Giulio Alessandrini (or Julius Alexandrinus de Neustein) (1506–1590) was an Italian physician and author of Trento who studied philosophy and medicine at the University of Padua, then mathematical science, and Greek language and literature. A physician of great renown, he served the emperors Ferdinand I., Maximilian II. and Rudolph II. He was a devoted follower of both Galen and Plato, and translated many of Galen’s works into Latin, adding his own commentary, as well as those of the Byzantine physician Joannes Actuarius. Maintaining that the famous De Theriaca ad Pisonem was falsely attributed to Galen, he opposed the use of theriac in fevers. He also entered into a drawn-out dispute with Giovanni Argentero over galenic teaching. His writings are marked by the actuality of the topic, as for example in his Salubrium sive de sanitate tuenda in which he discusses methods to preserve health and prevent illness, advocating amongst other physical exercise, rest, and alimentation.

Alessandrini was celebrated by Pietro Andrea Mattioli as an innovator of 16th-century medicine.

Provenance: Werner Rolfinck (1599-1673), German physician, scientist and botanist, with his inscription on title. Rolfinck studied at Wittenberg under Daniel Sennert, and at Leiden, Oxford, and Padua. He became a Professor at Jena University in 1629, and rearranged and expanded the botanical garden there. His experimental research involved chemical reactions and the biochemistry of metals, acquiring him the title of ‘director of chemical exercises’. He rejected the view that other metals could be transformed into gold.

Very rare Latin edition, translated from a Greek manuscript at the Vatican Library of Autolycus’ work on the rising and setting of the fixed stars. Little is known about Joseph Aurea, who translated and edited the work from a Greek manuscript at the Vatican. [Aurea] is believed to have lived in Naples around 1590, where he was renowned as a mathematician. His name might be derived from Italian Doria. He translated Heron and Diophantos from Greek into Latin and edited new translations of the books of Autolycus, Theodosius of Tripoli, and Euclid’s Phaenomena... For his Diophantos edition, Aurea wrote a number of preparatory manuscripts preserved now in libraries (Paris and Milan). Aurea’s edition could have become a synthesis of the two classes of Diophantos manuscripts, alongside the emendations by the humanists. The undertaking was nearly successful, but unfortunately the manuscript never got to print (Ad Meskens, Travelling mathematics, pp. 161-162).
book – the only one to have been translated into English – concerns ‘Ibn Sina divided his Canon of Medicine into five books. The first Granjon’ (Norman).
d’eMedici from Arabic fonts designed by the French typographer Robert of Man). The Arabic edition ‘was printed under the auspices of Cardinal own which in some respects superseded them’ (Printing and the Mind the West ideas of the great Greek writers and also introduced ideas of his 1114–1187). Through these printings Avicenna’s work transmitted to of and commentaries on, the Latin translation by Gerardus of Cremona first Arabic printing appeared in 1593, and there were many editions all universities … The Canon was translated into Hebrew (1491), the of Rhazes – and in its Latin translation became the authoritative book in superseded all previous works – even the great medical encyclopaedia of Khazars – and its Latin translation became the authoritative book in all universities … The Canon was translated into Hebrew (1493), the first Arabic printing appeared in 1593, and there were many editions of and commentaries on, the Latin translation by Gerardus of Cremona (1114–1187). Through these printings Avicenna’s work transmitted to the West ideas of the great Greek writers and also introduced ideas of his own which in some respects superseded them’ (Printing and the Mind of Man). The Arabic edition ‘was printed under the auspices of Cardinal de’Medici from Arabic fonts designed by the French typographer Robert Granjon’ (Norman).

Ibn Sina divided his Canon of Medicine into five books. The first book – the only one to have been translated into English – concerns basic medical and physiological principles as well as anatomy, regimen and general therapeutic procedures. The second book is on medical phytotherapy, arranged alphabetically, following an essay on their general properties. The third book concerns the diagnosis and treatment of diseases specific to one part of the body, while the fourth covers conditions not specific to one bodily part, such as poisoning and obesity. The final, fifth, book is a compendium of compound remedies (M. Nasser, A. Tibi, and E. Savage-Smith, ‘Ibn Sina’s Canon of Medicine: obesity. The final, fifth, book is a formulary of compound remedies’ in J R Soc Med, 2009).

As described above, this copy contains the complete Canon, and is here bound without the collection of philosophical and metaphysical treatises, al-Najat. The imprimatur of the Typographia Medicea being located at the end of the index to Avicenna’s Liber canonis, it suggests the al-Najat, which commonly follows, to be a late addition or an afterthought. Whether the composition of this copy represents an original version or is due to the publisher’s inclination regarding the make-up of the volume, which included issues with either a Latin or Arabic title (see Thomas-Stanford, Early Editions of Euclid’s Elements p. 17). The copy preserved at the American University of Beirut is bound exactly as here.

Provenance: the rare fine end-paper with the note ‘De Raritate Oper[a]’ (a copy with a Latin title page); Norman 1951 (with the al-Najat); Schnurrer, Bibliotheca Arabica 393 (with a complete collation); not in the Wellcome catalogue. Although a number of copies of the Medici Press Avicenna are recorded in institutions, many are seriously defective and the work is extremely rare on the market. Adams A 2522 (with the al-Najat); Bibliothèque Nationale, Inventaire des Livres Imprimés Arabes, 1514–1959, p. 415; Durling 376 (without proper collation provided); Garrison and Morton 44 (without collaboration); Index Arabolium 110.828; LeFaux, Notable Medical Books p. 93 (a copy with a Latin title page); Norman 1951 (with the al-Najat); Schnurrer, Bibliotheca Arabica 393 (with a complete collation; not in the Wellcome catalogue.)

EUR 80.000.-
The theory of sound and hearing

**BACHMEYER, Wolfgang.**

Calender-Vereinigung. Das ist: Wohlmönend und unsorgfältisches Bedenken und Gutachten, woe breeds, Alt und Neue Calendar zuvernehmen, mit einander zuverreignen, und in eine rächtige und beständige Form zu bringen. Habesano Anno 1654. ... Uml, gedrucht durch Balthasar Kühnen, bestellten Buchtruchern daulift, 1661. Quarto (190 x 150 mm) 20 Bl. (incl. engraved title), 174 pp., 21 Bl. 18th century mottled calf, green morocco lettering piece, gilt spine in compartments. From the "South Library", Shrubhill Castle of the Earls of Macclesfield, with engraved Edshua on inner cover, fine condition.

EUR 3.400.-

**BARTOLI, Daniello.**

La tensione e la pressione disputanti qual di loro sostenga l’argentovivo ne’ cannelli doppo introduction of the Gregorian calendar in the Protestant and Reformed. Only edition, a rare work on the calendar reform by the Protestant pastor, astronomer and cartographer from Ulm, Wolfgang Bachmeyer (1597–1689), a friend of Kepler who reviewed the Rudolfinian tables, and who supported the calendar reform and the introduction of the Gregorian calendar in the Protestant areas of Southern Germany. To this end, he played a leading role in the lengthy discourse on the introduction of the Gregorian calendar in the Protestant and Reformed territories. Before he had printed this work, he submitted expert reports to the Reichstag in Regensburg in the years 1651 and 1654 in which he presented the advantage of the new calendar and recommended it to be introduced. In the appendix to this book, he published an Easter calendar for the years 1650–1800 and an everlasting church calendar. The beautiful engraved allegorical title show the association of old & new calendar. "Don Alon um Newen Caleners Vereinigung" – VD17 39:119205A; Housenou–Lancaster 1387.

EUR 1.800.-

**BARTOLI, Daniello.**

Del nuovo de’ tremer armornico e dell udito. Rome, Nicolò Angelo Tinassi, 1679. 4to, pp. [16], 330, [1], with several woodcut initial and diagrams in the text, a very good copy in contemporary vellum; title with traces of an early ink inscription of a Jesuit college.

Scarcely first edition of Daniello Bartoli’s work on acoustics and the sense of hearing, a treatise in which he search for the physical basis of music were heard in hand and in hand with the search for its anatomical and physiological base in line with the musical studies carried out by the scientists of the Royal Society of London and the Académie Royale des sciences in Paris (Wilbur Applebaum, editor, Encyclopedia of the Scientific Revolution: From Copernicus to Newton). Bartoli was the youngest of three sons and barely fifteen when embraced a vocation to the Society of Jesus in 1623. Debuted by his superiors because of his manifest literary talents from the missions in the Indies he would later describe, he attained high distinction in science and letters. Giacomo Leopardi later celebrated him as the ‘‘Duone di Italian prose’’. After a novitiate of two years at Novellara, Bartoli resumed his studies in Piacenza in 1625. In Parma (1626–29) he completed his philosophate and (1629–34) he taught grammar and rhetoric to the boys of the Jesuit collegio. Under Jesuit scientists Giovanni Battista Riccioli and Niccolo Zucchi the young Bartoli, together with his younger contemporary Francesco Maria Grimaldi was involved in noteworthy experiments and discoveries of the planetary heavens. Bartoli along with Zucchi is credited as having been one of the first to see the equatorial belts on the planet Jupiter on May 17, 1630. And in his old age he would return to the world of science.

 EUR 1.900.-

Important work on the experiments of Torricelli, Pascal, Otto v. Guericke and Boyle on the vacuum & on the theory of capillarity. One of two variants in the same year.

Daniello Bartoli (1608–1665) was an Italian Jesuit writer, celebrated by the poet Giovanni Leopardi as the ‘‘Duone di Italian prose’’. His father, Triburino was a chemist associated with the Court of Alfonso II d’Este. Under Jesuit scientists Giovanni Battista Riccioli and Niccolo Zucchi the young Bartoli, together with his younger contemporary Francesco Maria Grimaldi was involved in noteworthy experiments and discoveries of the planetary heavens. Bartoli along with Zucchi is credited as having been one of the first to see the equatorial belts on the planet Jupiter. In his old age he would return to the world of science.

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He was ordained a priest in 1634 and continued his studies in Milan and Bologna. In his thirties he was an esteemed preacher delivering the Lenten sermons at the principal Jesuits churches of Italy including Ferrara, Genoa, Florence and Rome. He took his final vows as a professed Jesuit in Pistoia on July 31, 1643. In 1649 his treatise on the man of letters, L’huomo di lettere catapulted him to national celebrity and international fame as a leading contemporary writer of his Baroque age. For the rest of the century Dell’huomo di lettere received occasional reprints and translations abroad. During the process of her conversion to Roman Catholicism at the hands of the Jesuits in the 1650s Christina, Queen of Sweden specifically requested a copy of this celebrated work to be sent to her in Stockholm. Heading to preach in Palermo he survived a shipwreck off Capri in 1646, but lost the manuscrypts of his sermons. Because of his growing fame his superiors put an end to his decade as an itinerant preacher and brought him permanently to the order’s headquarters in Rome. In 1648 he was appointed Jesuit historiographer and spent the next four decades writing his great history, as well as moral, spiritual and scientific treatises.

Bartoli’s work in sound and hearing was of some influence and the work was almost immediately reprinted, with a Bologna edition appearing in 1680.

Gamba 1775; Willmore lip. 109; this first edition not in Kritsvet; OCLC locates six copies in the US, at Burndy, Huntington, New York Public, Pennsylvania, Stanford, and Case Western.
BARTSCH, Jacob.

Usus Astronomicus Indicis Aspectuum veterum et praecip. novorum, compendiose sine Calculo  1600 x 138 mm. pp. 27 with two folding engraved plates. Title within ornamental type border. An attractive antique calf, small stain in outer blank margin, spine gilt, red morocco lettering piece on spine.

EUR 4,900.–

The instrument show seven concentric orbits of the planets in the ptolemaic system with the time of the circulation, daily way at heaven, etc. including a hand or movable ruler.

BERLICOM (Berlicum; Burlicom), Andreas (Andries) van.


EUR 3,800.–

Very rare book on motion, maybe also translated into Dutch as: In de natuurliicke dingen aan te mercken, haer mate, reden, en gewicht, de oorsaecken van de bewegingen: beweegselen … of the same year.

The book is a treatise on metaphysics, astronomy, and biology, arranged somewhat spuriously in Euclidean sequences of ‘definitions’ and ‘theorems’, and expounding a broadly mechanistic physics which distinguishes between several different kinds of fundamental motion. Abraham du Prat wrote to Hobbes in April 1656 on this book and Huygens made notes out of it.

Andreas van Berlicom (ca. 1587–1656) studied philosophy and law at Leiden, became Secretary of Rotterdam in 1628 (succeeding the famous Cornelis Musch), and was appointed curator of the Latin school there in 1641. He was an amateur mathematician and as an important figure in Rotterdam had some contacts with both Descartes and Huygens and also with the mathematician Jan Stampioen. He remained Secretary of Rotterdam until his death in July 1656. One entry in the Dutch biogr. Dictionary says that his Elementorum was published in 1654, but this must be an error: the dedicatory epistle to Louis XIV is dated in October 1655. - Widekind, Verzeichniss raren Büchern 401; not in 17cent. Dutch Philosophers.


The instrument was designed by Jacob Bartsch and engraved by Jacob van der Heyden of Strasbourg. A seven disc set in a 330 mm square box with largest disc 305 mm. It was priced by E. P. Goldschmidt cat. 29, no 24 with 24 GBP. No other records of the first edition since then. This second edition here has an enlarged text and new plates and is different.

Bartsch (1600-33), was Kepler’s son-in-law and helped him compile his table of logarithms, assisted him on the Tabulae Rudolphinae, and, after Kepler’s death, took over the printing of the Somnium but died before publication was completed. Bartsch studied astronomy at the University of Leipzig and medicine at the universities of Strasbourg and Padua. This is a work of practical astronomy and is most remarkable for its large (330 x 320 mm.) engraved plate depicting a horizontal planetarium (its workings are described in the text). In three of the outer corners there are engraved seven moving pointers intended to be cut up and mounted. Fine copy. The 1624 is very rare, and the plates are often missing (see copies in Göttingen, Munich, Hildy Ltlanda, p. 244). Zinner, Instrumente, p. 245; Suzanne Karr Schmidt (May 2006). Catalogue of European Single-Sheet Interactive Prints, 1450-1700 no. 280; Kastner, Geschichte IV, 407 ff.

In the introduction Bartsch praised the Strasbourg instrument maker Johann Friedrich Schmiedt for his knowledge and skills. He has probably seen a similar instrument with him.

He then describes the instrument based on aspects newly introduced by Kepler. In astrology, an aspect is an angle the planets make to each other in the horoscope, also to the ascendant, midheaven, descendant and other points of astrological interest. Aspects are measured by the angular distance in degrees and minutes of ecliptic longitude between two points, as viewed from Earth. According to astrological tradition, they indicate the timing of transitions and developmental changes in the lives of people and affairs relative to the Earth.
First edition of his natural philosophical poem influenced by Lucretius.

Nicolaus (Nicolaas) Biesius (or Biese or Biesen) is a somehow forgotten humanist scientist of the Louvain circle. He had studied at Ghent and at Louvain, travelled to Spain to study in Valencia, studying further on in Siena, before he became prof. of medicine at Louvain University in 1558 to teach galenic medicine and a sort of natural philosophy. He lectured less on surgery and practical medicine, more on philosophy and medical methodology. He was in contact with several humanist, like Crato, Camutius, Clusius, Guenther of Andernach, Hajek, and Alexandrinus. When John Dee travelled on the Continent between 1548 to 1551 he met in Louvain ‘with some learned men, and chiefely mathematicians, as Gemma Frisius, Gerardus Mercator, Gaspary Mitra, Antonius Gogena, &c., but also Biesius’ atomistic philosophy seems to have attracted Dee. Biesius was undoubtedly one of the influences on Dee’s thinking at this time: He had listed various kinds of occult art and observed that they all seemed to have originated in the precept that all things are bound in an inevitable series of causes and that all bodies were governed by incorporeal forces. (Deacon, Dee 20-21) Biesius also became academic orator to the Duke of Alva. Due to his fame he was invited in 1571 by roman emperor Maximilian II. to became his personal physician in Vienna. Cornelius Gemma has already succeeded him as prof. of medicine in Louvain in 1569. Biesius died in Vienna after a heart attack in 1573 and Rembertus Dodoens followed him in the post as personal physician to Maximilian II.- Adams B2035; Thorndike II, 395. Provenance: later [17th-cent.] biographical annotation about the author to an old blank leaf at the front and an illegible signature to the upper cover in a similar hand. KVK: Neuburg/ Donau; Erlangen; Stabi Berlin (war lost), Tier, Münster, Diozöse Köln; Zentralbibliothek Zürich; COPAC: Edinburgh, Cambridge, Chetham; OCLC: not in NLM

BIESIUS (Biese, Biesen), Nicolaus van.

