 1875 in what is called the second edition,

which greatly enlarged the original work of 118 pages to 208 pages. Darwin "found that 'climbing' is a result of the process of nutation; the apex of the plant's stem bends to one side while it grows and the plane of the bend itself revolves, clockwise or counterclockwise, so that the apex describes circular sweeping movements... If the growing stem hits nothing, it continues to circle; if it hits an object it wraps itself around it by twining. Twining thus enables a young and feeble plant, in one season, to raise its growing point and leaves much higher from the ground, with more exposure to sunlight and air, without expending time and energy in the synthesis of woody supporting tissues." (*DSB* III, p. 575).

Darwin continued these researches further after publication through his investigations into the mechanics of the bending of a plant's stem, published in *The Power of Movement in Plants* in 1880.

Freeman 846.

24. GILMORE, Charles W.

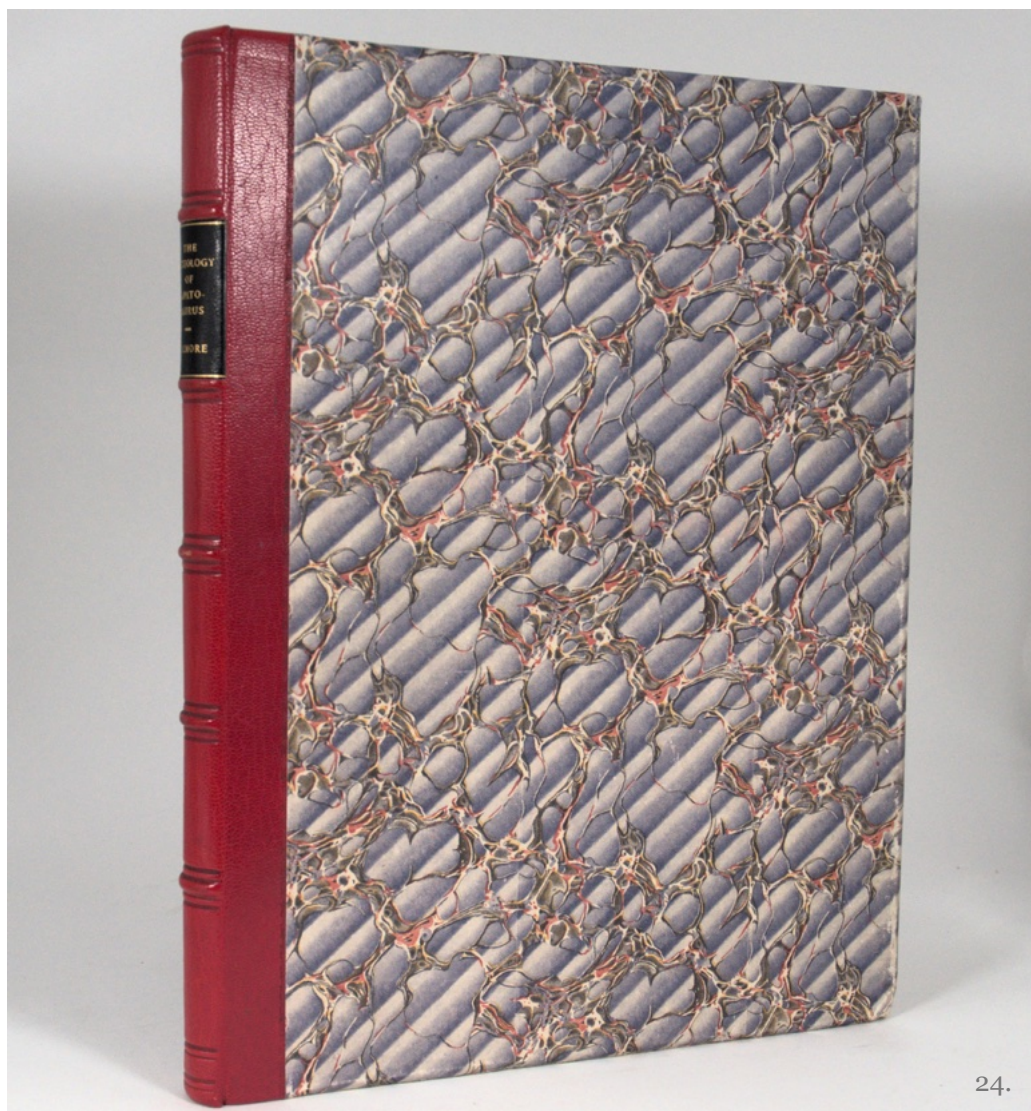
Osteology of Apatosaurus, with special reference to specimens in the Carnegie Museum.

