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Catalogue 184

Proofs

Science, Medicine, Natural History,

Chemistry, & Bibliography

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Selective Subject Index

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Catalogue 184

"The Best Bibliography Before the 18th Century"—Besterman

1. **ANTONIO, Nicolás.** *Bibliotheca Hispana sive Hispanorum, qui usquam unquamue sive Latina sive populari sive alia quavis lingua scripto aliquid consignaverunt Notitia, his quae praecesserunt locupletior et certior brevia elogia, editorum atque ineditorum operum catalogum Duabus Partibus continens, quarum haec ordine quidom rei posterior, conceptu vero prior duobus tomis de his agit.* Two finely engraved inserted frontispieces. Title printed in red & black. 40 p.l., 633 pp.; 690 pp. Two vols. Folio, cont. Dutch vellum over boards, blind-stamped arabesque device in center of each cover. Rome: N.A. Tinassi, 1672.

[with]:

—. *Bibliotheca Hispana Vetus, sive Hispanorum, qui usquam unquamue scripto aliquid consignaverunt, notitia. Complectens scriptores omnes qui ab Octaviani Augusti imperio usque ad annum M. flourerunt.* xl, [8], 410 pp.; 9 p.l., 286, [62] pp. Two vols. Folio, cont. Dutch vellum over boards, blind-stamped arabesque device in center of each cover, red goat-skin labels on spines. Rome: A. de Rubeis, 1696. \$9500.00

First editions and a fine complete set of this incomparable one-man achievement in the field of national bibliography. "To Spain belongs the credit

of having produced what is easily not merely the biggest but the best national bibliography before the eighteenth century. This is the *Bibliotheca Hispana* of Nicolaus Antonius. The first section of this work appeared in two large folio volumes from the press in Rome of Nicolaus Angelus Tinassius. Extending altogether to 1,360 closely printed pages, it consists of the main text in alphabetical order of authors by Christian names, followed by a succession of appendixes and appendixes to appendixes, bringing the work up to date; a section devoted to women writers; a section in three parts, devoted respectively to foreign writers in Spanish or to writers in the Spanish colonies, to writers closely connected with Spain, and to foreign writers on Spain; an index by surnames; a topographical index; four indexes by ecclesiastical adherence and rank; and finally a subject index based on an interesting classification. The whole work deals with Spanish authors since 1500, in whatever language they wrote, and enumerates about 6,500 such writers. The bibliographical details are remarkably full and accurate, and altogether this work, though it is little known, deserves to hold a high place among the classics of systematic bibliography . . .

"Nicolaus Antonius unfortunately did not live to see the second part of his great work through the press. It was published posthumously in Rome in 1696, in two folio volumes, about half the length of the first two, printed by Antonius de Rubeis. The *Bibliotheca Hispana vetus* deals in its first volume with Spanish writers from the beginning to the year 1000, in the second volume with those who flourished between 1000 and 1500. To the latter volume is added a 'Bibliotheca Arabico-Hispana', and a subject index to both volumes. Although the interest of these two volumes is naturally mainly literary and historical, they are of considerable value even from a specifically bibliographical point of view."—Besterman, *The Beginnings of Systematic Bibliography*, pp. 44-45.

Fine and handsome set in slightly different bindings. Occasional light foxing or browning. Complete sets are today rare on the market.

• Grolier Club, *Bibliography*, 66—"This amazing work is not only the biggest but also the best national bibliography published prior to the eighteenth century . . . The bibliographical details are remarkably full; several subject indices are provided. Antonio, who was perhaps the first scholar to devote himself full-time to bibliography, started this work in 1649 and constantly added to it until his death 35 years later."

A Great Bibliographer's Library

2. (AUCTION CATALOGUE: BRUNET, J.C.). *Catalogue des Livres rares et précieux composant la Bibliothèque de feu M. Jacques-Charles Brunet . . . Première [-Deuxième] Partie*. xlvi, 143 pp.; xiii, 232 pp. Two vols. in one. 8vo, cont. sheep-backed marbled boards (spine rubbed). Paris: L.

Potier & A. Labitte, 1868. \$650.00

A fascinating sale of 2499 lots; the bibliographical section is of the greatest interest. With a memoir of Brunet in Vol. I and a memoir of Mercier by Le Roux de Lincy in Vol. II.

Fine set. The separately published 16-page author's index and prices realized is bound in at the end.

• Bloie, II, cols. 113 & 114.

One of Gabriel Martin's Largest Catalogues

3. (AUCTION CATALOGUE: BULTEAU). *Bibliotheca Bultelliana: seu Catalogus Librorum Bibliothecae... Caroli Bulteau, Regi a consiliis & Secretariorum Regiorum decani*. Digestus & descriptus à Gabriele Martin... cum Indice Authorum alphabetico. Engraved arms on title. 5 p.l., xxxvi, 499 pp.; 1 p.l., [501]-1035, [78] pp. Two parts in two vols. 12mo, cont. speckled calf (two joints with short cracks at head), spines gilt, contrasting morocco lettering pieces on spines. Paris: P. Geffart & G. Martin, 1711. \$12,500.00

Charles Bulteau (ca. 1630-1710), historian and the King's secretary, took over the library of his brother Louis when Louis entered the Benedictine order. Charles greatly increased the collection and, upon his death, left a library of about 10,000 works. This is one of the most important and extensive catalogues compiled by Gabriel Martin and the first of 22 for which he made an index. Martin refined his system of arrangement, first used in the *Bibliotheca Bigotiana* (1706), for this catalogue. 8819 lots, including MSS.

Fine set.

• Bloie col. 2. Grolier Club, *Printed Catalogues of French Book Auctions... 1643-1830*, 18. Peignot, p. 85. Pollard & Ehrman no. 268 & p. 241—"The Bulteau library catalogue by Gabriel Martin has a note at the end saying that it was printed off before 5 September 1711, and that to conform with the new edict certain books have been taken out of the library and should not form part of the catalogue." Taylor, *Book Catalogues*, pp. 114, 157, & 235.

An Important & Enormous Sale

4. (AUCTION CATALOGUE: COLBERT). *Bibliotheca Colbertina: seu Catalogus Librorum Bibliothecae, quae fuit Primum... J.B. Colbert... deinde J.B. Colbert, March. de Seignelay; postea... J. Nic. Colbert... ac demum Caroli Leonorii Colbert, Comititis de Seignelay*. Three vols. 12mo, cont. speckled calf

(head of spine of Vol. I with tiny chip), double gilt fillet round sides, spines gilt, contrasting leather lettering pieces on spines. Paris: G. Martin & F. Montalant, 1728. \$11,500.00

The scarce sale catalogue of the enormous library formed by Jean-Baptiste Colbert (1619-83), statesman and minister to Louis XIV. This catalogue contains 18,219 lots but as many lots were bundles, it has been estimated by Guigard that there were roughly 60,000 to 70,000 books and MSS. in the library. After Colbert's death, the collection was added to by his descendants. Colbert was a great patron of the arts, sciences, and literature and his library reflects his wide activities and interests.

A fine set.

• Blogie cols. 2-3. Grolier Club, *Printed Catalogues of French Book Auctions . . . 1643-1830*, 28. Guigard, II, pp. 152-54. Peignot, p. 90. Pollard & Ehrman no. 270. Taylor, *Book Catalogues*, p. 237.

5. (AUCTION CATALOGUE: CROFTS, T.). *Bibliotheca Croftsiana. A Catalogue of the Curious and Distinguished Library of the late Reverend and Learned Thomas Crofts, A.M. . . . and Fellow of the Royal and Antiquary Societies, deceased: which will be sold by Auction, by Mr. Paterson . . . on Monday, April 7. 1783. and the Forty-Two following Days.* xvi, 420 pp. Thick 8vo, modern cloth-backed boards, uncut. [London: 1783]. \$950.00

A fine library of 8360 lots, notable for its Italian books, which De Ricci considered "the finest library of old Italian books yet seen in England; his sale (7 April 1783) also contained a number of fine French chivalry-romances" (p. 56). Crofts (1722-81), also had much fine early music, Spanish novels, Scandinavica, Polonica, and Eastern travel.

This copy belonged to Frank Marcham (bookplate dated 1899) who has interleaved this copy with fine paper and placed prices and buyers' names for each lot in his rather neat hand.

Fine copy.

• Taylor, *Book Catalogues*, pp. 169—"few eighteenth-century English libraries show such a preponderance of cinquecento books" (and see pp. 168 & 238).

A Fine Fine Art Library

6. (AUCTION CATALOGUE: CROZAT DE TUGNY). *Catalogue des Livres de Monsieur le President Crozat de Tugny. Dont la Vente qui se fera*

au commencement du mois d'Août 1751... xvi, 472 pp. 8vo, cont. mottled sheep (extremities somewhat worn, upper joint partly cracked but strong), flat spine gilt, red morocco lettering piece on spine. Paris: Thiboust, 1751. \$1500.00

The uncommon auction catalogue of the library of Joseph Antoine Crozat, Marquis de Tugny (1696-1750). Crozat was the best known member of a family who were prominent French financiers and art collectors. He formed one of the most precious collections of paintings, statues, drawings, and prints of the time. His library contained an equally rich assemblage of books relating to the fine arts. This catalogue, describing all the books (4872 lots), also lists 30 lots of prints.

Good copy.

✦ Grolier Club, *Printed Catalogues of French Book Auctions... 1643-1830*, 91. Guigard, II, pp. 169-70. Peignot, p. 93.

Bibliotheca Furliana

7. **(AUCTION CATALOGUE: FURLY, Benjamin).** *Bibliotheca Furliana, sive, Catalogus librorum... Benjamin Furly... inter quos excellant Bibliorum Editiones, Mystici, Libri proprii cujuscumque Sectae Christianae, & Manuscripti membranei.* Auctio fiet die 22 Octobris 1714. in Aedibus defuncti in Platea vulgò dicta Haringvliet. 2 p.l., 362 pp. Small 8vo, cont. polished speckled calf, spine gilt, contrasting leather lettering piece on spine. Rotterdam: Fritsch, Bohm, & N. Bos, 1714. \$12,500.00

The extremely rare sale catalogue of the library of Benjamin Furly (1636-1714), English Quaker merchant and religious writer who settled in Rotterdam in 1659 where he spent the rest of his life, prospering in business and becoming a naturalized citizen. "For three decades commencing in 1663 he opened his house to Quaker meetings and travelling Friends..."

"Beginning in the 1680s, Furly recruited colonists for Pennsylvania, and by 1700 he had sold nearly 50,000 acres for Penn. He was instrumental in facilitating the emigration of Quaker, Mennonite, Labadist, and Pietist colonists from the Rhineland, and he was responsible for Dutch and German editions of Penn's *Some Account of the Province of Pennsylvania* in 1681 and 1684 respectively. Taking exception to aspects of Penn's *Frame of Government* he offered a critique in 1682, opposing the provincial council's increase in power at the assembly's expense, mandatory sabbath observance, and the provision requiring gubernatorial consent for constitutional changes. He also called for a ban on the importation of slaves from Africa and the emancipation in eight years of those brought by masters from Maryland and Virginia. Furly disappointed Penn by not emigrating to Pennsylvania, though he purchased 4000 acres and was entitled to a further 1000. In 1684 he contributed an essay on the emigration of

non-Britons to *Recueil de diverses pieces, concernant la Pensylvanie*. Two years later he provided hospitality to Penn, translated when he preached, and accompanied him to The Hague for meetings with Prince William . . .

“Furly may have met John Locke in 1683, and they were certainly acquainted by 1686, remaining friends until Locke’s death in 1704. During this period English agents observed Furly’s movements, included him on a list of enemies and fanatics in December 1683, and reported in February 1686 that he was associating with Sir Patience Ward and Philip, Lord Wharton. Like Locke, Furly had ties to Sir Walter Yonge and John Freke. By February 1687 Locke had taken up residence with Furly, where he remained until 1689 and undoubtedly availed himself of Furly’s library as he wrote his *Two Treatises* and revised his *Essay Concerning Human Understanding*. Thereafter the two men corresponded frequently on current affairs, religion, finances, and book collecting . . .

“After several years of declining health Furly died in March 1714 . . . The German bibliophile Zacharias Conrad Uffenbach described him in 1710 as tall, slender, and earnest, with a patrician demeanour despite his threadbare coat. A bibliophile himself as well as a linguist and scholar–merchant, Furly amassed a library of more than 4400 books, including works by Sidney, Locke, Bayle, Durie, Gilbert Burnet, John Saltmarsh, Henry More, Jane Leade, the Levellers, Gerard Winstanley, Muggletonians, reputed Ranters, and Cicero. Catalogued in *Bibliotheca Furliana* (1714), it was auctioned for £7638 19s. In addition to fostering the exchange of ideas on such subjects as republicanism, religious toleration, the development of trade, and mysticism, thereby helping to set the stage for the Enlightenment, Furly facilitated the development of Pennsylvania’s Dutch and Germanic communities.”—*O.D.N.B.*

A very fine copy.

8. (AUCTION CATALOGUE: GERSAINT, Edme François). *Tableaux, Estampes et Dessesins qui se trouvent dans le Fond de feu Mr. Gersaint*. 14, [1] pp. 8vo, modern boards. Paris: Prault, 1750. \$1350.00

Extremely rare; no copy in *N.U.C.*, OCLC, or RLIN. Gersaint (d. 1750), was the leading auctioneer of the time in Paris of art objects and natural history specimens. Gersaint was not only an auctioneer with an exceptional ability to immediately and accurately evaluate paintings, prints, and natural history objects but a true scholar.

Upon his death, there were two large catalogues in 1750 of his books, paintings, drawings, and engravings. The present catalogue — a third sale — describes merchandise purchased by Gersaint on his final trip to Holland and which did not arrive in time to be put in the larger catalogues. This catalogue also contains many Chinese porcelains; 41 lots.

Fine copy.

The Bibliotheca Hulthemiana

9. (AUCTION CATALOGUE: HULTHEM, Charles Joseph Emmanuel van). *Bibliotheca Hulthemiana ou Catalogue Méthodique de la riche et précieuse Collection de Livres et des Manuscrits délaissés par M. Ch. van Hulthem*. [Compiled by A. Voisin]. Frontis. port. of Hulthem in Vol. I. Six vols. 8vo, attractive modern marbled boards (some foxing), uncut. Ghent: J. Poelman, 1836-37. \$4000.00

The very rare auction catalogue of the enormous library of von Hulthem. "Van Hulthem (1764-1832) shared a passionate love for books with his close friends and fellow bachelors Richard Heber and P.P.C. Lammens (1762-1836), librarian of the University of Ghent. For fifteen years or longer the three bibliophiles attended every important sale in the Low Countries and then dined together in the evening when the sale had been concluded... The Van Hulthem library... included 31,865 books and 1016 manuscripts. It contained choice editions of the classics (especially the editions printed in series), the most complete collection of books from the Plantin press that had been assembled up to that time, a very large number of early books printed in the Low Countries (Voisin has catalogued these with special care), many books on art and numismatics (including many eighteenth-century catalogues of sales of objects of art), and a superb collection of materials for the study of the political and literary history of the Low Countries which fills the whole of Volume IV. Since Voisin has arranged the books in eight hundred classes and sub-classes, the catalogue is both very large and easily consulted. Voisin prints many bibliographical and critical notes made by Van Hulthem. These notes are not, as is usually the case, lifted from obvious and readily available sources... The catalogues of private libraries (nos. 21519-21799) are divided according to countries and are accompanied by some useful notes. The Belgian (Nos. 22521-22668) and Dutch (nos. 22669-22778) catalogues are listed in the fourth volume which is devoted to the history and literature of the Low Countries."—Taylor, *Book Catalogues*, pp. 246-47.

Very good set. Rare on the market.

"Extravagantly Rich in Books Printed on Vellum"

10. (AUCTION CATALOGUE: MAC-CARTHY-REAGH). *Catalogue des Livres rares et précieux de la Bibliothèque de feu M. le Comte de Mac-Carthy Reagh*. Two folding engraved facsimiles (one in red & black). xxviii, 583 pp.; 2 p.l., 473 pp.; 15 pp. Three parts in two vols. 8vo, cont. sheep-backed green boards (joints a little rubbed), flat spines gilt. Paris: De Bure, 1815. \$1350.00

De Ricci described the Mac-Carthy-Reagh library as "extravagantly rich in

books printed on vellum" and the Duke of Devonshire was inspired to put in a bid of 20,000 pounds for the collection which in fact brought only some 16,000 pounds when it came up for auction in 1817. The mysterious Mac-Carthy-Reagh had been a collector on a grand scale, purchasing Girardot de Préfond's collection *en bloc* in 1769 and leaving a library which took over 6000 lots to sell at auction, admirably catalogued by the De Bure brothers.

The 15-page "Ordre des Vacations" is bound-in at the end of Vol. II.

Very good crisp set.

♣ Grolier Club, *Printed Catalogues of French Book Auctions . . . 1643-1830*, 567. De Ricci, p. 80.

Two Important Collections of Elzeviers

11. (AUCTION CATALOGUES: MARTIN, Louis Aimé). *Catalogue des Livres de la Bibliothèque de M. Aimé-Martin . . . dont la vente se fera le Lundi 28 Novembre 1825, et jour suivants.* 4 p.l., 234, [6] pp. 8vo, cont. blue calf-backed boards (upper joint very slight worn), flat spine gilt, uncut. Paris: A.A. Renouard, 1825.

[bound with]:

(MOTTELEY, J.C.). *Catalogue des Livres de la Bibliothèque de M. Motteley, composée d'une Collection considérable d'Elzéviens et autres beaux Livres et Manuscrits rares, précieux et singuliers, la plupart reliés par Desseuil, Padeloup, Derome, Simier, Purgold, Thouvenin et Vogel; dont la vente se fera le jeudi 2 décembre 1824, et jours suivans . . .* 4 p.l., 219, [3] pp. 8vo, uncut. Paris: Silvestre, 1824. \$950.00

Two important collections.

I. Martin (1786-1847), French man of letters and librarian at Sainte-Geneviève, was the author of the famous popularization of science — *Lettres à Sophie* (1810) as well as many other scholarly and dramatic works. "Cet homme de lettres eut deux bibliothèques livrées aux enchères : la première en 1825 avait été achetée en bloc par M. Renouard qui la mit en vente publique après avoir gardé quelques articles précieux (73). Le catalogue comprend 2716 numéros et 425 pour le supplément. Il y avait un grand nombre d'éditions elzéviennes et un choix précieux d'ouvrages intéressants en tout genre. Les reliures étaient fort soignées, quelques-unes somptueuses."—Brunet, *Dictionnaire de Bibliologie Catholique*, col. 405.

II. An important sale; the most significant of the seven collections accumulated by Motteley for later disposal at auction.. "Ce catalogue renferme une réunion très-nombreuse de livres imprimés par les Elzeviers; il en est de très-rares et qui étaient jusqu'alors restés inconnus aux bibliographes."—Brunet, *Dictionnaire de Bibliologie Catholique*, col. 498. We learn from the same source that Motteley (d.

1850), lived as a hermit, alone and isolated in a rundown apartment. He was afraid to make home repairs because of his fear of disturbing the treasures on which he had spent so much money. 2173 lots.

Nice uncut copies.

• I. Grolier Club, *Printed Catalogues of French Book Auctions . . . 1643-1830*, 590. *N.B.G.*, Vol. 34, cols. 48-50. II. Grolier Club, *Printed Catalogues of French Book Auctions . . . 1643-1830*, 587.

De Bure Corrected

12. (AUCTION CATALOGUE: [MEL DE SAINT CERAN]). *Catalogue des Livres Rares et Precieux de M.**** [Mel de Saint Ceran]. Disposé et mis en Ordre par Guillaume De Bure, fils aîné. xvi, 312 pp. 8vo, attractive calf-backed marbled boards by Aquarius. Paris: De Bure, 1780.