De universitate libri tres, quibus universa de natura philosophia continetur - Antwerpiae (Antwerpen), Apud Martium Nutium (Martin Nuyts) sub Ciconijs anno salutatis, 1556. 4to (199 x 140 mm). pp. (8), 224, (16) with one fold. table at T5. Woodcut device on title, initials, geometrical diagrams, folding letterpress table, errata leaf at end, variable spotting, staining and browning throughout, a few dark spots occasionally affecting letters, a few marginal tears or chips without loss. Contemporary limp vellum, new endpapers, spine rather worn, boxed. Old rebacking.

EUR 4.000.-

Rare first edition of Boeddicker’s drawings of the Milky Way, with later handwritten dedication by Patrick Moore on the label.

"Boeddicker’s work may be considered almost the only detailed representation of the northern portion of the Galaxy” later previous drawings were either more prominent features of the Milky Way, or like the one by Hess are mainly intended to show the relative intensity of different areas.

The drawings by Trouvelot, executed in 1874–76 fairly represent the naked-eye appearance of the Milky Way, but in far less detail than Boeddicker’s in which the complexity of structure is very remarkable.

"By the late 19th century, constellation figures no longer graced the pages of scientific star atlases. Yet these artistic lithographs of the Milky Way from a leading English observatory show how art and scientific astronomy were not disjointed but might remain associated in other ways. Boeddicker’s drawings of the Milky Way as it appears to the unaided eye were based on observations made over a five-year period. At Birr castle, near Dublin in Ireland, Lord Rosse devoted his considerable wealth to building better and better telescopes in an effort to continue the legacy of William Herschel. When Boeddicker’s drawings were displayed at the Royal Astronomical Society in London in 1889, they were highly praised for their careful delineation of the Milky Way’s intricate structure. This work consists of four lithograph reproductions of Boeddicker’s drawings. Plate II shows the Milky Way in the vicinity of the constellation Cassiopeia, and Plate IV gives a panoramic overview. Otto Boeddicker (1853–1937), a german astronomer, published drawings of naked-eye observations of the Milky Way made over a period of six years (1884–89) in an astronomical assistant of Lawrence Parsons, 4th Earl of Rosse (1840–1908) at Birr Castle in Ireland. Parsons was the son and successor of the astronomer William Parsons who built the “Leviathan of Parsonstown”, the largest telescope of its day. The telescope was dismantled in 1908. The original drawings were exhibited at the Meeting of the Astronomical Society in November 1889.

BOEDDICKER, Otto.

The Milky Way from the north pole to 10° of the south declination drawn at the Earl of Rose’s observatory at Birr Castle.- London, Longmans, Green & Co., 1892. 2 preliminary leaves, 4 lith. plates in size 460 x 590 mm. Original blue cloth folder.

EUR 2.500.-
Billy taught mathematics at Reims from 1631 to 1633. Around this time he became a close friend of Claude Gaspar Bachet de Méziriac, the commentator on Aristarchus whom he introduced to indeterminate analysis. Billy became master of studies and professor of theology at the Collège de Dijon, where one of his students was Jacques Ozanam, whom he taught privately because there was no chair of mathematics at the college, and in whom he instilled a profound love for calculus. Billy became master of studies and professor of theology at the Collège de Dijon, where one of his students was Jacques Ozanam, whom he taught privately because there was no chair of mathematics at the college, and in whom he instilled a profound love for calculus.

First edition, the Paris issue (see below) of this very rare and major astronomical work by a highly esteemed mathematician and early champion of Leibnizian analysis. Billy taught mathematics at Reims from 1631 to 1633. Around this time he became a close friend of Claude Gaspar Bachet de Méziriac, the commentator on Aristarchus whom he introduced to indeterminate analysis. Billy became master of studies and professor of theology at the Collège de Dijon, where one of his students was Jacques Ozanam, whom he taught privately because there was no chair of mathematics at the college, and in whom he instilled a profound love for calculus. Billy became master of studies and professor of theology at the Collège de Dijon, where one of his students was Jacques Ozanam, whom he taught privately because there was no chair of mathematics at the college, and in whom he instilled a profound love for calculus.

Divided into 9 books the Opus astronomicum presents a complete course in astronomy: book I treats the Sun, book II the Moon, book III eclipses, IIII the fixed stars, V Saturn, VI Jupiter, VII Mars, VIII Venus, and IX Mercury. The third book includes a catalogue of solar and lunar eclipses from 754 B.C. to 1659. Much of the observational data is supplied by hand at the time, and the oversized tables contained here, separately printed ‘tabula parallaxeon Lunae’ with its pagination (see below), slightly short at outer margin, but uncut and with page numbers supplied in contemporary manuscript; one oversized table outside foliation bound in after leaf Mmm4, mounted on a stub and with the lower margin folded in to avoid cropping; another table similarly inserted on a stub after Ppp2 and equally folded in at lower margin; a few marginal paper flaws, one that occurred during printing, affecting a few letters on Rr3; some intermittent browning owing to the quality of the paper of the period; a few leaves with tiny worm trails to lower gutter, four leaves with dampstain to upper outer corners; nonetheless overall a very good, large copy with many uncut lower edges in contemporary vellum over soft boards.

EUR 6.000.–

Billy, Jacques de.

Opus astronomicum in quo siderum hypotheses, eorum motus tum medijs tum serui, tabulorum condendorum ratio, eclipsum putandarum methodus, observationum praxem, catterorumque omnium quae ob astronomos pertactantur, scientiarum calculi, bres ac facilis via exponent. Dijon, Pierre Pailloit, and Paris, Elias Josset, 1661. 4to, pp. 1-501, 517, [1, errata], with numerous tables and diagrams (many half page) in the text; an unsigned leaf ‘tabula parallaxeon Lunae’ following 14 mounted on a stub at the time of binding (see below), slightly short at outer margin, but uncut and with page numbers supplied in contemporary manuscript; one oversized table outside foliation bound in after leaf Mmm4, mounted on a stub and with the lower margin folded in to avoid cropping; another table similarly inserted on a stub after Ppp2 and equally folded in at lower margin; a few marginal paper flaws, one that occurred during printing, affecting a few letters on Rr3; some intermittent browning owing to the quality of the paper of the period; a few leaves with tiny worm trails to lower gutter, four leaves with dampstain to upper outer corners; nonetheless overall a very good, large copy with many uncut lower edges in contemporary vellum over soft boards.

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EUR 6.000.–

Bussatti, Marco.

Regola … per la quale brevemente s’insegna di trovare l’Epatta, l’Aureo numero, & li tempi della luna, in perpetuo; & la cagione della correzione dell’anno. Con una tavola delle sole fisse, & altre cose curiose, & molti utili à chi di ciò diletta. Ravenna, Francesco Toldanii, 1583. 4to. ff. [6], pp. 1-18, 1, blank, 136, with woodcut arms on title and several woodcut initials, with the exception of one double page table the text within typeset throughout, the unnumbered pages 57 and 58 of the first part reprinted, with the final page appearing on the recto and the penulimatte on the verso; a little foxing; hole to outer margins of the final two leaves, minimally touching one border; occasional light marginal dampstaining; a good copy in contemporary vellum; inner hinge cracked.

EUR 1.900.–

Bussatti, Marco.

Regola … per la quale brevemente s’insegna di trovare l’Epatta, l’Aureo numero, & li tempi della luna, in perpetuo; & la cagione della correzione dell’anno. Con una tavola delle sole fisse, & altre cose curiose, & molti utili à chi di ciò diletta. Ravenna, Francesco Toldanii, 1583. 4to. ff. [6], pp. 1-18, 1, blank, 136, with woodcut arms on title and several woodcut initials, with the exception of one double page table the text within typeset throughout, the unnumbered pages 57 and 58 of the first part reprinted, with the final page appearing on the recto and the penulimatte on the verso; a little foxing; hole to outer margins of the final two leaves, minimally touching one border; occasional light marginal dampstaining; a good copy in contemporary vellum; inner hinge cracked.

EUR 1.900.–

First edition of Bussatti’s work inspired by the recent calendar reform allowing for the calculation of the year of Easter, and the calculation of the lunar phase. The opening section of the Regola explains the application of a Golden Number to each year in sequence to indicate the year’s position in 19-year Metonic cycle, which approximates to a common multiple of the solar year and the lunar month. A double-page table that follows shows the epochs for every year of the years 1383 to 1504. He explains the calculation of movable feasts, accompanied by a table of calculations up to 1508. The lunar part of the work discusses topics related to the calendar and the months and seasons of the year, some in question and answer form.

APPENDIX

The printer’s device of Bussatti’s Giardino di Filosofia (see below) appears on pages 23 and 24. Ongoing throughout the work are his typical pedagogical italics, quotations, and other annotations.

EUR 1.900.–

First edition of Bussatti’s work inspired by the recent calendar reform allowing for the calculation of the year of Easter, and the calculation of the lunar phase. The opening section of the Regola explains the application of a Golden Number to each year in sequence to indicate the year’s position in 19-year Metonic cycle, which approximates to a common multiple of the solar year and the lunar month. A double-page table that follows shows the epochs for every year of the years 1383 to 1504. He explains the calculation of movable feasts, accompanied by a table of calculations up to 1508. The lunar part of the work discusses topics related to the calendar and the months and seasons of the year, some in question and answer form.

EUR 1.900.–

Knowledge of the lunar phases then and now is equally a subject of much importance in agriculture and gardening. Bussatti’s influential Giardino di Filosofia appeared in 1592.

This work appears to be extremely rare, with no copies recorded in OCLC.

EUR 1.900.–

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This work appears to be extremely rare, with no copies recorded in OCLC.

EUR 1.900.–
Very rare first edition of the first Italian translation of Ptolemy’s Planisphaerium, including a learned commentary and Bottigaro’s own observations.

Ptolemy’s Planisphaerium can be translated as ‘celestial plane’ or ‘star chart’. In this work Ptolemy explored the mathematics of mapping figures inscribed in the celestial sphere onto a plane by what is now known as stereographic projection. This method of projection preserves the properties of circles. Originally written in ancient Greek, Planisphaerium was one of many scientific works which survived from antiquity in Arabic translation. One reason why Planisphaerium attracted interest was that stereographic projection was the mathematical basis of the plane astrolabe, an instrument which was widely used in the medieval Islamic world. In the 12th century the work was translated from Arabic into Latin by Herman of Carinthia, who also translated commentaries by Maslamah ibn Ahmad al-Majriti. The translator was the wealthy humanist & musician Ercole Bottrigari (1531–1612), who was educated at home and Bologna University, and whose interests included science, mathematics, architecture, Greek philosophy, and music. Having acquired profound learning in several scientific and artistic disciplines, he devoted much of his work to theoretical musical subjects. He wrote remarkable essays on music theory and practice and published books of madrigals, including Il primo libro di madrigali a quattro voci (1558) and Libro terzo de madrigali a cinque voci (1583). In 1546 Bottrigari established a small private press with the help of his father, but very few works from it survive. In 1576 he fled to Ferrara, where he got to know Torquato Tasso, and where he gathered information for his 1594 treatise Il Desiderio, overo de’ concerti di varii strumenti musicali. In 1586 he moved back to Bologna, where he was in touch with intellectuals such as Zarlino and A. Melone.

At page 67, with separate title page, starts an interesting section dedicated to mathematics: ‘Numerali operationi occorrenti nel trattato’.

EUR 2.800.–

First edition. At the behest of the Pope, Boscovich carried out a damage survey of a tornado in Rome and published it, along with a review of existing tornado theories. It was probably the most complete description of the early scientific efforts to understand tornadoes prior to Alfred Wegener’s book in 1917.

In Italy, the astronomer and mathematician Geminiano Montanari (1633–87) had already studied a tornado that occurred in the Veneto region on 29 July 1656. Published posthumously in 1694, Montanari’s study is one of the earliest detailed accounts of a tornado in Europe. But the most influential studies on tornadoes in Europe published before the nineteenth century was written by Bosovich in 1749 (Peterson 1982). Roger Joseph Boscovich (1711–87), a Jesuit polymath who was a precursor of atomic theory and made contributions to astronomy and geodesy, investigated a tornado that occurred on the night of 11–12 June 1749. The tornado started as a waterspout over the Tyrrhenian Sea and then moved inland, parallel with the river Tiber from Ostia to Rome. At the request of Cardinal Silvio Valenti Gonzaga (1690–1756), Boscovich conducted a three-week study of the damage caused by the tornado in Rome, and the results were published in a book in 1749. The book, which also contains information on other tornados that occurred in Italy and discussions on tornado formation, had a great influence on Benjamin Franklin’s theories on the formation of waterspouts. In 1756 Franklin sent a letter to Massachusetts physician John Perkins (1699–1781), Experimenta Nova de Aeris Motu, describing his observation of a tornado that had struck New England in 1750. In 1757 Franklin published his observations in a paper titled ‘A Description of a Tornado’. Franklin’s study was one of the earliest attempts to understand tornadoes in the United States. In 1766 Newton constructed a small private press with the help of his father, but very few works from it survive. In 1756 he died in Italy, where he was in touch with intellectuals such as Zarlino and A. Melone.

EUR 6.500.–

Very rare works on two newly designed sun-dials: a cylinder sundial clock and a cruciform sundial with copper plates intended as paper instruments. Paper sundials were commonly made in the imperial merchant city of Nuremberg in the late sixteenth and early seventeenth centuries. Such paper dials could be easily traded between scholars, and the engraved copper plates made them inviting for innovations and new discoveries. A guide to create a polyhedral dial from a flat pattern is seen in one of Brentel’s later works which includes his characteristically detailed vignettes. Georg Brentel the younger (1581–1654), son of a map painter, was a south German artist (painter & draftsman), engraver and instrument-maker; he constructed especially different sun-dials. Brentel was a painter & architect, but evidently he was more zealous with mathematics and astronomy, writing works in these subjects and creating instruments. He developed a special interest in the design of sundials. Since 1603 until 1619 several short writings on different sundials and instruments appeared every year. He had a high reputation creating instruments. He developed a special interest in the design of sundials. He had a high reputation dreaming of the comet’s progress and path, he records astronomical readings, and temperature.

The great comet of July 1819 observed by Piazzi’s successor at the Royal Observatory, Palermo

First edition, very rare, of Cacciatore’s observations of the comet of 1819, one of the hastily produced publications printed by the Reale Stamperia on behalf of the observatory. Born at Casteltermini, Sicily, Niccolò Cacciatore (1770–1841) studied mathematics and physics at Palermo. He there became acquainted with Giuseppe Piazzi, head of the Palermo Antemural Observations. He became a graduate student at the observatory in 1798, and a member of staff in 1800. Cacciatore helped Piazzi compile the second edition of the Palermo Star Catalogue (1814), and in fact did the bulk of the work. He succeeded Piazzi as director in 1817, two years before the present publication. The Great Comet of 1819, an easily visible, exceptionally bright comet, was discovered on July 1, by Johann Georg Tralles in Berlin, Germany. Tralles was discovered that it was polarized. He then observed the nature cure, Capelle, which did not show polarized light. This indicated that some light from the comet’s tail was reflected from the sun. This marked the first polarimetric observation of a comet. The folding plate shows a detailed diagram of the comet’s parabolic path, with two small images of its shape and appearance at top and one at lower right.

Provenance: from free-end-paper inscribed ‘Alla gentilissima Sig.ra D. ne Caravina di Simone in testimonianza di stima e rispetto / l’Autore’. On the same day that Cacciatore began his observations, François Arago analysed the light from the comet’s tail using a polarimeter, and discovered that it was polarized. He then observed other nature cure, Capelle, which did not show polarized light. This indicated that some light from the comet’s tail was reflected from the sun. This marked the first polarimetric observation of a comet. On the same day that Cacciatore began his observations, François Arago analysed the light from the comet’s tail using a polarimeter, and discovered that it was polarized. He then observed other nature cure, Capelle, which did not show polarized light. This indicated that some light from the comet’s tail was reflected from the sun. This marked the first polarimetric observation of a comet.

