Science

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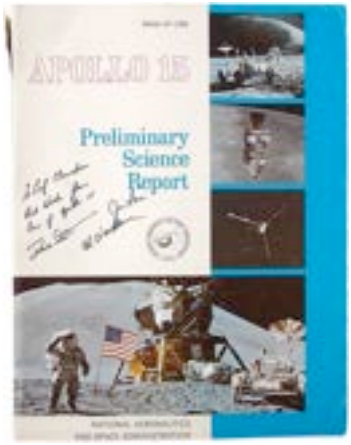
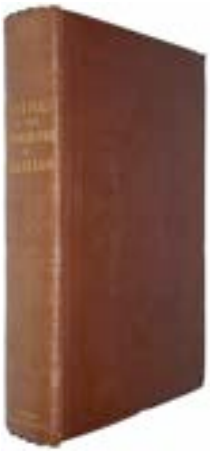
Title-page image from item 23.



Item 1

Item 2



Item 3

Item 4

1 [Apollo 15.] Apollo 15. Preliminary Science Report. Prepared by NASA Manned Spacecraft Center. *Washington: Scientific and Technical Information Office, NASA,* 1972. **£2250**

First edition. 4to. pp. xiv, 11, 11, 32, 4, 112, 25, 28, 25, 16, 7, 23, 10, 5, 6, 7, 6, 17, 7, 7, 6, 14, 9, 10, 9, 112, 3, 1, 3, [2], 11 folding panoramic plates, illusts.; original pictorial card wrappers, heavily bumped to head of spine and a little worn, else very good. Inscribed to the front wrappers “To Prof. Clemedson Best wishes from Crew of Apollo 15 Dave Scott Al Worden and Jim Irwin”.

The Apollo 15 mission, the fourth to land on the moon, was the ninth crewed mission in the Apollo programme. The longer time spent on the moon, the emphasis on science, and the first use of a Lunar Roving Vehicle marked it as a new departure. The crew - David Scott, James Irwin, and pilot Alfred Worden - were given extensive geological training. Scott and Irwin spent 18 1/2 hours on the moon during four long excursions on the rover, collecting 77 kilos of surface material that was brought back to earth. On the return journey, Worden made the first spacewalk in deep-space. The present work offers some of the initial findings from their mission, and it was presented by the crew to Carl-Johan Clemedson, a Swedish military physician working for the Swedish Defence Research Agency. Clemedson was one of the first scientists in Sweden to take an interest in space medicine, and he became a member of the International Academy of Astronautics.

2 [Campbell, George Douglas, Duke of Argyll.] A carte de visite with a seated portrait of the Duke. *No publisher,* n.d. c. 1860s. **£25**

A real photograph, mounted and uncaptioned as issued, some spotting to mount, abrasion marks to upper margin above photograph but not affecting image.

The Duke of Argyll (1823-1900) made contributions to geology, and opposed the Darwinian idea of continuous evolution. He espoused instead a form of ‘serial creation’, in which he posited multiple acts of creation resulting in the existence of organisms that contained a ‘plan’ through which the complexities of development could be examined and understood. The Duke was one of the pallbearers at Darwin's funeral.

3 [Chambers, Robert.] Vestiges of the Natural History of Creation. *London: John Churchill,* 1853. **£750**

10th ed., "with extensive additions and emendations". 8vo. pp. xii, 325, lxvii, [32, pubs. list dated March 1854]; woodcut illusts. to text; Earlston Reading-Room and Circulating Library label to front pastedown, near-fine in original cloth, gilt.