\$1250.00

A rare catalogue, priced throughout in a contemporary hand, of the library of Mel de Saint Ceran, receiver general of finances. "Catalogue curieux et qui peut trouver place à côté de celui de Gaignat. Il est fort bien raisonné; et plusieurs notes de l'éditeur corrigent très à propos quelques articles de la *Bibliographie instructive*."—Peignot, p. 112.

2295 lots with an author index at end. There are some fine early MSS. and bindings in this collection.

Nice copy.

• Blogie col. 14. Grolier Club, *Printed Catalogues of French Book Auctions . . . 1643-1830*, 290. Horne, p. 713.

Part of a Famous Controversy

13. BARBARO, Ermolao. *Castigationes Plinii et Pomponii Melae*. 348 leaves, 39 lines & headline, Roman & Greek type, 4-line initial spaces with printed guides. Two parts in one vol. Folio (290 x 205 mm.), 18th-cent. French red morocco (minor rubbing, first & last leaves with some inoffensive worming & soiling, minor dampstaining to a few leaves), triple gilt fillet round sides, spine richly gilt, a.e.g. Rome: E. Silber, 24 Nov. 1492 & 13 Feb. 1493. \$25,000.00

First edition of an important and massive work in the famous controversy regarding errors in Pliny, in which Leonicensis took the opposing side; this work was immediately saluted as the most authoritative discussion of Pliny's *Historia Naturalis* available. Barbaro (1454-93), was one of the leaders of humanism. Crowned as a poet at the age of fourteen by Frederick III, he became a doctor at

Padua in 1477, made a careful translation of Aristotle, held public office, taught Greek in public, and gathered about him the most illustrious scientists of the end of the century. In 1486, he was Venetian Ambassador to the Emperor Frederick, and in 1489 was Ambassador to Innocent VIII, who created him Cardinal and Patriarch of Aquileia. He died in 1493, leaving behind him a surprising amount of erudite work that showed a wide knowledge of Greek and of ancient literature.

"In 1490 Leoniceno inaugurated a famous controversy on the errors of Pliny the elder. In this year he sent to Politian a critique of Ibn Sina, in which he noted in passing that Pliny seems to have confused the two herbs ivy and cistus because of the similarity of their Greek names; Politian commended Leoniceno's castigation of Ibn Sina but politely challenged his criticism of Pliny. Leoniceno responded with a tract, *On the errors of Pliny and others in medicine* (1492), in which he not only defended his original point but charged Pliny with many other errors stemming from verbal confusion."—*D.S.B.*, VIII, p. 249.

Leoniceno's book aroused a great storm of protest, indignation, and malediction. In the present work, Barbaro responded indirectly. "He claimed to have freed the text from some five thousand errors of copyists and printers, but did not wish anyone to think that Pliny himself had erred and affirmed that his reputation could in no way be overthrown. Without mentioning Leonicenus by name, Barbarus expressly refuted — and that rather sharply — some of his criticisms of Pliny."—Thorndike, IV, p. 601.

A very good and fresh copy.

♣ Goff B-100. Klebs 143.1. Stillwell, *The Awakening Interest in Science during the First Century of Printing*, 592.

14. BARBIERI, Ludovico. *Errores Maximi circa Scientiam de Motu detecti cum Appendice ad Problema*. Woodcut vignette on title. 79 pp. Small 8vo, attractive antique half-calf & speckled boards, spine gilt, green morocco lettering piece on spine. Vicenza: J.B. Vendramini Musca, 1729.

\$950.00

First edition and very rare; OCLC locates no copy in the U.S. Barbieri (1719-56), an Italian nobleman from Vicenza, studied at Padua and was the author of several works on hydraulics and physics. "In this work, Barbieri identifies and corrects faults in the contemporary science of motion. An appendix contains example problems."—Roberts & Trent, *Bibliotheca Mechanica*, p. 22.

Old library stamp and several ownership inscriptions on title but a fine copy. Ex Bibliotheca Mechanica.

♣ Poggendorff, I, 99. Riccardi, I, 78.

*A Grolier Club Bibliographical Classic;
A Great Hebraica Bibliography*

- 15. BARTOLOCCI, Giulio & IMBONATI, Carlo Giuseppe.** *Bibliotheca Magna Rabbinica De Scriptoribus & Scriptis Hebraicis, ordine Alphabetico Hebraicè, & Latinè digestis.* Finely engraved port. of the Bartolucci in Vol. I & another engraved port. of Imbonati in Vol. V. Some full-page & smaller woodcuts in the text. Titles printed in red & black, printing in red & black in Vol. II. Five vols. Folio, early 18th-cent. polished calf (joints slightly rubbed, three head caps very slightly chipped, occasional browning & foxing), spines richly gilt. Rome: ex Typographia Sacrae Congregationis de Propaganda Fide, 1675-94. \$12,500.00

First edition and a complete set in five volumes; this is the most extensive and detailed work devoted to a special bibliographical subject which had appeared up to that time and was to remain without rival for a long period to come. Besterman, in his *The Beginnings of Systematic Bibliography* (p. 47), calls it "immense" and "monumental"; it is still of considerable value, and with its 25,000 entries far exceeds in contents the 10,000 items in Wolf's *Bibliotheca Hebraica*. Imbonati, Bartolucci's student, edited the fourth volume and wrote the fifth volume, a supplement which is a bibliography of writers against or about the Jews, and about Hebrew matters in general. The fifth volume, for some reason, is very often missing.

This work is also the most extensive publication of the Propaganda Fide Press.

"The first comprehensive bibliography of post-Biblical Hebrew literature (though in one of his numerous digressions Bartolucci gives a bibliography of printed Hebrew Bibles) . . . One of the foremost Hebraists of his time, Bartolucci taught at the Collegium Neophytorum in Rome and was 'Scriptor Hebraicus' to the Vatican Library."—Grolier Club, *Bibliography*, 72.

Fine and handsome set. Rare on the market.

♣ Petzholdt, p. 429.

- 16. BASTENAIRE-DAUDENART, F.** *L'Art de fabriquer les Poteries communes usuelles, les Poêles, les Grès fins et grossiers, les Creusets, les Carreaux, les Tuiles, les Briques ordinaires et réfractaires; suivi d'un Mémoire . . . sur . . . l'Enquête commerciale ordonnée par le gouvernement pour la levée de la prohibition existante en France sur les Poteries anglaises.* Three folding engraved plates. xxxii, 560 pp. 8vo, cont. aubergine sheep-backed marbled boards, flat spine gilt in the Romantic style. Paris: Anselin, 1835. \$650.00

First edition of this very rare work on the manufacture of various kinds of pottery for use in construction, the kitchen, industry, etc. Bastenaire-Daudenart

was the longtime proprietor and manager of the factory of Saint Amand-les-Eaux, and wrote several other books on the manufacture of porcelain, glass, and crockery.

Fine copy.

An Important Work on Mining & Metallurgy

17. BERGBAUKUNDE. [Edited by Ignaz von Born & Friedrich Wilhelm Heinrich von Trebra]. Two fine & large mezzotint vignettes on titles, 13 folding engraved plates & maps, three folding printed tables, & one engraving in the text. 4 p.l., 408, [12] pp.; 2 p.l., 468, [4] pp. Two vols. Large 4to, cont. marbled half-sheep & marbled boards (one spine with two minor defects), flat spines gilt, spines nicely gilt, contrasting lettering pieces on spines. Leipzig: G.J. Goeschen, 1789-90. \$6500.00

First edition and very scarce; this is a complete copy with thirteen plates. Born and Trebra were the founders in 1786 at Szklno in Hungary of the Societät der Bergbaukunde, which had the purpose of increasing the knowledge in the areas of geology, mining, mineralogy, and metallurgy. It was a very international scientific society and other early members included Lavoisier, Dietrich, Gmelin, Charpentier, Ferber, Poda, Boulton, Watt, Kirwan, Withering, Hawkins, and Goethe as well as members in the United States, Colombia, Mexico, and Russia. Their meeting in the autumn of 1786 very likely constitutes the first international scientific conference ever staged.

This is the first and only publication of the Society; "hierin findet sich alles Wissenswerthe des Bergfachs nach dem damaligen Stande der Wissenschaft und Erfahrung vortrefflich und eingehend erörtert."—*A.D.B.*, Vol. 38, p. 551. The first 34 pages of Vol. I print the plans and by-laws of the society. The remainder of the two volumes contain numerous contributions concerning various mining activities in Germany, Hungary, France, England, Mexico, etc.

Each title-page vignette is an extremely attractive mezzotint and the plates depict geological cross-sections, maps of mining areas, machinery, etc.

Fine set of this attractive book.

• *D.S.B.*, II, pp. 315-16 & XIII, pp. 455-56. Mikulas Teich, "Born's Amalgamation Process and the International Metallurgic Gathering at Skleno in 1786" in *Annals of Science*, 32 (1975), pp. 305-40.

The Influential Edition

18. BERZELIUS, Jöns Jakob. *Lehrbuch der Chemie...* nach des Verfassers schwedischer Bearbeitung... übersetzt von F. Wöhler. 13 folding engraved plates. Four vols. bound in six. 8vo, cont. half-sheep & marbled boards, flat spines gilt, contrasting vellum lettering pieces on

spines. Dresden: Arnold, 1825-25-26-26-27-28-31-31. \$2950.00

First complete edition in German of Berzelius' *Läbok I Kemien* (1808-30), "the most authoritative chemistry textbook of the period."—*D.S.B.*, II, p. 92. The translation was made by Friedrich Wöhler (1800-82), the prominent German chemist who trained under Berzelius, became fast friends with the great Swedish chemist, and translated many of the writings of Berzelius into German (see *D.S.B.*, XIV, pp. 474-79). This was a very influential edition and formed the basis of the numerous translations into French, Dutch, and Italian.

Fine set.

• Partington, IV, pp. 142-77.

"Aroused Much Interest"

19. BISCHOF, Gustav. *Die vulkanischen Mineralquellen Deutschlands und Frankreichs* [with facing title]: *Chemische Untersuchung der Mineralwasser zu Geilnau, Fachingen und Selters im Herzogthum Nassau, nebst allgemeinen Betrachtungen über vulkanische Mineralquellen, besonders über deren Ursprung, Mischung und Verhältniss zu den Gebirgsbildungen. Für Physiker, Chemiker, Geognosten und Aerzte, wie auch für unterrichtete Brunnen- und Bade- Reisende.* One engraved plate. xvi, 412 pp., [4] leaves. 8vo, cont. marbled boards (head of spine with small chip), spine lettered in gilt. Bonn: E. Weber, 1826. \$2250.00

First edition of an uncommon and important book. Bischof (1792-1870), professor of chemistry at the University of Bonn, was the first to investigate and emphasize the importance of water as a chemical agent in geological change. It was Bischof who created the new field of geochemistry.

"His main interest at first was the volcanic phenomena of the Eifel and neighboring areas — specifically, the springs in these areas, which he interpreted as being largely of volcanic origin. In 1824 [sic] he published *Die vulkanischen Mineralquellen Deutschlands und Frankreichs*, a work which aroused much interest and led to his being considered one of the main defenders of volcanistic theories (as opposed to the neptunistic)."—*D.S.B.*, II, p. 158.

Very good copy.

• Zittel, p. 202.

A Magnificent Book

20. (BOOKBINDING: ABBEY, J.R.) *English Bindings 1490 - 1940 in the Library of J.R. Abbey.* Edited by G.D. Hobson. 130 fine reproductions (12 in gold & color) & 46 facsimiles in the text. Title printed in red, black, & gold. Large 4to, orig. cloth, red morocco lettering piece on spine, t.e.g.

London: Privately Printed at the Chiswick Press, 1940. \$4750.00

Limited to 180 numbered copies, signed by Major Abbey and G.D. Hobson. This sumptuously produced catalogue, the only authoritative survey of the history of bookbinding in the British Isles, is especially valuable on account of the wealth of fresh information given in the detailed descriptions of a magnificent series of specimens, representative of the various styles and periods. With twelve appendices and four indices.

Very nice copy. Presentation copy, inscribed by Major Abbey to Pierre Beres.

♣ Breslauer, *The Uses of Bookbinding Literature*, p. 28—"Hobson's method was to make lists of bindings which had the same tools in common; if the binder of one or several was known, he could attribute the others to him; if the workshop was not known, he baptized it with a sobriquet, such as 'Queens' Binder'; all this required an immense amount of historical and archival research, the examination of the holdings of permanent libraries and private collections, and of the illustrations in books on bindings and auction and booksellers' catalogues."

Translated into English for Use at West Point

21. BOUCHARLAT, Jean Louis. *Éléments de Mécanique*. Eight folding engraved plates. [iii]-xv, [1], 328 pp. 8vo, attractive antique half-calf & marbled boards, spine gilt. Paris: Courcier, 1815. \$750.00

First edition of a very successful work which went through several editions in French. Boucharlat (1775-1848), French mathematician and physicist, taught at the Military School at Paris. The present work was translated into English in 1833 by Edward H. Courtenay for use at the U.S. Military Academy at West Point.

Very good copy. Stamp of Catharine College, Cambridge on title. Armorial bookplate and stamp of the Franklin Institute Library on verso. Ex Bibliotheca Mechanica. Half-title lacking.

♣ Roberts & Trent, *Bibliotheca Mechanica*, pp. 47-48.

The Influential Edition

22. CARNOT, Lazare Nicolas Marguerite. *Principe fondamentaux de l'Équilibre et du Mouvement*. Two folding plates. xxii, 262 pp., one leaf of errata. 8vo, attractive antique half-calf & marbled boards, spine gilt. Paris: Bachelier, 1803. \$1650.00

Second edition. The first edition was published in Dijon in 1783 as *Essai sur les Machines en général*; it is a very rare book. That first edition attracted almost no attention within the scientific world; it was our second edition which was

enormously influential and inaugurated the peculiarly French literature of engineering mechanics.

Carnot's "purpose was to specify in a completely general way the optimal conditions for the operation of machines of every sort . . . The principal explicit finding of the *Essai sur les machines en général* was that it is a condition of maximum efficiency in the operation of machines that power be transmitted without percussion or turbulence (in the case of hydraulic machines). That principle of continuity was usually known as Carnot's until after the middle of the nineteenth century, when its parentage became obscured in the generality of conservation of energy, of which felt but unstated law it was one of many early partial instances."—*D.S.B.*, III, pp. 72-73.

"Known to French history as the 'Organizer of Victory' in the wars of the Revolution and to engineering mechanics for the principle of continuity in the transmission of power, Carnot remains one of the very few men of science and of politics whose career in each domain deserves serious attention on its own merits."—*D.S.B.*, III, p. 70.

Fine copy. Ex Bibliotheca Mechanica.

• Roberts & Trent, *Bibliotheca Mechanica*, p. 63—"This new edition incorporates recent developments in the field. In the preface Carnot makes reference to Lagrange's invention of the calculus of variation and the law of least action."

Canals

23. CHAPMAN, William. *Observations on the Various Systems of Canal Navigation, with Inferences Practical and Mathematical; in which Mr. Fulton's Plan of Wheel-Boats, and the utility of Subterraneous and of Small Canals are particularly investigated, including an Account of the Canals and Inclined Planes of China.* Three engraved plates & one folding engraved map (slightly foxed or dampstained). 4 p.l., 104 pp. Large 4to, attractive half-calf & marbled boards, spine gilt, black morocco lettering piece on spine. London: I. & J. Taylor, 1797. \$950.00

First edition. "In 1796 Robert Fulton, the American engineer, published his, *A Treatise on the improvement of canal navigation*, in which he proposed a planned network of small canals of uniform dimensions to link the major British cities. An important part of his argument was the use of inclined planes of various kinds combined with wheeled boats, thus dispensing with the traditional pound lock. The present item is the reply to Fulton by William Chapman, one of the foremost civil engineers of his day. He was particularly concerned with the improvement of river navigations and worked with Jessop on the Grand Canal of Ireland. Chapman gives a history of the inclined plane, citing Edmund Leach as well as European works such as Bédidor and Bouillet. He also describes the two planes built by Reynolds in Shropshire, as well as various designs by Dukart, Stanhope etc., comparing some of Fulton's ideas with them. He goes on to look at the

expense and water consumption of Fulton's system with that of conventional canals, before going on to consider cases where Fulton's system might be applicable (though proposing some improvements). He also shows how wheel boats and inclined planes could be used in collieries, citing the Bridgewater Canal which already had such a system in its underground section . . .

"His considered comments, which are by no means all critical, reflect his wealth of practical experience and reveal much about the British approach to civil engineering. His chief argument is with Fulton's concept of a standardised network of canals of the same dimensions, commenting, 'Those who adopt any favorite system on practical subjects, without the aid of experience to guide them are liable to be carried away by the warmth of their imagination; and are led to apprehend they have attained a something of universal application'."—Elton, *Cat.* 17, item 37.

Chapman (1749-1832), "was a friend of Watt and Matthew Boulton. He was engineer of the Kildare canal, and consulting engineer to the grand canal of Ireland . . . Chapman was the author of many essays and reports upon engineering subjects."—*D.N.B.*, IV, p. 58.

Very good copy. Ex Bibliotheca Mechanica.

Large-Paper Copy

24. CHARPENTIER, Johann Friedrich Wilhelm Toussaint von. *Beobachtungen über die Lagerstätte der Erze, hauptsächlich aus den sächsischen Gebirgen. Ein Beytrag zur Geognosie.* Seven very finely engraved plates (one or two in marvelous mezzotint). 4 p.l., x, 206, [1] pp. Large 4to, cont. half-sheep & boards (minor foxing), spine richly gilt, green & brown morocco lettering pieces on spine. Leipzig: G.J. Göschen, 1799.

\$6500.00

First edition, a magnificent large-paper copy printed on fine paper. Charpentier (1738-1805), was professor at the Bergakademie at Freiberg and an important mining official. His son Johann also became a well-known geologist.

This is a highly significant book in the history of geology as it contains the results of a long period of additional observation and study based on the original research in his *Mineralogische Geographie der Chursächsischen Lande* (1778), which is considered to be "a classic in the early geological literature of Germany."—Zittel, p. 38. In both works, Charpentier concentrated on the question of the genesis of ore deposits. This book, directed against Werner's *Neue Theorie von der Entstehung der Gänge* (1791), contains excellent descriptions of the veins and other mineral occurrences of Saxony.

Fine copy. The handsome plates depict mineral veins.

• Adams, *The Birth and Development of the Geological Sciences*, p. 313—"excellent." *A.D.B.*, Vol. 4, pp. 105-07. Poggendorff, I, 422-23.

25. **CLARKE, William.** *Naturalis Historia Nitri, sive Discursus Philosophicus de Natura, Generatione, Loco & artificiali Extractione Nitri, ejusque Virtutibus & Usibus.* 79 pp. 8vo, modern vellum over boards (several wormholes to title carefully filled-in, touching a few letters). Frankfurt & Hamburg: G. Wolf, 1675. \$1500.00

First edition in Latin (1st ed., in English: 1670); it was this edition which allowed Clarke's work to become widely known on the continent. "An important chemical and medical monograph containing 'all information then available on the subject' (D.N.B.). The four chapters trace this history, extraction, purification, analysis, and uses of niter (potassium nitrate). Also described are the preparation of nitric acid, aqua regia, and various nitrates. The manufacture of gunpowder for military applications is covered. Foreshadowing the discovery of oxygen, this work . . . contains references to the presence in the air of 'nitre' (i.e., a substance that supports combustion."—Neville, I, p. 279—(1st ed.).

Clarke (1640?-84), probably knew Boyle while at Oxford and later became a physician at Bath.

Good tall copy with many lower edges uncut. With the collation note of Ernst Weil.

Presentation Copy to Brongniart

26. **CLEAVELAND, Parker.** *An Elementary Treatise on Mineralogy and Geology, being an Introduction to the Study of these Sciences . . .* Engraved folding map (hand-colored) & five folding engraved plates. xii, 668 pp. 8vo, cont. English polished calf (very carefully rebacked with the orig. spine laid-down, light browning), sides decorated in gilt & blind, flat spine nicely gilt. Boston: Cummings & Hilliard, 1816. \$2750.00

First edition of the first important mineralogical text published in the United States; this is a fine presentation copy, inscribed on the free front endpaper "To Monsieur Brongniart with the respects of the Author." Alexandre Brongniart (1770-1847), was one of the leading geologists in Europe for a forty year period (see *D.S.B.*, II, pp. 493-97). We learn from the preliminary leaves that Cleaveland extensively used Brongniart's *Traité élémentaire de Minéralogie* while writing the present book.