Della Cometa apparsa in luglio del 1819 osservazioni e risultati. [Palermo], della Reale Stamperia, 1819. 4to, pp. [vi], 72, with an engraved title vignette, one engraved head-piece, and a folding engraved plate; the first three or four leaves a little browneed or spotted at upper blank margins; a few leaves near the end with the narrow wormtrack to inner margins; the plate with a short tear to blank area near the gutter, far away from the image, and a bit stained in the margins; a very good copy, printed on thick paper, in contemporary calf-backed boards, inner hinge a little weak and the binding lightly soiled and with a wrinkle near to the extremities; presentation inscription in ink at front free-end-paper (see Provenance, below).

EUR 1.800.-

On the same day that Cacciatore began his observations, François Arago analysed the light from the comet’s tail using a polarimeter, and discovered that it was polarized. He then observed other nature cure, Capelle, which did not show polarized light. This indicated that some light from the comet’s tail was reflected from the sun. This marked the first polarimetric observation of a comet. In fact, it did the bulk of the work. He succeeded Piazzi as director in 1817, two years before the present publication. Cacciatore’s observations of the comet of 1819, one of the hastily produced publications printed by the Reale Stamperia on behalf of the observatory. Born at Casteltermini, Sicily, Niccolò Cacciatore (1770–1841) studied mathematics and physics at Palermo. He there became acquainted with Giuseppe Piazzi, head of the Palermo Antemural Observations. He became a graduate student at the observatory in 1798, and a member of staff in 1800. Cacciatore helped Piazzi compile the second edition of the Palermo Star Catalogue (1814), and in fact did the bulk of the work. He succeeded Piazzi as director in 1817, two years before the present publication.
A post-Galilean manuscript course absorbing the new astronomy

CALCAGNI, Girolamo, attributed to.

Della fabrica del mondo ouero cosmografia. Trattato, nel quale si discorre di tutte le parti che non si possa movere circolarmente …' (Girolamo on folio 10).

A highly interesting and finely illustrated astronomical treatise in dialogue form in the immediate post-Galilean period, discussing and absorbing the new astronomy.

Still largely unstudied, this is the earlier of two recorded versions of this text, the other originally stemming from the collection of the noted historian of science and Galileo expert, Stillman Drake, and now held at the Thomas Fisher Library, Toronto.

Possibly compiled for private instruction, and highly likely inspired by Galileo’s Dialogo, this extensive manual employs two interlocutors, a the title-page.

Possibly compiled for private instruction, and highly likely inspired by Galileo’s Dialogo, this extensive manual employs two interlocutors, a

Leading through from the elemental to complex astronomy, the treatise - apparently compiled the year after Galileo’s death in 1642 - frequently cites, then questions and challenges the teachings of the ancients, whilst cautiously presented and phrased: ‘L’opinione e la dottrina de moderni astrologi e piu conforme al vero, e l’esperienza (sic) stessa mostra il contrario di quello che hanno insegnato gli antichi. Dicemo dunq[ue]…

Whilst arguments in favour are always refuted, the purpose of the questioning tone appears clear. A number of dialogues discuss geographical questions and details, and a table provides longitudinal and latitudinal data on various European cities. Folios 40-44 provide brief information on distances and sizes of various countries, kingdoms, and islands, including Sumatra, Borneo, the Philippines, the Moluccas, Japan, Cule, and Haininolah. Following a 7 page index to this first part there is another group of dialogues concerning astronomical questions such as parallax, as well as astrophysical questions, illustrated with a number of finely executed diagrams, some in ink wash. Folio 74 verso includes a reference to the existence of moving sun-spectre, the venus of the leaf mentions the telescope, and refers to Kepler. There are discussions of solar eclipses, the epicycles of the various planets and, from folio 96 to 102, a dialogue on comets and cometary theory, including the important question whether comets are sublunary phenomena or not. The final dialogues are on the stars, the milky way, the constellations, and astrology.

As mentioned before, the passages concerning the ‘moderns’ contained in this manuscript are cautiously phrased, and all of the side-notes found in the margins refer to the traditional model only. Galileo is nowhere mentioned.

Our manuscript appears to form the basis of another, later version of this text, originally in the collection of the noted historian of science and Galileo expert Stillman Drake, and now preserved at the Thomas Fisher Library, Toronto. Written in the same hand, the newer Fisher manuscript shows some changes to the text, and was possibly intended to form the basis of a printed version.

Provenance: contemporary armorial device on title page of the Calcagni family of Ferrara in the province of Emilia-Romagna, one of the most thriving centers of Italian Renaissance culture – the place where Copernicus earned his degree in Canon Law, and Paracelsus his degree in medicine -. inscribed ‘Comitis Hieronymus Calcanei’ beneath the escutcheon, presumably the Girolamo Calcagni of the text, and maybe the same Girolamo Calcagni recorded as the purchaser in 1610 of the Castello di Montecastagneto in the same province; later ownership inscription (partly washed away) in Latin, signed ‘Marsilii Antonii’ and dated 1725 below; an addendum, in the same hand as the text, to one of the blank leaves at the end of the manuscript and dated 20 February 1643, lists two publications that may have been of particular interest to the author: Regiomontanus’ De cometis of 1472 and Girolamo Sirtori’s Della fabrica del mondo ouero cosmografia. Trattato, nel quale si discorre di tutte le parti che non si possa movere circolarmente …' (Girolamo on folio 10).

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First edition of this description of the solar eclipse which occurred on July 8, 1842, with the path of the eclipse shown on the map. A solar eclipse occurs when the Moon passes between Earth and the Sun, thereby totally or partly obscuring the image of the Sun for a viewer on Earth. Francis Baily observed the total solar eclipse from Italy, focusing his attention on the solar corona and prominences and identified them as part of the Sun’s atmosphere. Abate Giovanni Battista Capelli (1801 near Pavia–1877) joined the Brera Astronomical Observatory (Milano) in 1828 and was appointed Assistant in 1839. In 1862 he had achieved the rank of First Assistant and in 1872 he became the Third Astronomer. He devoted himself above all to meteorological observations, discussing the results in order to establish the Milan climate. He also dealt with position astronomy by publishing the results of his observations in the Milan Astronomical Ephemerides. — Lit.: G. Schiaparelli, Vierteljahresschrift der Astronomischen Gesellschaft, XIII, 1878, Pogg. KVK: outside Italy only St. Andrews; Columbia Univ.

CAPPELLI, Giovanni Battista.

Relazione dei principali fenomeni osservati nel totale eclisse solare del giorno 8 luglio 1842 ... — Milano: presso l’ incisore Dom. Bonatti, 1842. 8° (230 x 150 mm) pp. 32 with one fold. map and one engraved fold. plate showing the eclipse. Green Publisher wrappers, fine copy.

EUR 600.—

CASATI, Paolo.

Opticae dissertationes: in quibus plura physice explicantur de visibilibus de visione, de apparentiis visus. — Parmae: ex typographia Joseph Rosati, 1705. Quarto (217 x 162 mm) pp. (8), 92, (4) with half title, title with woodcut device, headpieces and initials, large woodcut diagram (some spotting, staining and browning throughout, a few darker spots occasionally affecting letters). Contemporary vellum, lightly stained.

Very rare first edition of his last work: on optical sciences, vision and apparitions.

Paolo Casati (1617–1707) is an interesting and understudied figure in Jesuit intellectual life in the generation after Galileo. After he had finished his mathematical and theological studies, he moved to Rome, where he took on the role of Professor at the Collegio Romano, the Jesuit university. After teaching philosophy and theology, he was given, due to his outstanding mathematical ability, the chair in mathematics. In 1677 he moved to Pavia, where he remained until his death. He is best known as the principal “handler” of Queen Cristina’s highly politicized conversion to Catholicism, leaving no doubt about his orthodoxy. He also wrote a work on a Galileian – style proportional compass and is credited by Baldini as a champion of Galileian mechanics, on which Casati lectured in Rome. The astronomical work Terra machinis mota (1658) imagines a dialogue between Galileo, Paul Guldin, and Marin Mersenne on various intellectual problems of cosmology, geography, astronomy and geodesy. For example, they discuss how to determine the Earth’s dimensions, floating bodies, the phenomena of capillarity, and also describe the experiment on the vacuum made by Otto von Guericke in 1654. The work is remarkable for the fact that it represents Galileo in a positive light, in a Jesuit work, only 25 years after Galileo’s condemnation by the Church. Casati also discussed the hypothesis of horror vacui, that nature abhors a vacuum, in his thesis Vacuum proscriptum, published in Genoa in 1649. Casati confused the existence of both vacuum and atmospheric pressure, but he did not rely entirely on scientific observation, and refers to Catholic thought in order to back his claims. The absence of anything implied the absence of God, and hearkened back to the void prior to the story of creation in the book of Genesis. This book is due to its rarity not yet properly studied.

EUR 4,500.—

CASATI, Paolo.

Mechanicorum libro octo. In quibus uno eadem principis sectis vires physicu explicantur & geometrice demonstrantur, atque machinarum annui generis componendarum methodus proponitur. — Lyon, Anisson, Jean Porel and Claude Rigaud, 1684. 4to (231 x 170 mm). [xvi], 799 pp., with printer’s device on title and numerous woodcut illustrations and diagrams in text; title repaired without loss, heavy stain to half title not affecting letters, variable browning, spotting and staining throughout. 18th-century burgundy morocco gilt, spine gilt in compartments, some wearing to spine, rubbed.

EUR 1,400.—
Johann Friedrich Wilhelm von Charpentier (1738–1805), a colleague of the famous Abraham Gottlob Werner (1749–1817). Charpentier’s book is the earliest colored geological map of Germany. The first maps used symbols to characterize single outcrops; later maps introduced shaded areas to display the distribution of specific rock-types, but the high printing costs of these maps were prohibitive. The Freiberg Mining Academy became the most important geological institution of the time and not only inspired in part by the appearance of the rocks, as basalt is often dark in color and also the signature for sand seems obvious, other colors seem to be used just for convenience. Therefore this map was never intended for a wider distribution or larger public and only one copy survives today. In the following years other naturalists produced regional maps with “rock-colors” added to make them easier to read, especially to the aristocratic landowners (interested in the distribution of resources on their proper-ty and potential buyers of the costly maps). The Freiberg Mining Academy was one of the first scientific institutions were this method was widely adopted. In 1775 a former student of the Academy became professor there—the famous Abraham Gottlob Werner (1749–1817). Werner not only established a basic rock classification scheme but also proposed a specific color scheme to display these rock-types. With Werner the Freiberg Mining Academy became the most important geological institution of the time and not only German, many foreign naturalists visited the academy and attended lectures there. Soon the color scheme as proposed by Werner was known by most geologists of the time.

**CHARPENTIER, Johann Friedrich Wilhelm von.**

"Mention must be made of Clavius’ improvement of the Julian calendar. Pope Gregory XIII brought together a large number of mathematicians, astronomers, and pedologists, who decided upon the adoption of the calendar proposed by Clavius, which was based on Renaissance’s Promissus Tables. To rectify the errors of the Julian calendar it was agreed to write in the new calendar 15 October immediately after 4 October of the year 1582. The Gregorian calendar met with a great deal of opposition from scientists such as Viète and Scaliger and from the Protestants (2008)."

A step by step rebuttal, Clavius first proves Scaliger’s critique on each of which his answer follows.

**CLAVIUS, Christoph.**

'It is certain that the Gnomon'..."
CLEOMENES [BALFOUR, Robert, editor & translator]

Meteorum Graece et Latin., A Roberto Balfouro ex ms. codicis bibliothecae illustrissimi Cardinalis Loyosii multa mendis repurgatus, Latinis versa, et perpustum commentario illustratus... Two parts in one volume.

Bordeaux, Simon Millanges, 1605. Quarto. [xvi], 126 pp., [2, blank], [129]-285 pp., [3], [2, blank]. Greek text and Latin translation in parallel columns; title printed in red and black with typographical ornament, title to the second part (p. 129) with woodcut printer’s device, wood-cut diagrams throughout. A very good copy in contemporary stiff vellum, spine lettered in ink; from the library of Sir Edward Sherburne and the Macclesfield Library.

EUR 4,800.-

First edition of Clesomades handbook on Greek astronomy.

Clesomades’ chief authority is Posidonius, and it is unlikely that he himself added anything original (two sentences affixed to the end of the manuscripts expressly state this), but he also used other sources to which sometimes disagreed with Posidonius’ views (see I, vi, 32–33). His own astronomical knowledge was that of the well-educated Latin writer of this time, and its limitations are sometimes apparent—in I, vi, 28, after giving a highly inaccurate arithmetical scheme for calculating the length of the day, he asserted that the ecliptic intersects the equator “nearly at right angles”; in II, iv, 105 he rejected altogether the possibility of annular solar eclipses; in II, vi, 123 that of the “paradoxical” case, when the eclipsed moon rises while the sun appears to be still above the horizon. Where he understood his sources, however, he gave a clear and useful account of basic astronomical phenomena. (Staehle: 338).

Rare German prognosticon

CNOLLUS (Knoll), Christoph.


RARE GERMAN PROGNOSTICON

EUR 3,900.-
The nova of 1604 – a divine exclamation point

The nova of 1604 lacked the full burden of novelty of the earlier occurrences [in 1572] in the sense that the possibility of this kind of event was now established. Although it was widely believed that God could do anything, no one in 1572 had foreseen that he would choose to make a star appear where none had existed before. The 1604 nova, by contrast, appeared not as a solo event but as a kind of divine exclamation point for the conjunction that the prognosticators had anticipated. Perhaps this unexpected union of ordinary and extraordinary circumstances is one reason that the writings about the 1604 nova took a more controversial turn. The early seventeenth-century controversy with universities at the center of contention.

Between 1605 and 1606, Padua, Florence, Rome and Venice were witness to no fewer than ten publications – some spaced as closely as a month apart …

Ludovico delle Colombe, who soon became one of Galileo’s great antagonists in Florence, believed the nova to be an already-existing entity, the visibility of which was blocked by patches of density in the starless crystalline sphere that lay beyond the fixed stars. As transparent regions of the sphere came between an observer and the previously hidden star, visibility was enabled in such a way that a pair of specularly as the nova itself, was a point of reference in astronomy and astrology.

The last quarter of Colombe’s book was devoted to an all-out, Piconian-style attack on astrology and the Heavens, as held by Cecco de Ronchitti. Early astronomical instrument


Johannes Copp von Raumenthal, also known as Johan Copp (ca. 1487–1531) came from a southern German nobility family. He worked as physican at Hochheim, Vienna University and at the Imperial Court in Prague (under Ferdinand I) and was asked by Gustav Vasa in 1535 to become his personal physician. He was summoned by Gustav Vasa to Sweden. He served as a kind of mediator of the king and the dukes. Copp seems to have been a well-educated person for his time. Zacharias Bornmann is also known through his published star atlas: Astros (1596). An astrolabe (a-astrolabium) is an elaborate inclinometer, historically used by astronomers and navigators to measure the inclined position in the sky of a celestial body, day or night. It can thus be used to identify stars or planets, to determine local latitude given local time (and vice versa), to survey, or to triangulate. It was used in classical antiquity, the Islamic Golden Age, the European Middle Ages, and the Renaissance for all these purposes. The astrolabe is effective for determining latitude on land or at sea, although it is less reliable on the heaving deck of a ship in rough seas.

Zweite Ausgabe, die erste in der Bearbeitung von Z. Bormann. Johannes Copp von Raumenthal, also known as Johan Copp (ca. 1487–1531) came from a southern German nobility family. He worked as physician at Hochheim, Vienna University and at the Imperial Court in Prague (under Ferdinand I) and was asked by Gustav Vasa in 1535 to become his personal physician. He was summoned by Gustav Vasa to Sweden. He served as a kind of mediator of the king and the dukes. Copp seems to have been a well-educated person for his time. Zacharias Bornmann is also known through his published star atlas: Astros (1596). An astrolabe (a-astrolabium) is an elaborate inclinometer, historically used by astronomers and navigators to measure the inclined position in the sky of a celestial body, day or night. It can thus be used to identify stars or planets, to determine local latitude given local time (and vice versa), to survey, or to triangulate. It was used in classical antiquity, the Islamic Golden Age, the European Middle Ages, and the Renaissance for all these purposes. The astrolabe is effective for determining latitude on land or at sea, although it is less reliable on the heaving deck of a ship in rough seas.

First edition of an exceedingly rare book in the debate about the supernova of 1604 by the Florentine Aristotelian philosopher.