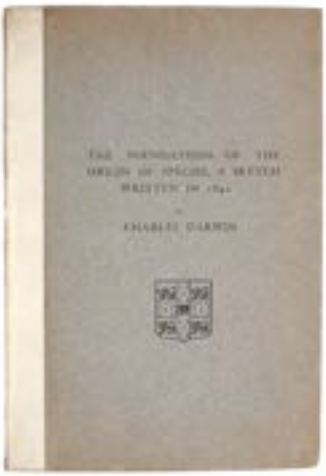
Chamber’s Vestiges was published anonymously in 1844. It went through several editions, and for this tenth edition some changes were incorporated: a new 6pp. autobiographical preface, 107 woodcut illustrations chosen by the physiologist William Carpenter; new sections on fossils in older rocks; and a long appendix containing “Proofs, Illustrations, Authorities Etc.” The advertisements at the end carry one for the present work, as well as for the second edition of the same author’s *Explanations: A Sequel to “Vestiges”*; the entry, as with all editions of the work to date, is anonymous.

4 Chambers, Robert. Vestiges of the Natural History of Creation. *London & Edinburgh: W. & R. Chambers,* 1884. **£575**

12th edition. 8vo. pp. xxxi, 418, lxxxii [2, Index]; port. frontis. of Chambers, woodcut illusts. to text; some foxing, occasionally heavy, else very good in original cloth, gilt, rubbed, darkened on spine.

The twelfth edition was the first to identify the author. A new 30pp. introduction by Alexander Ireland tells the “Story of the authorship of the “Vestiges” . . . for the first time” (Ireland had been instrumental in the original publication of the book in 1844). The edition also adds a portrait of Robert Chambers, taken from his original portrait by J. Watson-Gordon.

Item 5



Item 6

Item 7

Item 8

5 Chree, Charles. Studies in Terrestrial Magnetism. *London: Macmillan and Co.,* 1912. **£125**

First edition. 8vo. pp. xii, 206, [2, ads.]; diags. to text; very good in the original cloth, gilt.

Not in the usual Antarctic bibliographies. Chree specialised in terrestrial magnetism, and in this capacity assisted in the analysis of scientific results from several Antarctic expeditions - the 'Southern Cross' expedition, the Scottish National Antarctic Expedition, and Scott's two expeditions. The present work offers a "connected account of [Chree's] own original work" (Preface), and draws at several points on results from observations made at winter quarters during Scott's Discovery expedition 1901-4.

6 Darwin, Charles. The Foundations of the Origin of Species, a Sketch written in 1842 ... Edited by his son Francis Darwin. *Cambridge: Printed at the University Press,* 1909. **£2250**

First edition. 8vo. pp. xxii, 53; port. frontis. of Darwin, one plate with illustration of holograph; very good in the original vellum-backed boards, slightly discoloured on spine, this copy with the recipient's name of Lucien Claude Cuénot.

Freeman 1555. In 1842, Charles Darwin sketched his evolutionary ideas in a manuscript that was only discovered by his son Francis, editor of his father's Life and Letters, in 1896 (it had lain in a cupboard under the stairs at Down House). The sketch was prepared for publication in 1909, the year that Cambridge University marked the Darwin centenary with celebrations and lectures. This, its first appearance, "was not published but was printed for presentation to delegates to the Cambridge festivities", also the fiftieth anniversary of the publication of *On The Origin of Species*. This copy was presented by the Syndics of the University Press to the eminent French zoologist, pioneer of genetics and evolutionary theorist Lucien Claude Cuénot (1866-1951).

7 Darwin, Charles. Extracts from Letters addressed to Professor Henslow by C. Darwin, Esq. read at a meeting of the Cambridge Philosophical Society in November, 1835. *Privately Printed,* 1965. **£35**

"A reprint of the original pamphlet dated Cambridge, Dec. 1, 1835". 8vo. pp. v, 31; very good in the original printed wrappers, indentation mark to upper cover.

Freeman 4. A limited edition reprint of Darwin's first publication, now scarce, which printed extracts from letters written by Darwin from locations in South America during the Beagle voyage.