Pittsburgh: Carnegie Museum.
1936.

£1,000

4to. Recently rebound in quarter red morocco, black gilt morocco lettering piece to spine, marbled boards; pp. 174 - 298, frontispiece, 15 plates (many folding), numerous text illustrations; very good indeed.

First edition. *Memoirs of the Carnegie Museum*, Vol XI, No. 4. Gilmore's is an important study of the skeleton of the Apatosaurus, an enormous herbivorous dinosaur of the Diplodocid family whose fossil remains have been found in the western United States. It lived in the late Jurassic period and reached lengths of up to 75 feet. The particular specimen under discussion here is an unusually perfect skeleton that is still on show in the Carnegie Museum; it was excavated in 1909-10 and named *Apatosaurus Louisae* in honour of the wife of Andrew Carnegie.



A RIPOSTE TO DARWIN

25. **MIVART, St. George.**

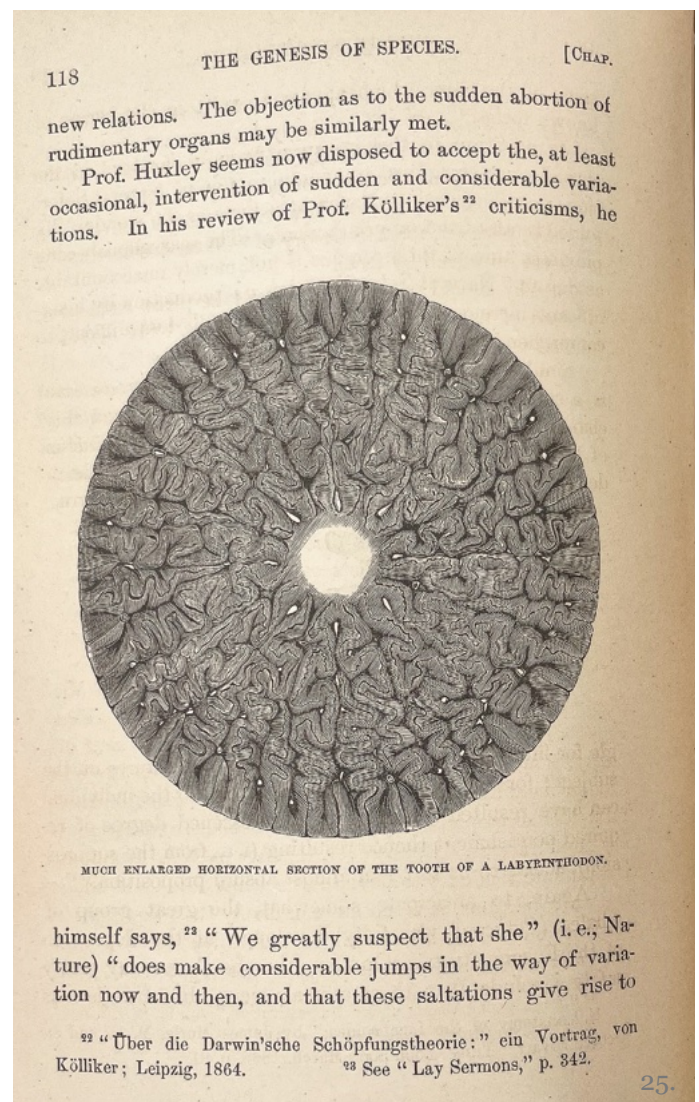
On the Genesis of Species.

*New York: D. Appleton and Company. 1871.***£400**

8vo. Original burnt sienna cloth; pp. 314, [10, ads], numerous text illustrations; cloth mottled and spine sunned, very good.

First US edition. Scarce. This was the riposte to Darwin's *On the Origin of Species* by Mivart, once a member of the great naturalist's inner circle but now an outsider due to his inability to reconcile natural selection with his Catholicism. Its provocatively imitative title is a sign of the bitterness that now existed between the two camps, especially after Mivart's vicious review of *Descent of Man* in *The Quarterly Review*, No. 131, July 1871: "...in our judgment the author of the 'Descent of Man' has utterly failed in the only part of his work which is

really important." This book was the most systematic and rational attack on Darwinism yet, and the one that Darwin took most seriously. One of Mivart's main objections was that natural selection failed to explain the presence of incipient structures, such as wings, before they become useful. Darwin devoted a whole chapter in the sixth edition of *Origin*, published in 1872, to a carefully argued rebuttal of Mivart's allegations. He had, in fact, turned Mivart's objections to his advantage by using them to further clarify his vision.