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Only edition with a photograph of Darwin

**DARWIN, Charles.**

Umbrella the plant art in the 1850s and 1860s from and to a variety of landscapes: trade and science (Shaffer, editors, The Literary and Cultural Reception of Charles Darwin in Europe, vol. III, 2014).

Regarding this letter, Darwin expressed his satisfaction with Jenner's work on smallpox immunization, commenting that Jenner had done him much good; his sickness had subsided enough for him to carry out tasks like counting seeds of Lythrum, which had published Les fleurs du mal a few years earlier – summarized the main theoretical ideas of both the species and the variety of antacids and purgatives, and limited Darwin's fluid intake; throughout his life Darwin suffered from periods of gastrointestinal distress, as well as headaches, fatigue, trembling, faintness, and dizziness. The particular bout of illness Darwin refers to in this letter likely was a condition known as porphyria, characterized by intermittent attacks of nausea, vomiting, and drowsiness, which can result from the metabolism of certain porphyrins.

In May, Darwin finished his paper on Lythrum, in the Linnaean Society of London, thus completing the work he started on the genus in 1862. His paper on Lythrum sylvestris was accompanied by a short note on the dimorphic aquatic cut-grass Leersia. Darwin exclaimed to his close friend, the botanist Joseph Dalton Hooker, “What a delightful day! Mr. Darwin fitted out on his own from his sickbed in April, carried out tasks like counting seeds of Lythrum...”

In the same month, Darwin began to consult William Jenner, professor of clinical medicine at University College, London, and physician-in-ordinary to the Queen. Jenner, who had published his famous text on smallpox in 1798, was later appointed director of the Royal Smallpox Hospital in London. He was later appointed director of the French railway company ‘Chemins de fer de Paris à Lyon et la Méditerranée.’

Laugel published articles in various journals, such as the Revue des Deux Mondes, including an ‘excellent and appreciative notice of the Origin’ (Francis Darwin, The Life and Letters of Charles Darwin vol. 1, p. 539), a review held in high regard by Darwin from a man whom he described as ‘very agreeable, clever, & charming’ (letter to J.D. Hooker, April 17, 1863), and whose views on slavery and the American Civil War he shared (letter to Ada Gray, April 19, 1863). Laugel had sent a copy of his article to Darwin at the time of its appearance in the Revue. ‘It was from more popular or accessible sources than translations that many readers planned their thoughts of what Darwin said or meant...’

While the image is notable as the first popular image of Darwin, the extent to which Darwin disliked it is also remarkable. Referring to the copy he had sent five years previously in his 1860 letter to Hooker, Darwin ex-plained “for Heaven’s sake oblige me & burn that now hanging up in your room. It makes me look so extremely wicked.”

One of the photographs used as a frontispiece in the German edition of Darwin’s work on the Beagle journey was probably made in 1857. Henry Maull received from Darwin the permission to distribute it in late 1862.

The photograph was produced in July of the original by Carl Johann Siegmund Buchner (1821-1918) who worked as artist in Stuttgart and became photographer of the Württemberg Court in 1885 (Th. St. V. 180).

By 1853, Darwin’s life as a naturalist was well established, and he was gaining in popularity thanks to his account of his journey on the Beagle and his two volumes of Journal of Researches that resulted from that voyage. Darwin, who followed Jenner’s example in 1863. In a letter of 26[-7] March [1864], Darwin exclaimed to his close friend, the botanist Joseph Dalton Hooker, “How charmingly we screwed up a little more work in natural history. With sincere respect & with my best thanks, I remain, dear Sir, your truly obliged Charles Darwin?”

The book’s author and recipient of the letter, Antoine-Auguste Lapel (1810-1914), was a French historian, engineer, and geologist, educated at the École Polytechnique, Paris. He was later appointed director of the French railway company ‘Chemins de fer de Paris à Lyon et la Méditerranée.’

Lapel published articles in various journals, such as the Revue des Deux Mondes, including an ‘excellent and appreciative notice of the Origin’ (Francis Darwin, The Life and Letters of Charles Darwin vol. 1, p. 539), a review held in high regard by Darwin from a man whom he described as ‘very agreeable, clever, & charming’ (letters to J.D. Hooker, April 17, 1863, and whose views on slavery and the American Civil War he shared (letter to Ada Gray, April 19, 1863). Lapel had sent a copy of his article to Darwin at the time of its appearance in the Revue. ‘It was from more popular or accessible sources than translations that many readers planned their thoughts of what Darwin said or meant...’

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One of the photographs used as a frontispiece in the German edition of Darwin’s work on the Beagle journey was probably made in 1857. Henry Maull received from Darwin the permission to distribute it in late 1862.
DAL NEGRO, Salvatore.

Nuovo Metodo di construire machine elettriche di grandezza illimitata e nuovi sperimenti diretti a riferire l’apparato elettrico dell’abate… Venezia, per Pietro Zelotti, 1779. 8° (235 x 155 mm). pp. XXXII, 112 with one fold. engrav. plate (495 x 325 mm). Contemporary blue wrappers, an excellent copy on thick paper.

EUR 1 200.-

First edition of this scarce treatise. Dal Negro (1768–1839) first studied law at Padua, but his interest shifted toward experimental physics, and the construction of electrostatic machines. Thus his first book, describes how he constructed his electrostatic machine, and some of the experiments he conducted with it. The folding plate illustrates the machine, which accompanies the instructions on how to build it. In the next few years he made various improvements to the pile of Volta, a recent invention, which he called electric motors (batteries). His interests were in the field of physics, where he devoted himself to the improvement of systems already known, but he also invented new ones. In 1809, for example, he invented a device for measuring very short spans of time, which he called an “alibrevrumento” based on a compound pendulum. The apparatus was improved several times and ultimately was used to measure both the time of falling bodies and the initial velocity of projectiles. In 1810 he perfected the hydraulic rain, invented by Montpellier. He also worked on topics related to electromagnetism. A member of many scientific societies, Dal Negro was appointed professor of experimental physics at the University of Padua. He constructed the first electric motor in 1830 and the first generator in 1832. His contributions to physics have not as yet been fully explored and evaluated.

DENORES, Jason.

Tavola… del mondo, et della sphere, le quali saranno, come introduzione a ‘libri di Aristotile Del Cielo, Delle Meteore, & de gli Animali. Con la sferetta del clarissimo M. Triphon Gabriele, nella quale con brevita, et chiarezza si descrivono i Cerchi Celesti. Padua, Paolo Miertto, 1582. 4to, ff. [2], 84, [2] 45, with woodcut device on title, and two half-page woodcuts in the text; a fine copy in 18th-century carta rustica.

EUR 2 100.–

Only edition of the Cypriot’s scholar’s Aristotelian cosmology, here rendered into synoptic tables. Divided into succinct paragraphs and columns, Denores treats the stars, the appearance of the Milky Way, thunder and lightning, the winds, and earthquakes.

De Saussure’s copy

De Saussure’s copy

DE LUC, Jean-Andre.


EUR 2 400.–

First edition of an important work by a major figure in meteorology who, in these Recherches sur les Modifications de l’atmosphère (1772) and his later Idees sur la Meteorologie (1786–1787) proposed significant advances in the design of meteorological instruments. A fine association copy.

The book is an encyclopedic compendium on the design and theory of instruments. There is a detailed history of the device along with a commentary on fourteen different designs. In conjunction with this detailed exposition De Luc reviews and criticizes the theoretical work of the principal 17th and 18th century commentators on hydrodynamics (as it relates to barometer design and theory). No less than D. Bernoulli and Leibniz came under De Luc’s scrutiny. It is in the context of this discussion that he introduces the ideas of latent heat into physics (later rigorously defined by Black). De Luc’s treatise touches on many key problems of instrument design and dramatically illuminates the practical and the theoretical issues.

“The barometric controversy between H. B. de Saussure, professor of philosophy at Geneva, and De Luc is one of lasting scientific interest. In Essais sur l’hygrométrie (1783, p. 282) Saussure stated that some of De Luc’s findings were based on erroneous reasoning and inadequate experimentation. ‘M. De Luc supposes that pure air is heavier than air mixed with water vapor… This supposition explains well why a lowering of the barometer is a sign of rain.’ Saussure, experimenting with closed containers, had found little difference in weight between dry air and humid air, and considered the differences quite inadequate to explain the large variations in barometric pressure that occurred at ground level in Europe. Modern meteorology has proved that De Luc was right, whereas Saussure was groping toward the influence of air masses and of the passage of cyclonic depressions and anticyclones.” (DSB).

Jean-Andre De Luc (1727–1817) was a Swiss chemist, meteorologist, and geologist who made several firsts in scientific discovery. He first used the term “geologie” (1778), and interpreted the six days of Moses creation as epochs of geological time. He was first to provide correct measurements of the heights of mountains by the effects of heat and pressure on a thermometer and to publish the correct rules for equivalent heights to barometric pressure. Along with other meteorological instrument ideas, he invented a hygrometer using gas as the medium for measuring the humidity of the air and became involved with French scientist Horace de Saussure (1740–1799) in arguments over evaporative theory. He noted the independence of vapor pressure to atmospheric air pressure before John Dalton (1766–1844), described the chemical and electrical effects of the electric pile, and shared with Joseph Black (1728–1799) the discovery of latent heat.- DSB IV, 29; Pogg. I, 545.

Provenance: H.(orace) de Saussure (old signatures on half titles); later inscription on title: G. B. Jan. later signature on front pastedown: Victorino G. de Lesse; Ex-Libris: Svante Arrhenius. Some old annotation over evaporative theory. He noted the independence of vapor pressure to atmospheric air pressure before John Dalton (1766–1844), described the chemical and electrical effects of the electric pile, and shared with Joseph Black (1728–1799) the discovery of latent heat.- DSB IV, 27– 29; Pogg. I, 545.

First printings are over evaporative theory. He noted the independence of vapor pressure to atmospheric air pressure before John Dalton (1766–1844), described the chemical and electrical effects of the electric pile, and shared with Joseph Black (1728–1799) the discovery of latent heat.- DSB IV, 27– 29; Pogg. I, 545.


First printings are over evaporative theory. He noted the independence of vapor pressure to atmospheric air pressure before John Dalton (1766–1844), described the chemical and electrical effects of the electric pile, and shared with Joseph Black (1728–1799) the discovery of latent heat.- DSB IV, 27– 29; Pogg. I, 545.
**D E L A N G E S, Paolo.**


First edition of this rare work by the famous Italian mathematician Paolo Delanges (or Deslanges) (1750 (?) - 1810). Much of his work was dedicated to hydrostatics and hydrodynamics and he contributed with his studies to the regulation of water in the Venetian provinces. Born at Brescia, he was captain of the corps of engineers for the republic of Venice, then professor of mathematics at the military school at Venice, later serving as director of the hydraulic commission. After the end of the Venetian Republic he retired to Brescia, where he was a honorary Inspector General of Waterworks and Roads.- Riccardi, I, 400-01; KVK: Lübeck, Göttingen; Schlatt. First edition of this rare work by the famous Italian mathematician Paolo Delanges (or Deslanges) (1750 (?) - 1810). Rare Sammelband containing two works on applied mathematics by the Italian engineer and mathematician Paolo Delanges (or Deslanges) (1750 (?) - 1810).

“The first work contains the first separate appearances of three papers by Delanges: ‘Esperienze per determinare le leggi colle quale procede la resistenza dello sfregamento del legno, e de’ metalli, e quella prodotto dalla durezza e ruvidita delle funi,’ published frequently in the Transactions of the Societa Italiana. He was a member of the Societa Italiana and of the Italian National Institute. He often worked with Lorgna and astronmer, the main rival of Giuseppe Campani, in which Divini presents his later experiments and improvements in the making of lenses and the construction of microscopes and telescopes with various multiple lens combinations.

Eustachio Divini was one of the foremost makers of optical instruments in the seventeenth century (see King, The history of the telescope pp. 58-59). He was among the first to develop technology for the production of scientifically designed optical instruments. He established himself in Rome about 1646 as a maker of clocks and lenses ... During this same period he experimented with the construction of telescopes of long focus ... He experimented with the elimination of chromatic aberration in his lenses with some success. He had received some scientific training from Benedetto Castelli, one of Galileo’s disciples (DSB).

From 1662 to 1665, there was another quarrel between Divini and Campani. Both worked in Rome, so some rivalry between them was inevitable. In those years, however, the rivalry became a hot dispute. Many “comparisons” were made between the instruments of those rivals, which Divini mentioned in his letter to Count Antonio Manzini (1666). The first public comparison took place at the end of October 1665 in the garden of Mattia de’ Medici, in the presence of the some famous astronomers like Giovanni Cassini. The contest ended in a draw since they acknowledged that Campani’s telescope had better focusing but Divini’s had bigger magnification’ (Biographical Encyclopedia of Astronomers p. 302).

Divini’s experiments aiming at the elimination of chromatic aberration are found on the final pages. It is clear too that he describes his micrometer eyepiece, first employed by him in his mapping of the moon in 1649.
DONATI, Giovanni Paolo.

Thesoria astro Speculationi Intorno alli Moti Celesti... nelle quali senza Eccentrici, Epischi, Spire, Circiori, Breviarii, u Differenti, con sano modo u adunan le celesti apparenze. – Venice: Appresso Francesco Bernardino Osano, 1575. 4to (215 x 153 mm). pp. (10), 68 with woodcut device on title, headpieces and initials, diagrams, the first few leaves browned, spotted & stained, title and one leaf repaired at foreedge, first 2 leaves somewhat crudely rehinged, some worming to last leaf affecting a few letters. 18th century mottled calf, spine gilt with red morocco lettering - pieces, some worming, extremities rubbed. Later endpapers, but overall a nice copy.

EUR 4.600.–

First edition of this strange, highly technical astrological work dedicated to Guglielmo Gonzaga who had some interest in astrology and ordered a horoscope related scheme for the decoration of the so-called astrological room at the ducal palace in Mantua for the same reason that Eleanor d’Este had ordered the scheme of constellations for her Hall.

**EHINGER, Elias.**


EUR 2.800.–

First and only edition, describing 151 comets from antiquity until his time and the comets he observed especially the famous comet in 1618. Ehinger (1573–1653) here lists all the historic comets and the ones he had observed. After a busy early life Ehinger became director of the higher school in Rothenburg a.d. Tauber and then librarian in Augsburg, where he published another work on comets in 1618. The comet described here: C. / 1618 W1 was a comet that could be seen by the naked eye in 1618 and 1619 and was the first comet to be observed with telescopes (as well as two smaller ones of the same year). While leading scientists such as Kepler, Cysat, Gassendi, or Snellius made accurate observations, others discussed at an Ulm colloquium whether these comets were divine signs (because of the recent pan-European war) or purely natural phenomena. The comet of 1618 were the first to be observed after the invention of the telescope with such instruments. In addition to more precise observation of their appearance, this also allowed much more precise measurement of their positions in the sky, which should later facilitate the calculation of the track elements. Kepler wrote about the three comets of the year 1618 in his De cometa libellus trius (1619), linking to a cognition of Brahe and Martelli. In 1577 the two succeeded in determining the passials on the comet of 1577. They were able to prove that the comets are not structures in the earth’s atmosphere, but real celestial bodies that move in circular orbits. In contrast, Kepler defended his assumption of a straightforward comet movement. In Ulm, a dialogue arose between the mathematician Fausthaler and the physician Remmelin on the one hand and the director of the Ulmer Gymnasium Helenesturm, the pastor Zimmermann Welte and the mathematician Johannes Kraft on the other. Shortly after the outbreak of the Thirty Years’ War, the question was whether the comets that appeared in the sky in 1618 were “miraculous signs” announcing the wrath of God and his punishment, or natural phenomena without any influence were at war and death, hunger and misery. On October 18, 1619, a colloquium of some scientists, including the mathematician Descartes, took place to clarify the issues in Ulm. – VD17 23 289409M; British Library 181, Brüning 811; ADB V, 697; Bucher A1009; Zimmer 4651 (1618); Cantamessa 2329.

KVK: Harvard; Stadtbibliothek Berlin; Deutsches Museum München; Augsburg; München; Wollenhaupt; Uni München; Coburg; National Library of Scotland; British Library; ETH/Zürich, Basel

**EPP, Franz.**


EUR 650.–

Original scientific study on a solar eclipse. The versatile and committed author (1733–1789), originally lawyer and later city preacher in Munich, taught in Dillingen and Munich physics, became a member of the Academy of Sciences there and promoted among other things meteorological observations. He wrote on electricity, magnetism and astronomy – ADB V, 157; Badura/G; V. 194; Fuggerstoffer I, 672.
ERCKER, Lazarus.