"The theoretical part of Cleaveland's work was compiled from the writings of European scientists. Thus, it fully described Haüy's crystallographic theory and method and closely followed Brongniart's systematic mineralogy. It also displayed a neptunist bias, in that Cleaveland not only assumed an aqueous origin for basalt but also classified rocks according to the Wernerian chronological-stratigraphic system. However, because it was the first important American mineralogical text and contained much valuable information

concerning the minerals of the United States, it was favorably received and praised on both sides of the Atlantic."—*D.S.B.*, III, p. 313.

A nice copy, without the heavy foxing which usually afflicts this book.

*"Catalogue Précieux" — With MSS. from
Mount Athos*

27. (COISLIN, Charles du Cambout, Duc de). *Bibliotheca Coisliniana, olim Segueriana; sive Manuscriptorum Omnium Graecorum...* accedunt Anecdota bene multa ex eadem Bibliotheca desumta cum Interpretationes Latina, studio & opera D. Bernardi de Montfaucon... Five engraved plates, two finely engraved headpieces, & several engravings in the text (some full-page). 12 p.l., 810 pp. Folio, cont. polished speckled calf, spine richly gilt. Paris: Guerin & Robustel, 1715.
\$12,500.00

First edition of this monumental catalogue, compiled by Montfaucon, the eminent historian and founder of Greek paleography, of the magnificent collection of Greek MSS. owned by Coislin (1664-1732), French prelate. A very scarce book, this is only the second copy I have had in thirty years.

Most of the manuscripts come from the library of Pierre Séguier (1588-1682), the celebrated Chancellor of France and Coislin's grandfather. "The manuscripts were given to the abbey of St. Germain des Prés in 1731. Part of them were burned in 1793 and the remainder is now in the Bibliothèque Nationale."—Taylor, *Book Catalogues*, p. 237. Thus, this catalogue is the best record we have of these wonderful MSS.

Montfaucon's catalogue is considered to be an extraordinary piece of scholarship.

Fine and handsome copy with the large and attractive engraved bookplate of Nicholas Joseph Foucault (1643-1721), Marquis de Magny, statesman, archeologist, and bibliophile. He formed an important and large collection of illuminated manuscripts and printed books.

✦ Peignot, pp. 89-90—"Catalogue précieux; le nombre des manuscrits dont le rédacteur donne la description, est d'environ 400. Plusieurs avoient été tirés des monastères syriens, situés sur le mont Athos. Chaque manuscrit est bien décrit; on en détermine l'état, et par conjecture dans quel temps il a paru."

28. COTTING, John Ruggles. *An Introduction to Chemistry, with Practical Questions: designed for Beginners in the Science. From the latest and most approved Authors. To which is added a Dictionary of Terms.* One folding printed table of metals & five engraved plates (one folding). vii, [4], 420

pp. 8vo, cont. American sheep (joints a little split at feet but strong), flat spine gilt, black morocco lettering piece on spine. Boston: C. Ewer, May 1822. \$350.00

First edition. "An American textbook published to 'bring the principles of chemistry into as small a compass as possible, and . . . exhibit the various subjects treated of by the most eminent chemical writers of the present day' (Preface). The brief 'Dictionary of terms' occupies pages 377-403. Cotting (1783-1867), lectured on natural and experimental philosophy, chemistry, and botany in Boston, Massachusetts."—Neville, I, p. 298.

Very good copy.

29. DANA, James Dwight. *Manual of Geology: Treating of the Principles of the Science with Special Reference to American Geological History, for the Use of Colleges, Academies, and Schools of Science.* One folding colored lithographed map & more than 1000 illus. in the text. xvi, 798 pp. Large & thick 8vo, orig. green pebbled blindstamped cloth, spine gilt. Philadelphia: T. Bliss; London; Trübner, 1863. \$150.00

Early edition of this classic work. Dana (1813-95), geologist and mineralogist for the Wilkes Exploring Expedition, was professor of natural history and later of geology and mineralogy at Yale. One of the foremost geologists of the 19th century, he wrote many standard works which went through many editions.

Fine and fresh copy.

Romé de l'Isle's First Mineralogical Work

30. (DAVILA, P.F.). *Catalogue systématique et raisonné des Curiosités de la Nature et de l'Art, qui composent le Cabinet de M. Davila . . .* Thirty engraved plates (many folding). xxxv, [1], 571 pp.; vi, 656 pp.; vi, 290 pp., 3 p.l., 286, [1] pp. Three vols. 8vo, cont. polished calf, crowned monogram in gilt on each cover of Maria Anna, daughter of Maria Theresa, and Archduchess of Austria, double gilt fillet round sides, gilt fleurons in corners, spines richly gilt, a.e.g., red & green morocco lettering pieces on spines. Paris: Briasson, 1767. \$12,500.00

First edition, and a very handsome set, of this lavish and detailed catalogue. "In 1767 Romé was employed, on Sage's recommendation, to draw up a catalogue of the curiosities that had been collected by Pedro Francisco Davila, who wished to sell his cabinet of natural history before returning to Peru. The work ran to three volumes, in the second of which Romé, in agreement with Linnaeus, stressed the importance of crystalline form in mineralogical

description.”—*D.S.B.*, XI, p. 520.

During Romé’s early years, he found steady employment by preparing at least fourteen other mineralogical catalogues. Davila’s enormous collection contained scientific instruments (26 items), medals, prints, sculpture, illuminated MSS., Oriental MSS., and books (402 lots) as well as natural history objects. In the Preface to Vol. I, Davila writes that he hopes to sell the collection *en bloc* but, if no person comes forward, the collection will be sold at auction beginning 12 November. The second part of the third volume is devoted to the classical bronzes and medals (catalogued by Abbé Grimaud) and the prints and drawings (catalogued by M. Remy).

“This catalog is far more than a mere listing of items, in fact each object is more or less adequately described and sometimes fully, causing some critics of this work to call it ‘outstanding’ and ‘useful.’ The first volume is devoted to products of the sea, e.g., corals, shells, various animal forms, man-made objects, and even a collection of bezoars and calculi as well as saltwater & freshwater pearls. The second volume lists earths, stones, and minerals, including metals, ‘inflammables’ or fuels, and volcanic products. Of interest to the gemologist in this volume are Davila’s collections of marbles, flints, jaspers, agates, other chalcidonic varieties of quartz, opals, jades, and precious stones . . . Elsewhere are listed dendritic agates and other stones displaying figures or striking patterns and lastly, jet and amber. Volume three is in two parts, the first on fossils in which appears the ‘odontolite’ or ‘bone turquoise,’ while the second part is on art objects but including jewelry, vases and other objects made wholly or in part from gem materials, and engraved gems. The 7th section of this part lists Davila’s books. The detail in this work resulted in it being frequently referenced . . . Very rare.”—Sinkankas 1594.

Fine and handsome set from the library of Maria Anna (1738-89), Archduchess of Austria and daughter of Franz Stefan and Empress Maria Theresa from whom she inherited an interest in mineralogy. As a member of Vienna’s royal family, she studied numismatics and mineralogy and later amassed her own collection of 9,980 specimens under the guidance of Ignaz von Born. The collection was rich in Cornish, Hungarian, Siberian, Transylvanian, and Scandinavian minerals. Her collection was sold to the Royal Hungarian University of Buda and is preserved there today (see Wilson, *The History of Mineral Collecting 1530-1799*, p. 182).

✦ Laissus, “Les Cabinets d’Histoire Naturelle” in Taton, ed., *Enseignement et diffusion des sciences en France au dix-huitième siècle* (1986), p. 668—“le cabinet compte alors parmi les plus riches de France: le catalogue de ce remarquable ensemble emplit trois gros in-8, le premier consacré aux règnes animal et végétal, le second aux minéraux et le troisième aux fossiles.” Wilson, *The History of Mineral Collecting*, p. 209—(erroneously calling for 7 plates only).

An Intimate of Lavoisier

- 31. DIETRICH, Philippe-Frédéric.** *Description des Gîtes de Minerai, des Forges et des Salines des Pyrénées, suivie d'Observations sur le Fer mazé et sur les Mines des Sardes en Poitou.* [Title for Vol. II]: *Description des Gîtes de Minerai, Forges, Salines, Verreries, Tréfileries, Fabriques de Fer-blanc, Procelaine, Faïence, etc. de la Lorraine méridionale.* [Title for Vol. III]: *Description des Gîtes de Minerai, Forges, Salines, Verreries, Tréfileries, Fabriques de Fer-blanc, Procelaine, Faïence, etc. de la Lorraine méridionale.* Eight folding engraved plates (four of which are finely handcolored) & 13 folding printed tables. [iii]-xxxiv, 328 pp.; 1 p.l., 329-597 pp.; 4 p.l., 193 pp.; [194]-417, [3] pp.; 2 p.l., xxxiii, [1], 244 pp.; [245]-576 pp. Six parts in three vols. Large 4to, cont. paste-paper boards (extremities a little worn). Paris: Didot & Cuchet, 1786 [Vol. I]; Didot, An VIII (1799) [Vols. II & III]. \$9500.00

First edition of this extremely rare work, complete in three volumes; OCLC locates no complete set. Both the author and this book are undeservedly little-known.

Dietrich (1748-93), came from a wealthy banking family in Alsace which also owned a number of factories producing iron. Indeed, Dietrich's father, Jean III, was the richest landowner in all of Alsace and the firm, De Dietrich, founded in 1684, continues today as one of the oldest companies in Europe. Frédéric shared his father's interest in mining and metallurgy; after studying law at the University of Strasbourg, he made a grand tour of Italy, Hungary, Germany, France, and England, taking particular interest in the natural history of the countries visited, as well as local mining and industrial operations. During his travels, Dietrich made important observations on the volcanic activity in Italy and discovered that the picturesque Kaiserstuhl range in Breisgau was of volcanic origin.

Upon returning to Strasbourg in 1772, Dietrich became active in his family's industrial enterprises and also became involved in the Paris Academy of Sciences, being named a correspondent in 1775. In the following years he continued his work in natural history, particularly in mineralogy and vulcanology, formed an outstanding natural history collection, and was active in the Academy of Sciences and other scientific societies, sending in observations and attending meetings. Until the Revolution, Dietrich published nearly a score of articles on mineralogy and industrial techniques in various scientific journals in France and Germany and translated scientific works by Ferber, Scheele's treatise on air on fire, Leonhardy's supplement to Scheele, and Trebra's work on the interior of mountains. An intimate of Lavoisier, Condorcet, and La Rochefoucauld d'Enville, Dietrich became one of the founding editors of the *Annales de Chimie*. His numerous contacts with provincial scientists and industrialists whom he encountered in his travels, as well as his acquaintance

with government ministers at the highest levels, caused Dietrich to be strategically placed in France's scientific elite.

In 1785, he was appointed a "commissaire du roi à la visite des mines, usines, bouches à feu et forêts du royaume." This was a new post, created for the purpose of surveying and improving France's mining and metallurgical industries and placed Dietrich in a key position for influencing national policy in those areas. During the next four years, Dietrich made several inspection tours of mines and manufactures in the Pyrenees, Lorraine, and Alsace, preparing reports for interested government departments.

The Revolution put a halt to Dietrich's scientific endeavors and propelled him into politics. He was elected the first constitutional mayor of Strasbourg on 18 March 1790. It was Dietrich who ordered Captain Rouget de Lisle to write a patriotic song, causing the "Marseillaise" to be born. Unfortunately, Dietrich made many political enemies and was executed on the Place de la Révolution on 28 December 1793.

The present work, Dietrich's most important writing and only book, is the fruit of inspection tours he conducted while serving as commissioner of mines. The first volume deals with the Pyrenees, the second with Upper and Lower Alsace, and the third, appearing posthumously, describes the Lorraine. He focuses on applied science but there is much on the nature and origin of volcanic action. He describes in incredible detail the mining and metallurgical activities of each area, provides extensive statistics on production, gives vocabularies for the expressions used locally in dialect, and provides many geological observations. These three volumes provide the best and most detailed account of the state of French mining and metallurgical activities in the final years of the *ancien régime*.

Fine set. Vol. I lacks the half-title to the first part. Vol. II has the re-issued title-page (1st issue: Paris: 1789). From the Turckheim library at the Château de Dachstein near Strasbourg.

♣Much of the biographical information comes from C.E. Perrin's "A Lost Identity: Philippe Frederic, Baron de Dietrich (1748-1793)" in *ISIS*, Vol. 73 (1982), pp. 545-51.

In a Handsome Nuremberg Binding

32. DIOSCORIDES. *De Medica Materia Libri V. De Letalibus Venenis, eorumque precautionione & curatione. De Cane rabido: Deque notis quae morsus ictusve animalium venenum relinquentium sequuntur: Deque eorum curatione, Lib. Unus.* Interprete Marcello Vergilio... eiusdem... commentarii... Woodcut printer's device on title. Much Greek printing. 14 p.l., 753, [1] pp., one blank leaf. Folio, slightly later cont. blind-stamped pigskin-backed wooden boards (light browning, minor marginal worming to last quarter of leaves), orig. clasps & catches (for more on the binding, see

below). Cologne: J. Soter, 1529.

[issued & bound with]:

BARBARO, Ermolao. ... *In Dioscoridem Corollariorum Libri Quinque. Adiectus est Index eorum quae hisce libris explicantur, quem post Dioscoridis indices consulto locavimus.* Large woodcut printer's device on title. 1 p.l., [1]-6, [1], 7-78 leaves (= 80 leaves). Folio (some worming in the outer margins of the book but I do not find it offensive). Cologne: J. Soter, 1530.
\$17,500.00

A very handsome *sammelband* in a noteworthy Nuremberg binding (for the binding, see below). It is hard to imagine a most attractive copy of these two books.

I. This is the first Greek-Latin parallel edition of Dioscorides, the most important botanical book from antiquity; the Greek text is based on the 1518 Aldine edition. The Latin translation and commentary was prepared by Marcellus Vergilius (1464-1521) and it is known for its excellence.

Dioscorides (fl. A.D. 50-70), "wrote an encyclopaedia of materia medica in five books which embodied the results of Greek research in pharmacy and applied botany and was far better arranged and more complete than the earlier compilations. This work remained authoritative for more than fifteen centuries... Dioscorides's work is of importance also for the history of ancient chemistry, as it describes simple chemical preparations... , mentions the earliest reaction of wet analysis..."—Sarton, I, pp. 258-59. More than 600 plants and plant ingredients, 90 minerals, and 35 animal products are described.

"Dioscorides identified natural families of plants long before Linnaeus's practical classification system of the eighteenth century; thus his work also has significance in the history of biology and taxonomy."—Grolier Club, *One Hundred Books Famous in Medicine* (1995), 3—(earlier eds.).

"It is no exaggeration to say that from its publication until well into the seventeenth century — even after the appearance of the *Pinax* of Bauhinus in 1623 — all botanical studies were based on this book, and the great part of any new botanical matter published during the sixteenth and seventeenth centuries was in the form of a commentary on Dioscorides."—*Printing & the Mind of Man* 20—(1st ed. of 1478).

Also included in this edition are the *Poisons and Antidotes* and *Poisonous Animals and the Treatment of their Wounds*.

The *De Materia Medica* also has substantial sections on the virtues of wine (see Simon, *Bibliotheca Bacchica*, I, p. 207 for the 1499 Aldine ed.).

II. Issued the following year is its companion piece, the noteworthy commentary *Corollarium* of Ermolao Barbaro (1454-95), humanist, diplomat, and editor. Barbaro's text has been edited by Giovanni Battista Egnazio (ca. 1478-1553).

BINDING & PROVENANCE: This is a fine Nuremberg binding of mid-16th

century blindstamped pigskin-backed wooden boards with the original clasps and catches. On the upper cover is stamped in black the arms of the church councillor Hieronymus Paumgärtner the Younger (1525-1602). It was the custom that bindings of the City Library of Nuremberg were stamped with the arms of church councillors and Paumgärtner was particularly involved in the growth of the library. The blind stamping on the pigskin employs the roll "Salvator — Johannes der Täufer — Paulus — David" which, according to Christine Sauer in her "Exlibris und Supralibros der Stadtbibliothek Nürnberg" in *Einbandforschung*, Heft 22 (2008), pp. 23-41 (especially pp. 28, 34, & 39), was especially favored by Paumgärtner's binder. The date "1564" has also been stamped in black on the upper cover of the pigskin. On the title of the first work, we also find the round printed book label of the church councillor Lukas Friedrich Behaim von Schwarzbach (1587-1648). Stamped in blind on the upper cover of the pigskin at top is "L K" and at bottom "B A."

Fine and large copies with many outer edges uncut.

☛ I. Pritzel 2294. II. Castiglioni, p. 373—Barbaro was "one of the leaders of Humanism." Pritzel 407. Sandys, II, p. 83.

"Catalogue Important"—Brunet

33. (ELCI, Angiolo Maria d'). *Catalogo dei Libri dal Conte Angiolo Maria d'Elci donati alla Imperiale e Real Libreria Mediceo-Laurenziana.* Engraved frontis. port of the collector. 148 pp. Large 4to, later 19th-cent. vellum-backed patterned cloth (some light foxing), spine gilt, red morocco lettering piece on spine. Florence: Tipografia all'Insegna di Dante, 1826.
\$1950.00

First edition. Count Elci (1754-1824), while largely forgotten as a satirical poet and archeologist, is still remembered for having assembled one of the few private libraries of Greek and Latin classics which could rival Lord Spencer's (they knew each other and corresponded). Elci had descended from a noble and rich family of Siena. This heritage allowed him to form one of the finest private libraries in Europe of the time and to take full advantage of the breakup of the libraries of religious houses. Elci's library contained 1,199 early editions, rich in the earliest printers and Aldines, and is described in the present catalogue. Dibdin wrote enthusiastically and in detail about Elci and the collection in his *Reminiscences*.

In 1818, Elci presented the library to the Laurenziana in Florence, but this privately printed catalogue of his gift only appeared eight years later, two years after the donor's death.

Fine and fresh copy.

☛ Gustave Brunet, *Dictionnaire de Bibliologie Catholique*, col. 631—(see his long note). *N.B.G.*, 15, col. 783. Taylor, *Book Catalogues*, p. 136.

Machines of Every Type

- 34. FISCHER, Johann Carl.** *Kurzer Entwurf der landwirthschafftlichen Maschinenlehre und Landbaukunde abgefasst.* 40 finely engraved plates. iv, 208 pp. 8vo, orig. printed wrappers (minor foxing). Leipzig: Baumgärtner, 1831. \$1500.00

First edition of this very rare book (OCLC locates no copy in the U.S.). Fischer (1761-1833), was professor of mathematics, astronomy, and physics at the University of Greifswald and the author of a monumental history of physics (1801-08).

This work describes in the text and depicts on the fine plates all sorts of tools and machinery used on farms and in workshops and factories. The range is enormous, from threshers to water wagons to metal stampers and presses, etc.

Apart from the foxing a fine copy in original state.

- 35. FONTANA, Gregorio.** *Dissertazione Idrodinamica sopra il Quesito cercar la cagione, per la quale l' acqua salendo ne' getti quasi verticali de' vasi . . . con un' Appendice sopra il Moto de' Corpi ne' Mezzi resistenti.* One folding engraved plate. 4 p.l., 136 pp. Large 4to, attractive antique half-calf & paste-paper boards, spine gilt, black morocco lettering piece on spine. Mantua: Heirs of A. Pazzoni, 1775. \$1350.00

First edition. Fontana (1735-1803), successor to Boscovich to the chair of mathematics at the University of Pavia, was the creator of the idea of polar coordinates. "Prize-winning paper for a competition run by the Royal Academy of Science and Literature of Mantua in 1774; the question concerns jets of water. With an appendix concerning the movement of bodies through resistant media."—Roberts & Trent, *Bibliotheca Mechanica*, p. 116.