26. WALLACE, Alfred Russel.

Tropical Nature, and other essays.

London: Macmillan & Co.
1878.

£800

8vo. Original green cloth, black stamped rules to sides, gilt lettering to spine; pp. xiii + [3] + 356 + [1, ads.], 1 chart, 1 figure in text; a little foxing to prelims and edges, very good. Provenance: title page with ink stamp of Stonyhurst College, the Jesuit school in Lancashire.

First edition. This wide-ranging collection of pieces concentrates largely upon tropical environments, including thorough surveys of climate, flora and fauna and with a special chapter on hummingbirds. There are also important chapters on the antiquity of man and on Wallace's special interests in sexual selection, coloration and the distribution of animals, all of which build on and feed into his full-length works on these subjects. The *Geographical Distribution of Animals* had been published in 1876, with *Island Life* to come in 1880 - this book can be seen as the link between those two great works.

DOPAMINE AND OTHER QUESTIONS OF THE BRAIN

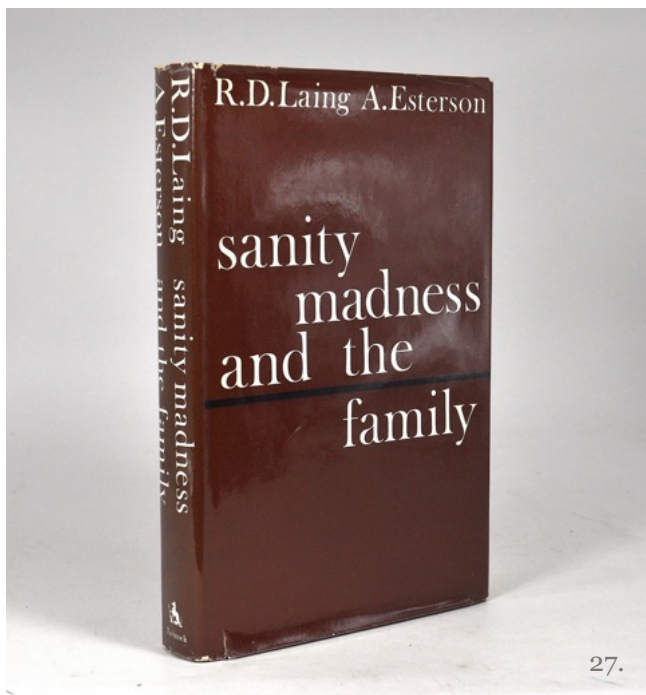
THE FAMOUS, RADICAL STUDY

27. LAING, R.D., and A. ESTERSON.

Sanity, Madness and the Family.

London: Tavistock Publications.
1964.

£500



8vo. Original black cloth, title lettered in silver to spine, upper edge stained lilac, with original brown dust jacket with white lettering; pp. xii, 272; minimal rubbing to spine ends, small flaws to extremities of jacket; near fine.

Second edition, inscribed by Laing "To Mike/From Ronnie/July 1970" to the front free endpaper.

In the 1960s, Glaswegian psychiatrist R.D. Laing rose to international prominence – not only as Scotland's most recognisable figure in his field, but as one of the most famous and

controversial therapists of his generation. Nicknamed the "high priest of anti-psychiatry", Laing was a central figure in the counterculture movement, known for challenging conventional psychiatric practices and beliefs.

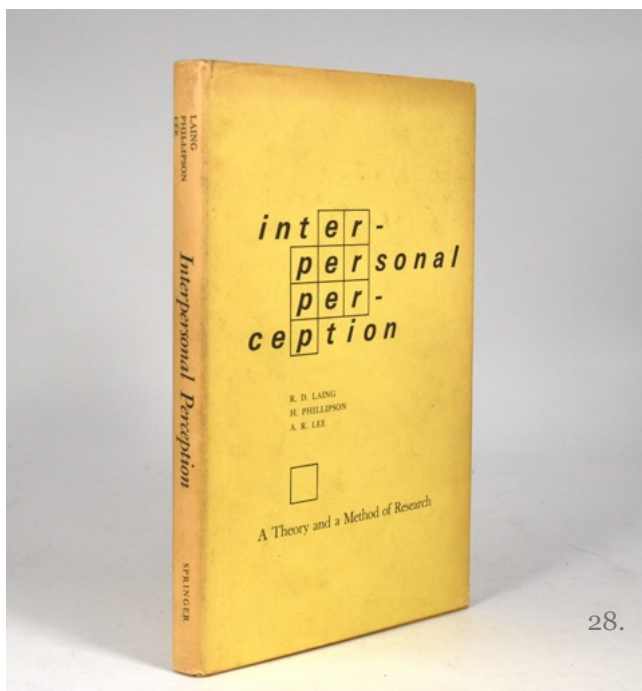
His early clinical experience at Gartnavel Hospital, where he helped establish an experimental unit for patients diagnosed with schizophrenia, formed the basis for his groundbreaking first book, *The Divided Self* (1960). It became an international sensation, selling over 700,000 copies in the UK alone, and introduced a radically different, existential approach to mental illness.