Folio (298 x 193 mm), ff [4] CXXXX [6, including terminal blank], title in red and black with woodcut illustration of furnaces, smelting and distillation operations and 33 large woodcut illustrations in text; lower outer quarter of leaf CXV (Ff3) torn away with old (early seventeeth-century paper with foolscap watermark) neat manuscript replacement, affecting portion of woodcut on recto and several lines of text on verso, light toning of paper throughout, marginal spotting, the last ten leaves with some heavier staining on lower third, still an attractive and appealing copy, untouched, in its original binding of a eleventh/twelfth-century Carolingian manuscript (see below), darkened and worn but intact.

EUR 66.500.-
Johann Fabricius was one of the first astronomers to observe sunspots in 1605, and then enrolled at Wittenberg University the following year. FABRICIUS, Johann. De maculis in Sole observatis, et apparente earum cum Sole conversione; Narratio cui Adjecta est de modo eductionis specierum visibilium dubitatio. Wittenberg, Lorenz Seuberlich for Johannes Borner the elder and Elias Rhefeld of Leipzig 1611. 4to, ff. [22]; lightly browned, a number of contemporary annotations in ink (some cropped); a fine copy in marbled wrappers.

The first published account of sunspot observations & the sun rotating

De maculis in Sole observatis, et apparente earum cum Sole conversione; Narratio cui Adjecta est de modo eductionis specierum visibilium dubitatio. Wittenberg, Lorenz Seuberlich for Johannes Borner the elder and Elias Rhefeld of Leipzig 1611. 4to, ff. [22]; lightly browned, a number of contemporary annotations in ink (some cropped); a fine copy in marbled wrappers.

EUR 28.000.-

![Image](image-url)

FABRICIUS, Johann.

De Maculis in Sole observatis, et apparente earum cum Sole conversione, Narratio cui Adjecta est de modo eductionis specierum visibilium dubitatio. Wittenberg, Lorenz Seuberlich for Johannes Borner the elder and Elias Rhefeld of Leipzig 1611. 4to, ff. [22]; lightly browned, a number of contemporary annotations in ink (some cropped); a fine copy in marbled wrappers.

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De Maculis in Sole observatis, et apparente earum cum Sole conversione, Narratio cui Adjecta est de modo eductionis specierum visibilium dubitatio. Wittenberg, Lorenz Seuberlich for Johannes Borner the elder and Elias Rhefeld of Leipzig 1611. 4to, ff. [22]; lightly browned, a number of contemporary annotations in ink (some cropped); a fine copy in marbled wrappers.

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FABRICIUS, Johann.

De Maculis in Sole observatis, et apparente earum cum Sole conversione, Narratio cui Adjecta est de modo eductionis specierum visibilium dubitatio. Wittenberg, Lorenz Seuberlich for Johannes Borner the elder and Elias Rhefeld of Leipzig 1611. 4to, ff. [22]; lightly browned, a number of contemporary annotations in ink (some cropped); a fine copy in marbled wrappers.

EUR 28.000.-

FABRICIUS, Johann. De Maculis in Sole observatis, et apparente earum cum Sole conversione, Narratio cui Adjecta est de modo eductionis specierum visibilium dubitatio. Wittenberg, Lorenz Seuberlich for Johannes Borner the elder and Elias Rhefeld of Leipzig 1611. 4to, ff. [22]; lightly browned, a number of contemporary annotations in ink (some cropped); a fine copy in marbled wrappers.

EUR 28.000.-
James Ferguson (1710–1776) was the son of a Scottish tenant farmer and received little formal education. While working at a variety of domestic jobs, he mastered the elements of surveying, horology, astronomy and portraiture.

Colin Maclaurin discovered Ferguson’s mechanical abilities and introduced him to Martin Folkes, who encouraged Ferguson to lecture to the Royal Society about his astronomical contrivances. A skilled designer of clocks and planispheres (as well as a ‘solar eclipsareon’), he became an accomplished public speaker and expounder of Newtonian ideas, especially after the publication of his Astronomy Explained Upon Sir Isaac Newton’s Principles (1756), which went through seventeen editions.

A dissertation upon the phenomena of the harvest moon. Also, the description and use of a new four-wheeled orrery, and an essay upon the moon’s turning round her own axis.

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Fortunato Bartolommeo Felice (1723–1789), Comte de Panzutti, was an Italian nobleman, a famed author, philosopher, scientist, and is said to have been one of the most important publishers of the 18th century. He was considered a pioneer of education in Switzerland, and a formative contributor to the European Enlightenment.

Very rare description of an invention of him: an orrery or mechanical planetarium. His first work.

FERGUSON, James.
A dissertation upon the phenomena of the harvest moon. Also, the description and use of a new four-wheeled orrery, and an essay upon the moon’s turning round her own axis. – London: printed for the author, 1747. 8°. pp. 72 [i.e. 74], with three folded engraved plates. Red morocco, gilt spine in compartment, gilt cover borders, gilt edges, spine renewed. Inside clean & fresh. A fine copy.

EUR 3.600.–

First printed in 1757, this appears to be a reissue of the original sheets with a new title-page. Clearly this issue, not in WorldCat, is much rarer than its rare predecessor. The Babson catalogue does not include this issue, but does have the 1757, calling it “seems to be rare”.

This Latin tract supports the views of Newton on gravitation, as opposed to those of G. W. Leibniz and Georg Ehrald Hamberger (1697–1755), the German professor of medicine and botany, who is known for his physiology of respiration, especially with respect to breathing. His writings included the study of gravitation and the ascension of gases.

During most of the eighteenth century the primary challenge the Principia presented to philosophers revolved around what to make of a mathematical theory of forces in the absence of a mechanism, other than action at a distance, through which these forces work. The new method of Newton, which proved most controversial at the time, was the willingness to hold questions about the mechanism through which forces effect their changes in motion in abeyance, even when the mathematical theory of the species and proportions of the forces seemed to have no alternatives but action at a distance. This aspect remained somewhat tacit in the first edition of the Principia, but then, in response to criticisms it received, was made polemically explicit in the General Scholium added at the end of the second edition. A lot of physicists of the 18th century still preferred the mechanistic Cartesian universe with celestial spaces of vortices carrying the planets.

Mechanism of gravitation?

A mechanical planetarium
GARGIOLLI, Guglielmo. *Iride celeste di Guglielmo Gargioli già Lettore delle Mattematiche nello Studio di Siena ... Strumento con il quale con facilità si può disegnare qualunque veduta, e sapere la sua giusta altezza, lunghezza, e lontananza dal luogo ove si sta a disegnare.* – Florence, Giovanni Antonio Bonardi, 1655. 4to, pp. 93 (including frontispiece with the author’s portrait), [1 leaf, errata], and five folding engraved plates; a very good copy in contemporary limp vellum; the binding slightly rubbed.

Exceedingly rare first edition. The Italian mathematician and engineer describes here the ‘iride celeste’, an instrument for drawing precise views with ease. The book was noted for its explanation of how to estimate from a distance the height of an object and its distance from the observer. This is the only printed work carried out by the author, a correspondent of Galileo, and in the service of the Medici. Guglielmo Gargioli was Professor at the University of Siena (or Studio of Siena) and Preceptor of the Paggi del Gran Duca in Florence. Together with Giovan Francesco Cantagallina, Alessandro Bartolotti, and Pietro Petruccini, Gargioli was commissioned by Ferdinand II of Tuscany to dry up the lake of Castiglione. Gargioli penned many other scientific tracts which are still unpublished in the National Library of Florence.

In the Vinciana library copy, the illustrations on pages 74-75 were corrected in the printing shop by attaching newly printed diagrams.

Riccardi mistakenly records an earlier edition of 1619 relying on Targioni, Atti, I, p. 334, but the date is obviously incorrect in respect of Gargioli’s rather obscure biography. The beautiful portrait by Della Bella is listed by De Vesme (pp. 95) as an engraving made in 1731. This created some animosity with Antonio Ghisleri, who considered himself Mezzavacca’s heir. ‘Ghisleri in 1731 published nearly a hundred pages of errors in Manfredi’s ephemerides, although modern computations show that Manfredi’s positions were generally better’ (Landolfi (ed.), *History of Astronomy* p. 507. Cantamessa 5069; see in Britain, Komorov-Literatur; OCLC: locate copies at Zürich, Paris Observatory; Columbia, Brown, and Ohio State, of which some with the variant title *Pronostico varie sopra le comete passate, e future ove si tratta il loro sistema, e calcolo ... Bologna: nella Stamperia di Lelio della Volpe, 1735. 4to, pp. [6], 246. 12], with engraved title and 10 folding engraved plates; a very clean, fresh copy in contemporary carta rustica.

EUR 2.600.–

GHISILERI, Antonio. *Predizione della cometa dell’ anno 1736. Con riflessioni curiose sopra le comete passate, e future ove si tratta il loro sistema, e calcolo ... Bologna: nella Stamperia di Lelio della Volpe, 1735. 4to, pp. [6], 246. 12], with engraved title and 10 folding engraved plates; a very clean, fresh copy in contemporary carta rustica.

One of two variants, this being probably the earlier version, later found bound together with the pamphlet on the comet of 1736. The Marchese Antonio Ghisleri (1685–1754) was a humanist and lecturer of law at Bologna University and a vivid amateur astronomer. He defended the correctness of the Ephemerides of Flaminio Mezzavacca against Eustachio Manfredi, who had begun an alternative series of Ephemerides. This created some animosity with Antonio Ghisleri, who considered himself Mezzavacca’s heir. ‘Ghisleri in 1731 published nearly a hundred pages of errors in Manfredi’s ephemerides, although modern computations show that Manfredi’s positions were generally better’ (Landolfi (ed.), *History of Astronomy* p. 507. Cantamessa 5069; see in Britain, Komorov-Literatur; OCLC: locate copies at Zürich, Paris Observatory; Columbia, Brown, and Ohio State, of which some with the variant title *Pronostico varie sopra le comete passate, e future ove si tratta il loro sistema, e calcolo ... Bologna: nella Stamperia di Lelio della Volpe, 1735. 4to, pp. [6], 246. 12], with engraved title and 10 folding engraved plates; a very clean, fresh copy in contemporary carta rustica.

EUR 2.600.–


Fine and exceedingly rare portfolio showing the Nice Observatory and its instruments. The observatory was founded in 1879 by the banker Raphael Buchoffeheim. The architect was Charles Garnier, and Gustave Eiffel designed the main dome. The 77 cm (30 inch) refractor telescope made by Henry and Gautier became operational around 1886–1887, was the largest in a privately funded observatory, and the first at such high altitude (125 m or 1,066 ft above sea level). It was slightly bigger in aperture, several metres longer, and located at a higher altitude than the new (1895) 76 cm (30 in) at Pulkovo observatory in the Russian Empire, and the 68 cm (27 in) at Vienna Observatory (completed early 1880s). In the records for the largest refracting telescopes all three were outperformed by the 91 cm (36 in) refractor installed at the Lick Observatory at 2,283 m in altitude in 1889. Jean Gilletta (1856 Levens – 1933), born Jean-Auguste Theodore Walburg de Bray and having travelled extensively throughout the south of France – often on a tricycle – to take over 10,000 iconic shots of its landscapes, architecture and subjects from the end of the Second Empire to the 1930’s. The content:

- Le personnel scientifique (18. Febr. 1911)
- Pavillon du Petit Meridien
- Le Cercle Meridien, Pavillon du Grand Meridien
- L’ Equatorial
- Le Grand Cercle Meridien, Pavillon du Grand Meridien, L’ Equatorial
- Le petit Equatorial, La petite Coupole, Le Grand Equatorial
- La petite Coupole, La Coudé, Le Petit Coudé, L’entree.

EUR 1.800.–
HAGECIUS ab Hayek, Thaddeus (Tadeas).

 Astrologia apocaluca antiqua. Fragmentum Astrologicum ... quomodo medicatio ad astrologicam rationem sit accomodata. Liber regum de significatiobus planetarum in duodecim domicillis coeli ... Liber Hermetis centum aphorismorum ... quomodo medicatio ad astrologicam rationem sit accomodata. Prague: Georg Melantrich, 1554. 4to. 61 Bll. Contemporary pigskin over wooden boards, marginal. M. G. (Haebler I, 150 f; probably Matthias or Matthias Garnier from Augsburg), one clasp of two missing. Different notes from antiquarian booksellers incl. small stamp Helmuth Domizlaff (1902-1983) on endpapers and Ex-Libris of J. B. Holzinger.

(bound with:) CARDANO, Girolamo.

Libelli quinque et unum. Quorum duo priores, iam demou et sunt emendati, duo sequentes iam primum in lucem editi, et quinta magna parte auctae est. I. De suplementis Almanach. II. De restitutione temporum et motuum coelestium. III. De iudicio gentium. IV. De exemplis centum gentium. V. De additis eiusdem regnri. Sex. De rectarum et obliquarum eclipticae et stellarum et radiorum, usque ad latitudinem octo partium. Eiusdem, antea non edita, iudiciis geniturarum. IIII. De revolutionibus. V. De exemplis centum gentium. Additis insuper Tabulis ascensionum et declinationum. Le liber regum [da F1 verso a H1 verso] est attribué à Gergis, alias Germa de Babylone, selon Thorndyke, History, t. II, p. 718. KVK: BNF; Munich; Dresden; Berlin; Göttingen; Wolfenbüttel; Basel; Oxford; Minneapolis; Chicago; New York Academy of Medicine; University of Texas; Yale; Kansas City; Berkeley; UCLA; Smithsonian Institution; McGill.

EUR 6.900.-
Kepler on comets: a remarkable work with some of his findings considered equivalent to the modern theory of tail formation, Kepler's de cometis furthermore opened a new chapter in physical astronomy.

First edition of one of Kepler's rarest works, his remarkable publication on the comets of 1607 and 1618.

"Kepler's theory of comets, on the one hand, explained the formation and change of the tails based on mechanical interaction of celestial bodies, and on the other hand, it acknowledged a kind of matter circulation (or redistribution) in the heavens. Later, modified versions of these concepts formed the foundation of Newton's theory of comets" (Teleg Haidarzadeh, A History of Physical Theories of Comets, From Aristotle to Whipple, pp. 65-66). As mentioned above two of the folding letterpress tables (those to pages 44 and 72) are bound in twice. Provenance: relatively unusually the two large folding diagrams carry manuscript notes with instructions to the binder in block ink to the outer and inner margins respectively. The much more extensive one to the outer margins of the first page: 'Diese figur gehört auch zwischen 36 und 37: doch muss nicht [the 'nicht' crossed out] hinder die andre eben...'. Scanned on-line versions taken from other copies of this work apparently do not contain similar notes.

Wilhelm Grafach in Kepler, Four Hundred Years, p. 79.

KEPLER, Johannes.

De Cometis libelli tres. I. Astronomicus, theorematum continens de motu cometalurn ... II. Physicus, continens Physiologicam Cometalum nostram ... III. Astrologicus, de significatimibus Cometarum Annorum 1607, & 1618. Augsburg, Andreas Aperger, 1619[-20]. 4to, pp. [viii], 138, [2, blank]; with two folding woodcut diagrams and five folding letterpress tables (two in duplicate, see below), one folding diagram with an old tape repair, glazed yellow thumb markers to title and sectional titles, said of the usual heavy browning; a very good copy, with some uncut leaves, in 18th-century style calf-backed boards; stamp of the "Königl. Kaiserl. Universitätsbibliothek, Vienna" to several leaves, including versos of most tables, and with their duplicate or release stamp superimposed. EUR 29.500.-
LEUTMANN, Johann Georg.

Instrumenta Meteorographicae Inserentia I. Thermoscopia, II. Baroscopia, III. Hygrosopium, IV. Anemometrum, V. Pluviometrum, VI. Hydrometrum, quorum constructio in plurimis correcta ... Wittenberg: Sumptibus B. Gedof. Zimmermann, 1725. 8vo (168 x 105 mm). 14 BL. incl. frontispiece, 175 pp., (1) with mezzotint frontispiece, title printed in red and black, headpieces, tables, 16 engraved plates, partly folding. Contemporary half vellum, rubbed and chipped, some pp., (1) with mezzotint frontispiece, title printed in red and black, headpieces, tables, 16 engraved plates, partly folding. Contemporary half vellum, rubbed and chipped, some browning, but a fine copy in original binding.