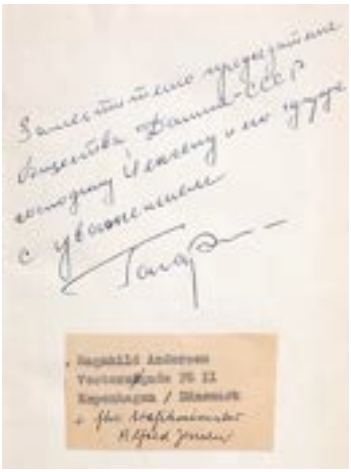
8 Fleming, Sir Alexander. Chemotherapy Yesterday, Today and Tomorrow. The Linacre Lecture 1946. *CUP* 1946. **£50**

First edition. 8vo. pp. 39; very good in the original limp paper wrappers, sightly rubbed.

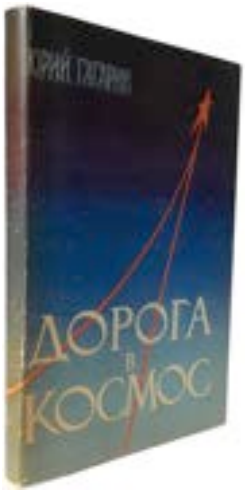
"Penicillin, its antecedents, its discovery, its applications and properties, its increasing production, are here described by the discoverer, who also touches upon the future of this and similar substances, and issues a powerful please for the speedy endowment of microbiological research" (blurb from inside front wrapper).

Item 9

Item 10



Item 11



9 Forbes, Professor Edward. The Natural History of the European Seas. Edited and Continued by Robert Godwin-Austen. *London: John van Voorst,* 1859. **£150**

First edition. 8vo. pp. viii, 306, [iv, ads.]; map frontis.; illusts. to text; near-fine in the original cloth, gilt, bookplate of Richard G. West.

Edward Forbes (1815-54) was "undoubtedly the pre-eminent British naturalist of his era ... one of many who attempted to make sense of the distribution of living organisms and the patterns of the fossil record by invoking idealistic notions of powers immanent in nature, God-derived or not, which united and made comprehensible the facts of natural history" (ODNB). The present work was left unfinished at Forbes's death, and its completion undertaken by the geologist Robert Godwin-Austen. The chapters are devoted to individual regions, beginning with the 'Arctic Province' and concluding with the Caspian Sea. There follows a chapter on the distribution of marine mammals, and a discussion of the 'Early History of the European Seas'.

10 Fourier, Joseph. The Analytical Theory of Heat . . . Translated, with notes, by Alexander Freeman. *Cambridge at the University Press,* 1878. **£475**

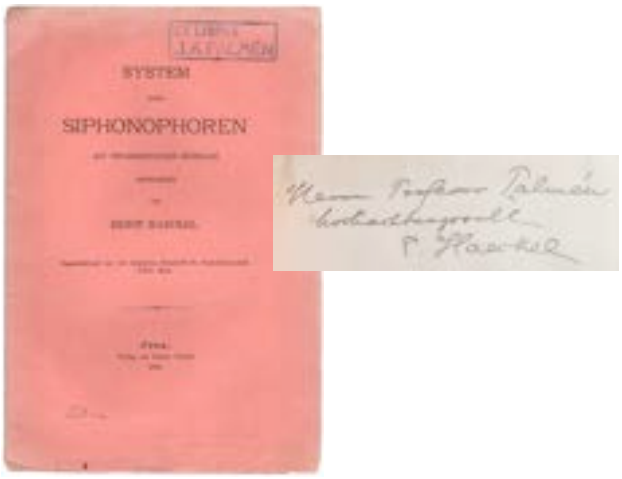
First English edition. 8vo. pp. xxiii, 466; a clean copy in contemporary full calf, gilt, slightly rubbed.

Sotherans Bibliotheca Chemica-Mathematica 2nd Supp. 4909; Honeyman Collection 1359. Fourier's important work, which placed the science of heat on an analytical mathematical footing and in which the theorem that bears his name appears, was published in France in 1822. Surprisingly, it was not translated into English until more than 50 years later in the present form.