Fine and handsome copy printed on thick paper. Ex *Bibliotheca Mechanica*.

♣ Riccardi, I, 469.

- 36. FOSSETT, Frank.** *Colorado. Its Gold and Silver Mines, Farms and Stock Ranges, and Health and Pleasure Resorts. Tourist's Guide to the Rocky Mountains.* One folding panorama plate, three folding maps, & numerous illus. & maps in the text. vii, 540 pp. 8vo, cont. green cloth (a little tired), gilt. New York: C.G. Crawford, 1879. \$250.00

Third and best edition, containing enlargements to the text and the folding maps and panorama which are not found in the earlier editions. This is a classic

work on the early gold and silver mines of Colorado.

Very good.

♣ Howes F-281.

Frederick the Great's Contribution

37. **[FREDERICK II, King of Prussia].** *Lettre d'un Academicien de Berlin a un Academicien de Paris. Avec la Traduction Allemande.* Woodcut arms of Frederick II on title. 61 pp. 8vo, cont. panelled crushed morocco, panels formed with gilt rules, spine gilt. Berlin: E. de Bourdeaux, 1753.

\$4500.00

First edition of this very rare contribution in the extended controversy over the theory of least action, one of the most notorious scientific quarrels of the 18th century. The origins of the controversy followed Maupertuis's move to Berlin in 1745 to become vice-president of Frederick the Great's Berlin Academy. Maupertuis formulated the principle of least action which soon brought him into conflict with one of his colleagues, Samuel König, who claimed the principle to have been stated earlier by Leibniz. Maupertuis insisted the Berlin Academy investigate the priority of the discovery, causing a pamphlet war to commence. Voltaire jumped in with an unexpected anonymous satirical attack on Maupertuis which provoked a defense, also in pamphlet form — the present work — by the king himself. Frederick interpreted Voltaire's satire as an affront to his own honor. The pamphlet war, spurred on by Voltaire, continued for several more years and all the journals and gazettes covered it.

Fine and handsomely bound copy printed on thick paper. Printed in German with parallel translation into French.

♣ Terrall, *The Man Who Flattened the Earth. Maupertuis and the Sciences in the Enlightenment*, pp. 270-309.

38. **GARNETT, Thomas.** *Outlines of a Course of Lectures on Chemistry.* 2 p.l., 176 pp. 8vo, modern cloth-backed blue boards, uncut. Liverpool: J. M'Creery, 1797.

\$1500.00

First edition. Garnett (1766-1802), a student of Joseph Black and first professor of chemistry at the newly founded Royal Institution, gave a series of lectures on chemistry at Liverpool. He became famous as a lecture demonstrator who pleased intelligent public audiences and he repeated the lectures in Manchester and Glasgow.

"Originally intended only for his students, this is a summary of the thirty lectures given in the author's successful courses presented in Liverpool. The lectures cover the history of chemistry, attraction, heat, combustion, oxygen, hydrogen, alkalies, acids, earths, metals, vegetable and animal substances, and

applications of chemistry to agriculture, bleaching, dyeing and the analysis of mineral waters."—Cole 504.

Fine copy.

• D.S.B., V, p. 276. Neville, I, p. 500—"A very scarce book." Partington, IV, p. 31.

The Famous Semmering Railway

39. GHEGA, Carlo di. *Atlas zu der Uibersicht der Hauptfortschritte des Eisenbahnwesens in dem Jahrzehnde 1840-1850, und die Ergebnisse der Probefahrten auf einer Strecke der Staatsbahn uiber den Semmering in Oesterreich.* Lithographed title & eight lithographed plates (one quite large & folding). Oblong folio, orig. cloth. Vienna: 1851. \$2000.00

First edition of this rare and handsomely illustrated work which depicts the famous Semmering Railway. This railway line, built over the highest point in the world accessible by rail at the time, was the first railroad to cross the Alps.

The prominent Austrian engineer Ghega (1802-60), was the designer and chief engineer of the Semmering Railway which ran from Gloggnitz to Mürzzuschlag. Ghega had made several tours of the railways in England, other European countries, and North America in 1837-37 and 1842 before he was entrusted with the entire planning of the future state railway system of Austria. The crossing of the Semmering Pass was not believed possible, but as early as 1844 he submitted a plan, with locomotives without an extra rail for gear wheels. Before the construction was launched, Ghega designed re-enforced locomotives which could overcome steep gradients. Construction of the "Semmeringbahn" was begun in 1848 and completed in 1854. The line was about 41 km. long and ascends 480 m. About 20,000 workers were engaged in the construction. The railway was built with 65 million bricks and 80,000 cut stones.

This book is charmingly illustrated with large plates depicting views of the railway surrounded by mountains, a large colored folding map depicting the gradient and the topography of the area, and illustrations of a number of the strengthened locomotives used.

Fine copy.

"One of the Glories of English Medicine"
A Famous Rarity

40. GLISSON, Francis. *De Rachitide sive Morbo Puerili, qui volgò The Rickets dicitur, Tractatus. . . Adscitis in operis societatem Georgio Bate, & Ahasuero Regemortero Medicinae quoque Doctoribus, & pariter Sociis Collegii Medicorum Londinensium.* Woodcut illus. in the text. 16 p.l., 416 pp. 8vo, cont. speckled sheep (small defect to foot of upper joint), sides ruled in

blind. London: G. Du-gard for L. Sadler & R. Beaumont, 1650.

\$22,500.00

First edition of "one of the glories of English medicine."—*D.N.B.*; this is a very fine and fresh copy in a well-preserved contemporary binding, complete with the preliminary leaf signed "A" (otherwise blank).

This book is the first full account of the childhood disease rickets, and one of the very first works on pediatric medicine to be published in England. Glisson was for many years a professor of medicine at Cambridge University, and later became one of the first members of the Royal Society. In 1645 he was assigned to a committee to study rickets which at the time was considered a new disease. His chief collaborators were George Bate and Ahasuerus Regemorter, whose names appear on the title-page. In fact, this volume, as it was finally printed, is almost entirely Glisson's own work (and his first book).

Glisson included a detailed study of the biomechanics of deformed bones and joints, and the pathologic anatomy of scoliosis. He used braces, splints, and shoes to straighten bowlegs and curved spines, and advocated exercise and massage to overcome muscular weakness. In attempting to correct the deformities of rickets, Glisson's work did much to advance the treatment of distortions in general.

"All writers on the diseases of children agree in their admiration of this book. Its 416 pages are full of original observation. The propositions arrived at are stated in a scholastic manner, and some of the accompanying hypotheses are associated with physiological doctrines now forgotten, but these are not mixed up with the observations of patients during life and after death, which make the book a work of permanent value."—*D.N.B.*, VII, p. 1316.

A fine copy of an extremely rare book on the market. It is interesting to note that Dr. John Martin, in his long book collecting career, never obtained a copy.

☛ Garrison-Morton 3729. Still, *The History of Paediatrics*, pp. 214-27.

41. GMELIN, Johann Friedrich. *Einleitung in die Pharmacie.* 7 p.l., 392, [14] pp. 8vo, cont. calf (a little rubbed), spine richly gilt, red morocco lettering piece on spine. Nuremberg: G.N. Raspe, 1781. \$2500.00

First edition of this very scarce pharmaceutical book; it became a standard book of its time. Gmelin (1748-1804), a member of the distinguished scientific family, was professor, variously, of philosophy, medicine, chemistry, botany, and mineralogy at the University of Tübingen. He is perhaps best known for his monumental history of chemistry which is one of the classic books in the field.

Fine and handsome copy.

☛ Ferchl, p. 189. Partington, IV, p. 181. Schelenz, p. 606.

- 42. GOTTHARD, Johann Christian.** *Die Cultur, Fabrikatur, und Benutzung des Tabacks, in ökonomischer, medicinischer und cameralistischer Hinsicht.* 3 p.l., 424 pp., one leaf of errata. 8vo, cont. marbled boards (some rubbing), flat spine gilt, contrasting leather lettering piece on spine. Weimar: Gädicke Bros., 1802. \$1500.00

First edition of a rare book. Gotthard (d. 1813), was professor of economics at the University of Erfurt and a member of many scientific and economic societies. In this work, he describes the history and cultivation of tobacco in America, Asia, and throughout Europe. He also discusses tobacco substitutes. There is much on the cultivation and manufacture of tobacco and its economic importance. Gotthard provides interesting chapters on the medical uses of tobacco.

Very good copy. Stamp of Wilhelm Schlösser. Bookplate of Rainer Immensack.
 ☛ Arents 1151.

- 43. (GRAEVIUS, Joannes Georgius).** *Catalogus Omnium Elegantissimorum Librorum, qui in utroque Thesauro Antiquitatum Romanarum ac Graecarum Joh. Georgii Graevii et Jacobi Gronovii, in Folio XXIV. Voluminibus reperiuntur, Ordine alphabetico digestus.* 31 pp. 8vo, cont. calf-backed marbled boards. Leyden: P. van der Aa, 1703. \$3500.00

First edition and rare. Graevius (1632-1703), German classical scholar and critic, was professor at Utrecht. He had a high reputation as a teacher and was a particular favorite of William III of England, who made him historiographer royal. His editions of the classics marked a distinct advance in scholarship. He is best remembered for his *Thesaurus Antiquitatum Romanorum* (1694-99), which is the first encyclopedic compilation of the knowledge of the ancient Roman world. His friend and colleague Jacobus Gronovius (1645-1716), Dutch classical scholar, published a complementary work — *Thesaurus Antiquitatum Graecarum* (1697-1702) — which dealt with ancient Greece. Both are compilations of earlier works by more than 120 contributors; they became standard reference tools throughout the 18th century.

Following Graevius's death in early 1703, Peter van der Aa, the publisher of the two thesauri, decided to stimulate sales by issuing the present catalogue. It was designed to be a guide to the contents of each series. It lists the contributors and their texts found in the two thesauri. References to each series, volume, and page number are given.

Fine copy.

44. GRANDI, Guido. *Instituzioni Meccaniche. Trattato.* 20 folding engraved plates. Title printed in red & black. viii, 160 pp. 8vo, attractive antique calf-backed speckled boards, spine gilt, red morocco lettering piece on spine, uncut. Florence: G.G. Tartini & S. Franchi, 1739.

\$1350.00

First edition. "This treatise is divided into ten chapters; they concern uniform movement, the moment of any kind of force, the center of gravity, motion composed of more uniform motion, as well as machines that facilitate motion. The next two chapters concern, first, accelerated and retarded motions, and second, motions composed of uniform and of accelerated motion, both of which make reference to his note on naturally accelerated motion which appears in the latest edition of the works of Galileo. The remaining chapters are devoted to percussion, to the pendulum, and finally to the resistance of solids . . .

"As well as the note on naturally accelerated motion mentioned above, Grandi refers in the preface to his other contributions to the latest edition of Galileo's works. These include his edition of the treatise on the uniform resistance of solids begun by Viviani, and his demonstration concerning the motion of solid bodies in a liquid medium."—Roberts & Trent, *Bibliotheca Mechanica*, p. 144.

Grandi (1671-1742), a devoted Newtonian, was a member of the Royal Society and introduced Leibnizian calculus into Italy. He also performed successful work in theoretical and practical mechanics; his studies in hydraulics evoked considerable interest from the governments of central Italy.

Very good copy. Ex Bibliotheca Mechanica.

☛ D.S.B., V, pp. 498-550. Riccardi, I, 627—"Buona ediz."

45. HASSENFRAZT, Jean Henri. *Traité théorique et pratique de l'Art de calciner la Pierre calcaire, et de fabriquer Toutes Sortes de Mortiers, Ciments, Bétons, etc., soit a bras d'Hommes, soit a l'aide de Machines.* Fine lithographed frontis. port. of the author & eleven folding engraved plates. xvi, 430 pp. Large 4to, cont. sheep-backed marbled boards (upper joint a little rubbed), flat spine gilt, black leather lettering piece on spine. Paris: Carilian-Goeury, 1825.

\$1250.00

First edition. "Although this work by Hassenfratz gives an excellent overall picture of the manufacture of mortars all over Europe and shows the state of knowledge which existed at this fruitful and productive period in the development of the material, the history behind its writing is also of great interest. Hassenfratz wrote it in his seventies, at the end of a long and distinguished career both in the Corps des Mines and as a professor at the Ecole Polytechnique, and in his rueful preface he laments that young men, specifically Vicat who had been his pupil, fail to acknowledge the work of their predecessors

as they forge ahead with their new discoveries. Consequently his own book gathers together and describes the work of every scientist, chemist and engineer, ancient and modern, ever concerned with the development of cement and includes all sorts of different mixes of mortar without distinguishing between good and bad, much to the disgust of his young contemporaries, notably Raucourt de Charleville. Nevertheless, it does contain a great deal of detailed information, though it is probably more useful to the modern historian than it was to the engineers of his own time searching for a strong and reliable mortar among this forest of facts."—Elton, *Cat. 6*, 220.

Hassenfratz (1755-1827), learned chemistry while working in Lavoisier's laboratory. He later became professor of physics at the École Polytechnique and later taught the industrial applications of mineralogy at the École des Mines.

Fine copy. Bookplate of General J. Doreau.

• Cole 609—"This extensive work covers quicklime and limestone, their properties, both physical and chemical, the calcination of limestone, including much information concerning the furnaces used, and the manufacture of mortars and cements. *D.S.B.*, VI, pp. 164-65.

46. HENRY, William. *An Epitome of Chemistry, in Three Parts. Part I. Intended to facilitate to the Student, the Acquisition of Chemical Knowledge, by minute Instruction for the Performance of Experiments. Part II. Direction for the Analysis of Mineral Waters; of Earths and Stone; or Ores; of Metals; and of Mineral Bodies in general. Part III. Instructions for applying Chemical Tests and Re-agents to various useful Purposes.* x p., [2], [13]-214 pp., one leaf of ads. 8vo, cont. American marbled sheep (upper cover somewhat wormed, foot of spine a little worn), spine gilt, red morocco lettering piece on spine. Philadelphia: J. Humphreys for S.F. Bradford, 1802. \$450.00

First American edition, prepared from the second English edition of 1801. "The book is a useful compilation of chemical information with numerous bibliographical references. A large amount of information is presented clearly and concisely. The numerous experiments given are mainly those used by the author in his earlier courses of chemical lectures. The book was very popular."—Cole, p. 254—(2nd English ed.).

Henry (1774-1836), studied under Joseph Black at Edinburgh University and became a partner in the chemical works established by his father Thomas Henry. His *Elements of Experimental Chemistry* was the most popular and successful chemistry text in English for more than thirty years.

Very good copy. Contemporary signature of "Jon French" on title.

• Cole 628. *D.S.B.*, VI, pp. 284-86. Neville, I, p. 624.

47. HERMBSTAEDT, Sigmund Friedrich. *Anleitung zu der Kunst wollene, seidene, baumwollene und leinene Zeuge ächt und dauerhaft selbst zu färben; desgleichen Leinwand und baumwollene Zeuge zu bleichen, und degruckte Kattune und leinene Zeuge, so zu waschen, dass die Farben nicht zerstört werden.* x, 114 pp. 8vo, cont. marbled boards (extremities a little worn), contrasting leather lettering piece on spine. Berlin: C.F. Amelang, 1815. \$1500.00

First edition and rare. "A 19th-century handbook on domestic dyeing, bleaching, and washing."—Ron, *Bibliotheca Tinctoria*, 518. The author wrote several other classic works on dyeing and bleaching.

Hermstädt (1760-1833), the first chemist in Germany to adopt Lavoisier's views, was professor of technological chemistry at the University of Berlin. His numerous writings in this field proved to be very influential in the development of industry in Prussia.

Very good copy. This copy lacks the two leaf publisher's ads at end. Old private library stamp on verso of title ("v. Böhl. Cramon").

♣ Partington, III, pp. 577-80. Poggendorff, I, 1082-83.

"An Excellent Monograph"

48. HILDEBRANDT, Georg Friedrich. *Chemische und mineralogische Geschichte des Quecksilbers.* x, 476 pp. 4to, cont. half-sheep & marbled boards, flat spine nicely gilt, green morocco lettering piece on spine. Braunschweig: Schulbuchhandlung, 1793. \$1950.00

First edition. "Hildebrandt (1764-1816), M.D. (Göttingen, 1783), became professor of medicine, chemistry, and physics at the University of Erlangen. In this book, his first, he presents a detailed history of mercury and its compounds, with reference to the works of earlier chemists (e.g., Paracelsus, Basil Valentine, Becher, and Stahl), as well as those of more recent authors (e.g., Crell, Macquer, Priestley, Scheele, and Lavoisier)...Hildebrandt also published one of the earliest German textbooks to use the new theory of chemistry of Lavoisier, entitled *Anfangsgründe der Chemie* (Erlangen, 1794)... Scarce."—Neville, I, p. 640.

A fine and attractively bound copy.

♣ Ferguson, I, p. 404—"An excellent monograph with numerous lists of books and papers."

49. HORNE, Thomas Hartwell. *An Introduction to the Study of Bibliography. To which is prefixed a Memoir on the Public Libraries of the Antients.* Folding frontis., 11 plates (several folding), & numerous text

illus. (including facsimiles & type specimens). [iv]-xvi, i-[xxvi], [27]-402 pp.; 1 p.l., [403]-758, [2], clvi pp. Two vols. Large 8vo, cont. half-calf & marbled boards (sides & extremities a little rubbed), spines gilt. London: T. Cadell & W. Davies, 1814. \$500.00

First edition. "This is a very valuable work to the student of the history of printing."—Bigmore & Wyman, I, p. 345. Topics include paper, MSS., history and techniques of printing, bookbinding, the nature of rarity, classification systems, bibliographies, catalogues and reference books, etc.

"Horne relied largely on Peignot, but made some independent additions. He names (pp. 564-614) perhaps a hundred and fifty institutional catalogues published outside the British Isles. His references to catalogues printed in the latter part of the eighteenth century are especially valuable. Few bibliographers have mentioned catalogues of Russian and Turkish libraries and few European bibliographers have cited those issued by Harvard College (1790) and the Library Company of Philadelphia (1807). Horne's list (pp. 614-637) of these and other foreign libraries has not been completely replaced by any later list."—Taylor, *Book Catalogues*, p. 209 & see pp. 16, 118, 188, 214, & 220.

Good set. Lacking half-titles.

♣ Besterman 784 & 3561.

With Fine Color Plates

50. JACQUIN, Nikolaus Joseph, Freiherr von. *Miscellanea Austriaca ad Botanicam, Chemiam, et Historiam Naturalem spectantia...* 44 finely handcolored engraved plates (several are folding). 2 p.l., 212 pp.; 423, [1] pp. Two vols. 4to, cont. marbled half sheep & marbled boards, flat spines richly gilt, contrasting vellum lettering pieces on each spine. Vienna: Kraus, 1778-81. \$7500.00

First edition. "This, like its continuation of larger format, the *Collectanea* (1786-96), was a device for publishing articles of Jacquin *et amicorum*... Among the friends, Franz Xaver von Wulfen (1728-1805) is especially important for his 'Plantae rariores Carinthiae.'... *Great Flower Books* notes that the drawings for the plates were by Jacquin and the engravings by Adam."—Hunt 655—(their copy lacks five plates).

This work contains the first printings of von Wulfen's two treatises on Carinthia wulfenite. These are contained in his articles "Minera Plumbi Spatosa Carinthiaca" and "Exploratio Chemica Plumbi Spatosi flavi Carinthiaci." The other articles deal with botany, chemistry, mineralogy, entomology, pharmacology, zoology, etc.