This first edition, a rare book on instruments, especially for meteorology. Johann Georg Leitmann (Leitmann) (1667–1736), a learned and versatile glass cutter & instrument maker from Wittenberg, was one of the academics from Germany, who worked at the St. Petersburg Academy of Sciences. After completing his studies at Wittenberg University, he worked as a pastor in nearby Dabrun, where he set up his own mechanical workshop. At that time he wrote a book on the basics of heating technology and demanded an effective heating system with the lowest possible consumption of fuels. Also in 1718, his book on watches appeared, which aroused the interest of our Peter I who invited Leitmann to St. Petersburg in 1726. He became Professor of Mechanics and Optics at the Academy of Sciences there. He devoted himself to the construction of various apparatuses and instruments like measuring instruments, pumps, microscopes, binoculars and rifles – VD18 11412674 (Note: the plates are numbered I-XI, but V & VI are bound later as listed in Hinder’s report) – COPAC BL London, Royal Society; OCLC: Harvard, National Oceanic; Madison, Wisc.; Vancouver.

Eudiometer invented

LANDRIANI, Marisilo.

Ricerche fisiche intorno alla salubrità dell’aria ... Milan: G. Marilli, 1775. 8° (204 x 135 mm). pp. (2), XIII, (1), (2), 92 with engraved title page, two engraved headpieces, and three folding engraved plates by G. Cattaneo, partly affected by worming. Chan & fresh, printed on strong paper. Carta rustica, inner cover with Ex Libris: Biblioteca Sormani Andreani Verri.

EUR 2.800.–

Rare first edition of this important work in the history of chemistry, his first book which translates as: "Physical investigations on the salubrity of air", in which he described a new instrument, the eudiometer, to measure the purity of air, which was later improved by Volta with the addition of spark wires.

Throughout the 18th century, a bewildering variety of ‘airs’ was discovered. In Pariackham, Stephen Hales used a water trough to collect ‘atmospheric air’ (nitric oxide) produced by nitric acid reaction with metal, keeping it from the atmosphere which was to become known as ‘acid orange fumes’. In London, Henry Cavendish isolated ‘inflammable air’ (hydrogen) from the reaction of metals with acids. Combustion was gradual in these studies, but it was mostly understood. A substance of fire, phlogiston, was invoked to explain the presence of materials rich in phlogiston burned in air until the air became saturated with phlogiston and combustion caused ‘phlogisticated air’ (N2 and CO2) to be isolated by Daniel Rutherford and Black. By keeping careful track of the volumes of gas he was mixing, Joseph Priestley made a remarkable observation: when ‘atmospheric air’ mixed with ordinary air in the presence of water, there was a startling one-fifth contraction in the volume. Priestley believed he had found a way to measure the ‘goodness’ of the air. This finding caused a huge stir across Europe. In Milan, Priestley’s work was read avidly by Marisilo Landriani (1751–1815), the son of a patrician lawyer. Landriani devoted himself to ‘pneumatic studies’ under Pietro Moscati, professor of surgery at Milan’s main hospital. As Landriani wrote in his book, there was so much to be discovered that even a beginner such as he might contribute. What intrigued him was that by removing the plug at the bottom of a sealed glass tube, phlogiston burned in air until the air became saturated with phlogiston and combustion ceased. ‘Phlogisticated air’ (N2 and CO2) was isolated by Daniel Rutherford and Black. By keeping careful track of the volumes when ‘atmospheric air’ mixed with ordinary air in the presence of water, there was a startling one-fifth contraction in the volume. Priestley believed he had found a way to measure the ‘goodness’ of the air. This finding caused a huge stir across Europe. In Milan, Priestley’s work was read avidly by Marisilo Landriani (1751–1815), the son of a patrician lawyer. Landriani devoted himself to ‘pneumatic studies’ under Pietro Moscati, professor of surgery at Milan’s main hospital. As Landriani wrote in his book, there was so much to be discovered that even a beginner such as he might contribute. What intrigued him was that measuring the ‘goodness’ of air might explain both the origin of disease and another enduring mystery – the motion of mercury in Evangelista Torricelli’s barometer.

He repeated Priestley’s experiment. But rather than using clumsy gas jars, Landriani designed a compact system. He moulded a glass bulb above a graduated glass tube of similar volume linked by a stopcock. The tube sat in a movable bowl of water, and could be sealed at the bottom with a sealed plug attached to a metal spiral. After filling the apparatus with water from the top, nitrous air was drawn into the bulb by removing the plug at the bottom. Next the water was allowed to fall to the bottom of the tube, drawing in a slug of air. With the device stopped, the slow mixing of the gases caused the water to be drawn back up the tube giving the change in volume. Landriani proudly named it an eudiometer, from the Greek for ‘wholesomeness of air’. But as Landriani wrote up his work, Moscati became aware that the Tuscan court physician Polc Fontana in Paris had built a very similar device. Crestfallen, Landriani presented Fontana with a copy of his book, cunningly pointing out his priority. Fontana generously conceded. But in spite of Landriani corresponding with Priestley and sending him an eudiometer, it was the better-connected Fontana’s version that was noticed abroad.

However, Landriani’s friend A. Volta went one step further. He equipped an eudiometer with spark wires to study gas combustion. Though he noticed ‘dew’ on the glass after exploding ‘inflammable air’, it was Cavendish and Lavoisier, working in dry glassware, who realised water was being produced; it was the dawn of a new chemistry. Landriani’s work brought him acclaim in Italy and the chair of experimental physics at the Brera ‘Gymnasium’ in Milan, and he remained a lively correspondent with scientists across Europe. Between 1787 and 1788 Guyton de Morveau and Antoine-Laurent Lavoisier tried to convince Landriani to change over to the new chemistry, but he never was able to decide between phlogiston and oxygen. But his attachment to phlogiston theory left him mired in a scientific time warp; he eventually switched to an unsuccessful career in diplomacy.
Appended to Martius' work is a critical commentary by the Italian humanist and classical scholar Giorgio Merula (c. 1430–1494). The Merula's critical commentary appended was the Milan edition of 1490. The present work contains the descriptions of the experiments with the largest electrostatic generator of the 18th-century. The engraved plates show the enormous machine, its functioning and conducted experiments. The 8 colored plates in the second part illustrates the various metals and brine alloys.

-binding and provenance: bound in a thick vellum sheet, a generous section of the outer edges folded in; the vellum sheet attached to the book block via two strips of stone and trivalent across the spine, no front or rear paste-downs, as per its original structure; the book block attached across its back and onto three sets of thin cardboard over short vellum guards; the guards equally exposed at the back, the whole allowing for perfect insight into the entire, original structure of the binding and the process of its making; smudged inscription to the first (of two) front fly-leaves, verso-contemporary inscription “Casper van Escherlbaech” at head of title below what appears to be a Latin motto; another inscription, with the surname partly erased and dated 1646 to the center of the title-page; a third early inscription “Ex Supellectili Jo[ann]is Philippi... Volta also greatly admired van Marum’s work…” (DSB). The last supplement is missing as nearly always.

"These experiments were greatly admired and reported all over Europe. Van Marum concluded that Franklin was correct in his theory of a single electric fluid – Volta also greatly admired van Marum’s work…” (DSB). The last supplement is missing as nearly always.

-First edition of Marum’s description of his huge electric machine, including the rare famous plates of the large electrostatic generator built by John Cuthbertson. The present work contains the descriptions of the experiments with the largest electrostatic generator of the 18th-century. The engraved plates show the enormous machine, its functioning and conducted experiments. The 8 colored plates in the second part illustrates the various metals and brine alloys.

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-there were subsequent editions and commentaries.

-binding and provenance: bound in a thick vellum sheet, a generous section of the outer edges folded in; the vellum sheet attached to the book block via two strips of stone and trivalent across the spine, no front or rear paste-downs, as per its original structure; the book block attached across its back and onto three sets of thin cardboard over short vellum guards; the guards equally exposed at the back, the whole allowing for perfect insight into the entire, original structure of the binding and the process of its making; smudged inscription to the first (of two) front fly-leaves, verso-contemporary inscription “Casper van Escherlbaech” at head of title below what appears to be a Latin motto; another inscription, with the surname partly erased and dated 1646 to the center of the title-page; a third early inscription “Ex Supellectili Jo[ann]is Philippi... Volta also greatly admired van Marum’s work…” (DSB). The last supplement is missing as nearly always.

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Far-sighted though Mendeleyev was, he had no notion that the periodic table of the elements, as well as those of their compounds, are periodic functions of their atomic weights (relative atomic masses). In 1869, he stated that “the elements arranged according to the magnitudes of atomic weights show a periodic change of properties.”

“Mendeleev compiled the first true periodic table, listing all the 63 elements then known. Not all elements would “fit” properly using the atomic weights show a periodic change of properties”

Mendeleev didn’t achieve instant recognition for what he had done. Robert Bunsen, the celebrated German chemist of the time, rebuked one of his students who had tried to explain to him the profound significance of the discovery! “Don’t get to me with this garbage. The same “regularities” can be found in much muddier reports!” It was not until the late 19th and early 20th centuries that Mendeleev’s theory was finally acknowledged. In the first decade of the 20th century, Mendeleev was nominated for the Nobel Prize three times (1905, 1906 and 1907) and it was for purely circumstantial reasons that he did not receive it. He opposed the Nobel brothers’ policies in respect of Russian oil industry, and having failed to win twice, he was robbed of the Prize after being awarded on his third nomination, because of his untimely death in early 1907.

Provenance: from the library of the Russian engineer, teacher, and historian. These works contributed much to the development of Russian pedagogy in the 19th century. Mikhnevich’s pencil underlining or marginalia in Russian are found throughout the book. In vol. I it adds a few elements to the periodic table as well as the phrase: “somewhat different table in the new edition”, a very rare instance of proof of a contemporary’s interest and occupation with Mendeleev’s work.

EUR 55.000,-
NOVARINI, Antonius.

Anatomia Curiosa Das ist, Defl aller fürrechtschlichen höchst und edelsten Geschöffs aller Creaturen, dft Menschen, … Weisheitsheß Beschreibung und vortreffliche Verzierung, darinnen nachsichtig von dft Menschen wunderbarlich- und hoch verratlicheren Ursprung … Erster von allen eisern- und unanrückliche Miracul und Wunder … discurriert wird … Frankfurt, Franz Mayer, 1681. Folio; pp. 105, with an engraved title, the lettering there printed in red and black, and 52 plates on 25 sheets; the first eight leaves with a small oil stain, touching a few images; one page with a paper flaw; otherwise a very good copy in contemporary calf, hinges cracked at head of spine.

EUR 6,000.–

First edition of a very rare surgical work and anatomical atlas by an otherwise unknown author.

In addition to chapters on anatomy, the work contains precise instructions on various operations such as cæsarean section, removal of the tonsils, amputations, and operations on the brain. The beautiful anatomical engravings (not woodcuts as some libraries note) are mainly based on earlier designs.

Novartini’s Anatomia was first published in 1681 in Frankfurt by Franz Mayer in one volume, as here. The work must have enjoyed at least some success, medical or commercial, as it was reprinted in 1682 by Noah von Millenau at Rothenburg ob der Tauber, accompanied by a second part or volume.

The plate numbering is confusing: The plates are: title engraving, 1 unnumbered plate with instruments, then plates numbered: III, V, VI, I, VII, VIII, X, XI, XIII, II + XII + XIV + XIX, XV (folded), XVI, IX + XVII, XVIII, XX, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX. Plate 51 contains flaps to be mounted on the figure on plate 15. The printer’s device at the end is probably missing.

VD 17 15:7408848. KZM 2553 (50 plates). Wellcome IV. p. 250: Waller 307. KVK locates copies at Leipzig (citing woodcuts), Copenhagen, Staatsbibliothek Berlin (citing 51 woodcuts, but lost during the war), Munich (citing an edition of 1681/82 with an Ellwangen (?) imprint); the British Library and Wellcome erroneously cite the Frankfurt edition with a second part; the Italian online copy of the Rotterhun edition lacks the instrument plate.

EUR 3.400.–

Rare dialogue on a tornado which had devastated the Venetian hinterland in 1686, written by the Italian astronomer Geminiano Montanari and published posthumously by Francesco Bianchini. From pp. 271-312 there is: Discorso del vacuo. Montanari (1633–1687) was also a lens-maker and a proponent of the experimental approach to science. He is best known for his observation, made around 1667, of the second-brightest star (called Algol) in the constellation of Perseus varied in brightness. It is likely that others had observed this effect before, but Montanari was the first named astronomer to record it. In 1662 he moved to Padua, where he drew an accurate map of the Moon using an ocular micrometer of his own making. He also made observations on capillarity and other problems in statics, and suggested that the viscosity of a liquid depended on the shape of its molecules. In 1669 he succeeded Cassini as astronomy teacher at the observatory of Panzano, near Modena, where one of his duties was to compile an astrological almanac. He did so in 1665, but perpetrated a deliberate hoax by writing the almanac entirely at random, to show that predictions made by chance were as likely to be fulfilled as those made by astrology. On 21 March 1676 Montanari reported a sighting of a comet to Edmund Halley and his observations of the great comet of 1680 are mentioned twice in the third volume of Newton’s Principia. In 1679 Montanari moved to a teaching post in Padua, but almost all records of this period of his life have been lost. A new chair of astronomy and meteorology was created for him, but Montanari was allocated a salary in order to be fullfilled as those made by astrology. On 21 March 1676 Montanari reported a sighting of a comet to Edmund Halley and his observations of the great comet of 1680 are mentioned twice in the third volume of Newton’s Principia. In 1679 Montanari moved to a teaching post in Padua, but almost all records of this period of his life have been lost. A new chair of astronomy and meteorology was created for him, carrying a very high salary. But, the Republic of Venice, not content to have him, merely teaching, expected his advice and assistance on, the control of rivers and the protection of the Venetian Lagoon, military fortifications and the training of, the artillery, and especially the organization of the, mint and all problems having to do with currency.- Provenance: “A.N.” (old stamp on title), Rare Meteorological Society: Symons Bequest 1900 (label), sold by order of the Royal Meteorological Society 1973 (label); KVK: München, Staat Berlin, Einstein Zentrum Potsdam, Hannover, COPAC: Cambridge,Wellcome, BL London; OCLC: McGill, Cornell, Columbus, Princeton, Toronto, Smithsonian, Oklahoma, et al.; not in Rosenbach, Pustzandt, 1594; Riccardi, U. 179.

Tornados in Italy
PIERINI, Giuseppe.


EUR 1.200.–

Rare first edition, description of a wind and sun-dial which was found in 1614 in the Vigna Cassini, near Via Appia, Rome. It had been used as a gravestone in an Arenaria which formed part of the Caracost of St. Caluera. The names of the twelve winds were inscribed on it in Greek, and as it was made of Pentelic marble from quarries which were owned by Herod Atticus, Francesco Peter concluded that it had belonged to Herod’s villa, which was little more than half a mile from the place where the dial was found - CENSOR. Oxford. OCLC: no copy (?)

EUR 800.–

PIROVANO, Gabriele.

Defensio astronomiae. Milan, Leonardo de Vegiis, for Alessandro Minuziano, 1507. Folio, [52] pp., with one large woodcut diagram in the text, narrow paper strip to outer gutter of the first two leaves; the final leaf with a repaired tear to lower outer corner; occasional light marginal foxing; a few spots or small stains; a very good copy in recent calf.