11 Gagarin, Yuri. Дорога В Космос. Записки Летчика-Космонавта СССР [Doroga v Kosmos. Zapiski letika-kosmonavta SSSR]. *Moscow: Izdatel'stvo "Pravda",* 1961. **£2500**

8vo. pp. 223, [1, contents]; frontis., illusts.; very good in original cloth in d.-w. Inscribed to flyleaf by Gagarin in Russian to the former Danish traffic minister Alfred Jensen, address label of Ragnhild Andersen with Jensen's name in ink.

Gagarin was the first human to reach space, on the 12 April 1961. This memoir - the title translates Road to Space. Notes of a USSR's pilot-cosmonaut - appeared only a few months after his space-flight. With a foreword by Nikolaj Kamanin (1808-82), head of cosmonaut training in the Soviet space programme and the man who made the final selection of Gagarin, the book tells the story of the modest young man from humble beginnings, and his path from a war-torn Russia, through his work as a mechanic and later an aviator, to his epoch making journey into space. He inscribed this copy - with the words "To the vice- chairman in the Denmark-Soviet Union Society Mr Jensen and his wife with respect, Gagarin" (translation) - to Alfred Jensen (1903-1988), a member of the Danish Communist Party and its leader during the years of Nazi occupation. In 1952 Jensen married Ragnhild Andersen, and it is her address label that appears beneath the inscription. Jensen and Ragnhild remained loyal to Moscow when the Danish Communist Party, under its leader Aksel Larsen, distanced itself from the Soviet Union; their meeting with Gagarin, and the inscribed copy of his book, might be regarded as a reward for their loyalty.



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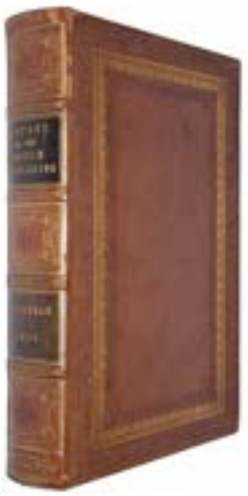

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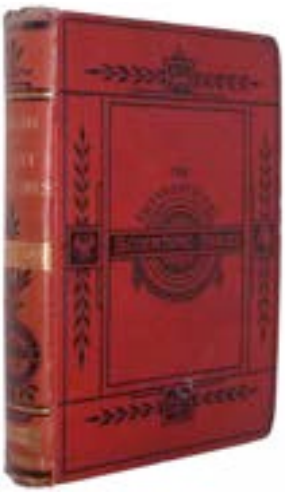


Item 14

12 Haeckel, Ernst. System der Siphonophoren auf phylogenetischer Grundlage entworfen. *Jena: Verlag von Gustav Fischer,* 1888. **£750**

First separate edition. 8vo. pp. [ii], 46; very good in original printed wrappers, chipped and slightly faded to extrems., ex libris inkstamp of J. A. Palmén to upper wrapper. A presentation copy, inscribed to title- page "Herrn Professor Palmén hochachtungsvoll E. Haeckel".

Offprint from the *Jen. Zeitschritft für Naturwissenschaft*, Bd. XXII. HAecjel (1834-1919) studied with several naturalists, including Johannes Müller, before taking up the position of professor of zoology at the University of Jena in 1862 (a position he held until 1909). Haeckel's many zoological monographs contained reports of nearly four thousand new species of lower marine animals, mainly radiolaria, medusae and sponges, for which he tried to establish phylogenetical natural systems. His article on the siphonophorae is based upon the collections made by the Challenger expedition under Wyville Thompson,, to which reference is made in the opening pages. The article preceded Haeckel's monograph on the same subject, which appeared in 1888 as volume 28 of the scientific results of the voyage of H.M. S. Challenger; parts of Haeckels' article appear in the Introduction to that report. Inscribed copies of Haeckel's works are not common, this being a presentation to Johan Axel Palmén (1845-1919), professor of zoology at the University of Helsinki, Finland.