Sanity, Madness and the Family (1964), co-authored with Aaron Esterson, examined the lives of eleven young women diagnosed with schizophrenia, focusing on the complex dynamics within their families. Based on research that began in 1958, the book challenged the medical orthodoxy of the time by suggesting that the symptoms of schizophrenia might be deeply rooted in family interactions, rather than in biological dysfunction alone.

At the time of publication, it was the only major study to explore schizophrenia through detailed case studies of family life. Its implicit suggestion that parental behaviour might contribute to the onset of psychosis provoked intense controversy and professional backlash.

The dominant view then, as now, was that schizophrenia should be treated as a primarily medical condition.

Despite – or because of – its controversy, *Sanity, Madness and the Family* remains a landmark in psychiatric literature. It exposed the contested nature of psychosis and questioned the very boundaries between mental health and illness, sanity and madness.



THE MEANINGFUL ENCOUNTER

28. LAING, R.D., H. PHILLIPSON, and A.R. LEE.

Interpersonal Perception: A Theory and a Method of Research.

New York: Springer Publishing Company. 1966.

£500

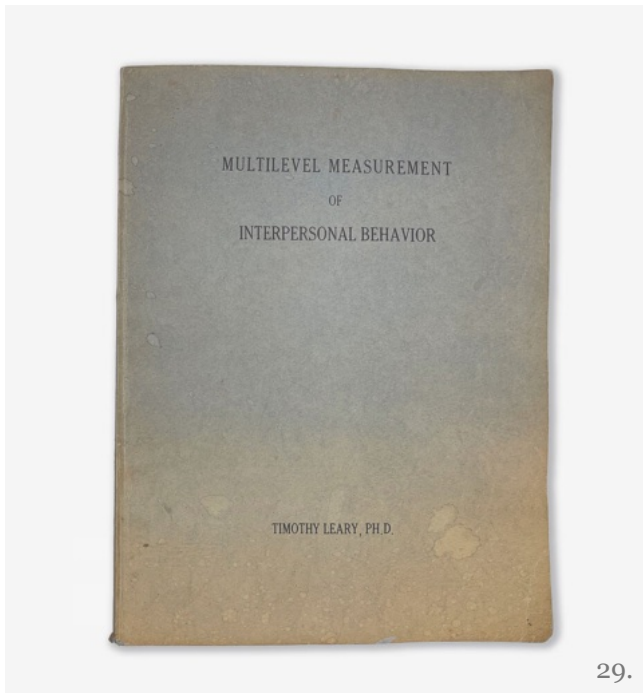
8vo. Original yellow cloth with black lettering to spine and front board, with original yellow dust jacket printed in black; pp. [x], 179, [1], with fold out

IPM chart; extremities very lightly rubbed, a few small marks and short edge tears to jacket, spine slightly sunned; a near-fine copy overall.

First edition, inscribed by Laing “To Mike / With all wishes / from Ronnie / March 1969” to the front free endpaper.

R.D. Laing remains one of the most controversial figures in modern psychiatry, renowned and reviled for his efforts – as he wrote in the preface to *The Divided Self* (1960) – “to make madness, and the process of going mad, comprehensible”. His commitment to understanding psychosis through human relationships rather than clinical abstraction won him admiration from the 1960s counterculture and scorn from much of the psychiatric establishment.

Interpersonal Perception: A Theory and a Method of Research explores the experiences, perceptions, and actions that arise when two people engage in a meaningful encounter. While much of the study focuses on the marital relationship, it also extends to other dyadic interactions and broader “we / they” dynamics. A meticulous and methodologically distinctive investigation, it stands as one of the more unusual and underrated contributions to Laing’s provocative body of work.



29.

“TUNE IN, TURN ON, DROP OUT”

29. LEARY, Timothy.

Multilevel Measurement of Interpersonal Behavior.