Jacquin (1727-1817), professor of chemistry and botany in the Medical Faculty of the University of Vienna, made important contributions to botany and chemistry. "He was the most important of the younger contemporaries of

Linnaeus. He was the first writer in German to utilize to any large extent Linnaeus' system of binary nomenclature, and was foremost in his time with respect to the number of new species described precisely and in a consistent way."—*D.S.B.*, VII, p. 58. Jacquin also formed a magnificent collection of minerals which "was ultimately purchased for the enormous sum of 20,000 gulden by Archduke Johann and eventually incorporated with his own collection in the 'Joanneum' in Graz."—Wilson, *The History of Mineral Collecting 1530-1799*, p. 102.

Very pretty set in a most attractive contemporary binding.

• *B.M. (N.H.)*, Vol. II, p. 918—(with a list of the contents). Pritzel 4367. Schuh, *Mineralogy: A Bio-Bibliography* 2426—"Volume two contains 'Minera Plumbi spatosa Carinthiaca' by F.X. Wulfen." Stafleu & Cowan 3248.

His First Book

51. JAMESON, Robert. *An Outline of the Mineralogy of the Shetland Islands, and of the Island of Arran...with an Appendix; containing Observations on Peat, Kelp, and Coal.* Folding engraved map serving as frontis. (somewhat foxed & with some offsetting onto title) & two engraved plates. 2 p.l., xiv, 202 pp. Large 8vo, cont. speckled calf (one corner a little jammed, upper joint with short crack), spine gilt, red leather lettering piece on spine. Edinburgh: W. Creech et al., 1798.

\$1500.00

First edition of the author's first book; it is scarce on the market. Jameson (1774-1854), founded the Wernerian Natural History Society in Edinburgh and was for fifty years Professor of Geology at Edinburgh University. His books were instrumental in introducing Wernerian geognostic doctrines and his classification of the rock strata into Britain.

A fine copy.

52. JARS, Gabriel. *Metallurgische Reisen zur Untersuchung und Beobachtung der vornehmsten Eisen- Stahl- Blech- und Steinkohlen-Werke in Deutschland, Schweden, Norwegen, England, und Schottland, vom Jahr 1757 bis 1769.* Aus dem Französischen übersetzt und mit Anmerkungen begleitet von Carl Abraham Gerhard. Vignettes on each title (the first is engraved), 31 folding engraved plates, & two folding printed tables. Four vols. 8vo, cont. marbled half-sheep & marbled boards (bindings with a few unimportant defects, each title foxed), flat spines gilt, white & pale green vellum lettering pieces on each spine. Berlin: C.F. Himburg, 1777-

77-85-85. \$3000.00

First edition in German of this extraordinarily detailed record of the mining and metallurgical industries throughout 18th-century Europe and especially in Britain where major developments were then taking place. The first edition, in French, appeared in 1774-81. Our edition is especially noteworthy as it was translated with valuable additions by Gerhard (1738-1821), privy councillor for finance, war, and crown lands in Prussia. He later became commissary for the administration of mines and smelting works and, in 1779, was appointed councillor for mining. Gerhard's chief writings are in mineralogy, but he also wrote on geology, medicine, botany natural history, and chemistry.

"While still students, Jars and Duhamel visited the lead mines of Brittany and the mines of Pontpéan and Ste.-Marie-aux-Mines in Alsace. In 1757 the French government sent them to inspect Central European mines, particularly those of Saxony and of several provinces of Austria, including Bohemia, Hungary, Tirol, Carinthia, and Styria. After two years Jars returned to Chessy, where, with the exception of a year at the coal mines of Franche-Comté, he remained until 1764. He was then sent to study the English coal mines and the manufacture and use of coke in metallurgical work . . .

"In addition to a thorough examination of the more advanced English and Scottish technology, Jars visited lead mines, observed the preparation of white and red lead, the making of steel by cementation, and the manufacture of oil of vitriol. He was accorded unusually generous treatment by the proprietors of the establishments . . .

"The following year he visited the Low Countries, Germany, and Scandinavia . . . Soon after he toured east-central France from Champagne to Franche-Comte, with government orders to examine factory operations and advise the proprietors on methods that would bring their manufacturing 'to the degree of perfection of which they are capable' (Ballot, p. 439). His success led to a similar survey of central France from Orléans to Auvergne."—*D.S.B.*, VII, p. 78.

Jars (1732-69), probably the first professional French metallurgist, was an important catalyst in the French government's endeavors to bring about the modernization of industrial practices to meet the challenge offered by the drastic developments occurring in England.

Attractive set.

*"Of the Greatest Rarity"—Weil
Binomial Classification*

53. **JUNG, Joachim.** *Opuscula Botanico-Physica ex Recensione et distinctione Martini Fogelii . . . et Joh. Vagetii . . . cum eorundem Annotationibus accedit Josephi de Aromatariis . . . ad Bartholomeum Nanti Epistola de Generatione Plantarum ex Seminibus . . .* Three woodcuts on one page. 12

p.l., 183, [1] pp. 4to, cont. vellum over boards, red leather label on spine (a little chipped, minor foxing). Coburg: G. Otto, 1747. \$5500.00

First collected edition of Jung's revolutionary lectures on botany including Giuseppe degli Aromatari's letter on the germination of plants from seeds. The stagnation of descriptive botany in the 17th century "was ended by extremely important new theoretical developments, particularly in plant morphology, which stemmed from the work of Joachim Jung (Jungius), and which were certainly the reflection, in systematics, of the rising experimental philosophy . . .

"Jung was a man of great versatility and powerful intellect, ranking beside Galileo, Bacon and Descartes, his contemporaries . . . He was led by philosophy and observation to a systematic analysis of plant form which had a lasting impact on descriptive botany."—Morton, *History of Botanical Science*, pp. 167-68—(and see pp. 167-75 for a detailed account).

"Jung [1587-1657], for fear of heresy, published nothing in his lifetime and nearly a century passed before his notes were printed. These show an almost modern grasp of plant identification and classification. He gave botany much of its present nomenclature and provided the clear divisions of botanical interest into plant morphology (structure), physiology, and ecology (relationships). He classified plants by a binomial system, the first being a generic term, the second a descriptive adjective. The great rarity of his writings has hindered the wider adoption of his contributions."—Dibner, *Heralds of Science*, 23.

Jung's works were based upon transcripts of lectures, edited shortly after his death by his students Martin Fogel and Johann Valet.

Fine copy. Bookplate of Robert James Shuttleworth ((1810-74), the English-Swiss botanist and conchologist (see *D.N.B.*, XVIII, pp. 176-77). His collection of shells is now at the State Museum of Bern and his herbarium was donated to the British Museum.

• *D.S.B.*, VII, pp. 193-96. Evans, *First Editions of Epochal Achievements in the History of Science* (1934), 82. Ernst Weil, *Cat. 12*, item 137.

"Rare"

54. KUNCKEL, Johannes and others. *Pyrotechnical Discourses. Being I. An Experimental Confirmation of Chymical Philosophy, treating of the several Principles in the Animal, Vegetable, and Mineral Kingdoms. With a perspective against Chymical Non-entities. Written by John Kunckel . . . II. A short Discourse on the Original of Metallick Veins; by George Ernest Stahl M.D. which may serve as an Answer to Dr. Woodward's Theory of the Earth, and was a forerunner to. III. The Grounds of Pyrotechnical Metallurgy, and Metallick Essaying; by John Christian Fritschius . . . All faithfully Translated from the Latin, and useful for all such as are any ways concern'd in Medicine or*

Metals. x, 268 pp. 8vo, later 18th-cent. marbled calf, spine gilt, green morocco lettering piece on spine. London: B. Bragg, 1705. \$2500.00

First editions in English. "This rare work remained unknown to Ferguson. It contains the only English translations of the works mentioned."—Duveen, p. 490—(putting this under the title). These texts were translated by Francis Moulton, a chemist who manufactured at the Sign of Glaubers-Head in Watling Street. Moulton also translated Grew's tract on Epsom salt into English.

Kunckel's *Chymische Anmerckungen* first appeared in Wittenberg in 1677. Stahl's work — *De Ortu Venarum Metalliferarum* — originally appeared in Halle in 1700. The third work actually appears to be by Stahl (Fritsch was Stahl's student; see Partington, II, p. 660, VII and p. 661, XII).

Fine copy. Bound-in is a copy of William Hamilton's classic *Observations on Mount Vesuvius, Mount Etna, and other Volcanoes: in a Series of Letters, addressed to the Royal Society...* (1772). It is a fine copy with the five plates but lacks the folding map.

♣ Hoover 668.

A Rare Assaying Book

55. KURZE UND DEUTLICHE VORSTELLUNG *der Edlen Probier-Kunst, Was eigentlich dieselbe sey, worinnen sie bestehe, was vor Instrumenten darzu erfordert werden, wie man zu der rechten Erkänntnuss aller Mineralien und Metallischen Ertzen zu gelangen... Nebst einem ausführlichen Bericht, von Salpeter sieden, und Erklärung aller Chymischen Wörter und Zeichen.* Engraved frontis. depicting an assayer in his laboratory. Title printed in red & black. 12 p.l., 523 pp. Thickish 12mo, cont. vellum over boards. Nuremberg: J.F. Rüdiger, 1718. \$3500.00

Second edition of "this treatise on the assaying of metallic ores. It gives an account of the reagents, apparatus, furnaces, precautions, list of technical terms, and methods for analysing ores in the dry way."—Ferguson, I, p. 487—(our edition).

Fine copy and very rare. There is no copy of the first edition of 1695 listed in *N.U.C.* Contemporary engraved armorial bookplate of Christoph Froschmayr, Edler von Scheibenhof, the well-known collector of alchemy. Recent booklabel of J.A. Freilich.

♣ Darmstaedter, *Berg-, Probir- und Kunstbüchlein*, p. 102 & Ferchl, pp. 425-26—(both 1695 ed.).

56. LABBÉ, Philippe. *Bibliotheca Bibliothecarum Curis secundis auctior. Accedit Bibliotheca Nummaria in duas Partes tributa. I. De Antiquis*

Numismatibus. II. De Monetis, Ponderibus & Mensuris. Cum Mantissa Antiquaræ Supellectilis ex Annulis, Sigillis, Gemmis, Lapidibus, Statuis, Obeliscis, Inscriptionibus, Ritibus, similibusque, Romanæ, præsertim Antiquitatis Monimentis collecta. Editio III. auctior, & meliori ordine disposita. Additus Joann. Seldeni Angli Liber de Nummis. 16 p.l., 398 pp.; 27 pp. Two parts in one vol. 8vo, cont. calf (extremities a little rubbed), contrasting leather lettering piece on spine. Rouen: A. Maurry for L. Billaine, 1678.
\$2750.00

Third edition (1st ed.: 1664) "of the earliest extant bibliography of bibliographies. It is basically an alphabetical list, arranged by authors' first names, followed by eight intricate subject indices, among them one of publishers' and booksellers' catalogues. Appended is a very useful numismatic bibliography. The work enjoyed three later editions during the seventeenth century and provided the basis for Teissier. Labbé (1607-67), one of the most learned polymaths of his time, was a Jesuit professor of philosophy in Paris."—Grolier Club, *Bibliography*, 62—(1st ed.).

The work attributed to John Selden on the title-page is actually by Alessandro Sardi (1520-88), and first appeared in 1579.

There is also included a substantial bibliography on weights and measures.

Haebler, in his *Handbuch*, states that this is the second book on incunabula and the first in which the word is used in connection with printing.

A fine copy with some minor foxing.

• Taylor, *Book Catalogues*, pp. 176, 208, & 219-20.

The Origins of Binary Mathematical Notation

57. LEIBNIZ, Gottfried Wilhelm. *Epistolæ ad Diversos, Theologici, Juridici, Medici, Philosophici, Mathematici, Historici et Philologici Argumenti.* E Msc. Auctoris cum Annotationibus suis primum divulgavit Christian. Kortholtus. Finely engraved frontis. port. Four vols. bound in two. Thick 8vo, later 18th-cent. red morocco-backed red boards (some foxing & browning due to the quality of the paper), flat spines gilt. Leipzig: B.C. Breitkopf, 1734-35-38-42.
\$2500.00

First edition of this important collection of correspondence of Leibniz with his contemporaries; about 500 letters are printed here and reflect Leibniz' vast erudition in so many disciplines. As this work was published over an extended period of time, complete sets are uncommon.

These letters and dissertations, which are mostly published here for the first time, contain important material reflecting on Leibniz' varied interests and

activities. Also present here are a number of John Locke's shorter hitherto unpublished writings.

Letters on scientific subjects are present throughout the volumes. Much of Vol. II is concerned with Chinese culture and science — a subject which particularly fascinated Leibniz — and it is here that we find on pages 413-94 his "Lettre sur la Philosophie Chinoise." In this important letter, Leibniz develops, based on the 64 symbolic hexagrams of the *I Ching*, binary mathematical notation, the working foundation of all modern computers.

Very good set, attractively bound.

☛ Ravier 394, 401, 407, & 417.

58. LEMERY, Nicolas. *A Course of Chymistry. Containing the Easiest Manner of performing those Operations that are in Use in Physick. Illustrated with many Curious Remarks and Useful Discourses upon each Operation . . .* Translated by Walter Harris, Doctor of Physick. Title within ruled border. 16 p.l., 323, [15] pp., [2] leaves of publisher's ads. 8vo, modern calf (marginal wormhole at foot throughout, rather larger at the beginning). London: W. Kettilby, 1677. \$1750.00

First edition in English, translated from the first French edition of 1675. The translator, Walter Harris (1647-1732), had lived and studied with Lemery. Later, Harris became physician to Charles II and William III and attended Queen Mary on her deathbed in 1694.

Lemery (1645-1715), one of the most influential chemists of his time, gave lectures in Paris on the principles of chemistry which were known for being clear and simple. The present work is the textbook of his course of lectures. Lemery's textbook enjoyed unprecedented success and went through many editions in French, English, Italian, German, Spanish, Dutch, Latin, etc.

Good copy.

☛ Cole 804. *D.S.B.*, VIII, pp. 172-75. Partington, III, pp. 28-41.

59. LEMERY, Nicolas. *A Course of Chymistry. Containing an easie Method of Preparing those Chymical Medicins which are used in Physick. With Curious Remarks and Useful Discourses upon each Preparation, for the benefit of such who desire to be instructed in the Knowledge of this Art . . . The Second Edition very much Inlarged.* Translated from the Fifth Edition in the French, by Walter Harris. M.D. Three engraved plates, each with explanatory leaf of text. Title within ruled border. 14 p.l., 548, [14] pp., one leaf of ads. 8vo,

cont. mottled calf (pp. 226-464 with gnawed upper outer corner, well clear of text), spine richly gilt. London: R.N. for W. Kettilby, 1686.

\$2250.00

“The greatly enlarged second edition in English, translated by Walter Harris from the fifth French edition (Paris, 1683). It is the first English edition to contain illustrations of chemical apparatus and the first to describe experiments on the preparation and properties of elementary phosphorus and other luminescent materials.”—Neville, II, p. 44.

Apart from the gnawed corners, a fine copy with the imprimatur leaf.

☛ Cole 806. *D.S.B.*, VIII, pp. 172-75. Partington, III, pp. 28-41.

60. LEUCHS, Johann Carl. *Vollständige Tabak-Kunde, oder wissenschaftlich-praktische Anleitung zur Bereitung des Rauch- und Schnupftabaks und der Cigarren. Nach neuen Verbesserungen.* Several woodcuts in the text. vi, 248 pp. 8vo, cont. marbled boards, spine gilt, contrasting leather lettering piece on spine. Nuremberg: C. Leuchs, 1830.

\$1500.00

First edition of a very scarce book. Leuchs (b. 1797), a native of Nuremberg, was the author of more than ninety works on technology, economics, trade, and government. In the present work Leuchs provides a history of tobacco and its introduction throughout Europe. A botanical account is given, describing the various species and there is much on the cultivation of tobacco. Leuchs also describes methods of curing, fermentation, and manufacture and he reports on the trade of cigarettes, pipe tobacco, cigars, and snuff. In one interesting section he gives prices of various grades of tobacco in numerous cities in Europe.

Fine copy. Lacks a leaf of ads at end. Bookplate of Rainer Immensack.

☛ Arents 1351. Poggendorff, I, 1437.

One of the Great Early Library Catalogues

61. LEYDEN UNIVERSITY LIBRARY. *Catalogus Bibliothecae Publicae Lugduno-Batavae noviter recognitus. Accessit Incomparabilis Thesaurus Librorum Orientalium, praecipue MSS.* [Compiled by Friedrich Spanheim]. 12 p.l., 424, [4] pp. 4to, cont. speckled calf (unimportant dampstain at head of some leaves). Leyden: Widow & Heirs of J. Elzevir, 1674.

\$7500.00

The third in the series of the four early Leyden University Library catalogues; the first, printed in 1595, is the earliest published catalogue of an institutional library. The Leyden University Library was the largest and finest Dutch library

of its time. Founded in 1575, the collection greatly benefitted from the acquisitions of the libraries of Joseph Scaliger, Isaac Voss, Levinus Warner, Bonaventura Vulcanius, Ruhnken, and Hemsterhuis.

This catalogue was, during its time, one of the most influential and comprehensive of all institutional catalogues. The catalogue was consulted by scholars throughout Europe. It is divided by subject and then by size. The famous collections of oriental books, including Arabic, Persian, Turkish works, are separately listed.

Spanheim (1632-1701), professor of theology at the University of Leyden, was a member of a prominent and learned family of Calvinist professors.

A fine copy.

• Taylor, *Book Catalogues*, pp. 18, 22, 46, 94, 101-02, & 183.

The First Great Catalogue of The Library Company

62. LIBRARY COMPANY OF PHILADELPHIA. *A Catalogue of the Books belonging to the Library Company of Philadelphia; to which is prefixed, a Short Account of the Institution, with the Charter, Laws and Regulations.* xl, 406 pp., one leaf of errata. 8vo, attractive antique half-calf & marbled boards (light browning), spine gilt, red morocco lettering piece on spine. Philadelphia: Z. Poulson, 1789. \$2950.00

The first of the modern catalogues describing the book collections of the Library Company of Philadelphia. Founded in 1731 by Benjamin Franklin, it was the first subscription library established in North America. From the Revolutionary War to 1800, when the national government was in Philadelphia, the Library Company also served as the Library of Congress. Until the 1850s it was the largest public library in America.

The earliest surviving catalogue of the collection was issued in 1741. That catalogue and the subsequent pre-Revolutionary War catalogues, issued in 1757, 1764, and 1770, were all arranged in an extremely inconvenient method, preventing readers from identifying books they wanted. When the printer and newspaper publisher Zachariah Poulson, Jr. became the librarian in 1785, he compiled and printed the present indexed catalogue.

The arrangement of this catalogue was greatly influenced by the Enlightenment. We learn from the "Advertisement" that "in conformity to the general delineation of human science, laid down by Bacon, and afterwards illustrated and enlarged by D'Alembert, the books have been divided into three classes, corresponding with the three great division of the mental faculties — Memory, Reason and Imagination." This arrangement was greatly facilitated by an excellent author index at the end.

Fine copy.

• Winans 131.

Rare

63. LINNAEUS, Carl. *Museum S[ueci]ae R[egin]ae M[ajes]tis Ludovicae Ulricaе Reginae Suecorum, Gothorum, Vandalorumque... in quo Animalia rariora, exotica, imprimis Insecta et Conchilia describuntur et determinantur.* Title printed in red & black. 4 p.l., 720, [2] pp. 8vo, cont. mottled sheep (head of spine a bit chipped), spine richly gilt, contrasting leather lettering piece on spine. Stockholm: L. Salvius, 1764.

[issued & bound with]:

— *Museum... Adolphi Friderici Regis... in quo Animalia rariora imprimis & exotica: Aves, Amphibia, Pisces describuntur.* 110 pp., one leaf of errata. Stockholm: L. Salvius, 1764. \$7500.00

First edition of Linnaeus' catalogue of the natural history cabinets of the Swedish queen, Louisa Ulrike (1720-82), sister of Frederick the Great. This work establishes binomial nomenclature for insects and shells. Both the King, Adolf Fredrik (1710-71), and his wife Louisa Ulrike, were ardent natural history collectors.