EUR 9.000.–

Very rare first edition of Pirovano’s influential work in defence of astrology and in opposition to Pico della Miranda’s writings on the subject. Pirovano’s ‘Defensio’ contributed to continuing the influence of the medieval astronomico-astrological scientific vision, both in respect to astrological medicine and in respect to larger issues of predicting all universal and popular events, event not only in prophecies and not necessary visions for the event. Cinquecento, according to the accommodation of stellar transformations into not causes but signs’ (Brendan Doolan, A Companion to Astrology in the Renaissance pp. 132-133). Pirovano taught the alchemy at Milan from 1450 to 1478. Between 1460 and 1465 he was under the patronage of Gian Galeazzo Sforza, nephew of Ludovico Maria, and taught at Pavia University. Together with Ambrogio Varesi di Bembo, Pirovano then served as physician-astronomer at Ludovico’s court in Milan. Both are recorded in the Indications of Ludovico Sforza in Lina. Piodani’s Delle prime cose che seranno in studiato dal re, ed in Academia Leonardo da Vinci’s at Ludovico castle in Milan on February 9, 1498. For its form and content, the opening chapter that constitutes Pacioli’s dedicatory letter to the Duke warrants special attention. There, Pacioli recalls how in February 1498, Duke Ludovico assisted, at his Milanese residence in the Castle of Porta Giovia, at the performance of a laudable scientific duel (“scientifico duello”). Presumably the duel was staged as a disputation on the nobility of geometry and mathematics, a topic that features prominently in the opening chapter. Both lay and ecclesiastical personalities who tended to frequent his court accompanied the Duke. From Pacioli’s account it seems clear that this was a large-scale event that gathered together the most influential personalities of the time. Pacioli’s dedicatory letter contains much additional information on the circumstances of the duel and on the events that led him to write the book. Together with ecclesiastical personalities, courtiers, archbishops, and men of arms, Pacioli recorded the presence at court of numerous eminent persons, expert in the noble arts of medicine and astrology. In order, these figures are: Ambrogio Varesi da Arona, “a scholar of Sforza and Asturion, expert investigator of the celestial bodies and interpreter of future events”; Alfonso Malaspina, “a learned man who can cure any ailment”; Gabriele Pirovano, “kept-observer of all matters relative to medicine”; Nicolò Cusano, “who is estimated and venerated by all the aforementioned gentlemen in all those arts”, and, finally, Andrea Nardonese, “very expert in the astrological profession”. Padoan briefly mentions the presence of illustrious doctors in law, scientists and philosophers who simply explicitly naming any of them. He concludes by introducing Leonardo da Vinci as one of the most illustrious participants ...

‘A study of the archival and historical sources pertaining to the court of Milan reveals that all these figures were extremely important representatives of Ludovico’s court entourage. Ambrogio Varesi da Roati, Gabriele Pirovano, Nicolò Cusano and Alfonso Malaspina were among the most acclaimed natural philosophers, doctors, astronomers, and scientific intellectuals in Italy.

Not only were these learned physicians trusted members of the court but – at least in the case of Varesio and Pirovano – they were also the representatives of that class of “celestial” mathematicians practicing astrology and astronomy who considered themselves superior to scholars like Pacioli. While Pirovano is now better known for his role in the polemics over astrology he took up with Varesio and Pico della Miranda, they were also the representatives of that class of “celestial” mathematicians practicing astrology and astronomy who considered themselves superior to scholars like Pacioli. While Pirovano is now better known for his role in the polemics over astrology he took up with Varesio and Pico della Miranda, Varesio’s reputation rested almost solely on his astronomical predictions for the Duke (Michele Rovinski, Anatomy of a Debate, pp. 118-122 passim).

Published posthumously by his brother Michele, Gabriele Pirovano’s Defensio is presented in dialogue form. The work was republished in 1554, together with two related works by Lucio Bellanti. Pirovano is known to have written several other texts and calendared astronomical work which survive in manuscript, a number of letters relating to the health of various members of the Sforza family survive in Milanese archives. Adams P 2759. Rossouw and Lencioni 4489. Proctor 13878. Riccardi 2.581, this first edition is very rare outside Italy, with OCLC recording several copies in France, a single copy in Germany, in Tübingen, a single copy in Spain, at Valencia, two copies in the UK, at the British Library and Cambridge, and three copies in North America, at Chicago University, Harvard, and New York Public Library.
PORPORINO, Baroncino. Ad Kalendarium Romanum Amittens effusum minuscula commentaria. Naples, Ludovico Casali, 1680. 4to, pp. 18, 34, plus one large folding engraved plate; old inscription cut away from lower blank margin of title, and with an old patch; the title and last leaf verso a bit dust-soiled; some foxing throughout, bound in modern carta rustica. EUR 1.500.–

STIRN’s Geheim-Camera

Photographen mit C. P. Stirn’s patent. Photograph. Geheim-Camera. square Octavo (115 x 175 mm) 6 gilt printed boards (110 x 170 mm) 6 gilt printed boards (110 x 170 mm) 6 gilt printed boards (110 x 170 mm) 6 gilt printed boards (110 x 170 mm), altogether 48 small photographs. Leporello in red gilt printed original portfolio. EUR 800.–

A most important dedication copy linking Rantzau and Tycho Brahe

RANTZAU, Heinrich. Tractatus astrologicus de genethliacorum thematum iudiciis pro singulis nati accidentibus. Ex vetustis et optimis quibus... –... Frankfurt am Main: Johann Weichel, 1593. 8° (180 x 110 mm) 8 ff., 355 pp., 14 ff., with 5 fold. tables. Woodcut printers device on title, small woodcut portrait recto titre, a few diagrams within text. (Sign.: f8, A–Z8, Au8) Contemporary binding over wooden boards, two claps, gilt edges, gilt cover stamps, these oxidized and faded. Little worming inside, else a very fine copy in first appearance. EUR 6.800.–

Only edition of this rare antiquarian study by a monk of the Celestine Order of a Roman calendar resurrected at amittens (San Vittorino Amittens) in the Abruzzen region, an important Roman site and the birthplace of Sulla. The large folding plate copies the inscriptions on the tablet. Porporino’s description was reprinted in Saligino’s Novae thesauros antiquitatum romanarum in 1716. OCLC locates copies of the original, 1680, Naples edition at the Bayerische Staatsbibliothek, Munich, and Amory University only.

“Spy-cam” then

First edition, the most important work of Heinrich Rantzau, a clear and systematic exposition on astrology according to the principles of Ptolemaios, Campanus, Alchabitius and Geocritus thereby summarizing the methods of ancient and contemporary astrologers (Alphohil, Cardan, Schöner, Ringsberg). Rules of interpretation and examination of various cases follow the exposition (births, marriage, prison, friends and enemies, honor and riches, etc.). The last part of the work deals judicial astrology and includes an examination of the author’s horoscope. Heinrich Rantzau or Ranzauer (Ranzau) (1526 – 1598) was a German humanist writer, statesman, and a prolific astrologer and an associate of Tycho Brahe. He was a Chancellor of the Danish royal throne in the Duchy of Holstein, a rich man and celebrated book collector. Rantzau is frequently best remembered as a patron of scholars (Georg Rollenhagen, Nikolaus Reuwer, David St. Nathan Chytraeus), Janus Lipsius, Heinrich Melchior, Kramers Ussau. His own Tractatus astrologicus de genethliacorum thematum appeared in 1597 and went through five editions by 1615. In his own time, he was regarded as a generous supporter of artists and writers. Rantzau was also a successful merchant with trading interests in the east-west trade through Haarum and Lübeck.

Dedication copy to Jakob Kurz von Senftenau (Jacob Curtzius), dated 1593 (seven lines) with a dedication binding “Henricus Ranzovius” and “Produx genethliaci methodum” (Oestmann 42 ff.) – VD16 R256; Honeyman 2576; Houzeau/L. 4965: “un des traités anciens d’astrologie judiciaire le plus complet”; Graesse VI, 24; Cantamessa 6559; Lit....

Dedication copy to Jakob Kurz von Senftenau (Jacob Curtzius), dated 1593 (seven lines) with a dedication binding “Henricus Ranzovius” and “Produx genethliaci methodum” (Oestmann 42 ff.) – VD16 R256; Honeyman 2576; Houzeau/L. 4965: “un des traités anciens d’astrologie judiciaire le plus complet”; Graesse VI, 24; Cantamessa 6559; Lit...
Ramsden, Jesse. Description d’une Machine pour Diviser les Instruments de Mathematiques ... Publiee a Londres, en 1777, par ordre du Bureau des Longitudes. Traduite de l’Anglois, Augmente de la description d’une machine a diviser les lignes droites, et de la notice de divers ouvrages de M. Ramsden par M. de La Lande ... Pour faire suite a la Description des moyens employes pour mesurer la base de Hounslow–Heath. – A Paris: Chez, Firmin Didot, 1790. small folio (285 x 208 mm). pp. 46 with 7 folding engraved plates printed on pale blue paper, some variable browning, staining and spotting throughout, although plates much less affected, a few darker spots. Contemporary half calf over marbled boards, short split to upper joints, extremities lightly rubbed, red morocco lettering piece. EUR 3.200.–

First French edition of “Description of an engine for dividing mathematical instruments” of 1777, translated with comments by Jerome de Lalande after he could borrow a copy of Prof. Shepherd. As is pointed out in the preface to this first French edition, most copies of the first (English) edition of 1777 (and 1787 as the title wrongly states) were destroyed in a fire (“consumee par un incendie”) at the printer’s warehouse. Ramsden (1735–1800) was a British pioneer in the design of precision tools. Ramsden was apprenticed as a boy to a clock worker, but in 1758 he apprenticed himself to a mathematical instrument maker. He went into business for himself in London in 1762. He designed dividing engines of great accuracy for both circles and straight lines and produced highly accurate sextants, theodolites, and vertical circles for astronomical observations. He also built barometers, manometers, assay balances, and other instruments. He was elected to the Royal Society in 1786 and awarded the Copley Medal in 1789.

Ramsden’s dividing engine allowed instruments to be made smaller while being just as accurate in measurements. The rights for a portable sextant designed by Ramsden and used for maritime navigation was obtained by the Board of Longitude in 1777 for £300. An additional £315 was paid to allow for its construction details to be used by other craftsmen. Ramsden was of a genial disposition, but at the same time acrimony sometimes got out of hand. For example, Ramsden’s three-year delay in providing William Roy with the theodolite for the Anglo-French Survey 1784–1790 provoked a public row within the portals of the Royal Society and in the Philosophical Transactions. In his favour it should be pointed out that many delays could be ascribed to Ramsden’s quest for perfection, continually refining his designs as the slightest shortcomings were revealed. Prominent libraries stamps to title and to versos of plates. – Lit.: Anita McConnell. Jesse Ramsden (1735–1800) London’s Leading Scientific Instrument Maker. 2007; Taylor, Mathematical Practitioners of Hanoverian England, 57–59, 244–245; Repsold, Geschichte Instrument Maker. 2007; Taylor, Mathematical Practitioners of Hanoverian England, 57–59, 244–245; Repsold, Geschichte der astronomischen Messwerkhäuser, 82–87.

Probably the earliest photographic documentation regarding the work of the “Red Cross”, exhibited at the Vienna World Fair in 1873. Until the middle of the 19th century, there were no organised and/or well-established army nursing systems for casualties and no safe and protected institutions to accommodate and treat those who were wounded on the battlefield. A devoted reformer Christian, the Swiss businessman Jean-Heurê Durant, in June 1859, travelled to Italy to meet French emperor Napoleon III with the intention of discussing difficulties in conducting business in Algeria, at that time occupied by France. He arrived in the small town of Solferino on the evening of 24 June after the Battle of Solferino, an engagement in the Austro–Sardinian War. In a single day, about 40,000 soldiers on both sides died or were left wounded on the field. Jean-Heurê Durant was shocked by the terrible aftermath of the battle, the suffering of the wounded soldiers, and the near-total lack of medical attendance and basic care. He completely abandoned the original intent of his trip and for several days he devoted himself to helping with the treatment and care for the wounded. He took part in organizing an overwhelming level of relief assistance with the local villagers to aid without discrimination. Back in his home in Geneva, he decided to write a book entitled A Memory of Solferino (PMMD 350; Norman 670; Garrison-M 2166; Grolier/Norman 73; Woller 2659; Scharf of Hippocrate, 1945; En François dans le Trav 284) which he published using his own money in 1862. He sent copies of the book to leading political and military figures throughout Europe, and people he thought could help him make a change. In addition to presenting a vivid description of his experiences in Solferino in 1859, he explicitly advocated the formation of national voluntary relief organizations to help nurse wounded soldiers in the case of war, an idea that was inspired by Christian teaching regarding social responsibility, as well as his experience after the battlefield of Solferino. In addition, he called for the development of an inter-national treaty to guarantee the protection of medical and field hospitals for soldiers wounded on the battlefield. The wide interest generated by Durant’s book led in 1865 to the formation of a committee which later became the International Red Cross, and in 1864 to the establishment of the Geneva Convention. Durant shared with Frédéric Passy the first Nobel Peace Prize in 1901.

The photographs show: View of the sanitary pavilion with military tents, Field pharmacy, Field operation table, Transportable bed, Stretcher with frame for mattresses, Wheels stretchers; Pushcart, mountain car; Donkey for wounded; Railway medical train, et al.

The Vienna Photographers Association was an organizational union of the Viennese companies Oscar Kraemer, M. Frankenstein & Comp., J. Levey and Gygéry Kline on the occasion of the Vienna World Fair in 1873. They employed the photographers Max Julli (1849–1919), Gustav Luger and Philipp Georg von der Lippe. For stereo photography Pierre Elmer Ernst Lamy and for the process of heliogravure / photogravure Johann Baptist Oberneder (1840–1887) was used. The recordings were made in cabinet format, in carte-de-viste format and partly in stereo format. These have been combined into trios, Leporellos or bound albums in various designs and offered for sale in a private pavilion. In another pavilion, the glass plates were developed in the wet collodion and further processed. The photographers had assistants who carried camera equipment and chemicals off-road and kept them ready. There were also photochemists and bookbinders. Around 50 people were used for the pictorial documentation. The total image production was about 2,200 images. – OCLC: Stift Berlin (lost in war); OCLC: with bibliographies see photographs, Landesarchiv Baden-Württemberg, not in OCLC or COPAC.

EUR 8.500.–
RITTER, Franz.

Very rare discussion on the comets of 1664, the author (died 1685) was prof. of philosophy and mathematics at Sapienza University in Rome and tried to reconcile Aristotelian theories with more modern aspects similar to Chirnomo before him. The controversy on comets dates back to Tycho Brahe almost a century earlier and concerned the location of comets, whether they moved in the celestial or terrestrial realms. When Tycho observed the 1577 comet from his observatory on the island of Hven, he hoped to determine its distance from Earth using parallax. Because the comet displayed far less apparent movement against the background of the stars compared to the Moon, Tycho concluded that comets must be celestial objects. In 1619, following the appearance of another bright comet, Galileo in a dispute with Orazio Grassi, a Jesuit mathematician from the Collegio Romano and a supporter of Tycho's comet claims, took the unusual position of denying Tycho's parallax observations, despite the support such observations could lend to Copernicanism. Rather than grant any credibility to Tycho's claim, which was based on observations of the comet's position relative to the stars, Galileo refused to acknowledge the assertion, instead maintaining a strict Ptolemaic and Aristotelian world view. He published his observations in 1619 in a work entitled Catalogus in which he theorized that different objects in the universe were formed by different processes. In several publications during his career, Chirnomo maintained a strict Ptolemaic and Aristotelian world view and engaged in a campaign to deny the use of parallax in comet observations

"In 1664 and 1665 two bright comets appeared, and between them occurred an eclipse of the Moon. Such a triple omen was unique. One can almost hear the collective intake of breath in anticipation of the unparalleled disasters that surely must follow. Lost or poorly written discussion of the comets, John Gadbury, an English astrologer, thoughtfully interpreted them in his book of 1665, De Cometa. 'These Blazing Stars! Threaten the World with Famine, Plague, & Wars,' he trumpeted. To Princes, Death: to Kingdoms, many Crises: to all Estates, inevitable Losses!' He can hardly have believed his luck when London was hit by the Black Death in 1665 followed by the Great Fire the year after. Unwittingly, he had demonstrated a fact that modern-day astrologers know well: the laws of chance ensure you can't be wrong all the time. While London suffered, in Danzig one of the greatest astronomers of the day, Johannes Hevelius, was watching the comets with scientific detachment. He published his observations in 1666 in a work entitled Cometographia in which he theorized that comets are thrown out by the planets, notably Jupiter and Saturn, and move past the Sun on boomerang-shaped curves. Unlike boomerangs, though, they never came back. One attractive feature of Hevelius's work is a series of drawings of comets. To the untrained eye they may resemble the amputated tails of small furry mammals, but they were the most accurate renderings up to that time. A number of astronomers began to suspect that comets reflected the Sun on paths like exaggerated versions of the planets' orbits, but no one could prove it." (Ian Ridpath - Astronomy in 2005: 103, Rosenthal M.A., Dacardi L. & 395, EKV, no copy in: Germany & Switzerland, COPAC: B. London, Cambridge Special Coll.; OCLC: Oklahoma, Columbus, Toronto.