Berkeley: Psychological Consultation Service. 1956.

£300

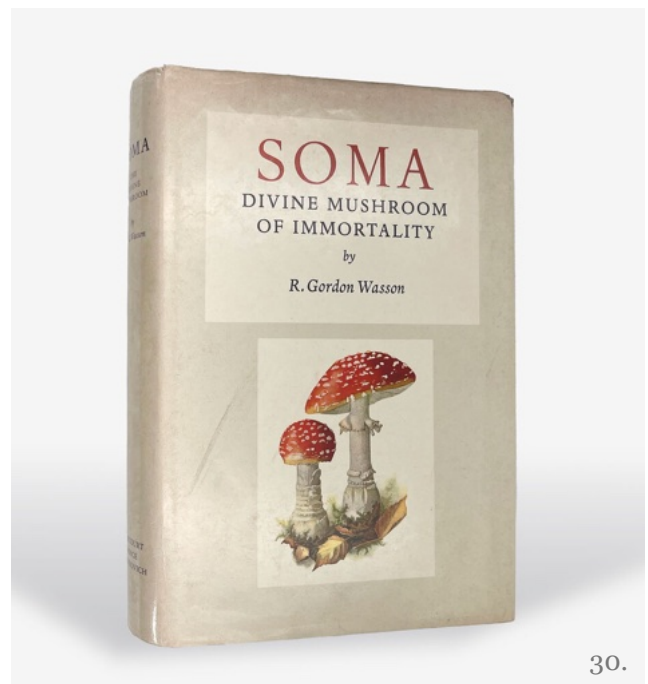
4to. Original blue printed wrappers; pp. [viii], 110, with several in-text diagrams and graphs; wrappers slightly discoloured in places, with a few marks and light wear to extremities.

First edition of the scarce debut publication by the future icon of psychedelic counterculture.

Multilevel Measurement of Interpersonal Behavior marks Timothy Leary's first foray into print, produced while he was still working as an assistant professor at Berkeley. Just a few years later, as a Harvard lecturer, he would become a central – and controversial

– figure in the psychedelic movement. Fired in 1963 for his drug experiments, Leary became the “high priest of LSD”, champion of the “Psychedelic Renaissance”, and author of the legendary slogan: *Turn on, tune in, drop out.*

This early study on interpersonal dynamics belongs to Leary's pre-psychedelic phase, but already reflects his deep interest in the structures of personality and human behaviour. He would later develop these ideas more fully in *Interpersonal Diagnosis of Personality* (1957), before taking a radical turn toward consciousness expansion.



30.

J.P. MORGAN BANK AND
MUSHROOMS - A DOUBLE LIFE
30. WASSON, R. Gordon.

Soma: Divine Mushroom of Immortality.

New York: Harcourt Brace Jovanovich, Inc. 1968.

£900

8vo. Original blue cloth with gilt title to spine, with original price-clipped illustrated dust jacket; pp. xiii, [3], 380, [3]; light white staining to front board, minor black mark to front panel of jacket, light toning and scuffing to spine ends; still a near-fine copy; **bookplate of Anthony Storr to front pastedown; a typed copy of his contemporary review of the book is loosely inserted.**

First edition, with an excellent provenance: from the library of English psychiatrist and author Anthony Storr (1920-2001), who reviewed the work on publication.

This groundbreaking study identifies *Soma*, the divine, intoxicating substance of the *Rig Veda*, as the psychoactive fly agaric mushroom (*Amanita muscaria*) and traces its influence across Indo-European religious and cultural traditions. Wasson's radical thesis challenged the prevailing academic view that *Soma* was an alcoholic preparation, offering instead a compelling case for

its mycological origin – one that has since proved enormously influential.

R. Gordon Wasson (1898-1986), a vice-president at J.P. Morgan, made his most lasting contributions not in finance but in the pioneering field of ethnomycology. He and his wife Valentina began their serious study of mushrooms in 1927 and went on to become the first Westerners to participate in a Mazatec mushroom ceremony in Mexico. Two species of hallucinogenic fungi were named in his honour, and it was specimens collected by Wasson that allowed Albert Hofmann to identify the active compounds psilocybin and psilocin. His work laid the foundations for the “psychedelic renaissance” of the 1960s, most famously through the influence it had on Timothy Leary, who encountered Wasson's writing just before embarking on his own experiments with LSD.

A copy of uncommon interest, combining a fine association with a key moment in the intellectual and cultural history of psychedelics.