In 1751 Linnaeus "began work on full-length accounts of the royal collections, which were housed in the castles of Ulriksdal and Drottningholm — a task that brought him into frequent contact with the King and Queen. The King's collection at Ulriksdal was mainly zoological — a splendid cabinet of various animals preserved in alcohol, innumerable stuffed birds, and an unbelievable quantity of pinned insects and shells in little boxes. It contained a number of human embryos, including the foetus from a miscarriage of Louisa Ulrika, and an elephant's embryo purchased from Seba in Amsterdam; many of the objects had been bought abroad, some of them for enormous sums...

"It was at Drottningholm... that the Queen kept her magnificent collection of shells and insects from India — a collection unrivalled anywhere in the world. In 1751, wrote Pulteney, 'Linnaeus was commanded to go to Drottingholm to describe them. For the shells, where no one had prepared the way, he unexpectedly found himself obliged to create a new system of classification'."—Blunt, *The Compleat Naturalist*.

The first volume describes the Queen's collection and is largely concerned with insects and shells. The second volume supplements Linnaeus' earlier catalogue of the King's collection published in 1754.

Fine and handsome copy of a rare book.

♣ Murray, *Museums. Their History and their Use*, Vol. I, p. 225 & Vol. III, p. 191.

64. **LOMEIER, Joannes.** *De Bibliothecis Liber Singularis.* Engraved title. 8 p.l. (incl. engraved title), 414, [21] pp. 8vo, cont. polished calf. Utrecht: J. Ribbius, 1680. \$1500.00

Second edition, greatly enlarged, and a very fine copy. This is an excellent treatise on the history of libraries since antiquity. Much of the book is devoted to descriptions of the great libraries of Europe during the 17th century. Chapter XIV is devoted to library architecture and decoration. Le Gallois relied heavily upon this book while writing his *Traité des Bibliothèques*.

Lomeier (1636-99), was professor of belles-lettres at the academy at Zutphen. Excellent copy of an interesting book.

♣ Petzholdt, p. 26—(& see his comments regarding Lomeier's ideas on bibliographical systems as presented in this book).

The Rare First Edition of this Collection

65. **LULL, Ramón & ALBERTUS MAGNUS.** *De Secretis naturae sive Quinta essentia libri duo. His accesserunt, Alberti Magni Summi philosophi, De mineralibus & rebus metallicis Libri quinque.* Quae omnia solerti cura repurgata rerum naturae stuidosis recens publicata sunt per M. Gualtherum H. Ryff, Argentinensem. Medicum. Eight woodcuts in the text. 4 p.l., 183, [4] leaves. 8vo, cont. limp vellum (light browning), three (of four) ties. [Strasbourg: B. Beck], 1541. \$17,500.00

First edition of this collection of texts to be edited by Walter Hermann Ryff (d. 1548), the prominent city physician of Nuremberg, surgeon, and author of many medical, anatomical, surgical, pharmacological, culinary, and technological books. This is a very rare book with no copy in OCLC.

The first part of this book contains a treatise in two books on various quintessences (leaves 1-56), of which one could transmute one hundred parts of mercury into gold or silver. It is a Lullian version of the *De Consideratione Quintae Essentiae* by Joannes de Rupescissa (1st ed.: Venice, 1514). Now considered spurious, this treatise had enormous influence on the development of alchemy and is regarded as one of the most authoritative texts on the *quinta essentia*.

"Although Lull himself was opposed to alchemy . . . his methods had obvious applications in the alchemical field — and they were so applied in a host of pseudo-Lullian alchemical works, most of them composed more than fifty years after his death. These works explain the traditional (but false) 'scientific' view which made him 'Lull the Alchemist'."—*D.S.B.*, VIII, p. 550.

The remainder of the book contains Albertus Magnus' *De Mineralibus*, his principal work on mineralogy, metallurgy, and chemistry; it is one of the best and most comprehensive of the western medieval lapidaries and was written

about 1260.

“He seems to have experimented with alchemy and is said to have been the first to isolate the element arsenic. He compiled a list of some hundred minerals, giving the properties of each. During his many travels, he made frequent sidetrips to mines and excavations in search of specimens. He was acquainted with fossils, and made accurate observations of ‘animal impressions’ and improved on Avicenna’s account of their formation. Albert suggested the possibility of the transmutation of metals, but he did not feel that alchemists had yet found the method to bring this about.”—*D.S.B.*, I, p. 101.

The woodcuts depict distillation equipment.

Fine copy in original state. A much more common second edition appeared a year later in Venice.

♣ Duveen, p. 369. Ferguson, II, p. 54—(no copy in Young collection).

66. LUTZ, Cyriacus. *Brevis, de Lithosophistica Erronea quorundam de Lapide Philosophico nunc disceptantium Doctrina, Religioni Christianae incommoda, Observatio: atque de Lapide Christosophico, summo Christianorum bono...* Title within typographical border. 1 p.l., 15 leaves. Small 4to, self-bound. Ingolstadt: D. Sartorius, 1582. \$2500.00

First edition of this very rare work; OCLC locates no copy in the U.S. Lutz took his medical degree at Ingolstadt; in 1571 he became professor of medicine and in 1574 was appointed rector at that university. While on a journey to the Middle East, he was imprisoned by the Turks. In this alchemical work, Lutz reveals his support of Paracelsus and his alchemical activities.

Fine copy. Two old library stamps on title.

♣ Hirsch, III, p. 870.

67. MAICHEL, Daniel. *Introductio ad Historiam Literariam de praecipuis Bibliothecis Parisiensibus, locupletata annotationibus, atque Methodo.* 12 p.l., 271 pp. 8vo, cont. Cambridge panelled calf (upper joint well-repaired, lower joint a little cracked), spine gilt, red morocco lettering piece on spine. Cambridge: C. Crownfield, 1721. \$1500.00

First edition. “A work of great rarity. It is divided into two parts, the first of which contains an account of the rise and progress of the King’s Library, and of nine other public libraries, at Paris. In the second part, the author discusses the use of public libraries, and the knowledge of literary history . . . Some notices are also introduced relative to the librarians and other literati then at Paris.”—Horne,

p. 561.

Very good copy.

• Peignot, p. 36—"Ouvrage très estimé."

68. [MARCET, Jane]. *Conversations on Chemistry, in which the Elements of that Science are familiarly explained and illustrated by Experiments and Plates, From the last London Edition: The Second American Edition: Enlarged by an Appendix Consisting of a Description, with a Plate, and the Manner of Using of the New Hydro-Pneumatic Blow-Pipe, invented by Mr. Joseph Cloud of the Mint of the United States. Also of Three Disquisitions, one on Dyeing, one on Tanning, and One on Currying.* Twelve engraved plates (foxed, one with a hole in blank portion of image). 427 pp. 8vo, cont. American mottled sheep (some foxing due to the quality of the paper), flat spine gilt, red morocco lettering piece on spine. Philadelphia: J. Humphreys et al., 1809. \$350.00

Second American edition, enlarged (1st ed.: Philadelphia, 1806). E.F. Smith in his *Old Chemistries* (1927), p. 69, states: "Cloud very likely acted as editor of this edition." This was one of the most popular introductory chemical textbooks ever written.

Very good copy and rather scarce.

69. [MARCET, Jane]. *Conversations on Chemistry, in which the Elements of that Science are familiarly explained and illustrated by Experiments and Plates. To which are added, Some late Discoveries on the subject of the Fixed Alkalies, by H. Davy, Esq. of the Royal Society. A Description and plate of the Pneumatic Cistern of Yale College.— and a short Account of Artificial Mineral Waters in the United States. With an Appendix, consisting of Treatise on Dyeing, Tanning and Currying.* Engraved frontis. & 11 engraved plates. xi, 358, 17, [7] pp. 8vo, cont. American marbled sheep (joints slightly cracked but strong, some foxing due to the quality of the paper), flat spine gilt. New Haven: Sidney's Press for I. Cooke, 1809. \$250.00

"The third American edition (first and second: Philadelphia, 1806, and 1809), to which the anonymous editor has added new material on mineral waters and the principles of dyeing, tanning, and currying. The recent isolation of the alkali metals, potassium and sodium, by Humphry Davy is described."—Neville, II, pp. 141-42. E.F. Smith has suggested that the editor was Benjamin Silliman the elder

(1779-1864), professor of chemistry at Yale. If that is correct, this edition might well proceed the Philadelphia edition of the same year.

Some light dampstaining but a very good copy. Signature of "Ann Eliza Whitney, April 3d 1820" on recto of frontispiece and on title.

☛ Cole 912.

A Classic of Mechanics by the "Bohemian Galileo"

70. MARCI A KRONLAND, Johannes Marcus. *De Proportione Motus Figurarum Recti Linearum et Circuli Quadratura ex Motu.* Finely engraved title, fine engraved port. of the author on verso of fourth preliminary leaf, & 32 engraved illus. in the text. Each page of text printed within a border of printer's ornaments. 72 leaves. Small 4to, cont. mottled sheep (covers with a few unimportant defects, third preliminary leaf with a long tear quite well repaired). Prague: [ex Typographia Academica], 1648. \$13,500.00

First edition of what I believe to be the rarest of all the books by Marcus Marci (1595-1667), professor of medicine at Prague University. Marci has been called the "Bohemian Galileo."

The present book, concerned with the theory of collisions, is a continuation and elaboration of his 1639 publication *De Proportione Motus seu Regula Sphymica*. In this work, Marci responds to criticisms made of his 1639 book and develops new theories concerning the geometrical form of bodies in movement, the properties of free fall, the duration of the oscillation of a pendulum and its length, etc. There are a number of references to Galileo.

Marci "was the first to make substantial progress with the difficult problem of impact, a problem that Galileo touched on without success and that Descartes completely muffed."—E.C. Watson in *American Journal of Physics*, Vol. 16 (1948), pp. 246-47.

Fine fresh copy of an attractively printed book.

☛ D.S.B., IX, pp. 96-98. Roberts & Trent, *Bibliotheca Mechanica*, p. 215.

71. MITCHELL, Thomas Duché. *Elements of Chemical Philosophy, on the Basis of Reid, comprising the Rudiments of that Science and the requisite Experimental Illustrations . . .* Two engraved plates (one rather foxed). xvi, 553 pp. 8vo, cont. American sheep (a little rubbed, a few stains & some foxing), flat spine gilt, black leather lettering piece on spine. Cincinnati:

Corey & Fairbank, 1832. \$350.00

First edition. "The work was prepared especially for the medical students in the College of Ohio. The author found the arrangement of topics used by Reid (*Elements of practical chemistry* 1830) agreed with his own ideas so he based his text on that work. Mitchell added material on affinity, caloric, light, combustion, nomenclature and mineral waters. For some of these topics Mitchell borrowed freely from Laugier's *Cours de chimie* Paris 1829."—Cole 943.

Mitchell (1791-1865), took his medical degree at the University of Pennsylvania where he helped to organize the Columbia Chemical Society. In 1831, he became professor of chemistry in the Medical College of Ohio in Cincinnati and later at Transylvania University in Kentucky.

Very good copy.

Limited to 50 Sets

72. (MURRAY, Charles Fairfax). *Catalogo dei Libri posseduti* . . . 401 pp., 1 leaf; 187 pp. Two vols. in one. Large 4to, cont. blue half-morocco & marbled boards (extremities a little worn). London [Rome]: 1899.

\$1750.00

Limited to fifty copies only; privately printed and very rare. This is the best and most complete record of Murray's library. "Murray (1849-1919) was one of the most singular figures of the art world. Himself an artist of no mean distinction, he succeeded, although without any large means of his own, in accumulating . . . illuminated manuscripts . . . and, above all, books of every description. A friend of William Morris and Burne Jones, he owned the finest set of Kelmscott books in any library. His collections of early German, French, and especially Italian books, were among the largest and choicest in private hands. If the Fairfax Murray library had been dispersed in one continuous series of sales, the event would have been truly sensational; unfortunately, the sales were spread over several years and no real system was followed. In addition, many of the finest books were sold privately."—De Ricci, p. 178.

4659 books are described.

Very good set, with a presentation inscription from Murray on the half-title, dated July 1902. A third volume, describing the Adda library at Milan and separately published in 1902, is not present as is usual.

73. NAUMANN, Emil Wilhelm Robert. *Catalogus Librorum Manuscriptorum qui in Bibliotheca Senatoria Civitatis Lipsiensis asservantur*. 15 lithographed plates of facsimiles (three are folding & several are colored by hand). 1 p.l., xxiv, 562, lvi pp. Large 4to, orig. boards (minor

wear), orig. printed paper label on spine. Grimma: J.M. Gebhardt, 1838.
\$1250.00

First edition of this comprehensive and useful catalogue of the manuscripts in the Stadtbibliothek of Leipzig, compiled by its librarian, who was also editor of the influential bibliographical journal *Serapeum*. The catalogue also describes many oriental MSS., including Hebrew and Arabic examples. The library traces its origins to the 15th century.

Fine copy from the library of His Serene Highness Prince Fürstenberg at Donaueschingen with his stamps on title and final leaf.

☛ Schwenke, *Adressbuch der Deutschen Bibliotheken*, 915.

With Valuable Additional Experiments

74. NERI, Antonio. *The Art of Glass, wherein Are shown the wayes to make and colour Glass, Pastes, Enamels, Lakes, and other Curiosities. Written in Italian . . . and Translated into English, with some Observations on the author. Whereunto is added an account of the Glass Drops, made by the Royal Society meeting at Gresham College.* 12 p.l., 362, [4] pp. Small 4to, cont. panelled calf (upper joints partly cracked but strong). London: A.W. for O. Pulleyn, 1662. \$5500.00

First edition in English and a fine copy of Neri's classic work on the manufacture of glass. The text was translated by Christopher Merret (1614-95), friend of Harvey and Boyle, and one of the founding members of the Royal Society. "Undertaking at Robert Boyle's suggestion a translation of Antonio Neri's *L'arte vetraria*, he went to the trouble of repeating the experiments described and added so many original observations from his own deep study of the subject as to almost double the length of what appeared in 1662 as *The Art of Glass*. This work is said to have given a considerable impetus to glassmaking in various parts of Europe."—*ODNB*.

Merret's observations on Neri's technique for making lead-glass may have aided George Ravenscroft in his invention of lead crystal a decade later.

Merret has dedicated this book to Robert Boyle.

A very nice and crisp copy of a book which, due to heavy use, is rarely found in nice condition. Armorial bookplate of J. Talbot Clifton of Kildalton. Early signature of Ezra Hayward on front paste-down.

☛ Duveen, p. 426.

A "Most Important Collection"

75. **NERI, Antonio et al.** *Art de la Verrerie, de Neri, Merret et Kunckel. Auquel on a ajouté le Sol Sine Veste D'Orschall; L'Helioscopium videndi sine veste solem Chymicum; Le Sol Non Sine Veste; Le Chapitre XI. du Flora Saturnizans de Henckel, Sur la Vitrification des Végétaux; Un Mémoire sur la maniere de faire le Saffre; Le Secret des vraies Procelaines de la Chine & de Saxe.* 16 folding engraved plates. 2 p.l., lv, 629, [3] pp. Large 4to, cont. mottled calf (small wormhole to first 20 leaves, mostly in the margin), spine nicely gilt, red morocco lettering piece on spine. Paris: Durand & Pissot, 1752. \$2250.00

First edition of this handsome book which amounts to an encyclopedia of glass-making, compiled by Paul Thiry, Baron d'Holbach (1723-89), the prolific contributor to the *Encyclopédie*. "The most important collection of early works on glass-making and allied industries to appear in the eighteenth century . . . This classic work summarizes all the knowledge then available on the chemistry and technology of glass-making and is valuable for the notes and additions by d'Holbach. A memoir by Zimmermann at the end describes processes for making the famous cobalt blue used in porcelains made in Saxony (pp. 589-600). Also described are the manufacture and coloring of porcelain made in China and Saxony."—Neville, II, p. 221.

The plates are especially valuable for depicting the apparatus of 17th-century glass-makers.

Fine and handsome copy.

☛ Cole 971. Duveen, p. 427. Kafker, *The Encyclopedists as Individuals: A Biographical Dictionary of the Authors of the Encyclopédie*, pp. 170-75.

76. **NODIER, Charles.** *Bibliothèque Sacrée Grecque-Latine; comprenant le Tableau Chronologique, Biographique et Bibliographique des Auteurs inspirés et des Auteurs ecclésiastiques, depuis Moïse jusqu'à Saint Thomas-d'Aquin.* xxiv, 456 pp. 8vo, a prize binding of cont. speckled sheep (joints rubbed, some foxing), stamped in gilt with the arms of the Collège Royal de St. Louis on upper cover, sides & spine nicely gilt. Paris: A. Thoissier-Desplaces, 1826. \$400.00

First edition of this valuable bio-bibliography of the published editions of early ecclesiastical authors, with comments on rarity, best editions, etc. About 4000 titles are listed.

Nodier (1780-1844), was a celebrated bibliographer and novelist.

Nice copy.

77. PAJOT DES CHARMES, Claude. *L'Art du Blanchiment des Toiles, Fils et Cotons de tout genre, rendu plus facile et plus général, au moyen des nouvelles découvertes... et des découvertes faites par l'Auteur dans l'art de blanchir les papiers... ouvrage élémentaire composé en faveur des fabricans, des blanchisseurs, des teinturiers, des imprimeurs en toiles et des papetiers.* Nine large folding engraved plates. 2 p.l., 280 pp. 8vo, orig. speckled wrappers (minor foxing, last three leaves with a light stain at foot), uncut. Paris: A.J. Dugour, An VIII [1800]. \$1500.00

Second edition, a corrected reprint of the first edition of 1798. "Formerly an inspector of manufactures at Abbeville (ca. 1791), Pajot des Charmes (1756-1835) established a soda factory in the department of Aisne (1779-84) and later (1808) assisted in running a glass factory at Tourlaville. In this book he gives a detailed account of Berthollet's bleaching process using chlorine water. In an attempt to lessen the deleterious effects of breathing chlorine on the health of the workmen, he added potash or soda, or both, with quicklime to the chlorine water, in order to lower the vapor pressure of the chlorine over the solution. He discusses the harmful effects of breathing air containing chlorine and urges his workers to use gas masks of his own design and chew licorice. This recommendation by the author represents one of the earliest attempts to protect the health of workers in the chemical industry."—Neville, II, p. 249.

Very good copy.

• Partington, III, p. 507. Ron, *Bibliotheca Tinctoria*, 800.

Commandino's Mathematical Renaissance Completed

78. PAPPUS, of Alexandria. *Mathematicae Collectiones.* Ed. by Federico Commandino. Numerous woodcut illus. & diagrams in the text. 4 p.l. (the last a blank), 334 (i.e., 332) pp. Folio, cont. limp vellum (title a bit soiled, last two leaves with some light dampstaining), ties gone. Pesaro: H. Concordia, 1588. \$25,000.00

First edition and a very fine and fresh copy of this uncommon book; this edition, providing the complete extant text, was the final work to be edited by Commandino and completes his life's work of reviving Renaissance mathematics by making available the best mathematical writings of antiquity.

"In the silver age of Greek mathematics Pappus stands out as an accomplished and versatile geometer. His treatise known as the *Synagoge* or *Collection* is a chief, and sometimes the only, source for our knowledge of his predecessors' achievements. The *Collection* is in eight books, perhaps originally in twelve, of which the first and part of the second are missing...

"Book VII is the most fascinating in the whole *Collection*, not merely by its intrinsic interest and by what it preserves of earlier writers but by its influence

on modern mathematics."—*D.S.B.*, X, p. 293-95—(and see pp. 294-98 for a full discussion of the contents).

This concerns, in a passage on Apollonius' *Conics*, the attempt to conceive of the product of more than three straight lines as geometrical entities, known as "Pappus' Problem." Descartes devoted a major part of his own *Géométrie* to this, and solved it by the use of algebraic notation. "Pappus' problem thus inspired the new method of analytical geometry that has proved such a powerful tool in subsequent centuries. In his *Principia* (1687) Newton also found inspiration in Pappus; he proved in a purely geometrical manner that the locus with respect to four lines is a conic section, which may degenerate into a circle."—*D.S.B.*, X, p. 296.