The observational stations were placed in the old convent of the Capuchins close to Terranova (now Gela), and on the terraces of the Auguste castle. The scientific program focused on the spectroscopic studies of chromosphere, corona and solar prominences. Having set up two stations, it was possible to host other scientists who collaborated in the astronomical, meteorological and magnetic observations. To move to Sicily instruments and astronomers, the Italian Royal Navy placed a steamer already used in the Expedition of the Thousand, Plebiscito, at the Commission’s disposal. The “senators” of Italian astronomy were won over by the possibilities offered by the eclipse, and thus the idea of setting up stations in the Augusto Castle was born. In a few days, the station was ready, equipped with a modern telescope and a photographic apparatus. The solar eclipse was observed on December 22, 1870, as a total eclipse, with an observation area the size of a table. The observations were conducted from the Auguste castle, with the cooperation of a team of astronomers and observers. The observations were supervised by the astronomer from Rome Angelo Secchi, being “the only one able to compete with foreigners in this field, did not miss the opportunity represented by the total eclipse. In 1851 astronomers obtained the first photographic image of the total phase of a solar eclipse showing the presence of a yellow line that later was to be associated to a new chemical element, Helium.

Following the results of this scientific expedition, on October 5 1871, the first astrophysical observatory in Italy was set up in the Auguste castle. The scientific program focused on the spectroscopic studies of chromosphere, corona and solar prominences. Having set up two stations, it was possible to host other scientists who collaborated in the astronomical, meteorological and magnetic observations. To move to Sicily instruments and astronomers, the Italian Royal Navy placed a steamer already used in the Expedition of the Thousand, Plebiscito, at the Commission’s disposal. The “senators” of Italian astronomy were won over by the possibilities offered by the eclipse, and thus the idea of setting up stations in the Auguste castle was born. In a few days, the station was ready, equipped with a modern telescope and a photographic apparatus. The solar eclipse was observed on December 22, 1870, as a total eclipse, with an observation area the size of a table. The observations were conducted from the Auguste castle, with the cooperation of a team of astronomers and observers. The observations were supervised by the astronomer from Rome Angelo Secchi, being “the only one able to compete with foreigners in this field, did not miss the opportunity represented by the total eclipse. In 1851 astronomers obtained the first photographic image of the total phase of a solar eclipse showing the presence of a yellow line that later was to be associated to a new chemical element, Helium.

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SARTI, Cristofano.

L’ottica della natura e dell’educazione indirizzata a risolvere il famoso problema di Molyneux (Molyneux). Opera di … - Luca: presso Francesco Bonignor, 1792. 8° (222 x 143 mm). pp. XVI, 227, 48 with frontispiece within pagination. Contemporary papercard boards, rubbed and soiled. Fine uncut copy.

First edition of this extensive and groundbreaking collaborative study of the total solar eclipse of 1870, consisting of individual reports by the leading Italian astronomers of the time, including Angelo Secchi, G. B. Donati, Gaetano Cacciatori, Pietro Blaserna, A. Nobile, P. Tacchini, et al. \textit{In the early 19th Century the studies on spectral lines by Joseph von Fraunhofer led to “the joining of physics and chemistry into astronomy” – as the essential results of a more general approach”, thus determining the birth of astrophysics. The application of two new techniques, such as photography and spectroscopy, to astronomical observations of total solar eclipses contributed greatly to further the development of solar physics. In 1851 astronomers obtained the first photographic image of the total phase of a solar eclipse showing the presence of a yellow line that later was to be associated to a new chemical element, Helium.}

On 7 July 1688 the Irish scientist and politician William Molyneux (1656–1699) sent a letter to John Locke in which he put forward a problem which was to awaken great interest among philosophers and other scientists throughout the Enlightenment up until the present day. In brief, the question Molyneux asked was whether a man who has been born blind and who has learnt to distinguish and name a cube by touch, would be able to distinguish and name these objects simply by sight.

In this formulation Molyneux’s problem attracted the attention of innumerable philosophers and other men of learning, such as Berkeley, Leibniz, Voltaire, Diderot, La Mettrie, Helmholtz and William James. Discussion concerning Molyneux’s problem took a new turn once the English surgeon and anatomist William Cheselden (1688–1752) published an account of a case of a congenitally blind person who had died after his cataracts had been removed (1723). The publication led philosophers to regard the Molyneux problem no longer as a simple thought experiment, but as a question which could be answered by experimentation. Others, however, such as La Mettrie and Diderot, regarded Cheselden’s account as wholly ambiguous in its implications. They pointed out that it was possible that the boy had been unable to make valid perceptual judgments because his eyes had not been functioning properly. They suggested that this could have been due to the fact that his eyes had not been used for a long time, or to their not having had enough time to recover from the operation. They pointed out that Cheselden had, perhaps, asked the boy leading questions. Some philosophers also believed that the results of the inquiry depended on the intelligence of the patient. Those who criticized the significance of Cheselden’s account in this way (most of them were French philosophers) made proposals as to how to avoid the problems mentioned. They suggested that one should prepare the patient carefully for the operation and for the interrogation, that one should allow his eyes time to recover from the operation and that one should give him the opportunity to exercise his eyes in darkness. What is more, one should avoid asking leading questions. Some philosophers were even more radically critical of operations like that performed by Cheselden. Mérian, for example, noticed that Cheselden’s observations, like all observations of blind people whose cataracts have been extracted, present difficulties because cataracts do not cause complete blindness and complete blindness cannot be cured. It could not be concluded from this fact that Molyneux’s problem could not be solved experimentally, however, for it could be maintained that patients operated upon for cataracts are directly relevant to the solution of it. They are unable to perceive forms before they are operated upon, and the essential issue at stake when posing Molyneux’s problem is the ability to distinguish and name forms. This is a point of view which was taken by many philosophers.
SMYTH, Captain William Henry


EUR 1.200.-

The first edition of William Henry Smyth’s classic handbook intended for amateur astronomers. His Cycle of Celestial Objects has long been regarded as the patron arch of celestial observing guides, particularly the second volume, which was named The Bedford Catalogue after the site of Smyth’s private observatory. What makes it so special is that it is the first true celestial Baedeker and not just another “cold” catalogue of mere numbers and data. Like the original Baedeker travel guidebooks of the last century, this work is full of colorful commentary on the highlights of the heavenly scene and heavily influenced several subsequent works of its type, even to the present day. In 1825 Smyth established a private observatory in Bedford, England, equipped with a 5.9-inch refractor telescope. He used this instrument to observe a variety of deep sky objects over the course of the 1830’s, including double stars, star clusters and nebulae. He published his observations in 1844 in the Cycle of Celestial Objects, which earned him the Gold Medal of the Royal Astronomical Society in 1845 and also the presidency of the society. The first volume of this work was on general astronomy, but the second volume became known as the Bedford Catalogue and contained Smyth’s observations of 1,604 double stars and nebulae. It served as a standard reference work for many years afterward; no astronomer had previously made as extensive a catalogue of dim objects such as this.

Smyth (1788–1865) had an interesting career: although born in England, he was a colonial resident of New Jersey and emigrated to England as a Loyalist after the Revolutionary War; he was also a descendant of Captain John Smith, the principal founder of the first English colony in North America at Jamestown, Virginia. The early part of Smyth’s career was with the Royal Navy, with which he served in the Mediterranean during the Napoleonic conflicts. During this period he visited the noted Sicilian astronomer Giuseppe Piazzi, famous for his discovery in 1801 of the first asteroid ever found—Ceres. Smyth’s visit to Piazzi’s Palermo Observatory was decisive in turning his interests to astronomy, and after retiring from the Royal Navy in 1825, he settled in Bedford, England, and started building what was then the finest private observatory in that country. It was equipped with a 6-inch refractor, a substantial instrument back then for an astronomical hobbyist. During the 1830’s Smyth put this instrument to good use, observing a huge variety of deep sky objects, including clusters, nebulae, double stars, and much else. He kept detailed symmatia notes of these observations, and was particularly interested in double stars. These notes were the basis of the Cycle of Celestial Objects which appeared in 1844 and was so well received that the Royal Astronomical Society awarded Smyth its gold medal and made him its president for one term.

EUR 5.500.-

Theophrastus did nothing but extend Aristotle’s view to physics in general (see Longrigg 1975). Furthermore, although some scholars have presented the action of the hot as constituting for Theophrastus the reason for the interchanges between the elements, others have counterclaimed that these should be understood as qualitative and not just due to a mechanical mixture (see Steinmetz 1964; Gotthelf 1967) (Stanford Encyclopedia of Philosophy, online).

PROVENANCE: Dr. A. v. K. Haake, Berlin (1921); Dr. A. v. K. Haake, Berlin; Sotheby’s, New York, December 1985, lot 114 (owning the auction label); Sotheby’s, London, 1986; Sotheby’s, London, 1988; Sotheby’s, London, 1989; Library stamp on front free endpapers Adams T 580 & T 581; with the Greek text apparently decidedly rarer than the Latin, the few copies containing both the Greek and Latin versions located by OCLC are at the University of Firenze Humanities Library, Staatsbibliothek Berlin, Boston Library, Cambridge, and Manchester; the Latin version is held by the Biblioteca Nazionale Centrale Vittorio Emanuel II, Leiden University, Universitätsbibliothek Mannheim, St油脂chische Landesbibliothek, Duschen, National Library Poland, Oxford, and Edinburgh; there appears to be no copy of the Greek text in North America, and a single copy of the Latin text, at the Other Library of the History of Chemistry, Philadelphia.
Of Shadows

THERIACA, Vespasiano.

Discorso et ragionamento di l’ombre di M. Vespasiano Theriaca. - Romae: apud Antonium Bladum, 1551. Small quarto (189 x 130 mm) ff. [12]; with Blado’s woodcut device on title showing a crowned eagle hovering above hills and holding a cloth in its claws, and one large opening woodcut initial; some light staining and spotting; margins cut a little short but not affecting text; bound in later paper-covered flexible boards; the date of the imprint changed to 1552 in brown ink and with an owner’s initials below, both possibly in the same, early hand.

EUR 4.500.-

TROILI, Domenico

Dell’oriuolo ultramontano ragionamento di Domenico Troili della Compagnia di Gesù dedicato all’ altezza serenissima di Maria Teresa principessa ereditaria di Modena ec. ec. - Modena: Eredi di Bartolomeo Soliani …, 1757. small Quarto (210 x 145 mm) 59, [1] pp., with a folded leaf of tables within pag., and folded leaf of plates. (Sign.: A-C⁸ D⁶). Halfsallum with handwritten title on spine, inscription in ink on title partly removed, title with spots, else fine and fresh.

EUR 1.800.-

An exceedingly rare work of philosophical ponderings on shadow, its opposite, light, obscurity, and clarity. In his dedication to the Roman Catholic Cardinal, Francisco Mendula de Bobadilla (1508–1566), the author voices his intent to pronounce ‘four words on shadows’. Most likely a pseudonym, the tract opens with ‘Theriaca’s’ thoughts regarding the alternation of day and night, considerations regarding crepuscule as the meeting point of the two opposites, and the shadows created by smaller things, inanimate or animate.

He continues with much related astrological observation including eclipses and the Zodiac, to finally discuss the ‘behaviour’ of shadows or a shadow on the example of a person moving in a lit room with a light source at a median height, with the shadow shortening or lengthening against the wall depending on movement towards or away from the source, as well as on the example of a light source from above.

Whilst the work has not found entry in Kirsti Andersen’s The Geometry of an Art, it has been recognised as pertaining to the history of perspective.

Cicognara 864; CNCE 24656; Riccardi I, II, 518; Cicognara Cat. I, 159; Cantamessa 7952; OCLC appears to record microform copies only.

First edition of his report about the Western European method of hour-reckoning: familiar to us, but “foreign” (ultramontane) in Italy, of two sequences of twelve fixed hours each, not adjusted according to seasonal daylight; it was called “small” or “half clock” in the Old World, from an Italian perspective orologio (oriuolo) ultramontano.

Domenico Troili (1722–1792) was an Italian Jesuit, who was responsible for the library of the Este family in Modena. He is known today as the first person who documented the fall of a meteorite, in 1766. Troili was a pupil of Boscovich at the Collegio Romano, and he supported his master’s atomic theory explaining the properties of matter. In 1766, Troili witnessed the fall of a stone from the sky near the town of Albanso. He collected reports from many other eyewitnesses, closely examined the stone and detected in its small grains of a brassy mineral. Troili summarized the results of his research in a 43-page document, Ragionamento della caduta di un asso (“Concerning the fall of a stone from the air”).

Although the work by Troili is widely recognized as describing a meteoritic fall, Troili himself, though searching for a scientific explanation in the spirit of the Enlightenment, did not recognize its extraterrestrial origin, but instead attributed the event to a by-product of a volcanic eruption: “the true cause of the fall of a stone in Albanso in mid-July, 1766, is a subterranean explosion that hurled the stone skyward”.

Hevelius' Comet of 1661

A better kind of astrolabe

WEIGEL, Erhard.
Speculum Uranicum / Aquilae Romanae Sacrum / Das ist / Himels Spiegel / darinnen außer denen ordentlichen auch die ungewöhnlichen Erscheinungen des Himmels / mit gebührender Anführungen abgebildt / vonemlich aber 7 der im Gestirne des Adlers / jüngsthin entstandene Comet / nebst einer neuen Himmels-Charte unter dem Adler des H. Römischen Reiches / dargestellt wird / von Erhardo VVeigelio, ... Jena (Jehna) bey Samuel Krebsen, in Verlegung Thomas Matthias Gätzen, 1661. Quarto (198 x 160 mm) 64 Bl. with engraved frontpiece, engraved star map (globe gore) and four woodcut plates, a few woodcut diagrams within text. Later wrapper period style. EUR 2.000.-

First published in Strasbourg in 1619, this is an enlarged edition of Welper's description of his quadrant to be used by astronomers, navigators, and engineers. The folding plate with the paper instrument (Quadrans Astronomicus et Geometricus M. Eberhardi Welperi Astrophili, editus A(nn)o 1661) is often missing, because it was pasted to wood to use it as an instrument.

The folding plates show Weigel with astronomical instruments before the building of the University of Jena and the comet within the star constellation of the Eagle (Adler). The engraved plate by J. R. Schildknecht similar to an engraved globe gore show the comet strait within star constellations. Erhard Weigel (1625–1699) was professor of mathematics at the University of Jena, who attempted to rename the classical constellation patterns, replacing them with figures from modern european heraldry. Thus 'ursa Major' became "The elephant of Denmark or 'Cygnus' became "the Ruta and Swords of Saxony". His uranography has not survived him. He is known as instrument and globe producer and has had an enormous influence on many german astronomers & mathematicians including Gerfried W. Leibniz, Johann Christoph Sturm (1638–1705) and Georg Christoph Eimmart (1638–1705). Erhard Weigel, astronomer, astrologer, mathematician, frequently attacked for his pansophic tendencies. In spite of the mathematical precision and the good astronomical observation it is rather the significance of comets which interests Weigel most." (Faber du Faur). EUR 4.500.-

Erhard Weigel (1790–1664) studied astronomy at Tübingen and taught mathematics at the University of Strasbourg where he was also active as an instrument and calendar maker and as a publisher. Paul Fürst (1608–1666), art dealer and also a publisher from Nürnberg, published mainly engravings and pamphlets, so that he became known as "Bildermann". In addition, he brought out numerous copper engravings. Around the middle of the 17th cent., Paul Fürst reprinted older works with paper instruments, like the engravings of the globe stripes of Johannes Oterschaden, the globe gores and paper instruments of Isaac Habrecht and those by Eberhard Welper. Nuremberg was one of the European center of scientific instrument makers and these paper instruments had have a market there. The new technology of printing had an important bearing on the diffusion of paper instruments, such as volvelles or cut-out quadrants. The accurate plates were intended to be used after cutting them out and pasting them on wooden frames. That's is why often the instrument plate is missing. (see: Andrew Hunter (ed.) Thornton and Tully’s scientific Books, Libraries and Collectors.


WELPER, Eberhard.
Usus quadrantis astronomici geometrici, Das ist: Beschreibung des Gebrauchs eines Astronomischen und Geometrischen Quadranten: welcher zu vielen schönen und nützlichen Sachen zugebrauchen … (Nürnberg: Paul Fürst; Gerhard, after 1661, ca. 1665) sm.Quarto. (182 x 138 mm) 40 (i.e. 38) pp., one blank leaf, with the rare folding engraved plate showing the paper instrument, which is often lacking. Engraved vignette on title depicting the instrument mounted on a stand, title within ornamental type border. Attractive antique calf, spine gilt, red morocco letter piece on spine. EUR 4.500.-