13 Hamilton, William R. 'On the Application to Dynamics of a General Mathematical Method previously applied to Optics' and 'On Conjugate Functions, or Algebraic Couples, as tending to illustrate generally the Doctrine of Imaginary Quantities, and as confirming the Results of Mr. Graves respecting the Existence of Two independent Integers in the complete expression of an Imaginary Logarithm.' Two articles in *Report of the Fourth Meeting of the British Association for the Advancement of Science; held at Edinburgh in 1834*. *London: John Murray,* 1835. **£475**

First edition. 8vo. pp. [iii]-ix, [iv], [ix]-xlviii, 700, bound without half-title; one large folding plate with inset diagram and one engraved plate. both relating to other articles; minor spotting at front and rear, else very good in contemporary full calf, gilt, by Neil, Binder, Glasgow, contrasting labels to spine, a.e.g., slightly rubbed.

This volume of reports from the fourth meeting of BAAS contains two papers by Hamilton, the first of which is important for his summary of the analogy between mechanics and optics. Hamilton had been working on a function, known today as Hamilton's principal function, that translated treatments in optics to the equations of motion. The article sketches his findings, which were discussed in greater details in two contributions to the *Philosophical Transactions*. This volume of papers also contains a report on recent progress and the present state of zoology by Leonard Jenyns, and brief notes by Robert Brown (for whom Brownian motion is named), R. I. Murchison, Charles Lyell, and others.

14 Henslow, George. The Origin of Plant Structures by Self-Adaption to the Environment. *London: Kegan Paul, Trench, Trübner, & Co. Ltd.,* 1895. **£125**

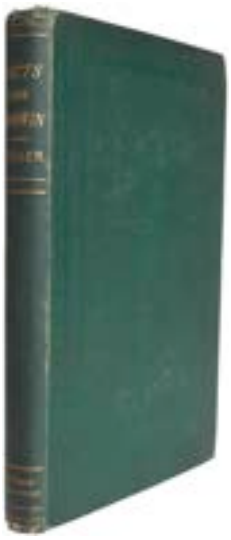
First edition. 8vo. pp. [iv, ads.], xiii, 256, 80 (pubs. list); minor spotting, else very good in the original red cloth, gilt, rubbed, a little faded on spine.

Published as volume 77 in the International Scientific Series. George Henslow (1835-1925) held several posts in botany at St. Bartholomew's, Birkbeck and Queen's College, London. "Though accepting the general idea of organic evolution, George Henslow found Darwinian natural selection unconvincing as a mechanism, preferring Lamarckian explanations as in his books *The Origin of Floral Structures* (1888) and *The Origin of Plant Structures* (1895)" (ODNB).

Item 15

Item 16

Item 17



Item 18

15 Huxley, Thomas H. Evidence as to Man's Place in Nature. *London: Williams and Norgate,* 1863. **£1250**

First edition, first issue. 8vo. pp. [v], 159, 8 (ads., dated February, 1863); frontis., illusts. to text; previous owner's inscription to half-title (dated March 1863), else near-fine in original cloth, gilt.

Huxley, known as Darwin's bulldog, in this work addressed for the first time the evidence for human evolution from primates. Huxley's expertise in comparative anatomy gave him a perspective from which to demonstrate analogies between human and primate anatomies, and also differences between human species such as the Neanderthal and homo sapiens. The advertisements at the end of the book are dated February 1863 in this copy, later issues appearing in March and later months the same year.

16 [Kingsley, Rev. Charles.] A carte de visite of Kingsley. *London: John & Charles Watkins,* c. 1880s. **£25**

A head-and-shoulders carte de visite of Kingsley, photographers' details printed beneath image and to verso, identified in pencil to verso, image slightly faded.