Topics discussed in the other books include astronomy and mechanics.

A very fine copy preserved in a green morocco-backed box.

• Rose, *The Italian Renaissance of Mathematics*, p. 214—"Within 25 years of Commandino's death the first step in founding the mechanics of the seventeenth century was to be taken by Galileo when, in criticising the inclined plane theorem of Pappus, the Tuscan mathematician adumbrated the notion of inertia. This step was not taken in an intellectual vacuum, but represents the culmination of the mathematical renaissance that had been achieved by the *Restauratores*."—(& see the whole of Chap. 9 for Commandino and this book). Smith, *History of Mathematics*, I, pp. 136-37.

79. (PARR, Samuel). *Bibliotheca Parriana. A Catalogue of the Library of the late Reverend and Learned Samuel Parr, LL.D. Curate of Hatton, Prebendary of St. Paul's, &c. &c.* [Compiled by Henry George Bohn]. Engraved frontisp. port. (offsetting, as always, onto title). vi pp., 3 leaves, 708 pp., 1 leaf, viii pp., 2 leaves of ads. 8vo, cont. red half-morocco & marbled boards (a little rubbed), spine gilt, uncut. London: J. Bohn & J. Mawman, 1827.

\$950.00

First edition. The *Bibliotheca Parriana*, particularly rich in classical authors, theology, and tracts, was issued two years after Parr's death by the bookselling firm of Bohn in an attempt to sell it *en bloc*. All efforts were in vain as the library of over ten thousand volumes was sold at auction in 1828.

Nice copy. Contemporary engraved bookplate of Henry Thomas Buckle.

• Sparrow, John, "Some Uncollected Authors IX. Samuel Parr (1747-1825)" in *The Book Collector* (Spring 1956).

80. PEIGNOT, Gabriel. *Répertoire de Bibliographies Spéciales, Curieuses et Instructives, contenant la Notice raisonnée, 1. Des Ouvrages imprimés à petit nombre d'exemplaires; 2. Des livres dont on a tiré des exemplaires sur papier de couleur; 3. des livres dont le texte est gravé; et 4. des Livres qui ont paru sous le nom d'Ana. Le tout rédigé et publié avec des remarques historiques, littéraires et critiques.* xv, [1], 286 pp. 8vo, cont. marbled calf, flat spine gilt, red morocco lettering piece on spine. Paris: Renouard & Allais, 1810.

\$950.00

First edition. The first two parts are an augmented reworking of Peignot's *Bibliographie Curieuse* of 1808 which was printed in one hundred copies only. The present copy has bound at the end the 16-page "Notice sur une nouvelle Edition de la traduction françoise de Longus, par Amyot, et sur la découverte d'un fragment grec de cet ouvrage" by A.A. Renouard.

Nice copy.

• Brunet, IV, 466-67.

The Finest Italian Book on Metallurgy of the Period

81. PINI, Ermenegildo. *De Venarum Metallicarum excoctione.* 36 folding engraved plates. 4 p.l., 275, [1] pp.; 6 p.l., 235 (i.e., 335), [1] pp. Two vols. 4to, cont. mottled calf (head of spine of Vol. I chipped), double gilt fillet round sides, spines gilt, red & green morocco lettering labels on spines. Milan: J. Marelli, 1779-80.

\$6500.00

First edition of the finest Italian book on metallurgy of the period. Pini (1739-1825), was professor of natural history at the College Saint-Alexandre in Milan and was in charge of its natural history cabinet. He travelled throughout Europe gathering specimens on behalf of the government and wrote numerous works on mineralogy, geology, and related topics.

The plates richly illustrate a great variety of extracting machinery, metallurgical factories, and processes.

Handsome set.

• Hoover 640. Schuh, *Mineralogy & Crystallography: A Biobibliography, 1469 to 1920*, 3719—"Rare."

The Graf zu Stolberg Copy

82. POTT, Johann Heinrich. *Exercitationes Chymicæ. De Sulphuribus metallorum. De Auripigmento. De Solutione Corporum particulari. De Terra foliata Tartari. De Acido vitrioli vinoso et de Acido nitri vinoso. Sparsim hactenus editæ, jam vero Collectæ restitutæ a mendis repurgatæ, variisque Notis, Experimentis et Discussionibus ab autore adauctæ, illustræ.* Title

printed in red & black. 4 p.l., 220 pp. Small 4to, cont. fine vellum over boards, spine lettered in gilt. Berlin: J.A. Rüdiger, 1738. \$2500.00

First edition and scarce. "The first collected edition of some of Pott's most important papers, published previously only in scientific transactions."—Duveen, p. 653.

Pott (1692-1777), a disciple of Stahl, succeeded Neumann as professor of practical chemistry and director of the royal pharmacy at Berlin. "Pott's principal contribution to chemistry was in the systematic examination of mineral substances. He extended knowledge of several metals, at a time when the traditional notion of a fixed number of metals was changing. . . He described bismuth fully and added to knowledge of its compounds and those of borax, alkalies, and alkaline earths."—*D.S.B.*, XI, p. 109.

A fine copy with the bookplate of Christian Ernst, Graf zu Stolberg.

• Cole 1053. Partington, II, pp. 717-22.

83. RÉAUMUR, René Antoine Ferchault de. *Art de faire éclore et d'élever en toute saison des Oiseaux domestiques de toutes Especes, soit par le moyen de la chaleur du fumier, soit par le moyen de celle du feu ordinaire.* 15 folding engraved plates & ten engraved headpieces. xii, 342 pp.; 2 p.l., 339 pp. Two vols. Small 8vo, cont. speckled polished calf (heads of spines a bit chipped, ends of two joints with short cracks), spines gilt, black & red morocco lettering pieces on spines. Paris: de l'Imprimerie Royale, 1749. \$1500.00

First edition of this early and famous work on the artificial incubation of eggs. "But the most famous of all the attempts to make artificial as successful as natural incubation were those of de Réaumur, whose book *De l'art de faire éclore les Poulets* of 1749 achieved a wide renown. He devotes many chapters to a detailed description of incubators of very various kinds; but he nowhere gives any indication of his percentage hatch. It was probably low. He speaks also of the 'funestes effets' of the vapours of the dung on the developing embryos, without, however, furnishing any foundation for an exact teratology. In the second volume he describes those experiments on the preservation of eggs by varnish which caught the imagination of Maupertuis and were held up to an immortal but by no means deserved ridicule by Voltaire in his *Akasia*."—Needham, *A History of Embryology*, p. 203.

Fine set.

• *D.S.B.*, XI, pp. 327-35.

84. RIBADENEIRA, Pedro de. *Bibliotheca Scriptorum Societatis Iesu, post excusum Anno M.DC.VIII. Catalogum R. P. Petri Ribadeneiræ Societatis eiusdem Theologi; Nunc Hoc novo apparatu librorum ad annum reparatæ salutis M.DC.XLII. editorum concinnata, & illustrium virorum elogiis adornata, a Philippo Alegambe . . . Accedit Catalogus Religiosorum Societatis Iesu.* 12 p.l., 586, [1] pp. Folio, cont. calf (joints a little rubbed, title dusty, some unimportant dampstaining towards end), spine richly gilt, red morocco lettering piece on spine. Antwerp: J. Meursius, 1643. \$4500.00

A greatly expanded edition of the first bibliography of the Jesuit order; the first edition appeared in 1608. Many entries relate to the Jesuit missions in the Orient and the Americas. This edition is very rare with no copy located by OCLC in the U.S.

Ribadeneira (1527-1611), a member of a noble Castilian family, after finishing his studies at the Universities of Paris, Louvain, and Padua, became a leading diplomat and administrator within the Jesuit order. A brilliant writer, he wrote a distinguished biography of St. Ignatius Loyola. The Belgian Jesuit historiographer Philippe Alegambe (1592-1652), extended the bibliography to include works published up to 1643 and added several useful indices.

Very good fresh copy. 17th-century signature of Robert Wallis on free front endpaper.

☛ Besterman, *The Beginnings of Systematic Bibliography*, p. 55. Sabin 70776.

One of His Rarest Books

85. RITTER, Johann Wilhelm. *Die Physik als Kunst. Ein Versuch, die Tendenz der Physik aus ihrer Geschichte zu deuten. Zur Stiftungsfeyer der Königlich-baierischen Akademie der Wissenschaften am 28sten März 1806.* 1 p.l., 62 pp. 8vo, modern decorated boards (minor foxing). Munich: J. Lindauer, 1806. \$3500.00

First edition; this is one of the author's rarest works. Ritter (1776-1810), who tragically died at a young age, discovered ultra-violet light, gave the earliest account of the decomposition of water by an electric current, and was the first to construct an electrical accumulator.

This is the first scientific work written by Ritter while under the influence of *Naturphilosophie* which had become prevalent in several German intellectual centers, including Munich.

Fine copy.

☛ D.S.B., XI, pp. 473-75. Poggendorff, II, 652-53.

The History & Architecture of the Vatican Library

- 86. ROCCA, Angelo.** *Bibliotheca Apostolica Vaticana a Sixto V. Pont. Max. in splendidiorem, commodioremq. locum translata . . . Commentario Variarum Artium, ac Scientiarum Materijs curiosis, ac difficillimis, scituq. dignis refertissimo, illustrata. Ad S. D. N. Gregorium XIV.* Two folding engraved plates (one slightly cropped, small hole in last leaf of index touching several words) & numerous woodcut facsimiles in the text. Title printed in red & black. Much exotic printing. 22 p.l., 424, [46] pp. 4to, early 18th-cent. speckled calf, single gilt fillet round sides, spine gilt, red leather lettering piece on spine. Rome: Typographia Apostolica Vaticana, 1591.
\$7500.00

First edition of a very scarce book on the market. Rocca (1545-1620), founder of the Angelica Library at Rome, was Vatican librarian. In 1585, he "was placed at the head of the Vatican printing-office, and entrusted with the superintendence of the projected editions of the Bible and the writings of the Fathers . . . The public library of the Augustinians at Rome, formally established 23 October, 1614, perpetuated his name. It is mainly to his efforts that we owe the edition of the Vulgate published during the pontificate of Clement VIII."—*Catholic Encyclopedia*, Vol. XIII, p. 100.

This history of the Vatican library has considerable architectural interest. Pope Sixtus V (1585-90), had commissioned Domenico Fontana to build a great library hall on an upper floor, frescoed by Cesare Nebbia of Orvieto, Giovanni Guerra of Modena, and assistants, with views of Roman monuments and ancient libraries, ecumenical councils, and portraits of the supposed inventors of alphabets. The bulk of the book is concerned with both the architecture and a description and explication of the elaborate decorations.

Pages 272-424 contain an "Appendix" which deals with exotic alphabets (with many exotic typefaces displayed), the history of the library and its chief donations and acquisitions, the arrangement of books, the invention of printing, and the completion of the dome of St. Peter's.

The first plate depicts the facade of the Vatican and the second plate shows St. Peter's with the completed dome.

Fine copy of a book I have been hoping to find for many years.

"A Milestone Text in the History of 18th-Century Metallurgical Chemistry"

- 87. SAGE, Balthazar Georges.** *L'Art d'essayer l'Or et l'Argent; Tableau comparé de la Coupellation des Substances métalliques, par le moyen du Plomb ou du Bismuth: Procédés pour obtenir l'Or plus pur que par la voie du Départ.* Four folding engraved plates. xii, 112, [3] pp. 8vo, orig. blue wrappers (spine carefully repaired), uncut. Paris: de l'Imprimerie de Monsieur,

1780.

\$1500.00

First edition and somewhat scarce; I have not had a copy before. "Written shortly after Sage had been appointed professor of assaying at the Paris Mint (1778), in this work details are given of furnaces, apparatus, and assay balances. Methods for purifying gold, silver, platinum, copper, and other metals by cupellation are described. Gold is purified by cupellation with lead and bismuth. Directions are given for the preparation of concentrated nitric acid. The older (Biringuccio, 1540) method of parting is described, in which mixtures of gold and silver are treated with nitric acid, which dissolves the silver, leaving the gold. A milestone text in the history of eighteenth-century metallurgical chemistry. Translations into German (Leipzig, 1782) and Spanish (Madrid, 1785) appeared."—Neville, II, pp. 411-12.

Fine uncut copy.

♣ Cole 1142. *D.S.B.*, XII, pp. 63-68. Duveen, p. 523. Hoover 707. Partington, III, pp. 97-98.

The Discovery of Oxygen; Extremely Rare

88. **SCHEELE, Carl Wilhelm.** *Chemische Abhandlung von der Luft und dem Feuer.* Nebst einem Vorbericht von Torbern Bergman . . . Engraved vignette on title & one folding engraved plate, both depicting chemical apparatus. 3 p.l., 16, 155, [1] pp. 8vo, attractive antique calf, gilt, spine richly gilt, a.e.g., contrasting morocco lettering piece on spine. Upsala & Leipzig: verlegt von Magn. Swederus . . . zu finden bey S.L. Crusius, 1777.

\$55,000.00

First edition of this extremely rare and important book which contains the announcement of Scheele's discovery of oxygen, made independently of and two years prior to, Priestley. Scheele's monumental discovery was made by 1773; he had begun his experiments on oxygen in 1770. The publication of this book was delayed due to the fact that Tobern Bergman was two years late in delivering his promised preface.

"The independent discovery of oxygen is here described and the composition of air by two gases is illustrated. One of these is necessary for combustion and respiration and it is absorbed by a number of solid substances and can be artificially produced; the second gas (nitrogen) prevents combustion. Scheele's 'fire-air' (oxygen) could be produced from saltpetre, from black oxide of manganese, from oxide of mercury, etc. The photo-sensitive nature of chloride of silver was announced, a discovery that led to photography."—Dibner, *Heralds of Science*, 41.

"Scheele was an experimental genius; he made more discoveries of first-rate importance with fewer opportunities and scantier appliances than any one else,

and his skill, insight and power of illuminating experimental results have never been surpassed, if indeed, they have ever been equalled."—Ferguson, II, p. 331.

A very fine and extremely tall copy (178 x 100 mm.).

• D.S.B., XII, pp. 143-50. Horblit 92. Partington, III, pp. 205-34. Not in Duveen or Ferguson.

89. SCHEUCHZER, Johann Jakob. *Jobi Physica Sacra, oder Hiobs Naturwissenschaftt vergliechen mit der Heutigen.* Title printed in red & black. 16 p.l., 467, [16] pp. 4to, cont. half-sheep & speckled boards (corners & head of spine a bit worn), spine gilt, contrasting leather lettering piece on spine. Zurich: Bodmer, 1721. \$1750.00

First edition of the preliminary work for Scheuchzer's monumental *Physica Sacra* (1731-35), a detailed explication of events in the Bible in terms of physics, medicine, and natural history.

Scheuchzer (1672-1733), the founder of paleobotany and European paleontology, was professor of mathematics at the Carolinum, professor of physics at the Academy, and *premier médecin* of Zurich as well as director of the city's Museum of Natural History.

Very good copy of a very scarce book. Old stamp of "Bibliothek vom Schloss Püchau" on title and with several other old library markings on free front endpapers.

• D.S.B., XII, p. 159.

*"An Exceedingly Rare Book"—Hunter;
Printed on Paper Made from Conferva*

90. SENGER, Gerhard Anton. *Die älteste Urkunde der Papierfabrikation in der Natur entdeckt nebst Vorschlägen zu neuen Papierstoffen . . .* x, [11]-96 pp. Small 8vo, orig. printed wrappers bound in cont. half-sheep & marbled boards, flat spine gilt, black leather lettering piece on spine. Dortmund & Leipzig: G. Mallinckrodt, 1799. \$19,500.00

First edition. "An exceedingly rare book of ninety-six pages relating to the oldest record of papermaking discovered in nature, with proposals for new materials for making paper. The essay is printed on paper fabricated from conferva, a water plant, called by Senger water wool. He states that water wool, or river paper, was the oldest form of papermaking in nature. This material he termed a coralline product, being the web of water insects, seed capsules, or insects' eggs. Senger discusses the probability of sufficient conferva being found as a substitute for rags in papermaking."—Hunter, *Literature of Papermaking*, pp.

46-47.

Conferva, according to the *O.E.D.*, is a genus of plants consisting of certain fresh water green algae, composed of unbranched many-celled filaments.

Fine copy and pretty copy. This is a truly rare book: Leonard Schlosser, the greatest collector of the 20th century of books on the history of paper, never acquired a copy. His collection is now at the NYPL and several years ago we were able to furnish a copy, thereby filling a conspicuous gap.

❧ Not in Schlosser's *An Exhibition of Books on Papermaking* (Phila.: 1968).

The Bute Copy

91. [SMITH, Godfrey, comp]. *The Laboratory, or School of Arts: in which are faithfully Exhibited and fully Explain'd, I. A Variety of curious... Experiments in Refining... Gold... II. Choice Secrets for Jewellers. III. Several uncommon Experiments for casting in Silver, Copper, Brass... IV. The Art of Making Glass... V. A collection of very valuable Secrets for the Use of Cutlers, Pewterers, ... VI. A Dissertation on the Nature and Growth of Saltpeter...* Translated from the German. Engraved allegorical frontis. & five engraved plates. 4 p.l., 242, [6] pp. 8vo, cont. speckled calf (corners a bit worn, headcap very slightly chipped), double gilt fillet round sides, spine gilt, red morocco lettering piece on spine. London: T. Cox, 1738.

\$2500.00

First edition of "a rare book of secrets of considerable chemical interest... Being a practical book on various chemical processes and other technology for the use of artisans, housewives, and other nonprofessionals, very few copies have survived. This work was translated by Godfrey Smith from the anonymous *Der Curieusen Kunst- und Werk-Schul* (Nuremberg, 1732)."—Neville, II, p. 486.

Nice copy with the engraved armorial bookplate of The Right Hon. John Earl of Bute.

❧ Duveen, p. 331—(under *Laboratory*).

A Pioneering Work

92. TREDGOLD, Thomas. *Practical Essay on the Strength of Cast Iron, and other Metals; intended for the Assistance of Engineers, Iron Masters, Architects, Millwrights, Founders and Others engaged in the Construction of Machines, Buildings, &c. containing Practical Rules, Tables, and Examples; founded on a Series of New Experiments.* Four engraved plates (somewhat

browned due to the quality of the paper) & illus. in the text. xix, 305, [1] pp. 8vo, attractive antique half-calf & marbled boards (title a little stained in gutter, some foxing), spine gilt. London: J. Taylor, 1824. \$1250.00

Second edition, "improved and enlarged." "This pioneering work on the strength of cast iron 'contains the results of the author's experiments and gives many practical rules for designers of cast iron structures.' Tredgold was the first to introduce a formula for calculating safe stresses for columns. As the use of iron for building increased, this book was widely used and translated into French, Italian, and German. –Timoshenko, 100 . . .

"While Pearson finds much to disagree with in this work, he states that one of its paragraphs contains something entirely new: Paragraph 233 on page 121 bears an attempt to determine the position of the neutral line which yields the same result as that obtained by a more accurate method . . .

"The text discusses the properties of iron and provides three tables for different kinds of resistance, with an explanatory section on their use. Further, it discusses the strength of iron beams of various conformations, and gives an account of various experiments on cast iron and on malleable iron and other metals. It continues to give testing results on resistance to torsion and to impulsive force and on the strength of supports compressed or extended along their length."—Roberts & Trent, *Bibliotheca Mechanica*, pp. 326-27.

Very good copy. Perforated stamp of the Franklin Institute on title. Ex *Bibliotheca Mechanica*. The first edition appeared in 1822.