Kingsley (1819-1875), the author of *Glaucus, or, The Wonders of the Shore* (1855) and *The Water-Babies* (1863) "welcomed the publication of Darwin's *Origin of Species* in 1859 because it seemed consistent with his own idiosyncratic theory of related moral and physical evolution" (ODNB).

17 [Lubbock, Sir John.] A carte de visite of Lubbock. *London: Elliott and Fry,* n.d. c. 1880s. **£25**

A head-and-shoulders carte de visite of Lubbock, photographers' details printed beneath image and to verso, identified in pen to verso, VG.

Lubbock (1834-1913), first Baron Avebury, was born into a banking family, resident at High Elms when Darwin moved to Downe a few miles away in 1842. "Lubbock's lifelong interest in natural history started with his early introduction into Darwin's 'inner circle' and membership of such groups as the Royal Institution, the Geological Society, the Royal Society (FRS 1858), and the X Club, and persisted through his enduring idea that natural selection provided a 'true cause' that could be applied to such disparate fields as archaeology and entomology" (ODNB).

18 Müller, Fritz [Johann Friedrich Theodor]. Facts and Arguments for Darwin. *London: John Murray,* 1869. **£675**

First English edition, later issue. 8vo. pp. vii, 144, 32 (pubs' list, dated January 1875); very good in the original cloth, gilt, rubbed, minor wear to spine ends.

Müller (1821-1897), the German biologist who emigrated to Brazil to join the new colony established by Hermann Blumenau in Santa Catarina, became an early supporter of Darwin's theory of evolution, and in 1864 published his *Für Darwin*. He sent a copy to Darwin, who had it translated for his own use, but its importance prompted Murray to publish this translation by W. S. Dallas, in a format similar to Darwin's *On The Origin of Species.*

Item 20

Item 21

Item 22

Item 23

19 Owen, Richard. 'Descriptions of Three Skulls of Western Equatorial Africans - Fan, Ashira, and Fernand Vaz - with some Admeasurements of the rest of the Collection of Skulls, transmitted to the British Museum from the Fernand Vaz, by P. B. Du Chaillu.' *[London: Printed by W. Clowes and Sons],* n.d. c. 1867. **£250**

First separate ed. 8vo. pp. 24; wood-cut illusts. to three pages; VG in plain blue wrappers with MS title to upper wrapper, ex-libris Dr. Hamy with his inkstamp to half-title and a library label to upper wrapper, some time folded with central vertical crease throughout. A presentation copy, inscribed "à Mons Georges Pouchet de son Ami Rd. Owen", with the additional MS note "Don de M. George Pouchet Paris 1870" (perhaps in Hamy's hand).

An offprinted version of Appendix I to Paul du Chaillu's *A Journey to Ashango-Land* (1867). Owen had asked the explorer to collect for him "skulls of natives of Western Equatorial Africa", and du Chaillu had satisfied this request, sending one hundred examples back to Owen from the coast before setting off into the interior.

20 [Playfair, Sir Lyon.] A carte de visite of Playfair. *London: Elliott and Fry,* n.d. c. 1880s. **£25**

A head-and-shoulders carte de visite, photographers' details beneath image and to verso, identified in pen to verso, VG.

Playfair (1818-1898) studied chemistry with Thomas Graham in Glasgow and London, and with Liebig in Giessen. He discovered and investigated the nitroprussides.

21 Russell, Bertrand. Physics and Experience. *Cambridge University Press,* 1946. **£20**

First edition. 8vo. pp. 26; previous owner's inscription at front, else very good in the original printed wrappers.

The Henry Sidgwick Lecture, delivered at Newnham College, Cambridge, 10 November 1945.

22 Shipley, A. E. "J." A Memoir of John Willis Clark Registrar of the University of Cambridge and sometime Fellow of Trinity College. *London: Smith, Elder & Co.,* 1913. **£45**

First edition. 8vo. pp. xi, 362, [2, ads.]; 2 ports. inc. frontis., one double-page plan; a little spotting, else very good in the original cloth, gilt, author's compliment slip loosely inserted.

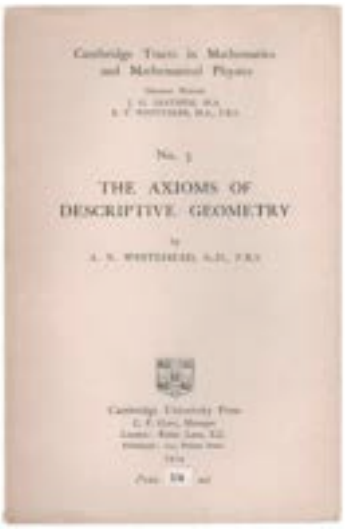
Clark (1833-1910) was Superintendent of the Cambridge University Museum of Zoology, and in this capacity had dealings with prominent figures of the day; an account of his time at the Museum appears as Appendix 1.

2 3 [South Georgia.] Einar Lönnberg. Contributions to the Fauna of South Georgia. I. Taxonomic and Biological Notes on Vertebrates. *Uppsala & Stockholm: Almqvist & Wiksells,* 1906. **£50**

First edition (separate printing). 4to. pp. 104; two chromolithographic plates of birds after originals by A. Ekblom, ten further plates including photo. illusts. and one double-page litho. of a whale; unopened and disbound.

This monograph by Swedish zoologist Lönnberg is based on collections made by Erik Sörling, who accompanied C. A. Larsen on a whaling voyage and spent November 1904 to September 1905 on South Georgia. The work effectively summarises knowledge of the ornithology of South Georgia, with coloured plates of several birds, and photographs of the King Penguin. Lönnberg also covers some of the whales and seals found. Published as no. 5 in the series *Kungl. Svenska Vetenskapsakademiens Handlingar* (volume 40), this is the version extracted from a bound series volume.

24 Whitehead, A. N. The Axioms of Descriptive Geometry. *Cambridge: At the University Press,* 1914. **£175**


Cambridge Tracts in Mathematics and Mathematical Physics

No. 3

THE AXIOMS OF DESCRIPTIVE GEOMETRY

by

A. N. WHITEHEAD, Sc.D., F.R.S.

Cambridge University Press

Reprint [1st ed. 1907]. 8vo. pp. viii, 74, 2 (pubs. list); very good in original printed wrappers, chipped to extremities, "WHITEHEAD" written in ink along spine.

In 1906 and 1907 Whitehead produced two small volumes - *The Axioms of Projective Geometry* and the present work - for the series Cambridge Tracts in Mathematics and Mathematical Physics. Written during the same years that he was working with Bertrand Russell on their *Principia Mathematica* (1910-13), the Cambridge tracts were composed in traditional notation, rather than the notations of symbolic logic employed for the *Principia*. Nonetheless, Whitehead adopts an axiomatic approach, and writes in his Preface "after the statement of the axioms, the ideas considered are those concerning the association of Projective and Descriptive Geometry by means of ideal points, point to point correspondence, congruence, distance, and metrical geometry". The present copy is the 1914 reprint by CUP, one of the niceties of which is that Whitehead and Russell's *Principia Mathematica* features in the publisher's list at the rear.

25 [Wilberforce, Samuel.] A carte de visite of Wilberforce. *London: Elliot & Fry,* n.d. c. 1880s. **£25**

A half-length portrait carte de visite, photographers' details verso, trimmed to foot with loss of photographers' details where one time contained in an album, original owner's inscription to verso.

Wilberforce (1805-1873), the son of William Wilberforce, became Bishop of Oxford, and in the 1860 Oxford debate on Evolution opposed Darwin's views as championed by Thomas Huxley. The information written to the verso reads "Wilberforce Bishop of Newcastle Latest photo Bought Feby. 11th 1888".

From item 23