The History & Theory of Optics

93. **VENTURI, Giovanni Battista.** *Commentari sopra la Storia e le Teorie dell' Ottica . . . Tomo Primo* [all published]. Fine engraved frontis. port. of Bonaventura Corti & ten engraved plates (including "VIII" & "continua VIII"). 1 p.l., xxxii, 246 pp. Large 4to, later wrappers (some occasional foxing), uncut. Bologna: Masi Brothers, 1814. \$1500.00

First edition. Venturi (1746-1822), professor of physics at the Universities of Modena and Pavia, is most famous for what is now termed the "Venturi Principle," namely that in passing through converging pipes fluids under pressure gain speed and lose head, and vice versa for diverging pipes. The Venturi principle is now very widely adopted for metering flows in pipes, tunnels, and channels.

He also performed important work on optics and color theory and this is one of his chief contributions to these subjects in which he provides a history of optics and perspective from ancient times to Huygens. At the beginning is a memoir of Bonaventura Corti (1729–1813), professor of physics in the College of Reggio and Venturi's teacher, who discovered cycloids in 1774. His observations

were overlooked, however, and the phenomenon was rediscovered by Treviranus in 1811. Venturi here restates the original observations made by his master Corti.

Fine copy in fresh condition. Signature of "R.S. Creed, Oxford, January 23, 1938" on free front endpaper.

♣ Poggendorff, II, 1193.

The Earliest Work on Symbolic Algebra

94. VIÈTE, François. [*Opere Restitutae Mathematicae Analyseos, seu Algebra nova*]. Six works [see below] in one vol. Small folio, early 17th-cent. calf (a few very skillful repairs to binding), double gilt fillet round sides, spine gilt. Tours: [Privately Printed by] J. Mettayer, 1591-1593; Paris: [Privately Printed by] D. Le Clerc, 1600. \$450,000.00

First editions, privately printed in a few copies each, of six very important mathematical treatises by François Viète (1540-1603), including his *In Artem Analyticam Isagoge* (1591), the earliest work on symbolic algebra. I have known of the existence of this collection of works for many years (essentially a nonce collection of works published in a piecemeal fashion; the general title is taken from the sub-title of several of the individual books) but have never seen a copy in commerce. This is, along with the Lobachevskii (1829-30), the rarest of all the mathematical works included in *Printing and the Mind of Man*. It is interesting to note that Robert B. Honeyman, who collected in the 1920s and 1930s when mathematics books were plentiful and really made an effort to obtain all the high spots of mathematics, failed to find a copy. Harrison D. Horblit and Haskell Norman did not possess copies either. OCLC locates only one copy in America, at the Smithsonian (gift of Bern Dibner; the copy at Iowa is a ghost).

This work contains six titles:

- I. *In Artem Analyticam Isagoge*. 9 leaves. Tours: J. Mettayer, 1591.
- II. [Drop-title]: *Zeticorum Liber Primus [-Quintus]*. Numerous woodcut diagrams in the text. 24 leaves. N.p. [but Tours]: n.d. [1593].
- III. *Supplementum Geometriae*. Numerous woodcut diagrams in the text. [12]-21 leaves (complete). Tours: J. Mettayer, 1593.
- IV. *Effectio Geometricarum Canonica recensio*. Numerous woodcut diagrams in the text. 7 leaves, one blank leaf. N.p. [but Tours]: n.d.
- V. *Variorum de Rebus Mathematicis Responsorum, Liber VIII. Cuius praecipua capita sunt, De duplicatione Cubi, & Quadracione Circuli. Quae claudit Procheiorn* :[in Greek], *seu Ad usum Mathematici Canonis Methodica*. Woodcut vignette on title & numerous woodcut diagrams in the text (one full-page). 3 p.l., 49 leaves (i.e., 50 leaves), one blank leaf. Tours: J. Mettayer, 1593.
- VI. *De Numerosa Potestatum ad Exegesim resolutione*. 1 p.l., 36 leaves. Paris: D. Le

Clerc, 1600.

Viète, the greatest French mathematician of the sixteenth century, was by profession a lawyer from Brittany who spent his life in the public service, ultimately becoming a member of the King's privy council. He was a wealthy man to whom mathematics was a delightful hobby. While in the service of Henry IV of France he succeeded in putting his mathematical activities to good use by finding the key to a complicated cipher used by the Spaniards.

In Artem Analyticem Isagoge. "The 'Introduction to the Art of Analysis' is the earliest work on symbolic algebra. Vieta's greatest innovation in mathematics was the denoting of general or indefinite quantities by letters of the alphabet instead of abbreviations of words as used hitherto. It is true that arbitrary letters of the alphabet had been used to denote algebraic quantities in the thirteenth century by Jordanus Nemorarius and in the fifteenth and sixteenth centuries by Stifel and Regiomontanus in Germany and by Cardanus in Italy; but Vieta developed the idea systematically and made it an essential part of algebra. Known quantities were represented by consonants, unknown ones by vowels; squares, cubes, etc., were not represented by new letters but by adding the word *quadratus*, *cubus*, etc. Vieta also brought the + and — signs into general use, although they are found in some earlier German works and have been traced back to about 1480 . . . This algebraic symbolism made possible the development of analysis, with its complicated processes, a fundamental element in modern mathematics."—*Printing & the Mind of Man* 103.

"This innovation, considered one of the most significant advances in the history of mathematics, prepared the way for the development of algebra."—*D.S.B.*, XIV, p. 19—(& see the detailed account on pp. 19-20).

Zeteticorum Liber Primus [-Quintus]. "In 1593 Viète published *Zeteticorum libri quinque*, which he very probably had completed in 1591. In it he offered a sample of *logistique speciosa* and contrasted it directly with Diophantus' *Arithmetica*, which, in his opinion, remained too much within the limits of the *logistique numerosa*. In order to stress the parallelism of the two works, Viète ended the fifth book of his *Zetetics* with the same problem that concludes the fifth book of Diophantus' *Arithmetica*. In other parts of the book he also takes series of problems from the Diophantus work . . .

The *Zetetics* is composed of five books, the first of which contains ten problems that seek to determine quantities of which the sum, difference, or ratio is known. The problems of the second book give the sum or difference of the squares or cubes of the unknown quantities, their product, and the ratio of this product to the sum or the difference of their squares. In the third book the unknown quantities are proportional, and one is required to find them if the sum or the difference of the extremes or means is given. This book contains the application of these problems to right triangles. The fourth book gives the solutions of second- and third-degree indeterminate problems, such as IV, 2,3, to divide a number, which is the sum of two squares, into two other squares. The fifth book contains problems of the same kind, but generally concerning three numbers:

for instance (V,9), to find a right triangle in such a way that the area augmented with a given number, which is the sum of two squares, is a square.”—*D.S.B.*, XIV, p. 20.

Supplementum Geometriae. “In 1593 at Tours, Jamet Mettayer edited *Francisci Vietae Supplementum geometriae, ex opere restituae mathematicae analyseos seu algebrae nova*. The following statement from proposition XXV — ‘Enimvero ostensum est in tractatu de aequationum recognitione, aequationes quadratoquadratorum ad aequationes cuborum reduci’ — is important because it shows that by 1593 his tract *De aequationum recognitione* had already been completed, long before its publication by Alexander Anderson (1615). The tract begins with the following postulate: A straight line can be drawn from any point across any two lines (or a circle and a straight line) in such a way that the intercept between these two lines (or the line and the circle) will be equal to a given distance, any possible intercept having been predefined. The twenty-five propositions that follow can be divided into four groups:

1. Propositions 1-7 contain the solution of the problem of the mesographicum — to find two mean proportionals between two given straight line segments — and its solution immediately yields the solution of the problem of doubling the cube.

2. Propositions 8-18 contain the solution of the problem of the trisection of an angle and the corresponding cubic equation. The trigonometric solution of the cubic equation occurs twice: in propositions 16 and 17.

3. Propositions 19-24 contain the solution of the problem of finding the side of the regular heptagon that is to be inscribed in a given circle.

4. Proposition 25 explains the importance of the applied method: the construction of two mean proportionals, the trisection of an angle, and all problems that cannot be solved only by means of the ruler and compass but that lead to cubic and biquadratic equations, can be solved with the aid of the ancient *neusis* procedure.”—*D.S.B.*, XIV, p. 21.

Effectioinum Geometricarum Canonica recensio. It is in this work that Viète begins to demonstrate precise relationships between geometric constructions and algebraic equations.

Variorum de Rebus Mathematicis Responsorum, Liber VIII. “In 1592 Viète began a lively dispute with J.J. Scaliger when the latter published a purported solution of the quadrature of the circle, the trisection of an angle, and the construction of two mean proportionals between two given line segments by means of the ruler and compass only. In that year Viète gave public lectures at Tours and proved that Scaliger’s assertions were incorrect, without mentioning the name of the author. For this reason he decided in 1593 to publish book VIII of his *Variorum de rebus mathematicis responsorum Liber VIII* . . . In chapters 1, 2, and 5 Viète treats the traditional problem of the doubling of the cube, that is, of the construction of two mean proportionals. In the first chapter, on the basis of Plutarch’s *Life of Marcellus* (ch. 14), he calls this an irrational problem. In the fifth chapter he treats it synthetically, referring to the ‘ex Poristicis methodus’ that he had presented

in the *Supplementum geometriae*. In chapter 3 he is concerned with the trisection of an angle and, in chapter 7, with the construction of the regular heptagon to be inscribed in a given circle, proposed by François de Foix, count of Candale, the most important contemporary editor and reviser of Euclid. Chapters 6 and 14 are related to Archimedes' *On Spirals*, already known in the Latin West through the Moerbeke translation of 1269 . . .

"In chapter 8 Viète discusses the quadratrix and, in chapter 11, the lunes that can be squared. He investigates the problem of the corniculate angle in chapter 13 and sides with Peletier, maintaining that the angle of contact is no angle. Viète's proof is new: the circle may be regarded as a plane figure with an infinite number of sides and angles; but a straight line touching a straight line, however short it may be, will coincide with that straight line and will not form an angle. Never before had the meaning of 'contact' been stated so plainly. In chapter 16 Viète gives a very interesting construction of the tangent to the Archimedean spiral and, in chapter 18, the earliest explicit expression for π by an infinite number of operations."—*D.S.B.*, XIV, p. 21.

De Numerosa Potestatum ad Exegesis resolutione. In this work, Viète demonstrates "a method for approximating to the root of an equation. By his brilliant researches in mathematics Vieta became a key figure in its development and his influence can be seen on Descartes, on Harriot, and even on Newton and Leibniz. All his books were published privately at his own expense for distribution to his friends and are therefore notably rare."—*Printing & the Mind of Man* 103.

"Viète's method influenced later work on the subject through the 19th century. In particular, it is similar to the so-called Newton-Raphson method, developed by Newton three-quarters of a century later and elaborated by Joseph Raphson in 1690. We know that Newton studied the present work closely (working from Schooten's 1646 edition of Viète's *Opera*); his notes on it are preserved in the manuscript "Annotations from Viète and Oughtred. Section 1. Notes on Viète's *De numerosa potestatum exegesis resolutione*" (reprinted in Whiteside, *Papers*, Vol. I, pp. 63-71).

Fine copies. With the early bookplate of the monastery Santa Maria del Fiore at Florence "Est Monasterij S. Mariae de Florentia ad usum D. Petri Aloysii della Torre." Inscription on a free front-flyleaf: "Badia No. 13616." Early signature of Louis de Boissy at head of fourth leaf of first work.

♣ Ball, *A Short Account of the History of Mathematics*, pp. 229-34.

95. **VOGEL, Rudolf Augustin.** *Institutiones Chemiae ad Lectiones Academicas accomodatae. Edito Nova polita et locupletata*. 4 p.l., 382, [10] pp. 8vo, cont. sheep-backed speckled boards (foot of spine a little worn & spine a little wormed), red leather lettering piece on spine. Frankfurt &

Leipzig: 1762. \$950.00

New edition. Vogel (1724-74), "was a man of wide and varied knowledge... His interest extended to various branches of natural history, botany, mineralogy, physiology, and chemistry, of which he made a special study."—Ferguson, II, 51.

"The textbook used by Vogel in his classes at Göttingen, with numerous references to earlier literature on the subject. It is an introductory work on general chemistry, the first edition of which (Göttingen, 1755) was reprinted at Leyden and Leipzig (1757). The text of the present (corrected) edition was reprinted in 1764 and 1774... The copy described by Cole (no. 1320) and Ferguson (II, 516), with a Bamberg, Frankfurt, and Leipzig imprint, 1762, has different pagination and is a reprint of the present edition but is misnumbered. The present rare edition, with the Frankfurt and Leipzig imprint, was unknown to Gmelin (II, 686) and is not in the usual bibliographies."—Neville, II, p. 592—(our copy is the same issue as Neville's).

Very good copy. Contemporary bookplate of the Misericordia convent in Vienna.

• Partington, III, p. 608. Poggendorff, II, 1217.

Lavoisier Refuted

96. **WALKER, Ezekiel.** *Philosophical Essays, selected from the Originals, printed in the Philosophical Journal, between the years 1802 and 1817, containing, among other Discoveries and Improvements, New Outlines of Chemical Philosophy, Founded on Original Experiments. To which are added, Essays on Interesting Subjects, not before printed.* Three engraved plates & several diagrams in the text. 3 p.l., vi, 186 pp. 8vo, cont. blue boards (rubbed), neatly rebaced in white paper, orig. printed label on spine. Lynn: J. Wade for Baldwin, 1823. \$1850.00

First edition and a rare provincial imprint. "This collection of 55 Letters (one is not by the author) and 6 essays consist of works previously published in Nicholson's Journal or the Philosophical Magazine from 1802 to 1817 and a number of previously unpublished essays with dates to 1822..."

"In the letters on electricity the author 'proves' experimentally that electricity consists of two imponderable, invisible and equal forces acting in opposite directions, the positive is the 'generator of heat', thermogen and the negative is the 'generator of light', photogen. These 'elements' are found in most substances. Combustibles contain photogen and supporters of combustion contain thermogen..."

"Applying these elements to explain combustion, the nature of oxygen gas (water combined with thermogen) and hydrogen gas (water combined with

photogen) etc., the author 'refutes' the theories of Lavoisier . . .

"The letters on chemistry also treat respiration, animal heat, renovation of the atmosphere, meteorological phenomena, evaporation, the transmutation of photogen, etc. Davy, Priestley, Scheele, Lavoisier, Berthollet, Ellis and others are cited. More than half of the letters deal with improvements and discoveries applied to time-pieces, quadrants, a micrometer, optical devices, etc."—Cole 1326.

Very good copy. Clean short tear to pages 177-78 touching letters but with no loss.

97. WALLER, William. *An Essay on the Value of the Mines, late of Sir Carbery Price . . . Writ for the private Satisfaction of all the Partners.* Two folding woodcut plates with letterpress. Title within double-ruled border. 12 p.l., 55 pp. 8vo, cont. panelled calf (small defect to foot of upper joint, browning & foxing throughout), panels formed with gilt filets, gilt fleurons in each corner. London: 1698. \$4000.00

First edition. "The famous copper, silver, and lead mines of Sir Carbery Pryse, or Price (d. 1695), were discovered in 1690 on his estates in Cardiganshire, Wales, and their reputed value was so great that they were called the "Welsh Potosi." Pryse formed a company of himself and twenty-four shareholders, but they were opposed by the Society of Royal Mines, and several lawsuits followed. When Pryse died in 1695, Sir Humphrey Mackworth (1657-1727) purchased the shares and formed the famous Company of Mine Adventurers. Mackworth was later accused of embezzlement and found guilty by the House of Commons in 1710 . . .

"This privately printed work is dedicated to Mackworth and about sixty other dedicatees, including Sir Christopher Wren, and was written to induce wealthy investors to exploit the riches of these mines. In addition to detailed discussions of economic matters, there are sections of chemical interest. Pages 36-50 concern the silver that can be extracted from these mines, and pages 10-14 describe the silver mines of Potosi in Bolivia, with the Welsh mines being very favorably compared with them. This is a copy of the issue without the printer's name, of which Wing W552A records only the Harvard copy: it is probably the first issue. The second issue of 1698 has "F. Collins" in the imprint (Wing W552) and is less rare than the first issue."—Neville, II, pp. 603-04.

The first plate depicts a geological cross-section of the mines in Wales and the second plate shows the silver mines at Potosi.

Apart from the foxing, a very good copy.

♣ Hoover 855.

98. WEBSTER, John White. *A Manual of Chemistry, containing the Principal Facts of the Science, in the Order in which they are discussed and illustrated in the Lectures at Harvard University, N. E. and several other Colleges and Medical Schools in the United States. Compiled and arranged as a Text book for the Use of Students, and Persons attending Lectures on Chemistry...* Frontis., two plates on page [xii] & about 200 woodcuts in the text. xxi, [1], 556 pp. 8vo, orig. green ribbed cloth, spine lettered in gilt. Boston: Marsh, Capen, Lyon & Webb, 1839. \$500.00

Third edition, which "has been changed considerably. The section on chemical analysis has been eliminated and some sections have been shortened (e.g. not as many salts are discussed at length). Chemical formulae are introduced for the first time, drawing on Turner and Liebig. The section of Organic Chemistry is based on Thomson's *Chemistry of Organic Bodies* (1838) with the Animal Substance section being taken from Reid's textbook. The topics still follow, in a general way, the order of the earlier editions."—Cole 1359.

The first edition appeared in 1826 and the book rapidly became the standard chemistry textbook used throughout American colleges. Webster (1793-1850), professor of chemistry and mineralogy at Harvard, is far more famous for having murdered George Parkman, one of the most sensational crimes of the time.

Uncommonly fine and attractive copy. Contemporary bookplates of Thomas B. Hall and the Free Public Library, Jackson, N.H.

The Peutinger Table

99. WELSER, Marcus. *Fragmenta Tabulae Antiquae, in quis aliquot per Rom. Provincias Itinera. Ex Peutingerorum Bibliotheca.* Two folding engraved plates. 60, [4] pp. Small 4to, early 18th-cent. calf, triple gilt fillet round sides, gilt fleurons in corners, spine gilt. Venice: Aldus Manutius the Younger, 1591. \$6000.00

First edition of this description of the famous *Tabula Peutingeriana*, a road map of the world, one of only two specimens of Roman cartography. It was discovered by Konrad Celtes (1459-1508) in 1494 and bequeathed by him to his friend Konrad Peutinger (1465-1547) of Augsburg. The map was originally thought to be third or fourth century but we now know it to be a 13th-century copy of an original Roman map. The *Tabula Peutingeriana* survives at National Library of Austria on eleven sheets (the 12th is missing).

Peutinger, a German humanist, diplomat, politician, and economist, was educated at Bologna and Padua. He formed one of the largest private libraries north of the Alps. Welser (1558-1614), historian, philologist, and lawyer, was one of the leading German humanists of his time. He established in Augsburg at his own expense a private humanist press named after its address "Ad Insigne

Pinus" ("At the Sign of the Pine-Tree"). The press, which was active from 1594 to 1619, specialized in the production of original Greek and Latin texts, all based on unpublished manuscripts.

Fine copy.

♣ Pfeiffer, *History of Classical Scholarship 1300-1800*, pp. 64-65.

100. ZENNECK, Ludwig Heinrich. *Anleitung zur Untersuchung des Biers nach seinen sowohl erlaubten als unerlaubten Bestandtheilen für Polizeibehörden, Chemiker und Bierbrauer.* One folding lithographed plate. vi, 142 pp. 8vo, cont. marbled boards (some foxing). Munich: Verlag der Literarisch-Artistischen Anstalt, 1834. \$1250.00

First edition and very rare; OCLC locates no copy in the U.S. Zenneck (1779-1859), was professor of natural history and chemistry at the Hohenheim Institute and later became professor at the University of Tübingen. He was a prolific author in many areas of science.

This is a quite interesting book on the history and current practices of beer brewing. Zenneck describes the lawful and unlawful ingredients and methods of making beer according to the *Reinheitsgebot*, the famous German beer purity law established in Ingolstadt in Bavaria in 1516. According to that law, ingredients in the production of beer were limited to water, barley, and hops. Zenneck describes the various products which were being considered as additives to beer and methods of brewing.

Very good copy.

♣ Poggendorff, II, 1404.